COLLEGE OF ART & DESIGN



PENCIL POINTS

A JOURNAL FOR THE DRAFTING ROOM

JULY 1928

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EIGHTEEN THOUSAND COPIES OF THIS ISSUE PRINTED

Medinah Athletic Club, Chicago. Walter W. Ahlschlager, Inc., Architects.

Entire exterior to be built of the interesting coarse-textured Buff Indiana Limestone.

Another Monument of Indiana Limestone for Chicago's Skyline

THE choice of a highly-textured variety of Indiana Lime, stone for the new Medinah Athletic Club now under construction just north of the Tribune Tower, is another example of the way in which this beautiful natural stone is beginning to predominate in our metropolitan centers.

Architects and building owners are becoming more and more convinced of the dollars-and-cents advantages that are gained from building of Indiana Limestone.

Besides the Medinah Athletic Club, two other great projects are being added this year to the already imposing array of Indiana Limestone buildings on Chicago's main thoroughfare. These are the new office building just south of the bridge, "No. 333 North Michigan," and the Willoughby Tower, further south at the corner of Madison Street.

Indiana Limestone Company with its ample resources and highly-developed organization is able to give these large undertakings, along with numerous others elsewhere in various parts of the country, the service and speed of delivery as well as the dependable high grade of stone that they require.

This efficient service and assurance of the product's structural merit are in evidence on any contract which this company accepts, small as well as large. They explain to a large degree why it has become not only practicable but also an economic advantage to use Indiana Limestone for all sorts of medium-priced buildings, as well as for the larger projects.





General Offices: Bedford, Indiana

Executive Offices: Tribune Tower, Chicago

ATLANTIC TERRA COTTA

The Dade County Courthouse and Miami City Hall, over 20 stories high, is faced with Atlantic Terra Cotta on all elevations from sidewalk to roof.

A. Ten Eyck Brown, Architect

August Geiger, Associate



ATLANTIC TERRA COTTA COMPANY
19 West 44th Street, New York

ATLANTA TERRA COTTA COMPANY

WHILE it is true that a very considerable number of the Colonial buildings of America were of wood, used in various forms, yet the masonry structure stands forth generally as the most interesting of all; and probably this is largely because of the lack of necessity for painting away the marks of age Moss may collect on deeply shaded walls, and vines may spread and climb undisturbed for generation after generation. The very elements, too, leave their imprints slowly but unmistakably and man finds no great need to erase them.

The character of brick work in such a building is one of its most definite and unmistakable earmarks, one of the things that brand it as belonging to its own "family", and each of the vast number of American Colonial styles shows some peculiarities of its own in this respect. Too often



Court House Williamsburg, Va.

Sir Christopher Wren

today, people think of Colonial brickwork in general rather than of some subtle but thoroughly characteristic type born, bred and reared with the very style itself.

O. W. KETCHAM

Architectural Terra Cotta Face Brick Hollow Tile

Other Burnt Clay Products

Factory-Crum Lynne, Pa.

PHILADELPHIA

New York

Washington



THE following letter is one of many received from contractors describing their experience with Armstrong's Corkboard as insulation for the walls and roofs of houses. This one, from J. A. Culkin & Company, Inc., Rochester, N. Y., particularly stresses the plaster base feature.

"A lot of new and untried materials are being offered to architects and owners at all times for incorporation in building projects. Since the contractor is forced to deal with these in a practical manner, his experience in carrying out the architect's ideas is worthy of the greatest possible consideration.

"Being familiar with the fact that Armstrong's Corkboard has been used as a plaster base in cold storage work for over thirty years, I accepted its application as a good house insulation material with implicit faith. I felt that any material which had proven a good base for Portland cement plaster would prove an even better base for a wood pulp plaster such as is used extensively in this section. I also felt that the natural ability to stretch slightly or be compressed, would serve to prevent all of the movement in the building framing from being transmitted to the plaster surface. This is desirable.

"In the past few years I have had the pleasure of building among others, two of the finest residences in the Rochester section. These are as follows:

Dr. C. Sahler Hornbeck Residence, Sandringham Drive Frederick W. Zoller Residence, Ambassador Drive

"Both of these homes were insulated with Armstrong's Corkboard as specified respectively by Arnold & Stern, and Mr. W. W. Ward. Both of these jobs serve to prove my impression that this was the best type of insulation which could be selected for residence work and one which would ultimately be accepted as a standard in spite of the fact that it is higher in price. I am convinced that it represents the biggest insulation value on the market today."

Special attention has been paid to the architect's requirements in the Armstrong filing catalog: "Armstrong's Corkboard Insulation for Walls and Roofs." If you do not have a copy in your files, send for one. Armstrong Cork & Insulation Company, 201 Twenty-Fourth Street, Pittsburgh, Pa.; 11 Brant Street, Toronto 2, Ont.; 1001 McGill Building, Montreal, Que.

Armstrong's Corkboard Insulation

A Heatproof Lining for Walls and Roof



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The architects, engineers and contractors of America are thoroughly familiar with these notable Barrett records. They know that no other type of built-up roof offers such irrefutable proofs of durability. That's why a majority of our finest modern buildings are covered with the Barrett Specification Roof.

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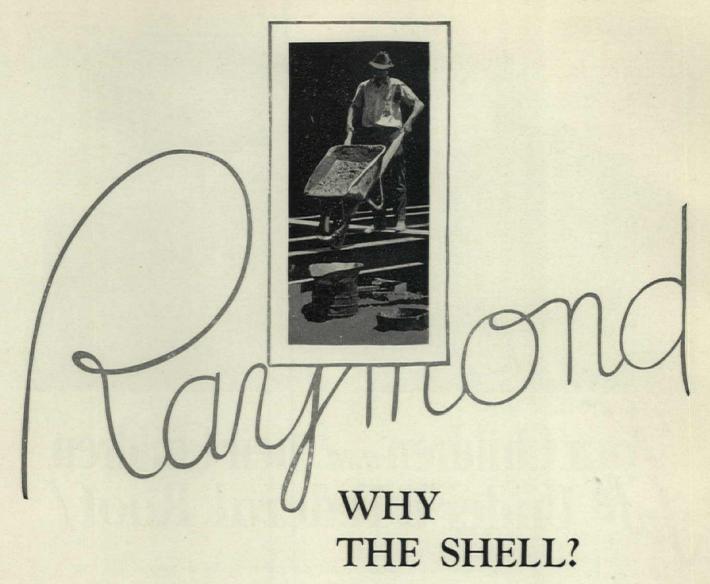
Good workmanship is a big part of any good roof. Good workmanship is a *certainty* when you providefora Barrett Specification Roof.

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IN CANADA:

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sist the "separating" action of ground-heaving caused by driving in fairly soft material over hard stratum. To allow testing before and after driving adjacent piles. To detect water infiltration before concrete is placed and to allow syphoning. To allow pile reinforcement where necessary. Every standard Raymond tapering concrete pile is poured into a spirally reinforced steel shell (of the requisite weight as to metal and wire) and every shell is left in the ground.

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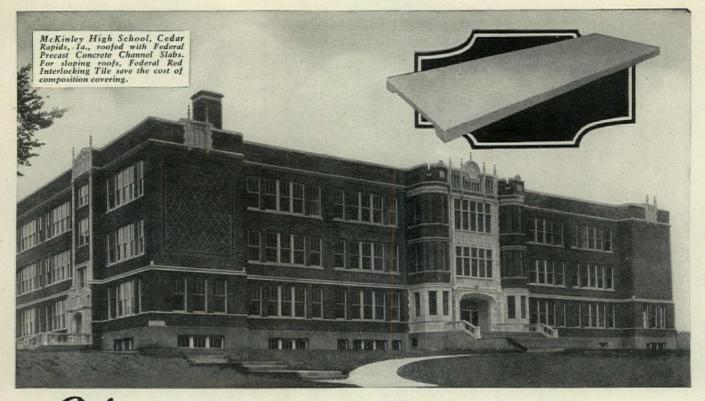
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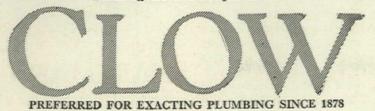
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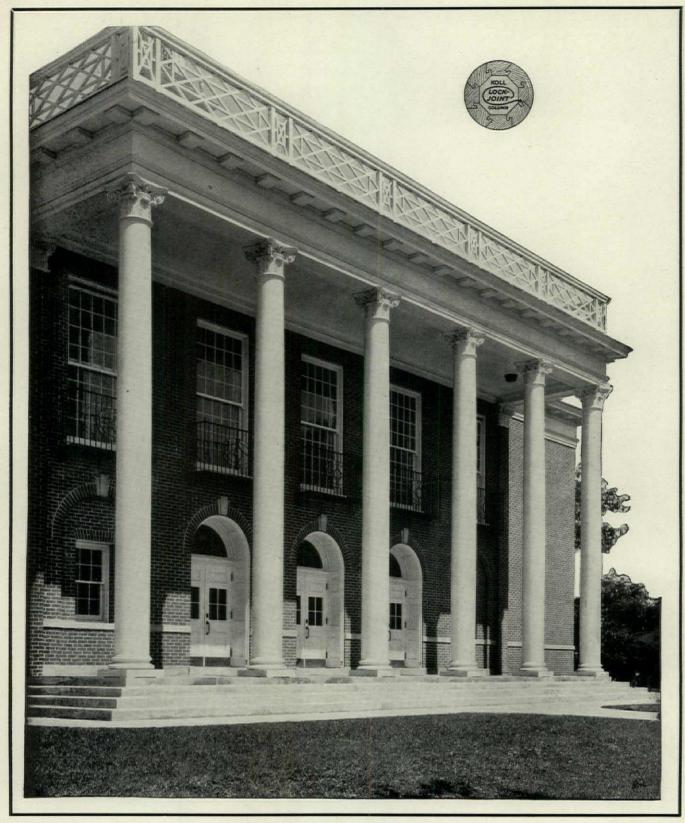
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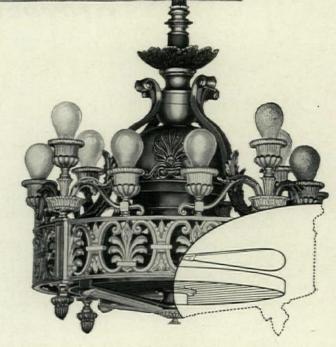
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Radiators can be kept hot for hours with fires banked, and system under vacuum vapor.

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Whale-bone-ite's Supremacy clearly maintained by this new feature



Seat shown is Model 18-568. Phantom view on opposite page gives details of construction.

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The makers of the Whale-bone-ite Seat offer this newest feature on all models of both closed and open-back seats. Whale-bone-ite is the only seat having the hinge you see pictured here. It is one more reason why you should specify this finest of seats for your building.

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This may sound to an outsider like a fairy tale, but for the purpose of again expressing our appreciation for what you have done for us, we invite you to send any person or party who may be in the same or similar condition that we were, for inspection and first hand information.

> Pobest Elong J. G. Halloud W. D. Hall Ed

> > IN the fall of 1927 two Burnham S-36-11 Boilers replaced four hot air furnaces and one steam boiler, as heating lunits at the Chester, New York Public School Building.

> > The letter reproduced above, signed by all four members of the District Board of Education, was written when the worst of the winter was past.

One of the two Burnham Boilers, equipped to burn oil, did all the work. The other, burning coal, was not used all winter.

