PENCIL POINTS
An Illustrated Monthly JOURNAL for the DRAFTING ROOM
Edited by RUSSELL F. WHITEHEAD
KENNETH REID & E. L. CLEAVER Published by THE PENCIL POINTS PRESS, INC.
Ralph Reinhold, President, Edward G. Nellis, Vice-President, W. V. Montgomery, Secretary

THE DRAFTSMAN AND THE CRAFTSMAN

WE HAVE always believed that it is one of the most important parts of a draftsman's education to become familiar with the materials from which his dreams are fabricated into realities. To design with real intelligence in any material implies a thorough acquaintance with the manipulations necessary to make it conform with the specifications of the design. A capable designer is never guilty of calling for something to be made in wrought iron which should better be of cast iron or bronze. He never details carved stone in the same manner as carved wood. He recognizes the differences between the crafts and takes them into account. As a result the finished work turns out as he conceived it. He has mastered the technique of architecture.

The recent action of the New York Chapter of the American Institute of Architects, through its Committee on Education, in arranging for means of contact between the draftsman and the craftsman is, in our opinion, one of the finest things that has been done for a long time to promote better architecture. In the belief that the younger generation of draftsmen has heretofore had little opportunity to become acquainted with the preparation of the materials of architecture, the committee has arranged with a number of the better known craftsmen in marble and stone, metal work, lighting fixtures, cabinet work, furniture, plaster work, glass, mosaic, leather, and textiles, to allow groups of draftsmen to visit their shops. The architectural offices which are cooperating with the committee by allowing their men time off to participate in these visits are to be commended for their wisdom and foresight for they, as well as their draftsmen, are bound to benefit.

We hope that every draftsman who has this opportunity thrust before him will take full advantage of it. We also hope that the practice will be adopted in all cities where the crafts' shops are available.

It was with the idea of helping this sort of thing along that we have been running, in PENCIL POINTS, articles on the technique of Stained Glass, Mosaic, Wrought Iron, Bronze, and so on. It will be a part of our editorial policy to continue presenting such articles from time to time so that those of our readers who are located at a distance from the shops may have this valuable information, while those who visit the shops will have a record to supplement their observations.

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EDITORIAL AND BUSINESS OFFICES, 419 FOURTH AVENUE, NEW YORK

PENCIL POINTS—Yearly subscription, payable in advance, $3.00 to the U. S. A., Insular Possessions, Cuba and Mexico. Foreign subscriptions in the Postal Union, $1.00 additional for postage; Canadian Subscriptions, 50 cents additional. Remittances by International or American Express Money Order or by Draft on a bank in the U. S. Payable in United States Funds. Subscribers are requested to state profession or occupation. TO SUBSCRIBERS: Instructions for change of address should reach us before the twetieth of the month to assure delivery of the forthcoming issue. Please give both old and new addresses. TO CONTRIBUTORS: We are always glad to receive manuscripts, drawings, etc. We will use due care with material in our hands, but cannot be responsible for damages. Copyright, 1927, by The Pencil Points Press, Inc., Trade Mark Registered. All rights reserved.

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CHARCOAL RENDERING BY FREDERIC C. HIRONS
BANKING ROOM OF SOCIETY FOR SAVINGS, HARTFORD, CONN., DENNISON & HIRONS, ARCHITECTS
TO WHOMSOEVER the graphic arts appeal no
literary introduction is needed to arouse his interest
in the series of drawings which accompany this article.
He is alive to the mannerisms of technique and,
passing beyond a consideration of these, he
reads the secret of the work. His eyes alone
tell him the story. And so, while it would be unjustified to cry down
legitimate interpretation of the methods by which
an artist accomplishes his work, yet the significance of the drawing, that
peculiar undefined something which remains of permanent value, is quite
apart from the transitory personal characteristics of
the artist. His views of life, his inhibitions and
his illusions may form the subject matter of an
instructive monograph, but his work of art has
flown away from all these. It no longer belongs in any way to him
but to every student who may bring to it an open
mind and humility of spirit.

* * *

FORTUNE endowed
Frederic Charles Hirons
with the inestimable gift
of a good technique. He did not, one may say, have
to learn how to draw. As his patron, M. Laloux,
twice said to him,—“Your difficulty is that you draw
too easily”. Yet from the beginning of his career
as a draftsman, Hirons has steadily exemplified the
moral which Henry James cites concerning de
Maupassant, to the effect that “to prove you have
first-rate talent you must have a first-rate style”.
From the beginning, the manner of presentation has
been of absorbing interest to Hirons and though the
passing years have brought the inevitable changes,
both as to his ideas and his manner of expressing them,
his facility in drawing has not diminished. Undoubtedly
the patient drawing of some of his early pen-and-ink renderings would
be difficult for Hirons to reproduce today,—even assuming that he would
have a desire to do so,—but in compensation for
this we have the much larger freedom of technique as shown in his
present day drawings.

Born in the town of
King’s Heath, near Bir-
mington, England, in
1882, Hirons passed his
early youth in England.
His ancestry is Welsh
and English. When he
was ten years of age, his
family came to this
country and his later boy-
hood was spent near Bos-
ton. A caprice of for-
tune decided that, instead
of following a “commer-
cial” career, he should
become one of the
notable architects of our
time.

A chance introduction
to the late David I.
Gregg,—at that time
the best known and the
ablest of American pen-and-ink renderers in the architectural field,—proved to be a turning point in
his life. Through Gregg’s generous interest in his
drawings and his manifest ambition, Hirons was
enabled to enter the office of the late Herbert D. Hale,
in Boston. This was in 1898. Both Gregg and Hale
exercised helpful and important influence on the
young draftsman. It was by Hale, however, that
Hirons was fired with the ambition to become a thor-
DETAIL FROM WORKING DRAWING, BY FREDERIC C. HIRONS

GRILLE FOR NATIONAL STATE BANK, ELIZABETH, N. J., REPRODUCED AT EXACT SIZE OF ORIGINAL
DETAIL FROM WORKING DRAWING, BY FREDERIC C. HIRONS

GRILLE FOR UNION MARKET NATIONAL BANK, WATERTOWN, MASS., REPRODUCED AT EXACT SIZE OF ORIGINAL
DETAIL OF DRAWING BY FREDERIC C. HIRONS, REPRODUCED AT EXACT SIZE OF ORIGINAL

ENTRANCE TO A TAPESTRY MUSEUM (SEE OPPOSITE PAGE FOR ENTIRE DRAWING)
oughly trained architect. Hale, in addition to being a most accomplished architect, was an unusually skillful draftsman, and his charming sketches are full of admirable qualities. Hale's drawings had a certain lightness of touch and this quality his young student caught and held in his own work. Gregg's influence was even more apparent, though it was the pen-and-ink line of Herbert Railton which later captivated Hirons. The drawing of Much Wenloch, shown on page 409, made in this formative period, indicates clearly how closely he made use of Railton's methods. This drawing was made in 1898, and it was, incidentally, the first "prize" drawing that Hirons made. Hirons' acceptance of Gregg and Railton at this period of his life undoubtedly did much towards perfecting his line, the precision and suavity of which are evident even in his early drawings. It is possible, however, that a too close adherence to Railton's methods of indication had a damaging effect on Hirons' work, inasmuch as Railton's notorious disregard for values "as they are" taught the young student to search for the form of things alone and not to seek their essence. Yet such is the debatable nature of such a conclusion that one may hesitate to pass judgment upon it. Just because an old Gloucester wharf is darkly weather-stained is in itself perhaps no reason for so presenting it in a drawing. And such considerations, unless one is wary, unlock the door which leads to academic discussion. One may note, however, that in the evolution of his work, the conscious technique of his earlier work is replaced by broader methods and far greater freedom of indication.

For five years Hirons remained in Hale's office, engaged in the general work which falls to a draftsman's life, and in 1901 he entered the course in architecture at the Massachusetts Institute of Technology, where he studied for two years under the late Professor Despradelle. In 1904 he won the Rotch Travelling Scholarship, thus gaining the opportunity of continuing his studies in Europe. In the same year he went to Paris and entered the preparatory atelier of Godefroy-Freynet. His
PEN-AND-INK DRAWINGS FOR SCULPTOR'S USE, BY FREDERIC C. HIRONS
PANELS IN ATTIC STORY OF THE TRENTON BANKING COMPANY BUILDING, TRENTON, N. J.
STUDY FOR A CEILING DESIGN, DRAWN IN COLOR BY FREDERIC C. HIRONS
UNION MARKET NATIONAL BANK, WATERTOWN, MASS.

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THE SOCIETY OF BEAUX ARTS ARCHITECTS
Requests the pleasure of your Company and of
that of your friends at the.
BALL OF THE FINE ARTS
and the
PAGEANT OF ANCIENT FRANCE
to be given for the benefit of the
BEAUX ARTS
INSTITUTE OF DESIGN
on Thursday Evening
March the Eleventh 1920
Nine o'clock at the Hotel Astor
COSTUMES DE RIGUEUR.
Tickets for Deluxe place may be obtained
on the East 13th Street an and after March
15. They will be sold however unless the
tickets be in Fancy Costumes.

PEN-AND-INK DESIGN BY FREDERIC C. HIRONS
INVITATION TO THE BEAUX-ARTS BALL

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work in this atelier gave ample promise of the more serious work he was to do later, in the Ecole des Beaux Arts. The esquisse shown on page 406 is an excellent example of his work at this period.

Fortune had smiled upon him, — and yet he was to be disillusioned in a most unexpected way. If it were not for the salutary moral, it would be out of place to touch on the incident which caused this temporary disillusionment. Whether youthful self-confidence was the mainspring of his defeat, or whether it was to be ascribed to some more inscrutable cause is unimportant, but the fact that he failed to pass the first entrance examinations at the Ecole des Beaux Arts was one of those healthy, painful and vivifying jolts that Destiny metes out even to her favorite sons.

Six months later, wiser and more determined, Hirons entered the school, having received the highest mark awarded in architecture, and being placed first among the four hundred and fifty aspirants for admission. And in this way began his five years' work at the Ecole. Shortly before entering the school, he had joined the Atelier Laloux. His studies were interrupted during a brief trip to this country in 1906, during which time he competed for the Paris Prize. Successful in winning this prize, he returned to Europe. During his years abroad, considerable time was spent in Italy and other countries, but it was Paris which was his real home in Europe. To what extent his development is due to his close association with his Patron, M. Laloux, one may only guess; but the devotion expressed so frequently by the student for le Maître in the early days, has continued through all the ensuing years. This article has to do, primarily, with Hirons as a draftsman, yet it would be incomplete if it failed to take note properly of the guiding influence which Laloux has exercised upon him. Laloux's force, his enthusiasm, his large understanding of architecture, his generous encouragement to his students, and his far-reaching critical ability, could command only Hirons' respect, admiration and gratitude, — just as they have commanded the respect and gratitude of the many Americans whose lives are richer because of their years spent in the Atelier Laloux under the guidance and compelling inspiration of the Master.

Of Hirons' work at the Ecole, numerous examples are shown on other pages. One may call attention, particularly, perhaps to the detail of the Museum of Tapestry. The delicate and careful drawing forms a strong contrast with the bold and striking indication shown in certain other drawings. The drawing is reproduced at the scale of the original, and while it is soigné, it is not laboré; its freshness is not lost through the evident painstaking labor that went into it. A considerable stimulus to Hirons' decorative work came from his association with Fernand Janin, Laloux's brilliant élève. The sketch in water color, for the mural decoration of the Watertown National Bank, shown on page 403, is reminiscent of Janin's manner, though the charm of this sketch can be appreciated only imperfectly in the black and white reproduction. Hirons' admiration for the work of the gifted Janin was spontaneous and lasting, and unquestionably Janin's decorative achievements did much to heighten Hirons' imaginative qualities. Such drawings as that of an imaginary Levantine city, shown as one of the color plates in this issue, owe their existence perhaps to the inspiration of Janin, though the technique and quality of the drawings are Hirons' own.