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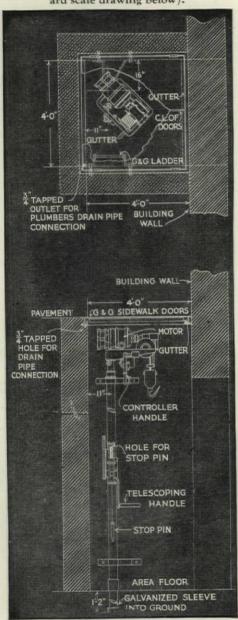
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The Problem - the Specification - the Scale Drawing-

22nd. Arch't Ed pp C3183-91



14th Engr. Ed. pp. 1144-45

GILLIS & GEOGHEGAN 548 WEST BROADWAY, NEW YORK AND THE COMPLETED INSTALLATION

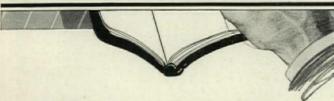
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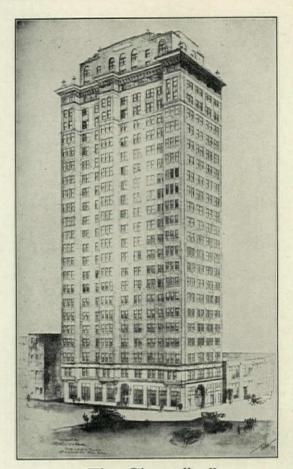
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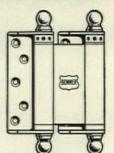
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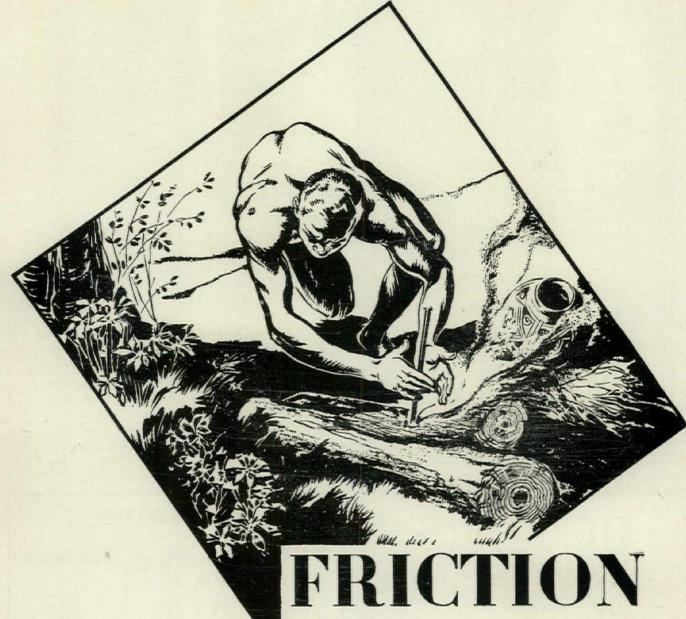
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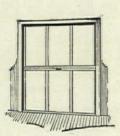
See details

Specify-Bommer-Always

They are the best

Bommer Spring Hinge Co., Brooklyn, N. Y.





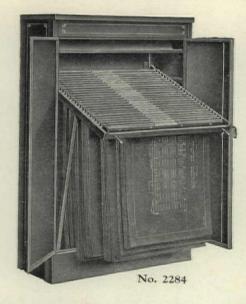
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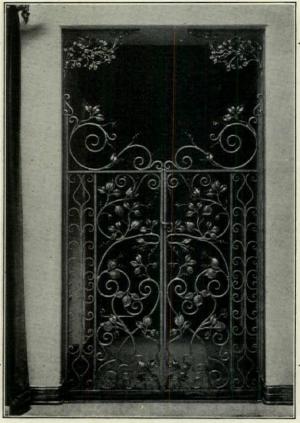
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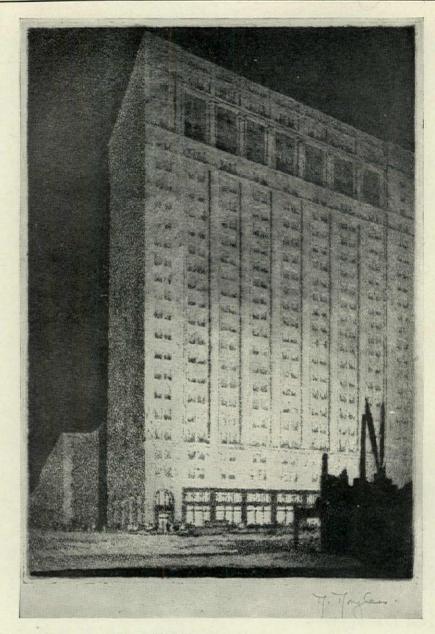
1088 Howard Street SAN FRANCISCO, CAL.



Fibre Back and Plain Metal Lath, its different uses and lists and illustrates numerous representative installations. It also contains a set of specifications for the architect's convenience. Mail the coupon today for your free copy.

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Scammell's FIBRE-BACK AND PLAIN METAL LATH



A Donald Douglass Aquatint Study of the Clark Building, Pittsburgh, Pa.

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**

Architects and Engineers

Architects and Engineers, Hoffman-Henon Co., Philadelphia, Pa.: Heating Contractors, George H. Soffel Co., Pittsburgh, Pa.

A business building buys on a business basis

Fig. 325 Jenkins Standard Iron Body Gate Valve, screwed

In equipping the new Clark Building in Pittsburgh, the builders bought on a business basis. Nothing but equipment of known value was approved.

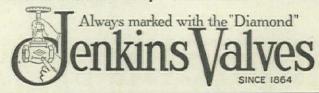
Jenkins Valves were installed throughout the heating system, and in the plumbing as well. They include Iron Body Globe Valves and Bronze and Iron Body Gate Valves.

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Plan emphasis by application of mass color to the floors . . . structural significance obtained by use of pattern floors . . . balance, the necessary coordination in floor patterns, of color and design—form an interesting architectural story told in the preceding three pages of this series. Reprints are yours for the asking. And a sample of Armstrong's Linoleum with the new Accolac finish. Armstrong Cork Company, Linoleum Division, Lancaster, Penna.

While the Ploor above is colored largely in shades of blue, certain subordinate elements in the decorative scheme are treated in orange, the color at the exact opposite side in the spectrum. Each additional color above the floor is keyed by repeating or contrasting the predominant or subordinate colors in the floor. Thus even the most elaborate color scheme can harmonize easily into a pleasing room ensemble. The pattern is Arabesq No. 9300.

The pattern shown on the right is Armstrong's Embossed Inlaid No. 3057.

*This is page No. 4 of a series— "Floors of Color—Their Architectural Value." Reprints of this and the other five pages of the series will be sent you gladly upon request.



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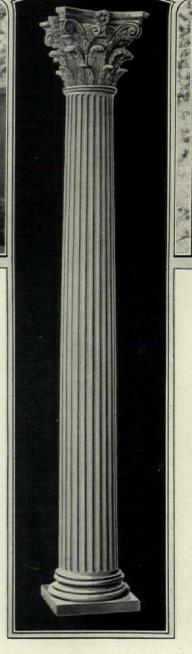
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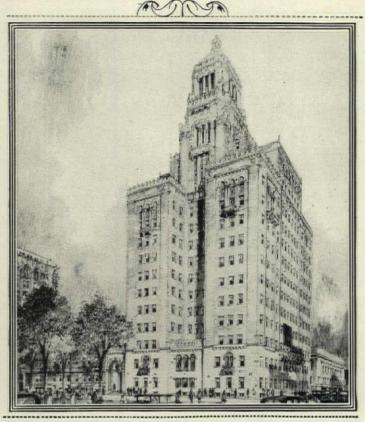
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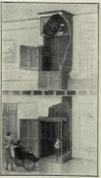
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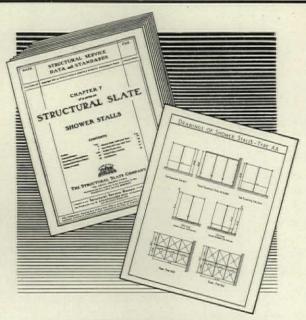
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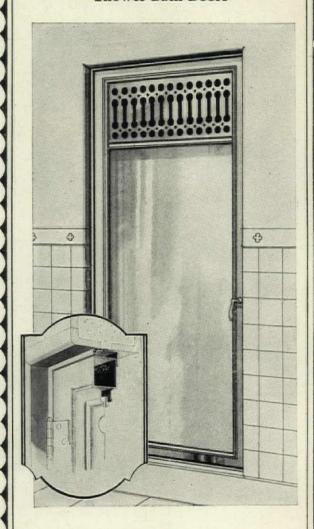


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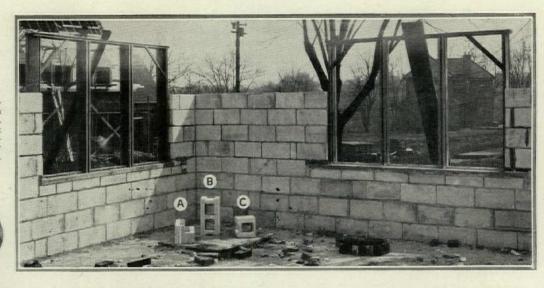
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This picture shows how light weight and smooth surface of tile contribute to ease and speed of placing. Wide side walls contribute to ease of placing mortar and materially reduce mortar loss.



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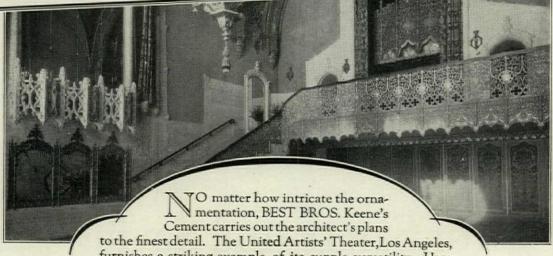


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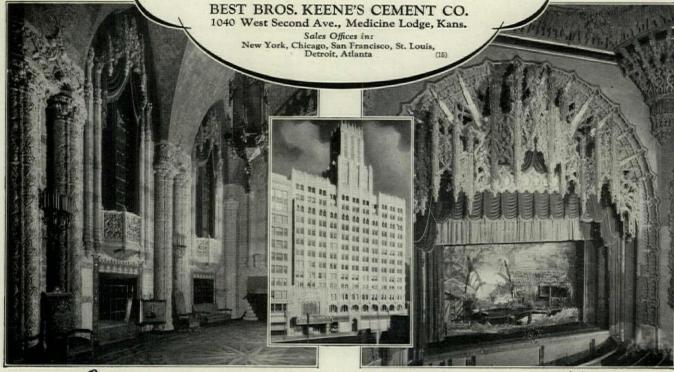
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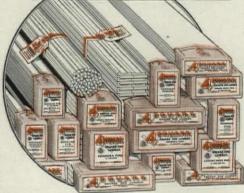