In 1909 Hirons returned to this country, and entered into partnership with Ethan Allen Dennison, under the firm name of Dennison and Hirons, for the general practice of architecture. This partnership, continuing to this day, has been fruitful in its production of notable buildings. It is not within the province of this article to deal with the architectural output of this firm, but one may note that his success-
PREPARATORY ADMISSION ESQUISSE FOR ECOLE DES BEAUX ARTS, BY FRÉDÉRIC C. HIRONS
A MONUMENTAL WELL HEAD
LITHOGRAPH CRAYON DRAWING BY FREDERIC C. HIRONS

CHATHAM AND PHOENIX NATIONAL BANK BUILDING, NEW YORK

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CHARCOAL PERSPECTIVE RENDERING BY FREDERIC C. HIRONS

FEDERAL TRUST COMPANY BUILDING, NEWARK, N. J., DENNISON AND HIRONS, ARCHITECTS
ful career has furnished Hirons with great opportunities both as a designer and draftsman. Particularly, Dennison and Hirons have devoted themselves to the design and execution of banking institutions, and the firm has taken a leading position in the profession in this special and exacting work.

Upon his return to this country in 1909, a group of young students who were about to form an atelier requested Hirons to become its patron. The atelier has produced Paris Prize men, such as McLachlan and Morgan, and has offered many logistes for the yearly competition. In addition to conducting his atelier, Hirons spent three years as a member of the architectural instruction staff at Columbia. In recognition of his aid in stimulating interest in the student work conducted under the Society of Beaux-Arts Architects, he was awarded the Legion of Honor by the French Government in 1926.

In all his work as a practicing architect, Hirons has never lost his vivid interest in drawing. He draws, one may say, just for the sake of drawing. With most busy architects there comes a time when they relinquish the pencil. A period comes in their lives when it is said of them, “Oh, you ought to see the drawings he  used to make”. Whether the medium be pen-and-ink, pencil, lithographic crayon, or pastel, we see in Hirons’ work the same qualities; the expression of a highly developed dramatic sense embodied in a technique which is remarkable for its precision, flexibility and delicacy. His knowledge of architectural forms is extensive. With his retentive memory for decorative motifs it is not necessary for building cannot be drawn. Nevertheless, in such a drawing as the one cited, the detail is undeniably suggested. Such capability of suggestion comes from one who actually knows what he is suggesting. The magic of such rapid presentation is given to those only who have seriously studied architectural detail. And Hirons can still draw an acanthus leaf as well as he could when he was in Hale’s office.

Victor Hugo, exiled at Guernsey, wrote his “Wil-
William Shakespeare," that masterpiece of the literature of power, without access to books or documents. He undoubtedly brought to his work a most fertile imagination,—but this was supplemented by an amazing memory. And if the erudition of the work is marred by errors, these errors do little beyond emphasizing for us the rare qualities of a marvelous memory. Apt allusions to the whole period of literary history are apparently always at his hand for his purpose. What Hugo accomplished in the way of literary expression through the exercise of a trained memory, the master draftsman achieves in the graphic arts through the instrumentality of a specially trained memory. His sense of decorative form is his primary gift, but it is supplemented by his constant and critical evaluation of the picturable world. A thing once seen is somehow grasped and held in its essential outlines and values. How much of this power can be gained by the student, through conscious application, is a perplexing question casting its pale light of doubt over the ambitions of most. But such considerations lead us into the abyss of philosophical speculation.

DESIGN FOR A MENU CARD, BY FREDERIC C. HIRONS
BUYING BOOKS ABROAD

By Marian Comings

EDITOR'S NOTE: The author of this article is Assistant in Charge of The Burnham Library of Architecture of The Art Institute of Chicago and the advice given in this article will be found of especial help to Architects and Draftsmen who are building their libraries.

IT IS A CURIOUS thing that architects who in their spare time glory in running down a genuine ship model or a piece of old Chelsea, will place orders for the good old books that make up their library as if they were the latest in roofing material that could be ordered one day and delivered the next.

The truth is that architectural books, the good old ones I mean, before the day of photography, must be hunted down; but they can sometimes be had remarkably cheap if one knows how to look for them. As an instance, Garnier's great two-volume work on the *Nouvel Opéra de Paris*, with its additional two volumes of text, could be found on various European markets during the summer of 1926 at the following prices:

- Leipzig, Dealer A.—120 marks ($30.00) unbound.
- Leipzig, Dealer B.—54 marks ($13.50) bound.
- Frankfurt, Dealer C.—150 marks ($37.50) unbound.
- Paris, Dealer D.—650 francs at .03 ($19.50) bound.

In such a state of affairs buying books has all the zest of hunting for antiques; and if one is not living from hand to mouth, but building up a collection that will be of constant assistance and a real life-saver on occasion, the reading of catalogues, the checking of prices, and the ordering, much of which can be turned over to a stenographer, becomes a hobby that pays for itself.

Our friends the importers of art books and the second-hand dealers will scarcely suffer if I counsel architects to watch the foreign markets for foreign books. There will always be the need of books in a hurry. Most architects will not take the time or do not think it is a good investment to get books ahead of their needs. Whether they are wise is open to dispute that I will sidestep; here I merely give a librarian's advice to those who want to collect a library deliberately.

As in hunting antiques, one must know the value of the quarry and many factors besides intrinsic merit must be considered: the date of the work, the number of copies originally issued, the completeness and condition of the copy offered, its binding and, if it is a book of engravings, the state of the impressions. Thus the Paris edition of Leterouilly's *Édifices de Rome Moderne* can still be found for about $100, but the price is rising steadily, while the Liège edition of the same work is a reprint, although published in the same decade as the original, and is not worth more than the $50 usually asked for it. A great deal can be gleaned from careful reading of the dealer's description in his published catalogue.

This reading of catalogues should hardly be mentioned yet, however. Books can be ordered without going to such trouble from a reliable dealer in Leipzig or London, to mention the two greatest book markets, and dependence can be placed on them to secure good copies at prices lower than one would pay here. In opening an account it is advisable to send an initial draft as a deposit.

First: Make a list of your wants on the subjects of most immediate concern. Do not include books you must have within two months. Choose a reliable dealer from the best information you can get. Among all the dealers you should know, the following may be called the gold standard by which you can measure service and stock. (You will undoubtedly frequently find prices lower elsewhere.) I will name only four:

- B. T. Batsford—London.
- Otto Harrassowitz—Leipzig.
- Karl Hiersemann—Leipzig.
- Georges Rapilly—Paris.

Order the books you want, being careful about the date if you want a certain edition, noting that only complete copies are wanted, and specifying that all books must be sent by parcel post. Ask to be notified in advance if any item is over, say, $50.

It is unfair to a dealer in old books to ask him for quotations unless he has the books in stock. He secures the book for you at the next auction and it may be dead lumber on his shelves if you do not take it. It is unfair to yourself as well if you send a list of your wants to half a dozen dealers asking for bids. You will have them running up the prices at auctions, where all dealers try to be represented, which is the effect you desire above all things not to produce.

If your dealer knows that he is not bidding against someone else he should give you an estimate of the price of books on your list. This can be only approximate but it is a guide. Relations with your dealer are apt to be very pleasant and personal as the specialized book shops are generally small and you deal directly with the owner, who as likely as not writes out his own letters and bills; a higher degree of organization obtains in Leipzig and London, but in France, Italy, and in general in Germany and Great Britain, you will find practically one-man shops.

Dealers in France and Italy no longer allow us to take advantage of low exchange. Prices have risen
correspondingly or prices are stabilized by use of Swiss francs in quotations.

If you want rock-bottom prices order from a dealer who has no show room and is several flights up, in such a location as Grund, or Colas, or Tiranti, who have small but specialized out-of-the-way shops. If you want excellent service, splendid copies, and continued interest in your wants involving years, perhaps, of searching, go to such a firm as Batsford, Quaritch or Harrassowitz. As an instance of such service: five years ago Batsford’s were asked to supply five plates missing from Nash’s Architecture of the Middle Ages. Without any further requests they kept on searching and this year supplied all five.

Second, having these immediate wants off your mind, and if you wish to know the values of books, as a connoisseur must, make out a list of books in your ideal library of the rosy future. Get this into catalog form so that you can arrange the authors alphabetically. Secure from some of the leading dealers their latest architectural catalogues and have them put you on their mailing list for future issues. A few dealers I can recommend are listed below. As each catalogue is received have it checked immediately with your card list. When a book on your list appears in a catalogue, note on your card the dealer, number of the catalogue, and price. You will soon find not only the price level of your various dealers, but the average price of a certain book. Some day will come the chance to secure at a real bargain the prize that you have sought. But be very careful to understand the dealer’s description which should give an accurate account of its condition, binding, and number of plates. A low price may indicate an incomplete copy. For first aid I append a list of common German and French abbreviations, for which I am indebted to F. K. Walter’s Technical Terms, and when they are in a foreign language their meaning and the English equivalent, for which I have sought. But be very careful to understand the dealer’s description which should give an accurate account of its condition, binding, and number of plates. A low price may indicate an incomplete copy. Some dealers advertise that your personal check on receipt of the invoice is acceptable, but it is usually better to send a draft. The liability that any item quoted in the catalogue may be sold before your order is received makes it obviously unwise to pay in advance.

Do not let an American dealer tell you that he is saving you duty and express charges. He is saving you trouble. There is no duty on books except 15% on books in English published within the last twenty years. But for shipments of over $100 consular invoices are required, with their attendant evils, entry and clearing house charges, bonding and what not. All this is avoided by having small shipments, for which large sets may be broken up if necessary, sent by parcel post and at intervals, so as not to pile up in your local post office until the $100 limit is reached.

I would like to add that hunting architectural books adds a savour to a trip to Europe; there is a rare charm in the little shops lined with Italian vellum bindings, such as you see at Rappaport’s or at Cassini’s, where you can turn over also portfolios of tempting prints and maps, or the luxurious shops like those of Maggs Brothers, Quaritch, or Jacques Rosenthal, where glorious old manuscripts are on display. Often a real savant is in charge. It was a pleasure last summer to see Dr. Rosenthal go through a fine copy of Boffrand plate by plate before it left his shop. He had himself checked up its vagaries of arrangement with a copy in the National Library. It is a famous amusement to go through book stalls on the quais of the Seine. I found nothing in the hours I spent there, but bought from a street vendor in Rome a fine copy of Scamozzi’s four volume work on Palladio, for about $16.00. I recommend book hunting as a hobby.

**TERMS USED IN BOOK CATALOGUES**

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[412]
BUYING BOOKS ABROAD

partly
out of print

Sewed in paper cover

bound in boards

half

illustrations

large paper (edition)

small size

Morocco

contemporary binding

edges trimmed

gilt top

volume

edge

DEALERS VISITED BY THE WRITER IN 1926

LONDON, ENGLAND:

B. T. Batsford, Ltd., 94 High Holburn St., (Great resources, specialty architecture.)

Maggs Bros., 34 Conduit St. (Specialty rare books.)

Bernard Quaritch, Ltd., 11 Grafton St. (New Bond St.), London W.1

John Tiranti & Co., 13 Maple St., Tottenham Court Rd. London, W.1 (Cheap location. Specialty architecture.)

PARIS, FRANCE:

Au Velin D’Or, 67 Rue de Seine.

Honoré Champion, 5 and 7 Quai Malaquais. (Exportation, specialty.)

René Colas, 8 Rue de l’Odéon.

Ernest Grund, 9 Rue Mazarine. (On 2nd floor. Cheap location.)

Librarie Leplanquais, 37 Quai des Grands Augustins.

L. Ollivier, 6 Rue de Seine. (Has great files of photographs of details and furniture also.)

Librarie Professionelle de l’Architecture et Beaux Arts, 67 Rue des Saints Péres.

Librarie Georges Rapilly, 9 Quai Malaquais, (Specialty art and architecture.)

Auguste Vincent, 4 Rue des Beaux Arts.

BERLIN, GERMANY:

Ernst Wasmuth, Berlin W.8 Markgrafeustr 31.

FRANKFURT:

Joseph Baer, Hochstr. 6 Frankfurt a. M.

LEIPZIG:

Otto Harrassowitz, Querstrasse 14. (Prices include carriage.)


Karl W. Hiersemann, Königstrasse 29. (Immense stock in art. Great resources.)

Tondeur & Sauberlich, Georgiring 3. (Large warehouse. Fine editions.)

MUNICH:

J. Halle, Ottostr.

Karl & Faber.

Jacques Rosenthal, Brienerstrasse.

Hans Stobbe, 12 Promenadenstr. (Largely current books. Some old ones.)

FLORENCE:

Leo S. Olschki, Lungarno, Corsini 2. (Finest rare editions. Large stock.)

Davis & Orioili, Lungarno Accioli.

ROME:

Rappaport C. E., 153 Via del Babuino. (Good selection of arch. books 1926.)

VENICE:

Stefano Cassini, Libreria antiqua. Via XXII Marzio 2424. (Old Italian books.)
BRONZE PANELS ON WOOD; DOORS OF S. ZENO MAGGIORE, VERONA. (11TH CENTURY)

Much the worse for time and wear but preserving some unusual features of pierced stile and rail members. The series of vertical panels on the right of the main stile at the center seemingly bears no intimate relation to the remainder of the panel scheme. The episodes start at the top and read down, the right half dealing with Old Testament history and the left with the New. The archaic modelling is not too serious in places in its treatment of the religious. The repoussé work is almost more characteristic of wrought iron than bronze, and illustrates early architectural usage of the material.
AN ARCHITECT MAY design beautiful bronze doors and the bronze contractor cast them perfectly—yet within five years they may not be a credit to either because of inadequate or improper care on the part of the client. It is an old problem, of course, to try to impress on clients that theirs is a responsibility which neither architect nor contractor can assume after the completion of the building. If bronze is to serve its purpose of beautifying a building it must be cared for continuously in an intelligent manner. No client thinks it an extravagance to place a regular contract for window cleaning, yet the same client will not consider placing a similar agreement for the weekly care of his exterior bronze unless duly impressed of the necessity by the architect. One of the outstanding banks of New York City has a beautiful bronze window with ornamental frame above the main entrance; the glass is religiously cleaned regularly, yet the bronze has not been touched since it was erected. All the conscientious efforts of the architects to achieve a thing of beauty in designing the ornament and the excellence of the workmanship are almost valueless as the bronze continues to become blacker and sootier. Soon it will appear to be cast iron, and may not even seem to have any ornament at all after the next hard coal strike. It is one thing to point to the famous Ghiberti doors on the Florence Baptistery and remark that they have not been cleaned once a week since they were up, but we have not any Ghiberti's who cast almost freestanding bronze ornament which, therefore, cannot be smothered by dirt. It is also well to recall that Florence is practically free from soot. Flat rinceau ornament twenty feet above the pavement is not worth doing in bronze if it is not to be properly cared for.

When the architect is discussing materials with his client at the outset, he should not make the assertion that bronze requires no care such as wrought iron and other metals do. It is only fair to the client that he know bronze should be cleaned regularly. Exterior work should be wiped off about once a week with a cloth moistened with boiled linseed oil, or wax, to clean it as well as to prevent excessive oxidation. Where bronze has long been left uncared for and it is desired to bring it back to a rich brown color, some bronze contractor should be given the job of applying some "sharp water" (dilute acid) and reconditioning the finish. Unintelligent cleaning of bronze usually results in shiny high-lights on the upper parts of the ornament and a sordid range of green and black polish-debris along all edges and in all depressions. A not uncommon modern practice is to have the bronze contractor apply lacquer to all interior work in the hope that it will continue to remain in the same state as when it leaves the foundry's finishing department. It is questionable whether this is good practice, because sooner or later the lacquer will wear off certain areas. What follows is that the bare spots oxidize because of exposure to the air and very soon they begin to appear quite different in color from the areas still lacquered. Almost everyone can recollect seeing bronze doors in lamentable condition, because of the coating wearing off and ugly, irregular splotches disfiguring the finish. The expense to remove all the lacquer in the attempt to give the surface a uniform appearance probably costs more than proper regular care.

One of the greatest problems of the bronze contractor is to be able to make an intelligent estimate from the architect's drawings. If the architect has details at ¼ of an inch scale, with an occasional full-size detail, and a specification which is absolutely definite, the estimator can give an accurate price which will be fair to his company as well as to the client. It will be a square competition between the bidders, and gives fair assurance that there will be no extras, hard feelings, pitched battles, or loss to the foundry. But where details are left at ¼ inch scale, one of two things is likely to happen: either the contractor realizes that he may be compelled to furnish more elaborate work than seems to be indicated and therefore adds a generous percentage for the unknown details existing only in the architect's mind—which is unfair to the client—or he bids on what seems to be shown, only to find that the architect in doing full-size details has elaborated greatly and refuses to grant an extra—which is unfair to the contractor who was no mind-reader.

When the architect is discussing time requirements for the various materials he may have difficulty in approximating the period necessary to allow for the completion of the bronze work. Even the bronze contractor may be unable to determine that exactly because of not knowing how long certain work not under his control will require. Certain kinds of bronze might be furnished in a month, but it would be exceptional cast bronze which could be delivered on the job so soon after signing the contract. Six to eight weeks would be a better minimum to remember, while a complicated problem such as a richly ornamented counter-screen would be more apt to take from three to four months. Following is a list of the operations and steps figuring in the time element, in the order they occur when the bronze contractor
The design and arrangement of the panels are noteworthy. Each horizontal row of panels has a repeating, unified characteristic, except in the four corners. There is an agreeable flatness which suits the surrounding mosaics surprisingly well. The sagging of various panels clearly indicates the method of casting or forging only small units and applying them on a wood door.
It is interesting to note how the characteristics of the earlier methods of making doors of wood or iron have been carried over in the usage of small panels, with rosettes at the intersections of stiles with rails. The ornament is excellent Romanesque, a general trait of Ravello architecture. There is a pleasing contrast between flat, over-all ornament on the stiles and rails, with the simpler but bolder modeling of the panels.
Ghiberti's North Doors; Baptistry, Florence Cathedral

One of the outstanding triumphs in bronze work for all time—remarkable from the minutest detail to the composition as a whole. The ornament on the stiles and rails seldom repeats itself, while the heads and panels are, of course, all different. These doors illustrate what may be accomplished by a sculptor of the capabilities of Ghiberti, and the infinite possibilities in bronze as a medium.
THE ARCHITECT, THE ARTISAN,—AND BRONZE

has been authorized to proceed after bids on a job have been opened:

(1) Details received from the architect's office, working drawings prepared and sent back for checking. (2 weeks under favorable circumstances; more likely 3 or 4.)

(2) Accurate measurements obtained from job or general contractor. (This can be done while the working drawings are being checked.)

(3) Models received from the sculptor or modeler, and patterns begun. (3 or 4 additional weeks at least; total so far about 5 weeks.)

(4) Metal patterns to be made. (2 weeks; total about 7 weeks.)

(5) Mill material ordered when shop drawings were checked, but shipments may be slow and hold up work. (Assume material arrives on time.)

(6) Pouring moulds. (2 weeks; total about 9 weeks.)

(7) Filing, fitting, and chasing. (2 weeks; total about 11 weeks.)

(8) Polishing, buffing or brushing; coloring. (1 week; total about 12 weeks.)

(9) Delivery and erection. (2 weeks; total about 14 weeks.)

The above list is only an approximation of course, for a strike or labor dispute in Timbuctoo may tie a bronze contractor's hands. He may have extraordinarily good luck on the other hand and sail along in better time. The list, however, gives the architect some idea of what conditions the bronze contractor must meet, and he can understand that unless his scale and full-size drawings are forthcoming at once when contracts are let that nothing can be started. Also, shop drawings unless promptly checked will hold up the entire parade. Any help the architect can give to the modeler by criticizing models when they are ready, instead of procrastinating, will expedite the work and get it finished with much better workmanship than if he delays. Too often he puts the contractor days behind schedule and then attempts to "speed things up" by jumping on the poor contractor at the time when the job would have been complete had the architect shown the speed he expects of the foundry.

It is human nature to suspect oneself of having the toughest row to hoe, and the architect usually decides without ever going near a bronze foundry that no contractor has as many worries or as meager financial return as he. But as stated previously, bronze men seem a good-natured sort and allow architects to believe themselves martyrs without raising a peep in protest. However, it is probably infinitely more difficult to run a foundry than a drafting room. There are many more complicated circumstances certainly. Draftsmen are not as numerous in an office as workmen in a foundry, do not have unions, and are brought up on the "charrette" idea. If a draftsman quits there are usually a half dozen to take his place. An order for tracing paper and thumbtacks can be filled within half an hour, but it takes months to get bronze from a mill. A drawing can always be lettered "Continue ornament", or "Details to be furnished to contractor later", or "Contractor to work out this condition on job." But the contractor must cast all of his ornament, must deliver all details when they are called for, and must work out all the hard corners which the architect's draftsmen could not or did not care to delve into.

On the other hand there is something to be said on the part of the architect, who conscientiously does all that can be expected toward expediting details, approving models promptly, and above all is anxious that his client be given the service that he is paying for. Some foundries are wont to give excellent service to the large offices which keep them supplied with work, but consider the small architect as legitimate prey on which to make up for their losses on other jobs. The shop foreman knows when castings should be re-done as well as the architect, yet it happens that his orders sometimes are that "Anything is good enough on this job. Shoot it through." If the foundry is being paid 100 cents on the dollar for first class bronze there is no reason why the architect should not demand 100 per cent. workmanship. Too often the architect never sees the bronze work until it is being erected on the job and then, although the flaws are frightful, he cannot afford to reject it because of an "opening date" when the work must be completed. It might not have happened had he sent a representative to the foundry after the castings were made, at a time when there still was an opportunity for recasting them. Some offices are so slightly acquainted with what good bronze work should be that they accept disreputable work as a matter of course. Ignorance of that sort cannot be condoned with such plentiful old and new work on record which eloquently represents what bronze should achieve. Shoddy work does the bronze trade as much harm as it does to the architectural profession.

The designer of cast bronze has less to cramp him than the worker in almost any other metal material; that is, he can do almost any sort of ornament and not trespass in a field more characteristic of another material. In wrought metal, for example, there are definite traits which, if violated, make the design look faulty and compel the craftsman to execute a tour-de-force. In bronze almost everything is in character except the twisted bar, which is really a possession of a wrought material. If a twisted bar is to be executed in bronze it must be treated as a wrought bar and twisted (when cold), or, if there were to be ornamentation on the bar as well as the twist, the "lost-wax" process might be employed. The sand will take up practically all the surfacing that the model has to offer, be the lines ever so slight. Also, for pierced work bronze will suffer itself to be more emancipated

(Continued on page 438)
PLANNING METHODS FOR LARGE INSTITUTIONS, IV

By George R. Wadsworth

Consulting Engineer: Director—Division Operating and Planning Research, Department of Architecture, State of New York

AN OLD ARAB proverb runs thus:—“He who knows not and knows not that he knows not is ignorant—Teach him! He who knows and knows not that he knows is ignorant—Wake him! He who knows and knows that he knows is wise—Follow him!” In the last analysis, for those who are doing, individual effort is an endeavor either to become the categorical wise man or to seek him out; and one pursuit is often as arduous and seemingly as futile as the other.

“What’s your authority?” is a snappy rejoinder to the man whose opinion you question. It is one of the polite phrases which should be included when round table discussions are chaptered in the Book of Etiquette. The best authority on eggs is the hen. Man made specifications are of no avail for the design of her product. Hers is a realm of facts not of opinions. Even a display of the ostrich egg sample with its implied admonition—“do your best”—caused no deviation in output. She knows her stuff and we know she knows it.

If your authority has an angular mind you are out of luck for the angles are over developed bumps nurtured by sad experience. The engineer whose design develops a weak propeller shaft is sure to specify oversized shafts in the future. The architect who provides a stairwell too small to get in the furniture will inevitably be extravagant in his future stair dimensions. The doctor who attributes the loss of a patient to a five minute delay in getting ice will insist upon an icebox in every room. But how to avoid the authority with the angular mind? That’s the rub.

An apt saying defines an engineer as one who can do with despatch and economy what almost anyone can do with plenty of time and money. And the greatest attributes for the saving of time and money are common sense and gumption. Sift out opinions; get the facts; set them up for comparative analysis against some scale—an average, a peculiarly good example; work out your plan grounded upon facts; season with a dash of opinion, a pinch of idea; flavor with enthusiasm, bake in the analytical dish, serve with energy and there you are.