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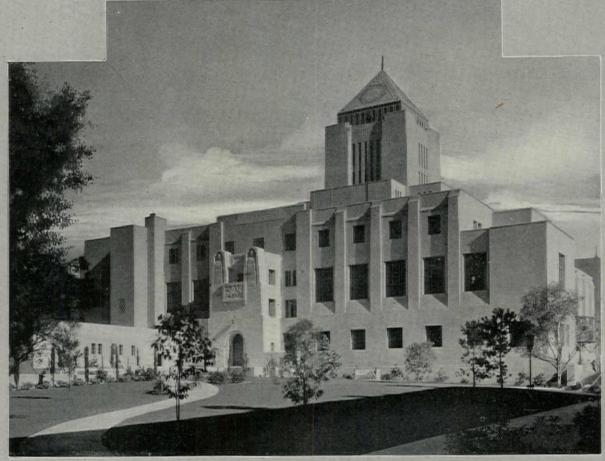
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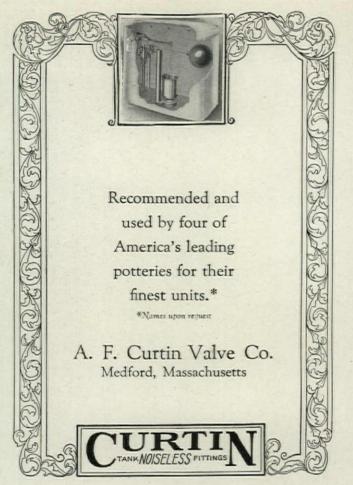
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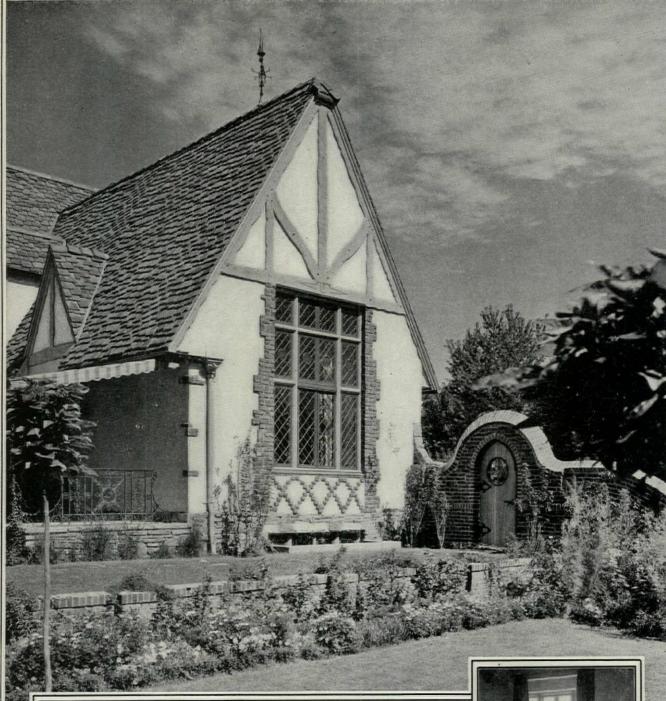
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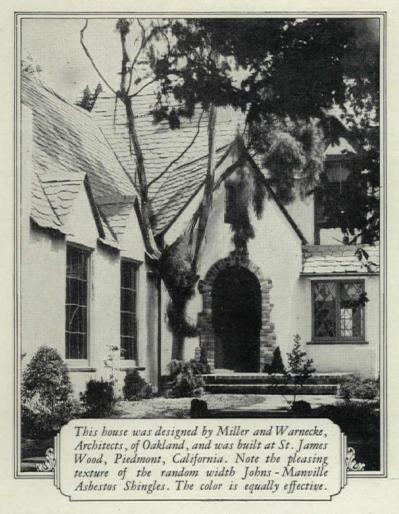
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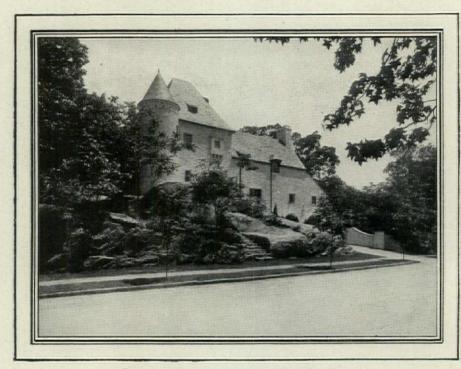
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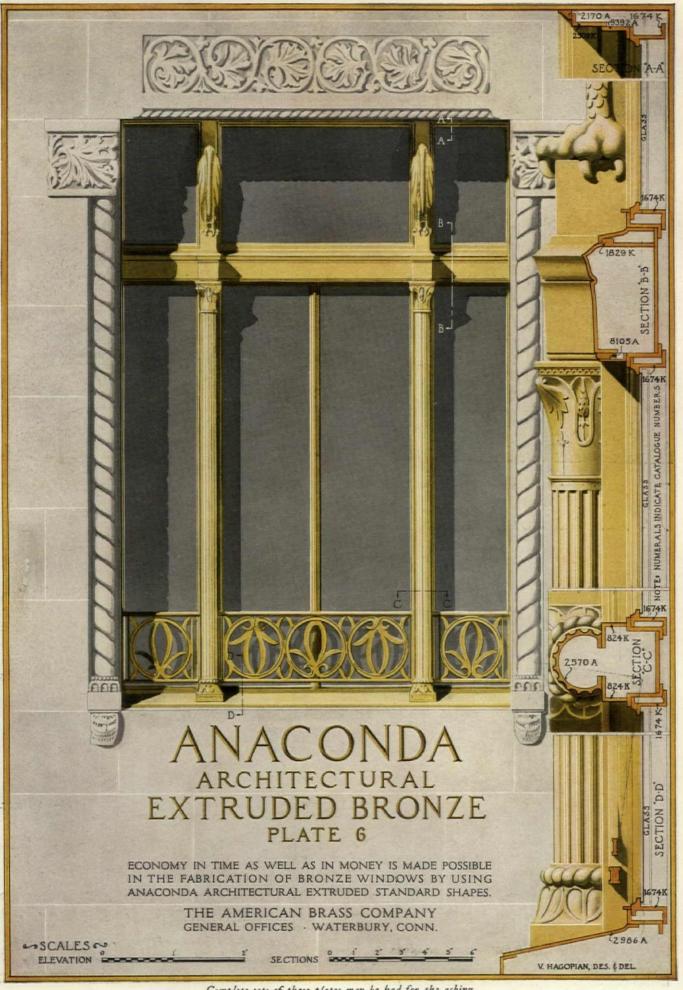
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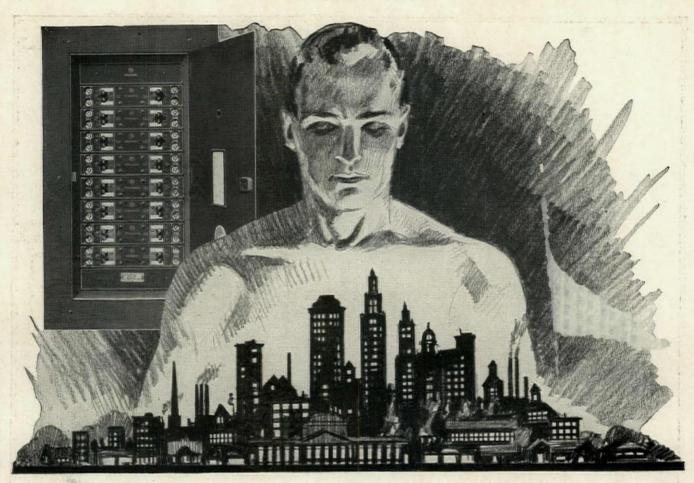
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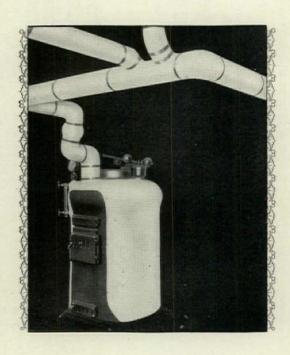
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CVERY Covert Damper is guar- constructed and without doubt an There are no parts to rust-no gear- us when they write "Covert" in ing to get out of order. Scientifically their specifications.

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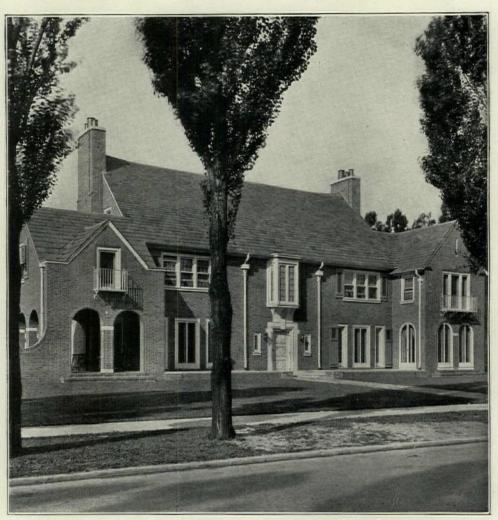
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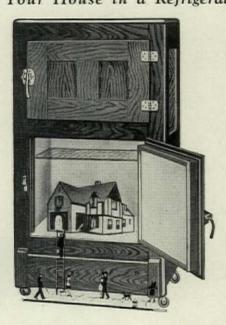
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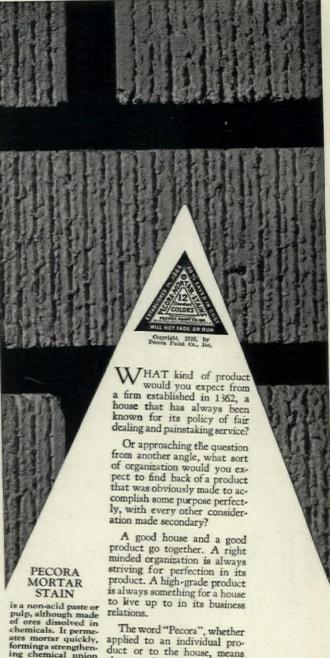
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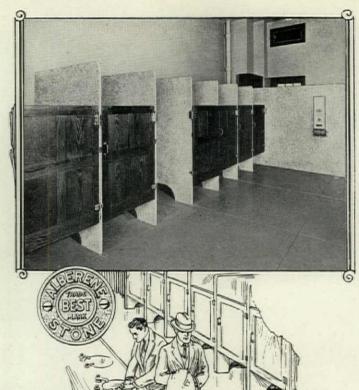
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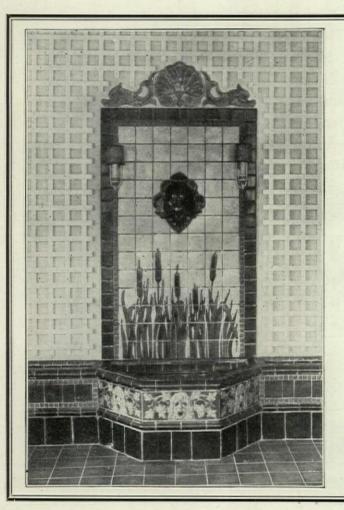
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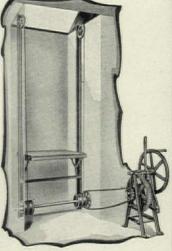
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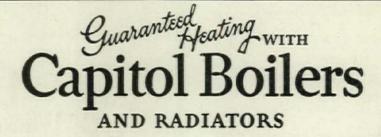
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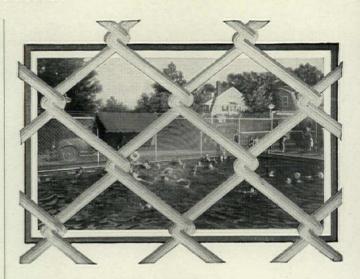
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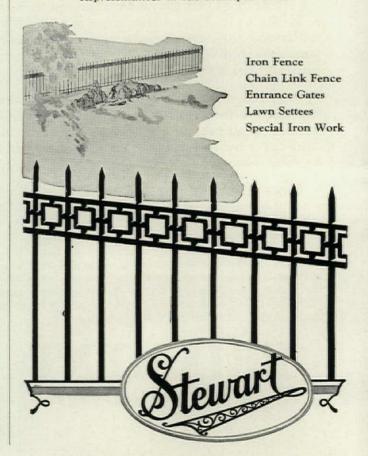