This by no means implies complete satisfaction with things that are. “Be Bold!” was frescoed on famous walls of a famous hall; “Be Bold!, Be Bold!”...
TENTATIVE DESIGN - 73 BED WARD FOR QUIET PATIENTS
NEW YORK STATE HOSPITALS FOR THE INSANE

Schedule
1. Attendant Toilets
2. Night
3. Utility Closet
4. Clothes Chute
5. Clothes Room
6. Charge Nurse Suite
7. Linen Closet
8. Clothes Chute
9. Waste Chute
10. Private Clothing
11. Issue Clothing
12. Utility Closet
13. Dumbwaiter
14. Towel Closet

TWO STORY
FOUR WARD UNIT
222 PATIENT BEDS
MAXIMUM CAPACITY

FLOOR PLAN OF WARD FOR QUIET AND WORKING PATIENTS
SULLIVAN W. JONES, NEW YORK STATE ARCHITECT
(From 45 to 50% of patients receiving continued treatment in Civil State Hospitals are classified as quiet and idle or as working patients.)
Now there”, said Raffles, pointing to a huge stone crushing shed, its bracing timbers, ladders, winding stairs and ponderous beams and tie rods towering 80 or 90 feet above the road that leads from Annapolis to Pimlico, “is a good example of the architecture of Escape.”

We were on our way home from Washington and the Sixtieth Annual Convention of the American Institute of Architects, where for three strenuous days we sat in serious conclave with the great minds, the leaders in the Fine Arts of the nation. The stimulating papers on architecture and the allied arts had naturally led to a discussion of the writings of Lewis Mumford. Raffles was full of Sticks and Stones and had reached page 102 in The Golden Day, so we naturally listened to his words with respect.

“Yes, yes, go on”, we said.

“Look at its mass,” he continued, “full of bold outlines with ‘accents’ in just the right places; no false and meretricious ornament, good egress, and from each changing point of view, sturdy and vigorous silhouettes. What more can art do? Mr. Medary summed it all up when he so eloquently likened the cooperation of the architect and the craftsman to the cross-fertilization of a full orchestra of trained artists (creative impulse) in the production of a well-balanced work of art.”

The month of May in Washington is comparable to Whitsuntide in Florence, buds bursting in the air, bobolinks trilling in the fields, hedges trimmed and lawns mowed, frugal housewives shaking hooked rugs over spic and span marble stoops, pretty girls with glances shy, in Siennese stockings and high heels clicking on the slate pavements, colorful negroes with rolling eye and

*Foot-note: These bunches of mint are destined for the homes of southern colonels and rooms in the Hotel Washington reserved for members of the Southern California and West Texas Chapters.
H. Magonigle's constructive mind tackled the problem and solved it. The solution is simple and we have his permission in giving it to the world.

In each hotel bedroom you will find a series of coat hangers—the ones shaped like a yoke with a spring bar for folding on the nether garments are the best. Mould the suit on this as carefully as possible and hang it over the rod high up in the bathroom that supports the shower curtain. Turn on the hot water and allow bathroom to become filled with steam; allow suit to become thoroughly impregnated with the hot moist climate of the room, fifteen or twenty minutes will generally be sufficient, (you may make your hot bath coincide with this period if desired), then, without disturbing the suit on its hanger, hang it in a cool dry place for another fifteen or twenty minutes and the wrinkles will all disappear. No better dressed man graced the Sixtieth Annual Convention than H. Magonigle. As one might say, his clothes were the cynosure of all eyes.

The second boon to architects and harassed mankind is known as the "Fellows Pousse-Café Bath". Fellows isn't quite the right name for it, but its inventor is modest and wishes to remain incognito. We respect his verseculdity. Every red-blooded American is supposed to take a cold plunge on arising in the morning. It's a tradition, a rite that must be observed and handed down from father to son. Now how many actually do take the water just as it comes from the tap marked "Cold" without the sly admixture of more or less of the hot? We would like to have others believe that we are Spartans, even though we know our friends are weak and take their baths "tepid". Fellows has revolutionized all this, and now everyone may take an icy plunge in perfect comfort. His system is as follows: draw the tub two-thirds full of cold water just as it comes from the tap, (the colder it is the more intense will be your enjoyment,) then just before stepping in, draw two or three inches of the hottest water the system affords; it will, strange to say, float on top for several minutes before it becomes amalgamated with the cold below. Now step in confidently, crouch down boldly (Fellows ducks completely under and comes up all pink from the cold, yet steamy and warm from the thin veil of hot water that remains at the top—it's an inspiring sight), slosh about a bit and there you are, a cold bath with nothing to dread, nothing to regret. These two suggestions alone were well worth traveling a thousand miles for, not to mention Uncle Jo's cocktails.

The second day of the convention the fame of these cocktails was bruited about with the result that when we returned to Room 710 after an exhaustive session at the Chamber of Commerce, (or maybe it was the Freerer Gallery and the Washington Monument) we found Jo's room, which communicated with ours, full of Los Anglicans and New Yorkers eagerly watching the incubation of a marvelous salmon pink concoction. They had stored away cock-
tails, a, b, and c minus, and we were just in time to
join them in d, e, f, and g plus.

We missed the sprightly evening session at which
the devilment of the Octagon was discussed, but our
esteemed confrère, Senator Witherspoon of Minne-
wack, who was present, assured us that it was a notable
occasion, far and away the most inspiriting he had
ever listened to, and quite human. The official report
of the Convention proceedings may be studied with
profit, if only as an indication of the working of the
professional mind, group practices, and hunting in
packs, whatever those things may mean. As for our
part, we can't help but think we are doing our duty
in cementing good feeling and promoting the *entente cordiale* between Washington, Los Angeles, New
York and Boston at LeParadis, where we were wel-
comed most hospitably.

Taken by and large the Sixtieth Convention was
the most stimulating architectural event it has been our
good fortune to attend in many years. There was an
earnest endeavor among the delegates to devote them-
selves to the purely cultural side of their profession,
to cultivate architecture as an Art, and they tried to
carry out the spirit of the programme as laid down
by the Convention Committee. We were most for-
tunate in meeting many who were imbued with that
spirit. In the old days a convention was a heavy,
ponderous affair, at which golden hours were frittered
away in solemn debate on the deadly practical things
of daily office routine, listening to turgid committee
reports on registration laws, school building standards,
contracts and such. All these things are necessary,
of course, and have their place. They may well be
left to the ministrations of officials and committees
and kept on file for reference. Golden hours are too
valuable to waste. A dozen years or so ago, we were
attending one of our first conventions. It was the
morning of the first day, and we were sitting duti-
fully in a hard chair in the middle of the hemicycle
of the Corcoran Gallery, listening to a very long and
very dry report of the Board of Directors. It was
nearly noon, and the report, (a printed copy of which
was at everybody's hand that we might follow it if
we so chose), was about half way through. Some-
body tapped our shoulder. We looked up sleepily into
the smiling face of Louis LaBeaume, whom we had
not seen for years.

"My God!" said Louis, "don't these people know
the sun is shining?"

We arose and tip-toed silently out of the smoke
wreaths into the bright sunshine where the bees were
humming and the meadow-lark wheeling in the azure.
Louis had a high-powered Mercer, some pleasant
friends, and in ten minutes we were wheeling on the
road to Annapolis. We had lunch near the old
Harwood Mansion, in the Carvel House Inn, as we
remember, admired the old Capitol and the fine quiet
streets, sniffed the salt air and the tar of rope walks,
laughed at the merry quiddities of Louis and his
friends, and thoroughly enjoyed ourselves, the more
so as we had all the time the feeling of playing
hockey. We returned in time for a late dinner, just as the reading of the Report of the Board was finished.

Since then we have, whenever possible, attended conventions largely for the thrill of stealing away in the middle of a dull session, to go some place and do things. This year we stayed through almost the entire session of the first day and barely had time to visit Jo's room before lunch. The addresses were interesting and the time passed rapidly. Just as lunch was finishing Arthur Shurtleff, who is a bit of a rogue at heart, and who was feeling immensely relieved at the conclusion of his address on Landscape Architecture, (like a boy out of school, in fact), gathered up half a dozen of us and under the skillful pilotage of Oscar Green took us all over the city. We saw the Freer Gallery, the Washington Monument, the Lincoln Memorial, the Academy of Arts and Sciences, Harry Shepley's church, Maginnis & Walsh's Trinity College chapel and shrine, the temporary White House, the Scottish Rite Temple, and everything else, almost, in the city. Again we missed the report of the Board of Directors. We learned things on the mark “repeat on four sides”, and the working drawings are all done. No full sizes or heating and plumbing plans to make. We decided, however, that the designer well earned his fee by the subtle beauty of the proportion of, to us, the most satisfying building in the world.

Under the dome of the Scottish Rite Temple, the guardian told us, among other interesting facts, that there were fourteen thousand tons of stone poised in the air, eight tons of bronze in the windows, and that the room was only used once in every two years.

“Six per cent, six per cent.
Look at the dome where the money went!” muttered Raffles softly. And that brings us back to our starting point.
The purely imaginary composition in color shown here is based on an oriental theme and furnishes an excellent example of the brilliant effects that can be obtained with economy of effort by means of pastels. Frederic C. Hirons, whose work is discussed in this issue, uses this medium to great advantage, working on black paper. The present example measured 22½” x 13¾”. The color scheme and composition could well be applied to some types of architectural renderings.
"WESTWARD HO!"

PASTEL DRAWING BY FREDERIC C. HIRONS
PENCIL POINTS SERIES
of
COLOR PLATES

We have reproduced here a pastel drawing by Frederic C. Hiron, an account of whose career as student, draftsman, and architect appears elsewhere in this issue. The subject is purely decorative and furnishes a nice bit of color, handled in the effective manner for which Mr. Hiron is widely known. The original drawing was made on heavy black pastel paper and measured 22½" x 28½".
ENGRAVING BY GIOVANNI BATTISTA PIRANESI

Number V of the Series, "Carceri Invenzioni"

PENCIL POINTS
ETCHING BY FREDERICK LANDSEER GRIGGS
THE QUAY
This etching by Frederick Landseer Griggs bears the etched date 1915-16. In this Mr. Griggs has given his most complete picture of a mediæval town, built on both sides of a narrow river and climbing the sides of a lofty hill surmounted by a fortress. The details of roof and towers, chimneys, balconies and oriel windows are beautifully imagined.
This old Colonial building of the Bank of the Mutual Trust Company of Port Chester was built about 100 years ago. The drawing reproduced is one of a series of lithographs made by Maurice Gauthier to be hung in the new home of the Bank, which has been erected on the same site as the old building. The size of the original print is $23\frac{3}{4}$" x $17\frac{3}{4}$".
In this pencil rendering by James Perry Wilson of the interior of the Bank of Hawaii, it is interesting to note the absence of any protective grille work. On the Island of Hawaii any bank robbers can be easily traced by watching the boats at the water front, a fact which accounts for this unusual freedom in the main banking room.
PALMA - MAJORCA
ELEVATION AND DETAILS OF PALACE
IN THE CALLE DE S. JAIME

Facade of Palace

Scale:

Detail and section of first-floor window

Scale:

Details

Moulded ends of roof timbers from adjoining houses

Example of roof timber - De De

Scale for elevation

Renaissance Architecture and Ornament in Spain
A Plate from the Work by Andrew N. Prentice

Pencil Points
This is an ancient palace of the nobility, built of stone, with its open “porche,” and projecting wooden roof, at present occupied as the headquarters of the “carabineros.” It will be observed that the sills of the principal floor windows have been cut down to the floor level by some modern improver, thus spoiling the general design. The solid blocks between the fluting of the pilasters are not square, but round, except at the entrance doorway, where they take a square form. The projecting roof with carved ends is quite a common feature in Palma, many of them displaying much ingenuity of design. In this example the ends are solid and are formed similar to the sharp stem of a boat, with carved work on either side.
“Seleneo,”
Contributor to The Architectural Association Journal, London, discusses some important points for architectural authors to observe:

“In discussing architectural theories we must be still more guarded against saying anything definite, and even if, to start with, we have clear ideas, we should be careful to confuse them in our own minds, otherwise it is more difficult to screen them from our readers. In composing this superior type of literature it is a good plan to write down what you can’t help meaning first and then to erase all definite information and to surround anything that this superior type of literature it is a good plan to write to start with, we have clear ideas, we should be careful more guarded against saying anything definite, and even if,

Arthur J. Busch,
Writer in The Brooklyn Citizen expresses some dissatisfaction with the ecclesiastical architecture of the “City of Churches”:

“If you’re interested in a mathematical problem unless you get as interested in a mathematical problem he does not like it, the high school graduate would do well to choose another profession.”

Frederick D’Amato,
Eminent French Architect and Professor of Architectural Design at Princeton University, in an interview with the press:

“Make your skyscrapers more human. They are built for men. They should personify the endeavors which take place within.

“Church architecture in America has been awful. God grant it may soon regain the lost characteristic and again be aweful.

Dr. Walter John Sherman,
Clergyman, “way out in San Francisco, broadcasts similar opinions as to the general shortcomings of American Houses of Worship:

“Church architecture in America has been awful. God grant it may soon regain the lost characteristic and again be aweful.

“Ruskin’s thesis in his ‘Seven Lamps of Architecture’ is simply that the building of a people is the best expression of their real selves. They are seen in the things they create. A nation’s architecture is that nation’s autobiography.”

Edward P. Simon,
Architect, of Philadelphia, and designer of the famous stadium which housed the Dempsey-Tunney fight, joins the chorus of critics of church architecture in America:

“Up to this point in our history, Americans have merely copied traditional models from the old world. The result is that church building designing has lagged far behind other forms. Today they come nowhere near expressing our life and our times.

“One might infer from the expressionless structures in New York, that all of their tenants are alike in their occupations, habits and temperaments. A building ought to exhibit the spirit of its occupants, and show sometimes that they are not engaged all at the same task. Behind the walls, men live, move and work; why not then, show a certain variety corresponding to the multitude of trades and efforts; why not show that men are thinking and acting within?”

Elbert Peets,
Architect, of Cleveland, writing in The Nation in praise of the mausoleum dome:

“These skyscrapers we see springing up around us are sometimes lovely and in groups they often have a rugged alpine picturesqueness. But they know as little of Michelangelo as a vaudeville theatre knows of Sophocles. His titanic logic is forgotten, the materials and forms he struggled with have become ridiculous toys. Well, our task is to form ideals for steel and to realize them. Perhaps it is in self-defense that we prefer not to think of other labors. But whoever wishes to know the heights of the human mind must try to know Michelangelo’s vision, a huge dome-centered building, as simple and as clearly formed by law as a sunflower or snow-flake.”

Adolphe Loos,
Eminent Viennese architect, whose execution of the Charleston won the applause of Josephine Baker, justifies his interest in the dance:

“The Black Bottom and the Charleston typify the new rhythm of modern life. An architect of today to be successful must be able to translate that rhythm into something of beauty in brick and stone.”

C. E. Silling,
Architect, of Charleston, W. Va., puts in a good word for mathematics:

“Unless you get as interested in a mathematical problem the hard hands of utilitarianism, where must we turn for architecture? And yet, some day, when you have an afternoon on your hands, walk through any section of our borough, with an eye for the churches you may pass. You will be amazed, if you haven’t noticed before, what frightful structures are many of these gifts of man to God!”

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Architect, of Philadelphia, and designer of the famous stadium, which housed the Dempsey-Tunney fight, joins the chorus of critics of church architecture in America:

“Up to this point in our history, Americans have merely copied traditional models from the old world. The result is that church building designing has lagged far behind other forms. Today they come nowhere near expressing our life and our times.

“The person who looks at our cities today will see in their exterior aspects the triumph of commercialism over religion, because our commercial structures dominate. Our commerce has pressed forward and has demanded of our architects that they provide for its necessities. Religion has made no such demands.”
PLAN AND SECTION OF WINNING DESIGN, BY HOMER F. PFEIFFER
COMPETITION FOR THE PRIZE OF ROME IN ARCHITECTURE, 1927

PRIZE OF ROME
COMPETITION MCMXXVII
ELEVATION OF WINNING DESIGN BY HOMER F. PFEIFFER

COMPETITION FOR THE PRIZE OF ROME IN ARCHITECTURE

The Prize of Rome in Architecture for 1927 has been awarded to Homer F. Pfeiffer. The program called for the design of a museum building in a small city, to house a collection of noteworthy classical sculpture consisting of one large important group, several minor groups, statues, busts, gardens and other pieces.

A preliminary fourteen hour competition was held in which there were thirty-two competitors from various institutions. Of these all but nine were eliminated for the final competition. The finalists were A. Fordyce (University of Illinois and Yale), A. F. Heino (Armour Institute and University of Illinois), A. E. Koelle (Washington University), A. Lord (Yale), J. E. Miller (Catholic University), H. D. Palmer (Yale), H. F. Pfeiffer (University of Illinois and Yale), D. Urrfier (University of Pennsylvania), and V. Vischer (Arts Institute and University of Illinois), and D. Urffer (University of Illinois and Yale), A. F. Heinö (Armour Institute and University of Illinois), A. Lord (Yale), J. E. Miller (Catholic University), H. D. Palmer (Yale), H. F. Pfeiffer (University of Illinois and Yale), D. Urrfier (University of Pennsylvania), and V. Vischer (Arts Institute and University of Illinois).

The members of the Jury who served for the final judgment were William Mitchell Kendall, Charles A. Platt, and William A. Delano. The two other members, John Russell Pope and Louis Ayres, were unable to be present. Fellows in architecture receive residence and studio at The American Academy in Rome without charge, and a yearly allowance of $50. for expenses incidental to their work, in addition to the yearly stipend of $1,250, over a period of three years.

Homer F. Pfeiffer won the Fellowship and John E. Miller won honorable mention. Mr. Pfeiffer's drawings are reproduced herewith and the following is taken from his explanation of the design:

"In the initial summing up and analysis of the program for the Rome Prize in Architecture for 1927, one major conclusion was decided upon; namely, that the problem of a small building for the exhibition of sculpture was one that called, not for a grandiose outlay of galleries, circulating corridors, lobbies and accessory rooms, but simply for a main gallery flanked by two adjoining smaller galleries with the necessary adjuncts in the way of vestibule, office, checkroom, and toilets.

"The fourteen hour sketch was given most careful consideration, inasmuch as the success of the entire project hung on the result of this preliminary study."

"The scheme finally chosen by the author survived because of its simplicity of elements, compactness of units, superiority of circulation, and adaptability to the lot. The elevations are equally pleasing from any side."

"The development of the plan differed but little in its final working out from the original sketch. The elevation, while retaining its essential parts—the breaking forward of the main portion, and flanking niches—was slightly changed (and to the author's mind, greatly improved) by bringing together these points of interest into a more unified, coherent composition.

"The circulation in this plan is most evident. The people are admitted from the vestibule to the main gallery. In one continuous circuit to the right or left, they have opportunity of seeing the entire contents of the three galleries, and of using any of the facilities, such as the check room, office, or toilets. They have easy access to the basement, or to the outdoor exhibition.

"The question of a lobby was given serious consideration. This unit was not called for, and the stand was taken by the author that this feature could be eliminated without impairing the plan in any way. An example of a like solution that is functioning successfully is the Butler Gallery, at Youngstown, Ohio, designed by McKim, Mead and White.

"The problem of lighting resolved itself into two possibilities; namely, clerestory windows or skylights. Careful research into the respective merits of each showed that the consensus of opinion favors the latter. Light from skylights gives the most consistent effect of light and shade, where the question of shadows is of such importance.

"The outdoor exhibition space was best handled by wrapping it around the building, on all sides except the front, which was kept open to the avenue. The layout is so arranged that it may easily be enclosed, with entrances flanking the building, and at the rear, thereby excluding visitors except during hours when proper supervision is maintained. Because of the surrounding gardens, the side and rear elevations take on great importance. The location of the building allows ideal garden treatment, with ample space in front."

"The author kept in mind the fact that this building might conceivably be built. He therefore strove for the utmost simplicity in plan, section and elevation, keeping its size and scale applicable to the needs of a small city."

"In general character, in expression style, the utmost restraint was practised. All 'trick' forms were carefully avoided. The so-called 'modern' and theatrical expressions were rigidly shunned. The author hoped to achieve a structure sound and conservative in style, unimpeachable in taste, in good proportion; a building dignified, restrained and beautiful."

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Mr. Roche was born in Ohio and brought to Chicago as a boy. He was educated in the public schools there and when a young man entered the offices of the then famous architect, W. L. B. Jenney. It was there chiefly that he learned his profession. During his period of employment in this office he met his later lifelong partner, William Holabird, who died in 1923, at the age of 69. Mr. Roche was a member of the American Institute of Architects. In 1917 he was appointed by Governor Lowden a member of the board of art advisers of Illinois. He was a bachelor and was a member of the leading clubs of Chicago.

THE ARCHITECT, THE ARTISAN,—AND BRONZE

(Continued from page 419)

than any other cast building metal. When cast iron gets down to \( \frac{3}{4} \) of an inch across a member it has just about reached the minimum, while bronze can be whittled down a fraction more.

Such firms as McKim, Mead & White, and York & Sawyer, usually have the modeler paint the plaster model a bronze color before final approval. Detail which on white plaster may appear to be correct in relief may be entirely too flat when cast in bronze. Also, since a certain amount of crispness is lost through casting, the models are often made a trifle sharper in detail than the finished bronze is desired.

Architects having draftsmen doing full-size details for bronze work probably save themselves time by carefully going over the drawings before they are sent to the modeler. Unless a man has done bronze detailing his initial attempts are almost sure to be of terra cotta or stone character, and not nearly fine enough in scale. Examples of excellent old and new work are reproduced with this article, in the hope that they may be of use as reference subjects, as well as to illustrate the possibilities of bronze.

BOOK NOTES

The Work of Dwight James Baum, with a Foreword by Harvey Wiley Corbett and an introduction and commentary by Matlack Price. 191 Plate pages, 12" x 16". Price $20. Published by William Helburn, Inc.

This, the most recent book of which we know devoted to the professional work of a single architect, is a splendid piece of bookmaking and a notable work of reference. Mr. Baum’s skill and versatility as applied to American residence design has long been recognized by the public and by his fellow architects. When the results of his steady productivity are gathered together under one cover and presented in the form of photographs and drawings of both exteriors and interiors the result is an impressive tribute to his ability. More than that, it is a valuable reference work to architects and draftsmen who are interested in good precedent for American country residence design.

The plates are divided into six sections devoted, respectively, to Colonial Types, Formal Georgian Types, Italian Types, English Types, Dutch Colonial Types, and miscellaneous pictures and sketches of details. In the words of Matlack Price, “Mr. Baum has always tried, with admirable success, to impart to the various types of houses he has designed a definitely American feeling, and at the same time to achieve an interesting and sufficient expression of stylistic origin.” One who turns these pages cannot fail to be impressed with the truth of this statement for each house, though true to the spirit of its style, fits
PENCIL POINTS

into its New World environment as naturally as though it grew there.

The photographs and drawings are both decorative and informative and are, incidentally, so placed on the pages that it is unnecessary to turn the book out of its normal position at any time. A small point perhaps, but evidence that whoever edited the work used every care that it should be as useful as possible.

A SKETCH BOOK OF NEW YORK, by Frederic V. Carpenter. 63 Pages, 5½” x 8½”. Price $1. Published by the Bridgman Publishers of Pelham, N. Y.

Here is a book which, although it was published to furnish a souvenir gift book or remembrance for visitors to New York, has a great deal of interest for the architectural sketcher. Its pages are copiously illustrated with reproductions of pencil sketches by the author which are likely to furnish useful suggestions as to technique, arrangement, and so on, for students and draftsmen. Incidentally, it gives a very good idea of a number of the outstanding pieces of architecture which ornament this great American city.

A SKETCH BOOK OF NEW YORK, by Frederic V. Carpenter. 63 Pages, 5½” x 8½”. Price $1. Published by the Bridgman Publishers of Pelham, N. Y.

THE DRAWING AND CONSTRUCTION OF ANIMALS, by W. Evans Linton. 244 Pages, 5½” x 8½”. Illustrated in line and half tone. Price $3.50. Published by Charles Scribner’s Sons, New York.

Though this book is not written for the architectural student or draftsman it should be extremely valuable to anyone who wishes to obtain a working acquaintance with the anatomy of the more familiar domestic animals. The author takes up in order the horse, the cow, the sheep, the dog, and the cat, explaining in each case how the animal is put together and how it should be drawn at rest and in action. There are many admirably drawn illustrations showing the subjects in a variety of poses.