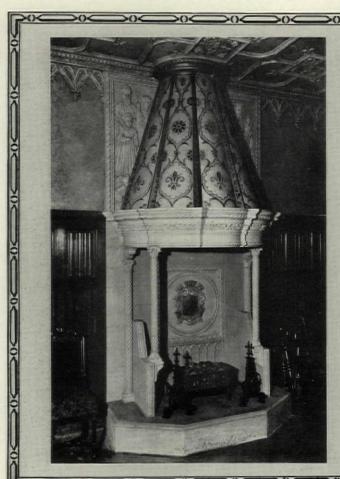
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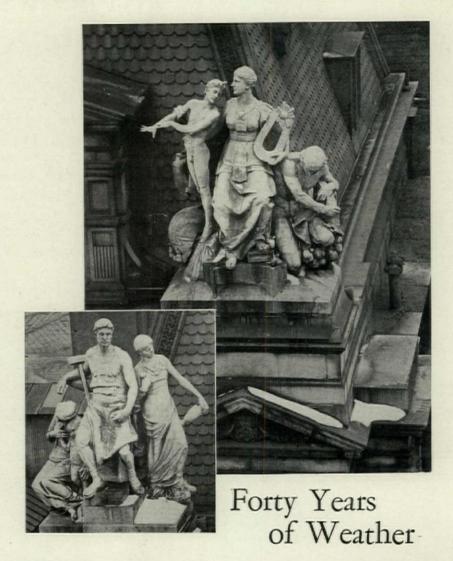
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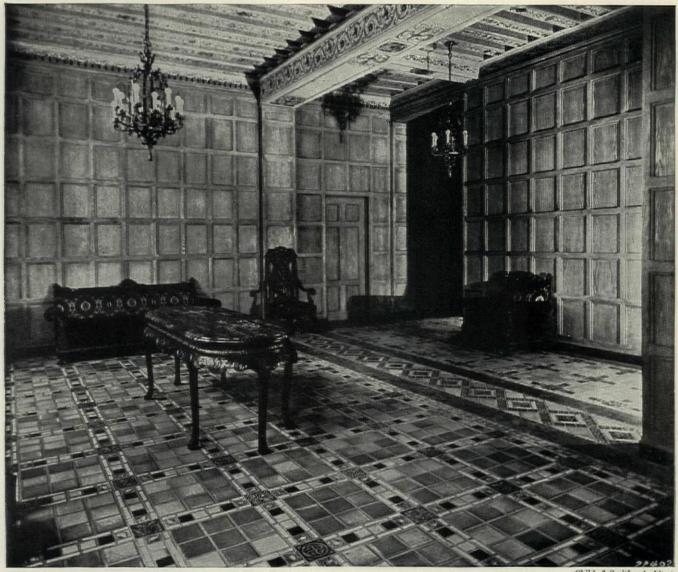
TEW England Weather at that—and through it all these marble groups have kept guard over the entrance to the United States Post Office in Boston. Two things stand out very clearly in these pictures. First, that Vermont Marble is well adapted for sculptural work. Second, that it remains firm under exposure to the elements.

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These Remarkable ALUMINUM FRAME SCREENS

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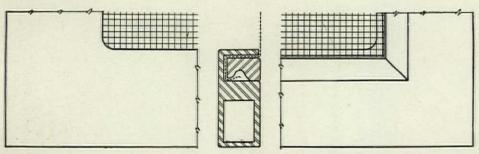
as it is possible to make Screens because Aluminum Will Not Rust or Corrode

Light-weight—easily handled when stored or put back into windows.

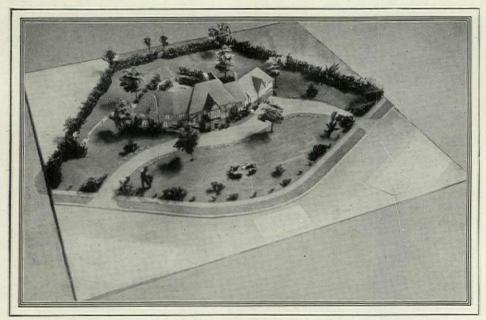
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Any finish desired, - bright or dull aluminum, or any applied color.



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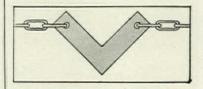
ORANGE SCREEN COMPANY

515 Valley Street

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Orange Aluminum Frame Screens

The alloy used in the manufacture of Orange Aluminum Screens was developed for our use by the Aluminum Company of America, and is exclusive with the Orange Screen Company. It is one of the strongest no-ferrous alloys—lightness, great tensile strength, elasticity, and rigidity—it is unsurpassed for metal screen frame construction.

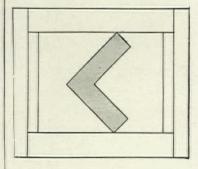


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Used as a link in a coupling, as shown above, it took a pull of several hundred pounds to distort the aluminum corner, and even then the distortion did not occur at the "weld."

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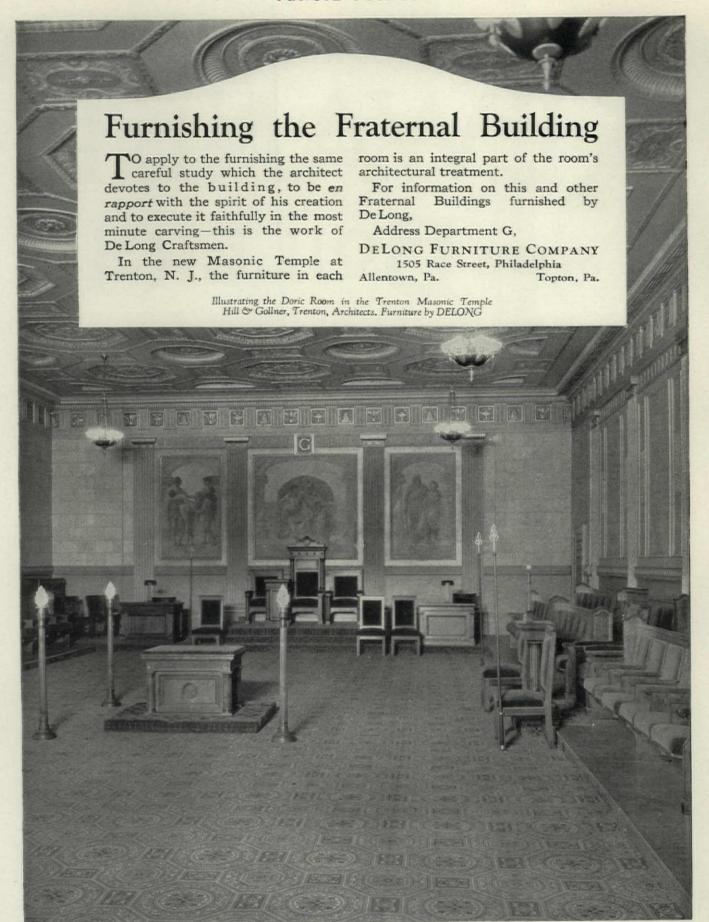
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Orange Aluminum Frame Screens are manufactured and sold on a guarantee by the Orange Screen Company, a company which is backed by financial responsibility and 18 years of manufacturing experience.



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for Lower Heating Costs

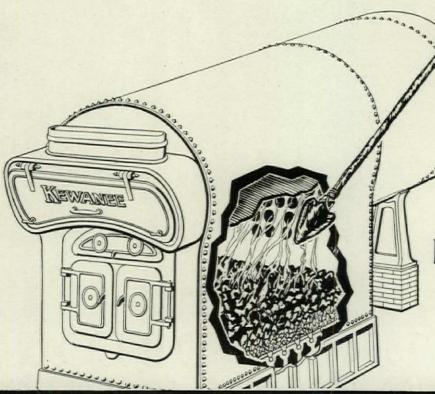
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A high and wide firebox lets the air penetrate the blazing fuel and mingle with the flames so that combustion is perfectly completed. And this is another Kewanee feature of 40 years standing which definitely insures lower heating costs.

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The spaciousness of a Kewanee Steel Riveted Fireboxis never 'skimped'—there is always ample room for a radiant heat giving fire.



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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



SPECIFICATIONS ONCE MORE!

EARLY THIS year we published a book which contained the complete specifications (including mechanical) for a small hospital designed by Messrs. York and Sawyer.

Quite a lot of architects and specification writers bought copies of this book and quite a lot did not. We said at that time that we were quite prepared to publish additional volumes in this series in which the

specifications for other types of buildings produced in good architects' offices would be rendered available to all, provided we received sufficient encouragement to justify us in doing so.

It was our thought that if we published fifteen or twenty complete specifications covering as many kinds of buildings, all prepared by architects having national reputations, a library of specification documents would be available to those desiring to compare their own specification work with that of

It has occurred to us that a moderate size school-house might be presented in the second volume and we already have the permission of a firm of architects, nationally known for the excellence of their school work as well as their other buildings, to publish one

of their specifications if we should desire to do so.

We have been told by many architects that they have more trouble with their specifications than with any other part of their work. To make a set of drawings does not seem to present the same difficulties which are encountered with the specifications. Not only are the specifications usually prepared under very heavy pressure, but so many things have to be

> looked out for in order that the drawings and specifications may be complementary and not conflicting in any important respect that it would seem to us that the plan we have proposed and actually started would be more enthusiastically received by the profession at large than it has been.

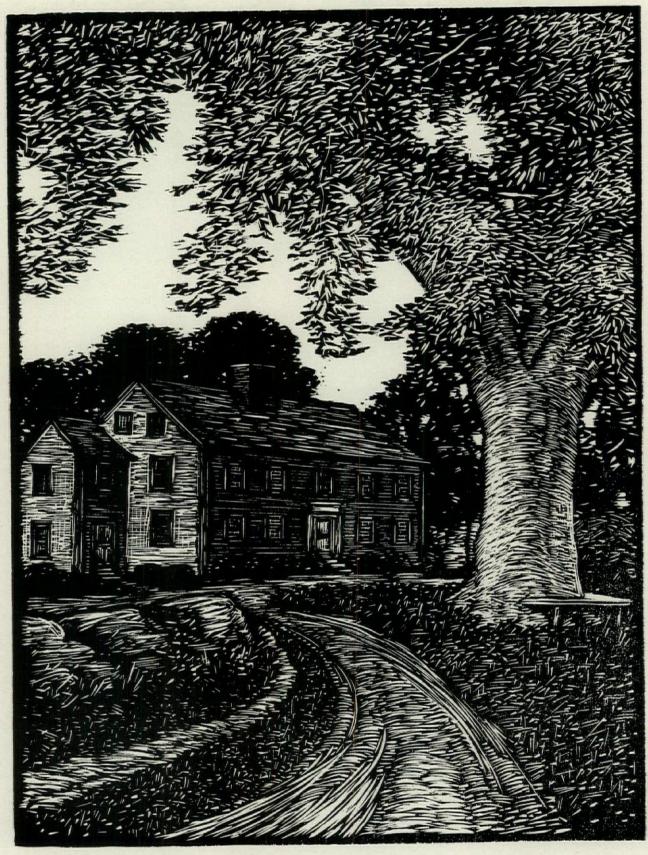
> Please tell us what you think about it. Do you want additional specification material of the type described herein or not? If you would care to see additional volumes in the series what do you think about a school for Volume II? What else would you like to see? We can guess about these things, of course, and it is possible that in this way you might be exactly suited. We would very much prefer, however, to have you tell us what you want so we can give it to you.

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EDITORIAL AND BUSINESS OFFICES, 419 FOURTH AVENUE, NEW YORK.

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"LINCOLN, MASSACHUSETTS—1634"—WOODCUT BY ERNEST THORNE THOMPSON SEE ARTICLE BEGINNING ON PAGE 401

Volume IX

July, 1928

Number 7

COST ACCOUNTING FOR ARCHITECTS, PART I

BUSINESS IN THE PRACTICE OF ARCHITECTURE

By Lloyd M. Hendrick, Jr.

EDITOR'S NOTE:—Feeling, as we do, that the business side of the architect's practice has been somewhat neglected in the past in many offices, we have arranged for a series of articles dealing with this important phase of architecture. The author is an able architectural designer who has taken the trouble to make a special study of accounting with particular reference to its application to our profession. The first article, which we have emphasized here by placing it at the beginning of this issue, is introductory. Subsequent articles will appear in consecutive issues and will take up the accounting problem in detail. It will be worth while for every practitioner and draftsman to follow the series closely.

THE PRACTICE OF architecture is a many sided vocation. It is an art in respect to the demands it makes on a knowledge of form and color and their relation to æsthetic effects; it is a profession in respect to its ethical and intellectual plane as compared to many occupations; it is a kaleidoscopic calling that must acquire knowledge sooner or later in every field of social and industrial activity; and it is a business because it requires participation in the inter-play of economic forces. To the common failure to recognize, to acknowledge to one's self, or to admit openly the business phase of architectural practice, have been due many of the ills suffered within the profession and in its relation to the public at large.

Until recently it was believed by some that the practice of architecture lifted one to a plane meriting the reverence formerly accorded the so-called learned professions, theology, law and medicine; and that in addition one stood on a basis of equality with the painter and sculptor. In this elevated position it was abhorrent to the mind to mix in the affairs of the market-place and to allow any commercial taint to creep in. There was only as much justification for this as is found in any half-truth. There have been and still are many men in the profession whom everybody can call to mind, who merit a high degree of veneration for their intellect and artistic ability. There have been many men of independent means in architectural practice, often the authors of much brilliant work. Though the accomplishments of the first group and the economic independence or indifference of the second could not be possessed by all, the less fortunate ones, the majority, pictured these conditions as an ideal and established a misleading scale of values of professional practice. Also, a generation or more ago every operation of building was on a smaller scale, permitting to a larger degree than now the existence of the "one man office." Nearly everything was done in what would now be regarded as a very informal way, lending support to the common conclusion that the architect was highly professional because he practiced more or less alone, and that system in his methods was not essential to success.

Thus out of the intellectual and creative success of some, the indifference of others, and the small size of many offices grew the notion that the observance of good business principles was more or less unnecessary if not actually somewhat of a hindrance to the creation of good architecture. This conception of architectural practice still persists to an amazing degree and exerts its pernicious influence to the great harm of the profession.

The outcome of this condition is that many have unconsciously drifted into a sort of Dr. Jekyll and Mr. Hyde existence. Because of tradition and greater appeal to the æsthetic senses we find often the stress given almost wholly to the creative side of the work wherein great mental satisfaction and pleasure are found in the making of sketches and studies, in developing an idea through the working drawing stage, and then in seeing it take tangible form in masonry and finish. Surely one can search the wide world over and not find any occupation that enthralls more, gives greater delight, and provides an equally lasting feeling of having contributed to the progress of the community. Lurking around the corner, however, is the other side of Self that gives but indifferent thought to the financial well-being of the office, fearful to demand a fee commensurate with the value of his product; hesitant, awkward, and equivocating because of a business inferiority-complex, often inconsiderate of the material interests of those in his employ, and managing with indifferent success the pecuniary relations with client and contractor. And then at the end of the year a bank balance provides the delusion that enables him to carry on. Let us not

call this a blanket indictment; it does not apply to the whole profession, but with equal truth it can be said that far too often it does accurately describe the situation.

It is to be urged most vehemently that the architect make a new assessment of the forces at work in relation to the activities of his office; that he recognize and acknowledge the essential character of business in the profession. It is better to recognize and develop to one's advantage this phase which is ever present and which if neglected becomes a tissue-consuming malady.

The tendency of the times is distinctly toward competition, not the kind which the A.I.A. fosters but that which rests upon selling methods of one kind or another followed up by efficiency in the execution of the commission. The outcome of this is the building up of an "organization," an office composed of specialists. This may exist in skeleton form if the practice be small with some of the technical problems met by outside assistance engaged from time to time, or the office may be large and quite complete in its complement of experts. The significance in this lies in the fact that the information going on the plans and into the execution of the work comes from many more sources than in the days when the "boss" and his draftsman did it all, and to the extent that this is true there exists the constant possibility of finances getting into a snarl. And possibilities frequently become actualities. Costs have to be met with fair regularity but income is received at irregular intervals and in point of time may have no connection with work on the boards at the moment. To relate properly the dollar received to that portion of the commission it should be paying for, and then to carry it back to its supposed equivalent in drafting charges and other expenses, is usually a devious route. The larger the office the longer or more involved this route appears to be, but in this very circumstance lies the greater necessity of scanning the situation very closely. The longer the period from moment of inception to the time of the final payment, or the greater the number of persons engaged upon a given piece of work, the larger is the opportunity, even likelihood, of losing the relationship in a financial sense of one part to another. It thus becomes the easiest thing in the world to pay out several hundreds of dollars and not be able to put a finger on its equivalent in drafting in relation to the progress of a particular job. Most architects get the greatest enjoyment out of the artistic side of the work, and find it irksome or to their distaste to pore over books of account or cost keeping systems, but dodging this side of the work is apt to be an expensive diversion. The factors making a true financial picture desirable arise naturally out of the character of business, not out of the brains of efficiency experts.

We find in every office at least the pretense of keeping some kind of books of account. This is fre-

quently but a concession to the inevitable; a record of some sort must be kept of moneys received and paid, and from or to whom, but rarely are these data used scientifically to deduce conclusions on which to base future policy. As a matter of fact poorly kept books are almost worse than none at all; they have a plausible, satisfying appearance and totals of figures look imposing, but no inkling is given of a wrong entry or improper arrangement. To some this makes no difference because no attention is paid to the books of account anyway; to others it is as a signpost which has been turned to point in the wrong direction. Blindly followed, the road leads to a financial impasse, and then comes the periodic blow-up. Out of the series of hectic conferences emerges a new system, new life is blown in the old slogan, "Costs Must be Kept Down," a change or two is made in the personnel, and then the organization goes creaking down some other road. The pity of it all lies in the futility of it, the unfair repercussion on employees, the lowered morale of the office, the color lent to the charge that architects are unbusinesslike, and the general hampering effect upon the creation of good design and the execution of good buildings. The last is probably the worst because the sole object of an office is the production of good work, and to let carelessness, indifference or ignorance stand in the way of this laudable purpose is nothing short of an architectural crime.

Some very successful offices have sufficient capital so that no stress is laid on the question of profits. This situation perpetuates archaic business methods or no methods at all as understood by the business world. Here we find waste and extravagance and no thought given to the real value of a dollar in terms of executed work. If this affected only the firm it would be nobody's business. Actually, however, every office is a point of contact which the profession has with the rest of the world, and if a bad impression is given by one, harm is done to all. Furthermore, every office is to some extent a training school for draftsmen, especially in the business and practical sides of the work which cannot well be taught in schools. Therefore, there is a duty laid upon the older men to set a good example and by wise precept develop appreciation for sound business practices that those who carry forward the torch of creative effort may have firm footing.

No office, as a consequence, can truly be an exception from the desirability of keeping good books of account nor from the equally necessary practice of always having a sound business system based on a technical study of those books. A retail merchant who does not know what return each of his several lines of goods is giving him will suffer severely in competition and usually does, especially from the chain stores where every cent, even to the fraction, is watched. A manufacturer turning out a variety of articles from his plant must know the true cost of each in order that the profit on one thing will not

COST ACCOUNTING FOR ARCHITECTS

be partly absorbed unknowingly in the costs of another. This would seem to be ordinary common sense. Nobody supposes that the General Motors Corporation does not know the exact cost of each kind of car it manufactures, or that the selling prices are fixed by arbitrary methods. It is urged that architects introduce into their offices the same sound business methods; not to engage in price-cutting campaigns, not to become fiends for figures, not in emulation of "big business," but only for the sake of intelligently caring for the financial side of the profession in order that the creative side may flourish untrammeled. Let the architect's business be based on facts, not guesses.

In entering upon a discussion of a business system for an office, particularly methods of arriving at costs, it is desirable to give a few definitions. Bookkeeping is the practice of keeping a record of every transaction in such detail that at any time in the future the complete history of that transaction may be available. The object of bookkeeping is to show debts, those which the proprietor of a business owes and those which are owed to him. Accounting is the scientific arrangement of accounts and the study of them in order that certain conclusions may be drawn regarding the solvency or insolvency of the business. The question of business health may apply to the past, present, or future. From the accountant's point of view the accounts in the principal books must be so entered and arranged that they, together with other data systematically arranged, will present a true picture to the trained student of books of the present situation and future tendencies. Every accountant can keep books; bookkeepers seldom know much about accounting. This is explained by the circumstance that bookkeepers are usually graduates of purely commercial schools which do not include accounting in their curricula, this

being a narrower and more intensive field which seems to be restricted to men. An auditor is an accountant who specializes in the examination of books in order to set forth the answer to certain questions such as the legality of transactions, correctness of the records as set down or conclusions drawn from them. It is important to have the foregoing clearly in mind because architects have been known to have had their books audited at the end of the year or for income tax returns and because the auditor gave his O.K. to the books the architect felt he had a good accounting system. The auditor's approval does not customarily extend to the accounting principles practiced unless he has been especially invited to consider them. As a consequence of the nature of his work the good accountant will make a thorough study of the business he is asked to report upon. For example, before a bond house finances a public utility it is customary to have an accountant examine the business. examination will include not only the books of record, but the methods of conducting the business, labor turn-over, consumption of fuel and many other such details. The report will be comprehensive and thorough and the conclusions dependable. It can be assumed that such a study will provide a safe basis of business conduct. Architecture, being more of a profession than a business, has not provided a field for the accountant's activities and it has not had the benefit of his study.

In the succeeding papers it is intended to take the accountant's point of view and in detail consider some phases of the bookkeeping in an architect's office, the kind of accounts and expenditures, the derivation and use of cost data, and the determination of profits. The exposition of the foregoing will be accompanied by examples to illustrate the principles given.



WOODCUT BY ROWLAND C. ELLIS-OLD HOUSE WITH WELL SWEEP



"WINTER'S MANTLE, MIDDLESEX FELLS"—FROM A WOODCUT BY ERNEST THORNE THOMPSON



"THE BOSTON POST ROAD"-WOODCUT BY ERNEST THORNE THOMPSON

THE TECHNIQUE OF THE MODERN WOODCUT

By Ernest Thorne Thompson

WITH THE RETURN of public interest in the graphic arts, there is a marked revival of the older medium of wood-block printing. It seems very fitting that the woodcut, the oldest form of printed picture, should again take its place among the more generally known and appreciated graphic processes. There is an atmosphere of quaintness and intimacy about the medium that adapts it, more than any other, to the rendering of old landmarks of other days.

The present trend in woodcut technique is a return to the vigorous pattern and crispness of line used in the work of the earlier wood engravers. In place of the methods of fifty years ago, where the artist made only the drawing upon the block and the wood engraver, a skilled craftsman, laboriously interpreted the drawing according to his own temperament, (usually in a coldly mechanical manner) we now find the artist doing his own engraving. As a result, the work becomes truly personal and is an ideal means of expression for the creative artist.