COLOR SKETCHES, by Charles L. Morgan with Introduction by Rexford Newcomb. A Portfolio of 30 sketches, 8½” x 11”. Price $7.50. Published by The Western Architect, Chicago.

Students of sketching are continually on the lookout for examples of this art which will give them suggestions for technique, composition, color arrangement, and so on, and this collection should be a helpful addition to the working library of anyone who is interested in the subject. Twenty-one of the sketches are in color, while the remaining nine are half tone reproductions of what appear to be pencil and crayon sketches. The subjects are varied and are distributed geographically through England, France and Spain. Mr. Morgan draws with a freedom which has been compared to that of Frank Brangwyn.


Architects and Draftsmen who are looking for books covering their field may be interested in the A. L. A. Catalog for 1926 which has just been issued. This gives, among a list of general books, a classified list covering Applied Science and Fine Arts. Under these listings are given the titles of the various books, the authors, the year published, a brief summary of the matter treated, the name of the publisher, and the price. It is a very complete and handy reference book. It also gives the correct classification number according to the generally accepted decimal system for library use.

HOMER J. PFEIFFER

HOMER J. PFEIFFER, the winner of the Prize of Rome in Architecture for 1927, was born at Diamond Springs, Kansas, in 1898. He graduated from the High School in Kansas City and entered the University of Illinois. During his architectural training at this school he worked under Professor Rexford Newcomb, to whom he feels beholden for help and encouragement in his work. In the summer vacation periods Mr. Pfeiffer worked in the architectural offices of Robert Gornall of Kansas City.

After his graduation from the University of Illinois he became a student in the Department of Architecture at Yale University. Here he studied under Dean E. V. Meeks and Professor Otto Faelton to whom he is indebted for advice and criticism.

Mr. Pfeiffer graduated from Yale in 1926 and entered the employ of Walker & Gillette, Architects, of New York. He is planning to remain with this organization until he sails in September to take up his studies at the American Academy in Rome. Mr. Pfeiffer also wishes to express his appreciation to both Mr. Walker and Mr. Gillette. When he has completed his training in Rome he will practice architecture in New York.

BIRCH BURDETTE LONG MEMORIAL FUND

The Committee on the Birch Burdette Long Memorial Fund has announced that the amount necessary to establish a fund for a yearly award to be made at the time of the annual exhibition of the Architectural League of New York seems certain to be forthcoming. The award will be given for architectural illustrations of distinguished merit.

Anyone who wishes to contribute to the fund may do so now before the Committee in Charge ceases to function. Checks should be sent to Ely J. Kahn, Chairman, 215 West 57th St., New York.
PLAN AND ELEVATION OF PRIZE WINNING DESIGN FOR "AN ARCHITECT'S OFFICE", BY EDWARD D. STONE

ROTCH SCHOLARSHIP COMPETITION, 1927
PENCIL POINTS

CHARLES EDWARD O’HARA, JR.

Charles Edward O’Hara, Jr., winner of the Schermerhorn Fellowship at Columbia University, was born in New York. He now lives in Englewood, N. J., with his uncle, Mr. Sydney A. Smith. He attended the Berkshire School, Sheffield, Mass., from 1916 to 1921. From there he went to Princeton University for two years and the last four years he has spent at Columbia University where he received the degree of B.Arch, 1927.

He has been connected with the firm of Boring and Tilton, architects, and this year has been an assistant instructor at Columbia under Professor C. A. Harriman. Last year he won the Henry Adams Prize, for the problem A Gothic Tower, issued by the Beaux-Arts Institute of Design. It is to Mr. Wallace Harrison of the firm Helmle, Corbett and Harrison, that Mr. O’Hara owes a great deal of his training in design.

The subject for the Schermerhorn Fellowship competition this year was A Museum of Peaceful Arts. The fellowship carries a stipend of $1875, providing a year of foreign travel and study beginning this fall.

Those who placed in the competition were George F. Trapp of New York, winner of the 1927 French Gold Medal of the Beaux-Arts Institute of Design, Francis Jencks of Baltimore, Andrew Halasz of New York, and Warren A. Draper of Duluth.

Judges of the competition were Prof. E. V. Meeks, Louis Ayres, Thomas Hastings, D. Everett Waid and Raymond M. Hood.

GARGOYLE, HONORARY FRATERNITY, INSTALLED AT TULANE UNIVERSITY

An affair of exceeding interest among the annals of Tulane University history took place recently. This was the installation of Gargoyle, the national honorary architectural fraternity. Tulane is the third chapter to be installed, Cornell, the Mother Chapter, being founded in 1901, and installing a chapter at the University of Illinois in 1917.

Tulane was chartered as the result of concentrated effort on the part of the members of Adytum, the local honorary architectural society, to join a national fraternity, coupled with the good fortune of having as members, Prof. J. Herdon Thomson and Douglas V. Ferret, Instructor, both of the School of Architecture at Tulane, and members of Gargoyle at Cornell, and who were also highly instrumental in bringing about the installation.


T. G. KRONICK WINS SCHOLARSHIP

T. Gerald Kronick, winner of the 27th Annual Foreign Traveling Scholarship of the Chicago Architectural Sketch Club, was born in Chicago in 1904 and attended the public schools there. In 1922 he entered the University of Minnesota for four years of architectural training and while there was awarded the A. I. A. medal for the best general average of the class.

Upon graduation he entered the office of Hall, Lawrence & Ratcliffe. He wishes to acknowledge his indebtedness to Professor Jones and Professor Arnal of the University of Minnesota, and to Ralph W. Hammett, his critic.

The funds for this scholarship are donated annually by the Chicago Chapter of the American Institute of Architects, the Illinois Society of Architects, and the Chicago Architectural Sketch Club.
Plan for a Spanish Galleon
by
Frank S. Browne.

Design for Building a Ship Model, by Frank S. Browne
BUILDING A SPANISH GALLEON

By Frank S. Browne

The tools needed are a sharp jack knife, a cross-cut saw, a compass saw, a hammer, a nail punch, and a small plane. In addition a two inch chisel will be found useful to shape the hull at the bow and sides.

As it is very hard to get a solid block of wood big enough to cut the complete hull from, I used a lot of boards from a box that a typewriter came in, first taking the box apart. They sell these boxes in the typewriter stores for 25 cents. I cut the boards off to the proper length and with the compass saw cut down the center of each one, as shown on page 442, leaving the two outside pieces higher so as to form bulwarks on the ship’s side.

I then nailed the seven pieces of board together with eight-penny finishing nails, being careful not to put these nails in the front or rear of the ship, where they would interfere with the cutting tool while the hull was being shaped. Before carving the bow I used the hand saw to saw off the ends as near to the line as possible, so as to reduce the work of carving the pointed shape of the bow.

The masts and spars to which the sails are attached are made of square pieces of the proper length, planed down until they are round in section, half an inch in diameter at the bottom, and a quarter of an inch at the top. The spars are smaller in size as shown. If you can carve wood with a knife, you can cut the scrolls on the bow, the port-holes on the side of the ship, and the windows on the house on the stern. If you cannot do this with a knife, paint them in with a brush. The railings are cut from cardboard, and nailed in place. Do not try to bend them into shape; cut out the curved shape where called for.

The uprights in the railings are quarter-inch square strips cut to a half-inch long. A one-inch box nail is driven through railing and each upright fastening them securely to the deck.

The strips around the side of the ship are of pasteboard, nailed on with brads. The pulleys on the spars and ladders are simply black beads from a necklace such as can be bought in the ten-cent stores. The ladder-like shrouds that support the masts are of green cord. To make the steps, use a darning needle or a needle with an eye big enough to thread the cord; push the needle through the upright cord and take a turn, or a half hitch as it is called, around the cord. Pulling it tight will knot it in place so that it will not slip down.

The sails are made of linen, cut to size. A copper wire was sewed along the edge, and the linen was given two coats of dark cream oil paint after the sails were sewed to the spars. The wire was then bent so as to look as though the ship were sailing along before the wind, the end of the wire being tacked to the ship as shown.

The overhanging stern is made of several pieces of wood which were nailed one on the top of the other to produce a sufficient thickness. The stern was then carved with a knife to the proper shape, and when finished nailed in place. The rudder is a piece of wood which was also nailed on to the stern after being cut to shape. The whole hull was then painted with mahogany stain, and the cardboard strips were nailed on and gilded. Gold powder mixed with clear varnish, such as you can get in the ten-cent store, was used for this purpose.

With the scale and figures given, it is not hard to build this ship and it will give you a lot of pleasurable diversion in the long evenings. Furthermore, you will gain a facility with tools and construction that cannot fail to be a great help to you in other pursuits.

ALFRED C. WINGOLD

Alfred C. Wingold, winner of the John Stewardson Memorial Scholarship for 1927, was born in Pittsburgh, Pa. He graduated from the Westinghouse High School in that city in 1921. In 1923 he entered Carnegie Tech and during his course there he worked part time, and in the summer months, in architectural offices for practical experience. He received his certificate from the Department of Architecture of Carnegie Institute of Technology in June of this year, completing a special course in design.

Mr. Wingold is a member of the Cimis Club, Delta Upsilon, and Scarab Architectural Fraternity. He feels that he owes a great deal to the able guidance of Messrs. Lashmit, Grapin and Hornbostel, under whom he studied.

The Stewardson Scholarship is valued at $1,000 and entitles the winner to travel for a year in Europe to study architecture. It has been offered annually, except for three years, since 1897.

ARCHITECTURAL LEAGUE OF NEW YORK

The Architectural League of New York, at a recent meeting, decided to take a step which is of considerable importance to the artistic community of New York.

For over forty years the League’s headquarters on 57th Street have been very inadequate to take care of the extensive educational and collaborative work of the professional men comprising its membership. There has also been a demand for a place where these various men might meet on a more social basis. The League therefore takes great pleasure in announcing that it has arranged to build on the property at Nos. 113-117 East 40th Street, adjoining the Architects’ Building, where exhibition rooms, dining rooms, studios and the like, will be provided, and where the ever increasing work of the League can be developed with similar enthusiasm.
PENCIL RENDERING BY PAUL F. WATKYES, FIRST PRESBYTERIAN CHURCH, MAYWOOD, N. J.

F. W. WENTWORTH, Architect.
To Pencil Pointer Philip S. Metcalf, of Boston, Mass., goes the Very Special Prize for the best letter dealing with our June issue. You may recall that we invited our readers to tell us what article or material published in the June number they considered the most interesting.

Here is Mr. Metcalf’s letter:

IT IS TO LAUGH

And it came to pass on a certain vernal morning that an enterprising journal for draftsmen gave birth to a series of laughs. The child was called The Diminishing Glass, and great was the rejoicing thereof through all the land.

For broadest humor and subtlest wit the pink pearls from the pregnant pen of Hubert Ripley are hard to match. These gems for the stoic and the epicure are highlights in the more or less utilitarian pages of the magazine devoted to such vital themes as “How to Write an Air Tight Specification,” “What a Young Draftsman Should Know,” et cetera.

Through The Diminishing Glass we are introduced to some clever flights of the imagination. If Pythagoras needs a sten named Besie to complete a triangle, Mr. Ripley strokes his beard (if he has it handy) and Besie, with heart of gold and teeth to match, springs presto from his brain to the picture, clad cap-a-pie in genuine E-flat, German silver, nickel-plated armor, ready to display her charms without comment or crit. from the Greek National Board of Review.

Yes, the world is full of sin and sorrow;—windows still occur in impossible places, clients still change their minds, and contractors aren’t all what Diogenes was looking for. We wouldn’t want anything that’s in Pencil Points now to be cut out, but the last thing we should want to see go is The Diminishing Glass;—we get a Big Kick when we read through that!

(Signed) Philip S. Metcalf.

We have a very interesting letter from George Elvin of Pittsburgh, whose choice is The Architect, The Artisan,—and Bronze, and also letters from A. B. Berkson and Gerald Anthony Paul who chose In the Library. It is not possible for us to mention by name the authors of all the interesting letters received but the foregoing deserve special mention.

And we are going to do the same thing again. Which article or material published in this issue of Pencil Points appeals to you most, and why? For the best letter not to exceed two hundred words received in this office before August first we will award another very special prize.
The suggestion contained in this department for June that our readers indicate their preference for various buildings located in various parts of the country has occasioned no avalanche of comment. In fact subscriber Arthur S. Payne of St. Louis is the only man who has registered his choice. In the city of St. Louis he chooses the new Masonic Temple, designed by T. C. Young and A. B. Groves, as the best designed building in St. Louis. Has anyone else a different opinion?

The prize winners this month in our regular competitions are as follows:

Class 1. E. E. Armstrong
Class 2. Colette M. Burns

No awards were made in Class 3 or Class 4.

Now do not forget that ten dollar prizes are offered each month for contributions which will be considered for publication in this department. The classifications are as follows: No. 1—Sketches; No. 2—Verse; No. 3—Cartoons and Caricatures; No. 4—anything else properly dealing with this department but not falling within the other classifications. All contributions should reach this office on or before the fifteenth of the month in order to be considered for the following issue.

Will the subscriber who submitted to us the contribution entitled Busted Pencils kindly let us have his name and address?

E. B. CHURCH LIKES MR. KYSON’S ARTICLE
The Pencil Points Press, Inc.

Gentlemen:

I wish to extend my congratulations to you on the article in the last issue of Pencil Points by Mr. Charles Kyson entitled Publicity and the Architectural Complex. It is not only excellently written but deals with the most vital problem confronting the architectural profession.

The common-sense view taken by this article in regard to appropriate educational publicity and toward the education of architects in matters of production cost is commendable in the extreme and until architects as a group take a like common-sense view of their commonest and most urgent need, they can never hope to place the profession upon the meritorious plane it deserves to occupy nor can they render to the American Public what it has a right to expect of them. I only wish all of the societies and chapters would give heed to this article—give some thought to the PRACTICE of architecture and stop filling the pages of our magazines with only so-called professional and ethical matter. They forget the first great principle of ethics which is that we must have before we can give—that egoism must always precede altruism.

Mr. Kyson is eminently right and I appreciate your giving the article publicity through your columns. I consider it one of the best articles you have ever published.

(Signed) E. B. Church.
ERNEST O. BROSTROM, architect, of Kansas City, Mo., has sent us a photograph of an interesting gateway to his offices. The gateway is reproduced at the left, and here is Mr. Brostrom's explanation of the design:

"The design started out to be a sort of caricature upon certain conceptions of the evolutionary theory, but the subject became so intricately involved that it blew up and devolved into a more commonplace decorative scheme.

"In this scheme there came into being various forms of life, emblematic of that universal instinct which results in the hunt for sustenance. The antediluvian beast, it might be said, is acting like that intangible something which is often called "What is the matter with the building industry? Architecture in particular?" The lion rampant, does it make you think of the constant demand to supply your clients with goods not specified? The architect with bow and arrow, assisted by—well you know who, and what is usually taken out to the hunt—is after the quarry which seems to be intent on scampering into foliage-hidden recesses.

"The Hunt: it really makes me think of the architect's business life which is made up of a series of incidents that might well be classified under that title. He who desires to become a draftsman, hunts an opening; the draftsman hunts employment intermittently; the graduate draftsman, after having hung out his shingle seeks business; after securing which he hounds out the architectural interpretation that will best satisfy the needs of his client; then hunts for the contractors; then, in earnest the chase proceeds, the hunter intent on trapping the little foxes that might otherwise prevent his—the architect’s—eating."
DETAILS OF CONSTRUCTION—BATH HOUSE FOR MR. ARTHUR HAMMERSTEIN, WHITESTONE LANDING, L. I.

Dwight James Baum, Architect
DETAILS OF CONSTRUCTION—BATH HOUSE FOR MR. ARTHUR HAMMERSTEIN, WHITESTONE LANDING, L. I.

Dwight James Baum, Architect
PENCIL POINTS

PENCIL RENDERING BY JOHN J. STANTON

PROPOSED NEW MASSACHUSETTS INSTITUTE OF TECHNOLOGY NATIONAL CENTER,
CHANDLER STEARNS, ARCHITECT

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THE SPECIFICATION DESK
A Department for the Specification Writer

THE USE OF A STANDARD SPECIFICATION
By Ralph E. Hacker

Every architect, at some time, has given considerable thought as to whether it is possible or practical to standardize specifications. Assuredly this is possible but only to a certain extent unless we are not averse to being in a class with those who also standardize their plans. Those who, when commissioned to prepare plans and specifications for a proposed building, be it apartment, residence, store or school, have everything so well standardized that it is only necessary to say to the office boy: "James, Plan No. 279 to the blueprinters for six sets. Mr. So and So's name on the title flap." "Miss Black, please bind six sets of our standard pages. For page numbers refer to Plan No. 279 Specification Filing Card. Don't forget the owner's name and lot location on the front page. The last set did not have this and the house was built on the wrong lot."

The General Conditions of a specification can and should be standard. So few paragraphs are liable to change that it is a waste of time to rewrite these for every building of similar character. There must, of necessity, be a difference between the General Conditions of a public building and one for a private owner. One requires a bond; the other may not. Methods of payment vary on public and private work. The amount of insurance to be carried—and by whom—is ever changing. A page substituted here and there easily takes care of these conditions.

In each subdivision of the main branches of the specification there are a few sub-headings that may well be standardized—such as "Sand", "Cement", "Stone Concrete", "Cinder Concrete"—but with the exception of these and a few others, every sub-heading should be rewritten for the particular building to which the specification will apply.

The usual "Standard" specification takes a particular type of building and paragraphs, sub-heads and sections every part of the construction and variations thereof, from removing water from the excavation by pump, bucket, drinking, or other approved method, to planting three rows of pink hollyhocks to screen the garage entrance.

Following the "Standard" part of the specification is the Appendix which makes the interpretation of the specification a simple manner. We are about to plaster the building and the foreman asks, "Which goes where?" We turn to "Plastering," in the Appendix, and find that the exterior walls of Rooms Nos. 1, 2, 3, 7, 10, etc., shall be plastered as specified under paragraphs (a), (b) and (c), Section A, Sub-heading "Plastering" for the scratch coat. The brown coat for exterior and interior walls of these rooms requires a reference to the same section and sub-heading but different paragraphs. The finish may require a different splitting of the above group unless all happen to have the same finish. Ornamental plastering requires, perhaps, a further separation of the first grouping, and each one requires turning back and forth to secure the desired information.

After repeating this operation through furring, lathing, trim, and other sub-headings that require reference to the standard section, one begins to suspect how cross word puzzles originated.

A great deal of time is saved to the estimators, con-
tractors' foremen, sub-contractors, and all others connected with the building, by the architect's very careful preparation of the specifications. This additional work is more than offset by the time saved when supervising the job, and the architect is obliged to refer to the specifications; also, the work of the office force is greatly facilitated when detailing the building if the specifications are as simple and clear as it is possible to make them.

The type of contract under which a building is to be erected and whether the bidding is to be confined to a selected group of contractors has, in many offices, considerable effect on how definitely the specification is written. If the building is being erected on a cost plus or cost and fixed fee there is little dissemination even though the specifications are loosely written. If the bidding is confined to a selected group of contractors who know the type of work of the office for whom they are bidding they are, in some cases, expected to figure sufficiently high to cover any looseness in the drawings or specifications without quibbling. The real study of the building comes after the contract is awarded and at the time of detailing.

But with a lump sum contract and little restriction as to the bidders it is imperative that the specification be clear, concise and complete. On public work it is mandatory that contracts be awarded to the lowest responsible bidder, and "responsible" from a legal standpoint covers financial standing are concerned.

On private work on the smaller projects the average owner is interested only in receiving and accepting the lowest possible estimate with but little regard to the quality of labor and material that he will receive in the building.

The Unit Schedule is an aid in checking requisitions on certain parts of the work--such as concrete forms, dirt excavation, etc.--it will help to eliminate differences of opinion in regard to modifications.

Three clauses that we incorporate in our specifications are, "Unit Schedule", "Sub-contracts", and "Substitutions". These we consider of especial importance in protecting the owner in the matter of payments and in the quality of labor and material that he will receive in the building.

The Unit Schedule is an aid in checking requisitions for payment and reads:

The Contractor shall, at the signing of the contract, file with the Architect a correct, complete, itemized schedule of the different materials and workmanship covered by the contract, giving quantities and unit prices of labor and materials complete in the building, including in each item its due proportion of expense and profit, all arranged in a satisfactory form. The sub-headings shall be used as a guide.

The complete schedule shall include everything required in the building for the execution of the contract and the total footings shall equal the contract price.

This schedule shall be for the use of the Architect, at his discretion, in checking requisitions for payments but is not binding against his judgment.

In public or private work where competition among the Contractors is, more or less, a matter of price only the successful bidder will usually award his sub-contracts on the same basis.

This may result in having some sub-contractors on the job who have been accustomed to the cheapest kind of speculative work. Such subs have little understanding or regard for drawings or specifications and as to following a detail, they have been doing it some other way for thirty years and why change now?

For this reason the clause "Sub-contracts" is very essential, and is as follows:

Subject to such exceptions as specified, the Owner and Architect will recognize only the Contractor who will be held responsible for the execution of the entire work under his contract.

Where necessary, portions of the work may be sub-let by the Contractor, after approval of the Architect in writing, --which will be given only when the proposed sub-contractor has an established business, suitable facilities, experience in such class of work, so located as to assure proper service and is, in the opinion of the Architect, otherwise desirable and responsible. The Owner reserves the right to reject work executed by parties who have not been approved by the Architect. The names of proposed sub-contractors, if any, shall be submitted for approval immediately after signing of the contract; and after approval, sub-contracts shall be promptly let. Such approval in no way relieves the Contractor and holds good only so long as contract requirements are met; such approval does not permit sub-letting any part of a sub-contract.

Sub-contractors shall be subject to the "General Conditions", and no sub-contracts shall be such as to conflict with any part thereof.

Should work or parties prove objectionable, and should violations of the contract requirements exist and continue after the Contractor has received a reasonable warning, then upon request of the Owner or Architect, such objectionable party shall be removed from the work and excluded from the buildings and shops and the work continued by others who are satisfactory.

The Architect shall, on request, furnish to any sub-contractor, where practicable, evidence of the amounts certified to on his account.

Nothing contained in the Contract Documents shall create any contractual relation between any sub-contractor and the Owner.

Where approval is requested of a sub-contractor who has only recently gone into business for himself, approval is given if the man appears to be of the right character and has had good training previously. We find, almost without exception, that such subs are very painstaking, anxious to turn out a first class job and give good service. Their work receives their personal attention which is so often lacking in the older and larger firms.
Having disposed of the sub-contractors we are flooded with requests to approve numerous materials—other than those specified—all of which are the equal or superior of the product mentioned in the specification.

The "or equal" or "approved substitute" phrase, after signing a lump sum contract, is construed by many contractors as "any material of use or appearance similar to the product specified that costs less." From the standpoint of the salesmen it means any product that he has to sell.

Refusal to approve brings forth valuable protests and sad stories of the great loss from the contractor. Apparently, in preparing his estimate, the contractor in every case knew a better or at least equal product that cost from twenty-five to fifty per cent less than the article specified.

The architect who permits numerous substitutions after the contract is let will soon find that high class contractors cannot and will not compete against others who base their estimate on the knowledge or assumption that they will be allowed to make numerous changes later that will reduce their cost.

An architect should and usually does investigate a product very thoroughly before specifying it. His investigation is not confined to the product of one manufacturer alone but of several. His final judgment is based not only on the quality of the product but on the efficiency and reputation for fair dealing of the organization that stands behind it. No product, though the best of its class, can be considered infallible but if the company behind it can be relied upon to replace defective work or materials at their own expense—or to furnish service promptly when something does go wrong—they have gone a long way towards earning and receiving a place in the specification of the architect.

An architect is duty bound to specify only products that he knows will give satisfactory service and, in his judgment, are the best that may be had for the money expended.

If other products are equal and it is to the benefit of the owner to accept a substitution let this appear at the time of receiving bids.

The owner is entitled to any saving that may result from such substitutions and the owner, in conference with the architect, can, before awarding the contract, determine whether to accept the substitution,—and saving, if any,—or retain the product specified.

This situation is covered by the following clause which we place under "Instructions to Bidders;":

**SUBSTITUTIONS**

*Where a particular system, product, or material is specified by name, it shall be considered as a standard basis for bidding and as most satisfactory for its particular purpose in the building. Any other product or material equal in all respects may be substituted under the following conditions:*

**First:** to insure a uniform basis for bidding the contractor shall base his proposal on the particular system, product, or material specified.