It is a medium of strong lights and rich shadows with a limited but interesting gamut of tones between and does not in any way resemble a brush and ink drawing. So many so-called woodcuts are appearing day by day—black silhouettes that might just as well have been cut out of paper, photographed, and printed as zinc line cuts. Therein lies an important distinction—the woodcut process of today is not intended only as a means of rapid reproduction, but as

a sympathetic technique for certain subjects, creating charm and quaintness where etching, lithography, or any of the other graphic arts would fail.

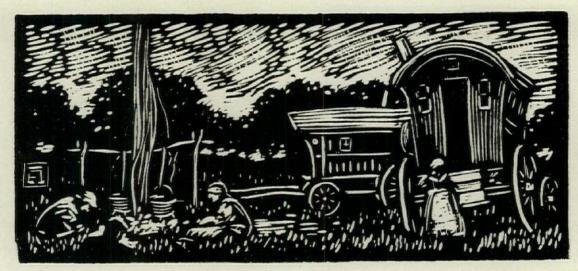
The process of woodcutting is comparatively simple yet it demands patience and neatness of execution. The very tools and kind of wood surface used definitely limits the amount of detail that can be expressed, yet it is surprising to see how much atmosphere really can be secured with such limited means. Instead of using Turkey boxwood and working on the end grain as an engraver must with his delicate burins, woodcuts are made with fine gouges on the plank or what is known as side-wood.

Very little equipment is needed to produce a professional result; in my own methods I even dispense with a printing press. Most important of all is the surface upon which to work. Secure at any planing mill some well seasoned pieces of clear-grained hard maple, finished on both broad surfaces and seveneighths of an inch thick. Have them cut to the desired dimensions and paint the end grain with shellac or linseed oil, place them on edge a space apart, or put the lot in a hand clamp until needed. This will prevent warping, although a slightly warped surface can do no harm. Sometimes a warped block can be flattened by dampening the concave side with water; a twisted block or one with a knotted grain must be rejected.

Some artists use different woods such as apple, pear,



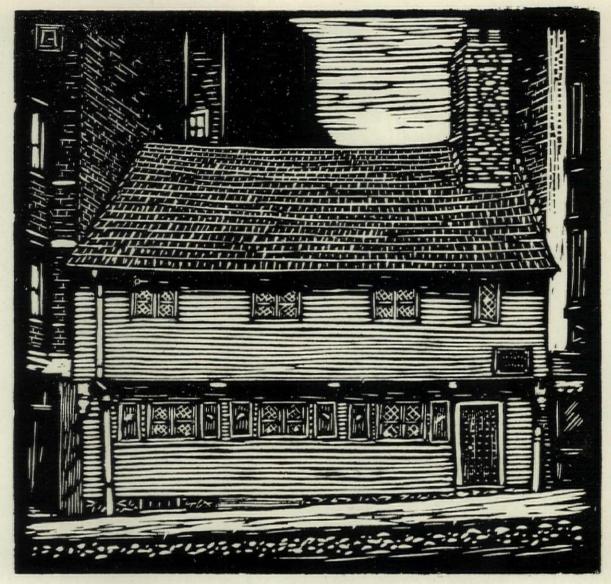
"BYWAYS OF HOLLAND"



"GYPSY CAMPFIRE, DEVON"



"ON THE BROAD HIGHWAY" FROM WOODCUTS BY ERNEST THORNE THOMPSON



"PAUL REVERE'S HOUSE, BOSTON"—WOODCUT BY ERNEST THORNE THOMPSON
REPRODUCED AT EXACT SIZE OF ORIGINAL

cherry, holly, and even boxwood which is ideal for the work but very expensive today. I find that a good piece of maple will hold any line that I care to make.

Small gouges are used instead of engraver's burins. There seems to be a difficulty in securing such gouges delicate enough in this country; all sets that I have seen are really more suited for wood-carving. Serviceable tools can be fashioned from pieces of umbrella rib, properly tempered, sharpened, and set in handles. Very fine wood-carving tools known as veining tools could be used if cut off to a convenient length. They usually come too long.

The best tools that I have been able to secure are some that I chanced to find in Paris. They are all well made, fit the hand, and come in a variety of small sizes, although two small "U" tools and a fine "V" tool are all that are necessary for ordinary purposes.

Send a check for \$5.00 on National Bank of New York to the Paris American Art Company, Rue Bonaparte, Paris, and ask for a set of Boulay tools for woodcutting.

Some artists advocate the use of a knife, but I have several and yet have never found a use for them at any time. The small "V" tool will do anything that the knife ever could and more.

Sharpen the tools exactly like a carpenter's gouge, on the outside bevel and not on the throat or inner edge of the tool. A fine carborundum slip-stone with a rounded edge to fit the inner curve of the gouges and a small triangular stone to fit the groove of the "V" tool will be needed to keep the tools in condition. It would be wise to have a fine white Arkansas stone also, to put a keener edge on the tools. The curve of the slip-stone may have to be shaped on a carbo-



FROM A WOODCUT BY ERNEST THORNE THOMPSON—REPRODUCED AT EXACT SIZE OF ORIGINAL OLD BRIDGE AT SHROPSHIRE, ENGLAND



FROM A WOODCUT BY ERNEST THORNE THOMPSON—REPRODUCED AT EXACT SIZE OF ORIGINAL OLD FAIRBANKS HOUSE AT DEDHAM, MASSACHUSETTS

"THE TOP OF THE STREET, CHESTER"—FROM A WOODCUT BY ERNEST THORNE THOMPSON



"CARRIAGE HOUSE AT WAYSIDE INN, SUDBURY, MASSACHUSETTS"—WOODCUT BY E. T. THOMPSON REPRODUCED AT EXACT SIZE OF ORIGINAL

rundum wheel to fit the groove of the gouges. It requires practice to get the knack of proper sharpening, especially on the "V" tool. Once the edge is secured, a little work with the slip-stone now and then will keep it in condition. A clean line cannot be made with a dull tool, so give them careful treatment from time to time and their use will be a pleasure. Have a small piece of maple at hand to try the edge upon and cut a line across the grain to test it. If the tool cuts with a ragged line and requires much effort to force it along, the tool needs more work with the stone to remove the wire edge. I sometimes examine, under a powerful jeweler's-glass, a tool that is difficult to sharpen and find exactly the spots that are not cutting. Don't attempt any work with dull tools if you wish to avoid ragged lines.

The maple block should be carefully sandpapered

by hand with number "O" and "OO" sandpaper, held flat around a small block of wood. Sandpaper with the grain only and carefully remove all lines and uneven spots. Look across the block at nearly the eye level and against the light in testing for inequalities. Be most careful to preserve a plane surface and avoid turning down the edges. If the block is not perfectly smooth it will print showing all these hair-like lines and yield a very thin proof. A machine-sanded surface is quite hopeless and will not print solidly.

In order to cut the block with any degree of certainty and to make a real positive process, I darken the surface before placing any work upon it. Then the lines appear white against black as the work progresses. With a printer's roller and ink, to be described later, roll up the surface very thinly with ink and wipe off



"SCOTCH-BOARDMAN HOUSE AT SAUGUS, MASSACHUSETTS—BUILT IN 1654"
FROM A WOODCUT BY ERNEST THORNE THOMPSON

as much as possible with a cloth. Let this surface dry for a few hours and you will find that it offers a pleasant tooth to hold a chalk impression without smudging. Another method is to dissolve a package of black Diamond dye in a pint of wood alcohol and rub it thinly over the block surface. This will not raise the grain as a water stain would.

On a piece of thin tracing paper make a careful drawing of the subject, within the dimensions of the block to be cut. There is no necessity of drawing all the finer details, stress only the large masses and place the planes very accurately. If it is of no importance that the woodcut will print in reverse, the drawing can be traced directly on the block. If it must appear as oriented in nature, turn the drawing over and trace from the back. I find that a rubbing of chalk on the reverse side of the paper, smoothed evenly with a finger tip, will yield a clear impression

that is readily followed. Fasten the paper over the edges of the block with thumb tacks and carefully trace with a medium hard pencil. Personally, I prefer to sketch directly on the block with a white wax pencil.

Now comes the important step—the actual cutting. Visualize all spaces that are to appear a clear white or nearly so and, with the small gouge, carefully outline them. Then remove the areas with the larger tool, sometimes treating with an interesting linework instead of actually removing the whole surface. Don't cut too deeply, from one-sixteenth to one-eighth of an inch is enough for the deepest passage.

After the large patterns of light and dark are indicated, start upon the intermediate surfaces beginning with the foreground or middle distance. Keep in mind the surface texture and contour of the forms being cut and try to suggest the planes by the general

THE TECHNIQUE OF THE MODERN WOODCUT

direction of the stroke. By lifting the tool quickly, a stipple surface can be rendered but this is very monotonous if carried to excess. A gray tone can be made by cutting a series of white lines at right angles to each other, leaving small black dots all over the surface.

At all times think of variety of textures and try to render each new surface with a different stroke. Surround your detail with a mass of black. Don't dig into the shadows to show detail. Let your lights be interesting and full of texture, but keep the shadows simple and unobtrusive. As the planes recede into the composition, restrain your desire for detail.

Avoid monotonous sky openings through tree foliage, remembering that

the tool is cutting only as you will it to cut. Experiment on cloud forms and graduate as soon as possible from that "telegraph wire" technique for skies that the beginner uses. Use the "V" tool very sparingly, for it makes a monotonous line if not properly handled and can be used to excess. Sometimes the values can be reversed in an area, as by making white bricks with



HOUSE IN SOUTH ORANGE, NEW JERSEY
WOODCUT BY ROWLAND C. ELLIS

Cut on boxwood with graver direct from nature

dark mortar joints instead of white lines between dark rectangles.

By all means have a small piece of blackened block at your elbow for experimenting on new surface textures. Remember that the black surfaces lend richness to the woodcut, the white areas give life, and the nuances of texture make the whole print sparkle. It might be a wise plan for a beginner to make a careful brush-and-ink drawing of the block to aid in visualizing the important areas. With the white pencil experimental textures may be tried before cutting them in the block itself. It is really surprising how slightly the finest lines have to be cut in order to register-just enough to feel with the finger nail as it is passed across the

block. Experience will teach you how deep to cut.

The medium is quite direct and no changes of any great importance can be made in a block once it is cut. Blacks that are once removed cannot be recovered, a good thought to keep in mind when in doubt as to cut some detail or leave the black! A small correction can be made by boring a hole through the block over



"THE HOUSE OF SEVEN GABLES"



"OLD GRIST MILL AT THE WAYSIDE INN"

FROM WOODCUTS BY ERNEST THORNE THOMPSON

the error and plugging it with a maple dowel; this should be surfaced flush again. Whites can always be added. By the method described, the finished print should be exactly as the block appears when completed. There may be a feeling that the print does not seem as rich as the original. This is perhaps because shadows are cast on the block itself in the hollows among the black lines, also on account of the interesting surfaces made by the tool where the whites are cut away. All of this makes the original block very much alive.

My own printing process is quite simple. Secure a tube of combination black, job black, or half-tone black printer's ink, a plate glass slab about twelve by fifteen inches, and two solid rubber rollers. These should be about three inches long and two inches in diameter. I made some ideal ones from the discarded rollers of a clothes wringer, and mounted them in handles. A real good photographer's squeegee roller would serve the purpose.

Lay a carpenter's wooden hand-screw on the table top and fasten the block in the jaws. This will make a small block easier to control when rolling the impression. Squeeze a small amount of ink on one corner of the glass and, with one of the rollers, work out an area of ink evenly distributed on the centre of the glass. Don't charge the roller too strongly with ink. Pass the inked roller across the surface of the block in several directions, making sure that it is evenly inked.

The only paper that will yield a print with the slight pressure obtainable with this method of printing is a Japanese silk tissue. This paper is ideal for the work, is very tough, takes every bit of detail, and when mounted properly has a richness of surface that ordinary paper never could equal. I use a white paper or a buff-colored paper according to the subject on the block. For white paper I employ Number Two

Hand-Made Silk Tissue and for warm-toned paper Kitakata Number 3966. These can be had from the Japan Paper Co. of New York. Cut the paper to size (it will not tear) with generous margins.

Take a piece of this paper and hold it above the surface of the block to locate the print position on the sheet. When properly located, drop it carefully to the surface and do not move it again. With the clean roller, lightly roll the paper from the centre out in all directions. When the paper shows an even impression of the block, put more pressure on the roller, being careful not to slip over the edges and tear the proof. The paper is so transparent that the impression will show through very clearly.

Carefully strip the proof from the block and set aside to dry for a few hours. With practice one can print by this method almost as quickly as on a hand press. Slightly heavier papers can be used if dampened thoroughly. A dampened proof has a tendency to take an impression of the edges of the black lines, which sometimes adds interest to the proof.

The proofs should be mounted in single-folded mounts of stiff cream-colored paper, with an opening in proportion to the size of the proof cut in one wing of the mount. Centre the proof under this opening, between the two wings and carefully catch the top edges of the proof with small pieces of gummed tape to the back wing. In this way the cover can be lifted and the print examined without disturbing it. Prints on Japanese paper must be backed with a white surface to show them off to advantage.

Sign the proofs, in pencil, if they come up to your expectations with the title and perhaps the number of the print and the total edition printed. Small mistakes in cutting can be corrected with a lithographic crayon carefully stroked over the surface of the proof. This can only be used in isolated spots however. For a large error the block should be re-cut.



"OUTGOING TIDE, GLOUCESTER"-WOODCUT BY ERNEST THORNE THOMPSON

MAKING FULL-SIZE DETAILS, PART I

By Evans Chrysler

SO MUCH OF THE character of buildings, particularly of the refinement and expressiveness of the forms, is dependent upon the proper making of the architect's full-size detail drawings that this may well be regarded as one of the most important divisions of drafting room work. It is, also, the part that seems to be the most difficult to reduce to a satisfactory system of procedure. For these reasons a comparison of the methods of full-sizing employed in a number of the best architectural offices and of the opinions of many architects upon the requirements for drawings of this kind was made as a basis for this article.

The first fact that became apparent through this inquiry was the great diversity of opinion and of practice encountered. Some good architects, seemingly, make full sizes of almost everything excepting the plain wall surfaces of their buildings, while others, whose reputations are quite as good, use comparatively few full-size details. Some draw not only every moulding, but every bit of ornamental detail fully and carefully, while others never make fullsize detail drawings of ornament. Between these extremes are architects who make full-size detail drawings of ornament that indicate the character and massing, but that allow great freedom of interpretation. This variety in practice arises partly from differences in the styles of architecture these men habitually employ and partly from their different ways of working with the modellers. The individuality of the architect and the personnel of his organization have much to do with it,-the personal element is, unquestionably, a large factor.

But these differences are more apparent than significant; they are simply expressive of different ways of arriving at the same result,—of meeting the same basic requirement, which is that the architect's intention be conveyed to the workmen fully and clearly in every particular.

Reduced to its simplest terms, this means that either a full-size drawing or a model must be supplied for every part of the design that has any but the simplest form, whether it be a moulding, a modillion, or a garland; also, that the manner of construction of every part must be determined by the architect's organization. If this is not covered by the scale drawings, the specifications, and the criticism of shop drawings submitted by contractors, it must be shown on the full-size details.

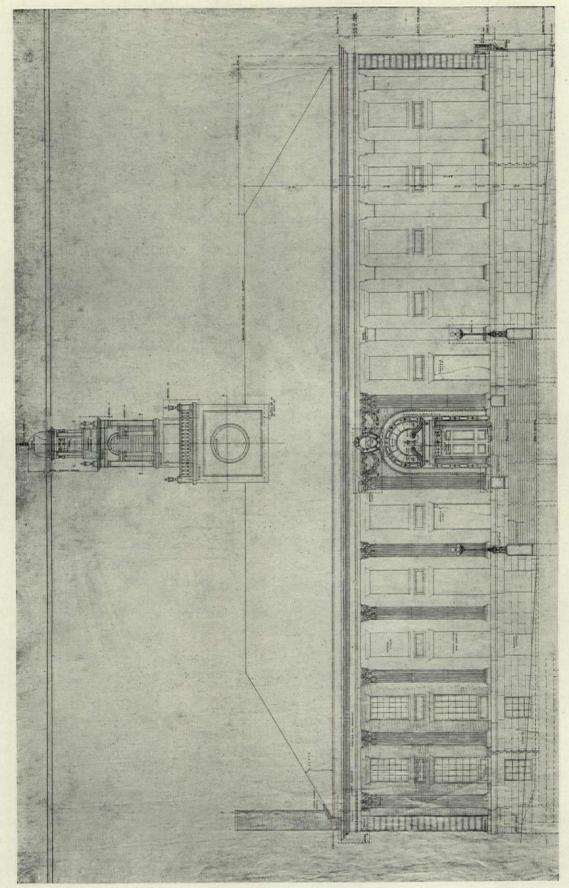
How much of all of this should be taken care of in full-size detail drawings, and how much in other ways, is the question that marks the point of divergence of opinion and of practice,—it is simply a matter of determining the part the full-sizes are to play in conjunction with other drawings, the specifications, and models. It is clearly not possible to consider full-size details to any advantage otherwise than in this connection.

All agree probably that the function of a full-size detail is to show refinements that cannot be shown on a scale drawing, the contours of mouldings, the exact size and shape of various parts that must be shown by the architect if others are not to be allowed to interpolate their own ideas and to read into the scale drawings their own versions of his intention.

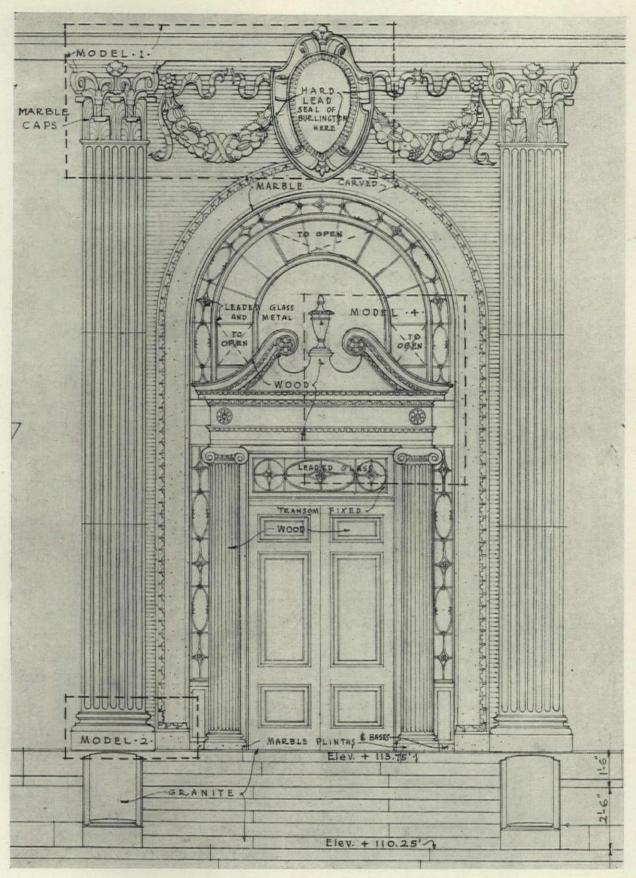
The full-size detail, often with the help of a model, serves to give what corresponds to a close-up view of a part of the proposed building that is seen on the scale drawing as though at a distance.

Since this is so, the full-size detail must not depart from the character or the limitations set by the smallscale drawing. If it does disregard these conditions, the relation of the values in the general composition will be disturbed. Of course, it sometimes develops during the making of a full-size drawing that this particular part of the building would not be satisfactory in detail if worked out as indicated on the small-scale drawing. This is not likely to occur, however, when the design has been carefully studied by an able designer. When it does happen, the best practice seems to be to go ahead with the drawing of the full-size in accordance with the small-scale drawing, then criticize it and make a satisfactory detail at fullsize. Next, reduce this new detail to the small scale, simplifying the indication, and transfer it to the smallscale drawing, making whatever changes may be necessary in other parts of the design of the building to adjust the composition to the new detail.

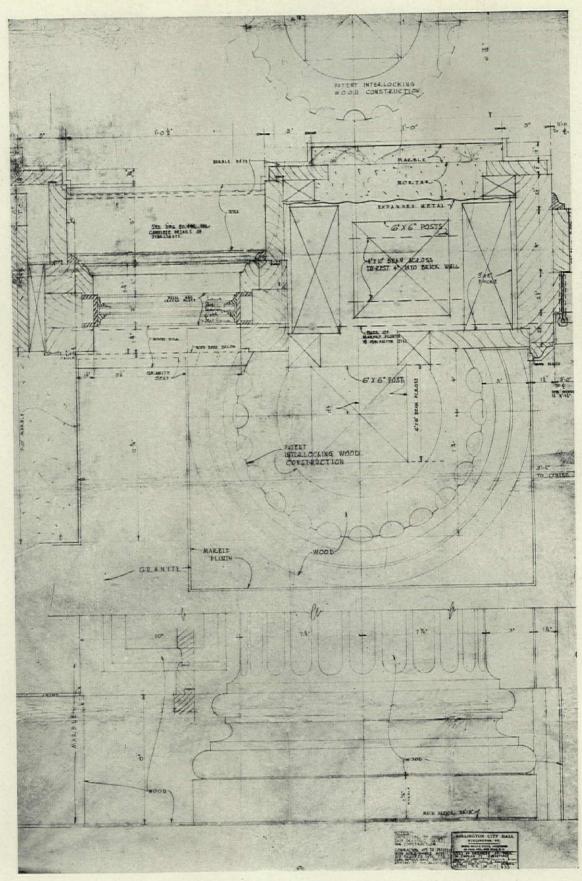
But, as has been said, the function of a full-size is to give a close-up view. For instance, on a smallscale elevation a belt course supplies a band of grey of a width and degree of greyness needed in the general composition of the façade. Its detail cannot be shown at this scale, however. Usually even an attempt to suggest its character more than very vaguely would result in falsifying the values. It may be stepped up to larger scale, say, one-half inch or threequarter inch for further study, but its detail must still be represented by simplified indication. Something much more definite is needed if the spirit the architect wishes to put into this detail is to be conveyed. Here is where the full-size enters; the massing of the ornament, at least, will be shown in outline. Perhaps the ornament will be drawn fully, so that the modeller or the stone carver will be held to what amounts to a mechanical reproduction of the drawing. But many architects believe that permitting freedom,