**Second:** the contractor shall attach to his form of proposal, at the time of submitting same, a separate sheet upon which shall be listed the particular system, product, or material that he desires to substitute and directly opposite each such item, the amount that he will add or deduct from his base estimate if such change is approved by the owner and architect previous to the signing of the contract, if no addition or deduction to the base estimate is allowed by the contractor for such substitution it shall be so stated opposite the item involved on the attached sheet. Substitutions estimates so submitted shall include any and all adjustments of that or other work affected thereby.

Such substitutions shall be permitted and adopted only upon authorization of the owner and approval by the architect.

Any proposal submitted that does not conform to the above requirements shall be considered as informal, unfair to other bidders submitting proposals and shall not be considered.

It has been our experience that this clause helps to eliminate friction and results in higher standards of workmanship and materials.

Today the connecting link between the architect and the manufacturer is the salesmen. They conserve and waste our time. They are a source of accurate and inaccurate information, which, carefully sifted is invaluable. Unwittingly they often reflect the companies they represent.

We all know and have confidence in the quiet, alert salesmen who in a few words tells of the product he represents and just how far his company will stand behind it. He tells where and under what conditions it will not prove satisfactory and what may prove pitfalls in its installation. Questions are answered from a thorough knowledge of his product, without having to "take that up with the home office." His catalogue has been carefully prepared with typical specification clauses and any technical data that may be desirable. It is of the proper size for filing, has been kept to a minimum number of pages to conserve space in the architect's files, has the A. I. A. File Number on the cover, is dated and can be quickly filed and easily found. His visits rarely exceed eight minutes.

His competitor arrives soon after and represents a similar product—"the very best on the market, bar none." It can be used anywhere and under any conditions. For fifteen minutes he elaborates on the fact that he accepted a position with this company only after he, personally, had thoroughly investigated every other similar product on the market and found them wanting.

The next hour and a half is spent in reading through three hundred and nineteen testimonial letters each of which have been given a full page spread in his catalogue. Accompanying the letters are numerous photographs of buildings, mostly speculative, where his material has been installed. One glance is sufficient to change all one's views on incendiariaism.

The barrage that accompanies the exhibits has been prepared by a high pressure sales manager and not a word is forgotten. Any feeble attempt to check the torrent of words is useless. Like the floods, it must subside, but only after the office desk has been pounded into submission and the floor carpeted with half smoked cigarettes. He notices that it is almost five o'clock so hastily shows several more copies of letters marked "Confidential to salesman, not to be shown except in special cases," leaves his catalogue and departs.

The catalogue in volume attempts to rival Sweet's, has about as much useful information as his talk, is undated, unmarked and a poor size for filing.

We might give you three guesses as to what happened to the catalogue and which product was specified—one should be enough.
PRIZE WINNING DESIGN BY ROBERT L. WALLDORFF, ARCHITECT
ARCHITECTURAL CLUB OF NEW HAVEN'S COMPETITION FOR A SMALL, CONCRETE-WALL HOUSE
SERVICE DEPARTMENTS

PERSONAL NOTICES

P. J. HEROLD, ARCHITECT & ENGINEER, will continue the practice and business of his brother, the late R. A. Herold, in the name of R. A. Herold Company, Architects and Engineers, with offices in the Forum Bldg., Sacramento, Calif., and the Hearst Bldg., San Francisco, Calif.

FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from our subscribers concerning the problems of the drafting room, broadly considered. Questions of design, construction, or anything else which may arise in the daily work of an architect or a draftsman, are solicited. Where such questions are of broad interest, the answers will be published in the paper. Others will be answered promptly by letter.

PERSONAL NOTICES. Announcements concerning the opening of new offices for the practice of architecture, changes in architectural firms, changes of address and items of personal interest will be printed under this heading free of charge.

PERSONAL NOTICES

Ruth Greene, 21 E. Cedar St., Chicago, Ill., wants a copy of January, 1926.

Kemper Goodwin, 626 S. Catalina St., Los Angeles, Calif., wants copies of January, August, October, 1925; will sell a copy of May, 1926.

Monroe R. Sandel, 10 East Huron Street, Chicago, Ill., wants a copy of February, 1926.

Professor C. F. Drury, Head of Dept. of Architecture, Oklahoma Agricultural and Mechanical College, Stillwater, Okla., wants copies of May, June, July and August, 1924; February and April, 1925; and September, 1926.

Rupert Loeffler, 8707 188th Street, Hollis, L. I., wants copies of July, August, September, and November, 1926.


Roy G. Kirby, 1151 So. Fourth St., Louisville, Ky., has a complete volume for 1926 which he will sell for $3.00, F.O.B. Louisville.

Dean L. Donaldson, Lindley Hall, University of Idaho, Moscow, Idaho, wants a copy of August, 1926.

C. E. McWethy, 1936 Courtland Ave., Norwood, Ohio, wants copies for entire years of 1923 and 1924, in first class condition and unbound.

William M. Hausmann, 201 Sylvania Avenue, Fox Chase, Philadelphia, Pa., has a copy of The Boston Architectural Club Year Book for 1925, Spain, which he wishes to sell.

WHITNEY & BECK, ARCHITECTS, have moved to 165 West Wacker Drive, Chicago, Ill.

M. FILLMORE HARTY, ARCHITECT, has opened an office for the practice of architecture and city planning at the Hawthorne Valley Country Club, Dearborn, Mich., and would like manufacturers' samples and catalogues.

RAFAEL & SIZER, ARCHITECTS, have dissolved partnership and closed their Springfield office. Mr. Sizer will continue the practice of architecture in his present office in Westfield, Mass.

Kemper Goodwin, 626 South Catalina St., Los Angeles, Calif., is an architectural designer and would like to receive manufacturers' samples and catalogues.

J. W. SMITH, ARCHITECT, has formed a partnership with H. H. LAND and D. CURTIS SMITH, ARCHITECTS. The firm will practice under the name of J. W. Smith & Associates, with offices at Suite 512-514 Osachita National Bank Bldg., Monroe, La.

GEORGE EDWIN POPE, JR., and WILLIAM REYNOLDS MANNING have opened an office for the practice of architecture under the firm name of Pope & Manning with offices at 303 Equitable Bldg., Wilmington, Delaware, and would appreciate manufacturers' samples and catalogues.

LARREMORE V. V. SWEENEY, ARCHITECT, is now located at 551 Fifth Avenue, New York.

JAMES G. FRANKLIN, 1521 Main St., Pine Bluff, Arkansas, is an architectural student and would like to receive manufacturers' samples and catalogues.

BRUST & PHILIPP, ARCHITECTS, 405 Broadway, Milwaukee, Wisc., have dissolved their partnership. Mr. Brust will practice at 105 Wells St., Milwaukee, Wisc.

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the degree of bachelor of arts or science. Such candidate shall in addition submit satisfactory evidence of at least five years' practical experience in the office of a reputable architect commencing after the completion of the high school course. The board may accept satisfactory diplomas or certificates from approved institutions covering the course required for examination, or, if the applicant be a disabled veteran of the world war, proof that the applicant, under the auspices of the federal rehabilitation board or bureau, has completed a four-year course in the subject of the examination in an institution in this state. Upon complying with the above requirements the applicant shall satisfactorily pass an examination in such technical and professional courses as are established by the board. The board, in lieu of examinations, may accept satisfactory evidence of any one of the qualifications set forth under either subdivisions one and two of this section.

1. A diploma of graduation or satisfactory certificate from an architectural college or school approved by the regents, together with at least three years' practical experience in the office or offices of a reputable architect or architects; but the three years' experience shall be counted only as beginning at the completion of the course leading to the diploma or certificate; the board may require applicants under this subdivision to furnish satisfactory evidence of knowledge of professional practice.

2. Registration or certificate as an architect in another state or country where the qualifications required for the same are equal to those required in this state.

Any architect who has lawfully practiced architecture for a period of more than ten years without the state shall be required to take only a practical examination, which shall be of the nature to be determined by the board.

Every person applying for examination or certificate under this article shall pay a fee of twenty-five dollars to the regents. Communications should be addressed to the Chief, Professional Examinations Bureau, Department of Education, Albany, N. Y.

FREE EMPLOYMENT SERVICE

(Other Items on Pages 78 and 80 of the Advertising)

Position wanted by junior architectural draftsman in New York City. Two years' technical school training, 3 years' practical office experience in New York City. Box A-41, care of PENCIL POINTS.

JUNIOR DRAFTSMAN, Technical School graduate, 21/2 years' practical experience, knowledge of all departments, desires position. Box A-44, care of PENCIL POINTS.

ARCHITECTURAL DRAFTSMAN desires permanent connection in middle west. University graduate, 5 years' varied office experience in high class work. Age 28, married, present salary $52.50. Box A-9, care of PENCIL POINTS.

WANTED: Office manager in architect's office in New York City. Write giving experiences in detail, also salary expected. Box A-30, care of PENCIL POINTS.

WANTED: Experienced architectural draftsmen with training in hotels, schools, banks. Must be capable of preparing working drawings, scale and full size details. Permanence of position depends on ability. State training, age, qualifications in first letter. Box A-31, care of PENCIL POINTS.

WANTED: Experienced and successful sales manager who can sell asphaltic waterproofing materials in metropolitan district to contractors, architects and engineers, and industrial plants. Box A-35, care of PENCIL POINTS.
MOSAIC FLOOR PANELS IN THE GREENWICH SAVINGS BANK, NEW YORK CITY
York and Sawyer, Architects
UNION METAL COLUMNS AND PENGUIN—New Catalog No. 50-C, A. I. A. File No. 12-M 1927. A valuable book containing many notable examples of metal columns, architectural and construction details, tables of dimensions, specifications, 10 beautiful color plates showing attractive column entrances. Also contains attractive ex-
amplifications of such specifications, foundation plans, also hand stands, comfort stations, etc., planned by architects and landscape engineers. 56 pp. $2⁄₄ x 11. Union Metal Mfg. Co., Canton, Ohio.

A. C. W. TIZENSMITH—Architect's specification and descriptive bulletin covering the use of "A. C. W." Tizensmith Integral Waterproofing Compound. This booklet gives complete and thorough data covering Tizensmith compound for integrally waterproofing mass concrete or cement mortar construction. A. I. A. File No. 7-22. $2.50 x 11.50. Tech Brothers, 443 Fourth Ave, New York, N. Y.

MURAL-TEX—Handsome brochure illustrating and describing Mural-Tex for the rich, mellow beauty of modern textured walls. Illuminates in color showing interesting Mural-Tex wall textures, also Spanish interior in color, Italian interior, Travertine interior. 16 pp. $2⁄₄ x 11. The Murale Co., Inc., Staten Island, N. Y.


Douglas Fir and Southern Pines—Pamphlet giving a comparison of physical and mechanical properties of these two species with tables of working stresses. 15 pp. West Coast Lumber Bureau, 562-G Stuart Blvdg, Seattle, Wash.

Cornell Rolling Doors—A. I. A. File No. 16-D-13 Catalog illustrating rolling and sliding shutters and doors, also show various shutters labeled rolling fire doors and shutters. Complete dimensions, diagrams, specifications, perspectives, 22 pp. $2⁄₄ x 11. Cornell Iron Works, 71 Marion St, Long Island City, N. Y.

Yeomans Form "A" Anti-Hydro Waterproofing Co., 265 Badger Bldg, New York, N. Y.


Gardens Furniture—Catalog "B" illustrates and describes many beautiful examples of garden furniture. Also illustration of an interesting landscape development of a suburban lot. Many illustrations of helpful suggestion for the garden and an interesting article on the arrangement of garden furniture. 62 pp. 7 x 9. Architectural Rendering Co., 1600 S. Riverside Drive, Chicago, Ill.

Deming Pumps for Hand and Power—Catalog No. 27 illustrates and describes fully this type of pump for all uses. Tables of capacities, specifications, sections. 7 x 10. 222 pp. The Deming Co., Salem, Ore.


Douglas Fir and Southern Pines—Pamphlet giving a comparison of physical and mechanical properties of these two species with tables of working stresses. 15 pp. West Coast Lumber Bureau, 562-G Stuart Blvdg, Seattle, Wash.