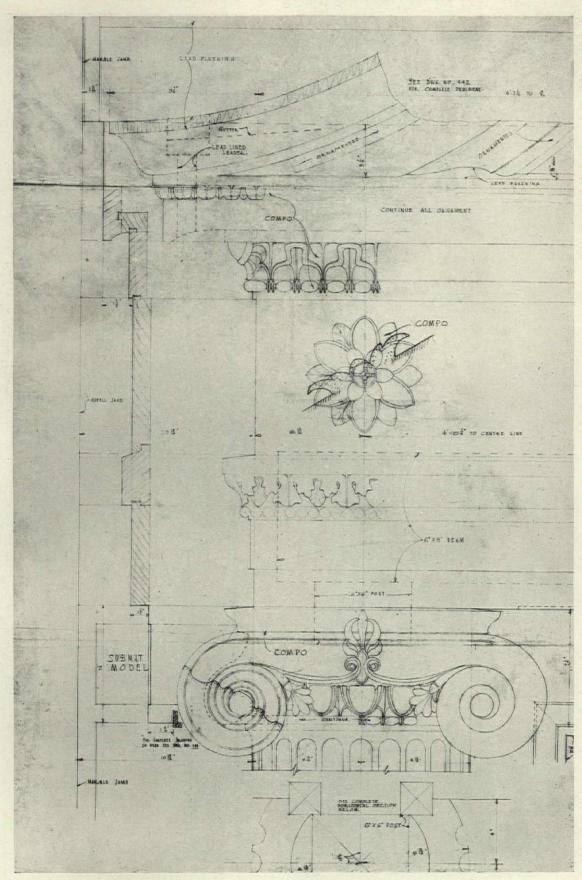
FROM QUARTER-INCH SCALE ELEVATION OF MAIN FAÇADE—BURLINGTON CITY HALL, BURLINGTON, VERMONT MC KIM, MEAD, AND WHITE, ARCHITECTS



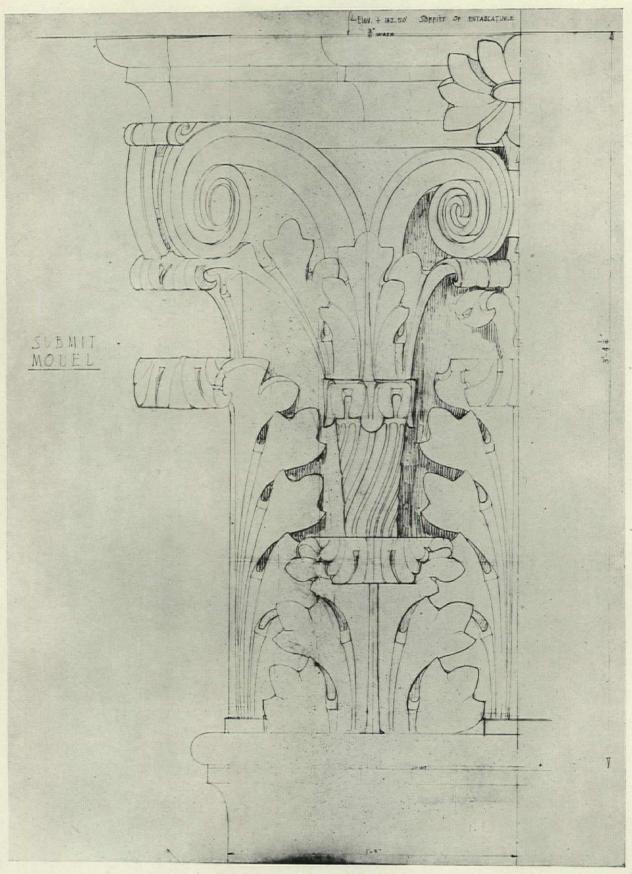
DETAIL OF DRAWING SHOWN OPPOSITE, SHOWN AT EXACT ORIGINAL SIZE ENTRANCE TO BURLINGTON CITY HALL—MC KIM, MEAD, AND WHITE, ARCHITECTS



FROM LOWER PORTION OF F. S. D. OF WOOD ENTRANCE DETAILS BURLINGTON CITY HALL, BURLINGTON, VERMONT—MC KIM, MEAD, & WHITE, ARCHITECTS

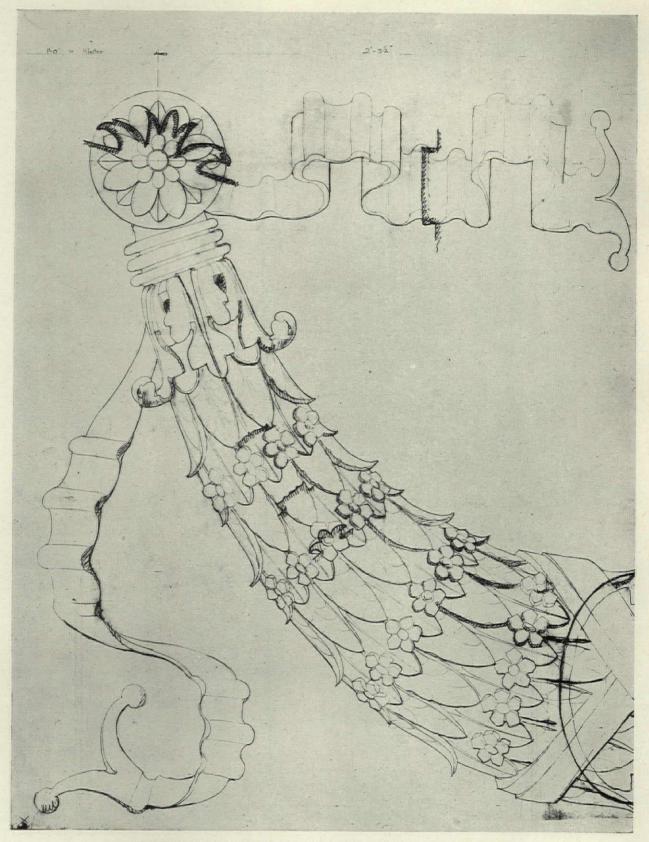


FROM UPPER PORTION OF F. S. D. OF WOOD ENTRANCE DETAILS
BURLINGTON CITY HALL, BURLINGTON, VERMONT—MC KIM, MEAD, & WHITE, ARCHITECTS



FROM FULL-SIZE DETAIL OF MARBLE PILASTER CAP AT ENTRANCE BURLINGTON CITY HALL, BURLINGTON, VERMONT—MC KIM, MEAD, & WHITE, ARCHITECTS

MAKING FULL-SIZE DETAILS, PART I



PORTION OF FULL-SIZE DETAIL OF LEAD GARLAND OVER ENTRANCE BURLINGTON CITY HALL, BURLINGTON, VERMONT—MC KIM, MEAD, & WHITE, ARCHITECTS

within limits, results in more spirited execution of ornamental detail. Probably the ideal way is to show only such architectural features as profiles of mouldings, the widths of members, and so on, with final definiteness upon full-size detail drawings, and to indicate all ornament in a spirited, sketchy way, criticizing the models thoroughly until the effects wanted are obtained. This leaves the modeller free to work with spirit in his medium and to make adjustments subject to the approval of the architect. These adjustments are suggested by the way in which the thing works out in three dimensions, and they are usually difficult to discount in studying details on paper.

Some architects go still further in this direction, as was pointed out in the beginning of this article, and make no full-size detail drawings of ornament. They prefer to indicate only the placing, size, and general contour of ornament in conjunction with the adjacent architectural features, to develop the ornament by means of rough sketches, often made in the presence of the modeller, and by oral instruction,—to work the thing out right with the modeller. The degree of definiteness in the indication of ornamental detail is largely a matter of individual preference on the part of the architect; he chooses the way that best suits his nature and the character of his work.

Though it is a bit aside from the subject, there is a matter that may be touched upon at this point. It is this. The modeller is allowed some freedom usually and the stone carver or wood carver should be allowed a certain amount of freedom also in translating the design from the model into his material. An uninspired copy of a clay model can never constitute good ornament in either stone or wood, the thing must have the character of the material and of the method of working it. It must be carving, not modelling.

This, in turn, brings us to a matter that is intimately connected with the drawing of full-size details, namely, the influence of the nature of the material upon the design and upon its representation in the drawings. The material is commonly disregarded to a great degree in the making of full-size detail drawings. As one architect put it, "If the owner is willing to spend the money, the detail is marked 'marble'; if he will not pay for marble, it is marked 'limestone'; and if there is still less money available this may be erased and 'terra cotta' written in. The difference is not in the drawing but in the name of the material marked on it."

This sounds worse than it really is, for the drawing of ornament on full-size details is usually intended to be suggestive rather than inflexible. The material in which the detail is to be executed is indicated to the modeller and he can interpret the drawing with the character of the material in mind. Furthermore, the modelling is done under the supervision of the architect or of some member of his organization who can

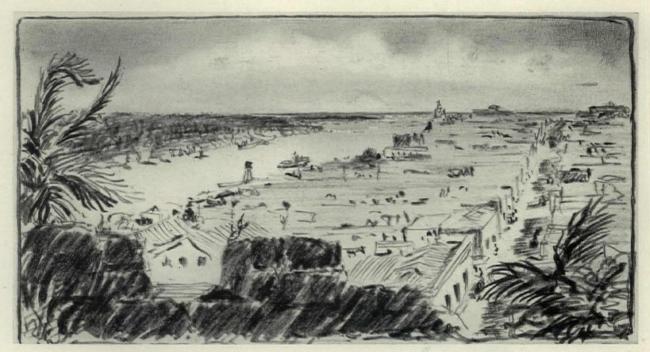
see that it is given a character in keeping with the material in which the work is to be executed. Nevertheless it is much better that the full-size be drawn with a feeling for the material, otherwise a degree of sharpness may be called for that is not obtainable in the carving of a soft stone or the possibilities of a close-grained hard material may not be taken advantage of, wood or iron that is to be painted may be detailed with little lines that will be filled up and practically obliterated by the paint. The modeller or the craftsman is then obliged to re-design the detail in some particulars, and he may not be as competent to do so as the architect or architectural draftsman. A considerable part of the alteration of models under criticism is necessitated by thoughtlessness in making the full-sizes.

An admirable example of the development of fullsize details, as well as a very fine work of architecture, is found in the drawings for the Burlington City Hall, Burlington, Vermont, by McKim, Mead & White, architects.

On page 413 is reproduced, at the exact size of the original drawings, a portion of the ½ in. scale front elevation of this building, showing the main entrance and the pilasters at each side of it. The entire elevation is shown at reduced size on page 412 in order that the relation of this detail to the whole composition may be seen.

This entrance and the adjoining treatment embraces a variety of materials that makes it an especially good example for study in connection with our subject. The doorway itself is of wood, the portion outside of the leaded glass is of marble and red brick, with marble pilasters. The garlands are of hard lead painted white. These garlands form a light and graceful connection between the pilasters and the cartouche. The character of the materials is clearly recognizable in the small-scale drawing because of the scale and because the combined fineness and delicacy of the wooden portion is in pleasing contrast to the relatively strong treatment of the harder marble. The scale drawing indicates the parts of which models are supplied to supplement the full-size drawings.

Portions of some of the full-size details are shown from page 414 through page 417. The detail of the marble pilaster capital is drawn vigorously and in a way suggestive of the nature of the material. It conveys the spirit of the design, but leaves the modeller free to work it out in the clay under the architect's criticism. The details of the woodwork about the door show not only the design with the requisite definiteness but show also quite clearly and fully the joinery, for the construction is a matter of importance in a case of this kind. A study of these illustrations will show that they bring out many of the points covered in the foregoing discussion.



SKETCH BY THE AUTHOR SHOWING GENERAL VIEW OF SANTO DOMINGO
THE MEMORIAL SITE IS TO THE LEFT OF THE RIVER

THE BACKGROUND FOR THE COLUMBUS MEMORIAL

By Edwin L. Howard

EDITOR'S NOTE:—The author, who is a New York architect, has been good enough to supply through this article a little advance information, gathered during a recent trip to Santo Domingo, concerning the site of the proposed Memorial to Christopher Columbus. The illustrations are from sketches and photographs made by him.

THE ANNOUNCE-MENT, made recently, concerning the Columbus Memorial Lighthouse Competition, soon to be held under the auspices of the Pan-American Union with Albert Kelsey as Professional Adviser, has caused architects all over the world to become interested in Santo Do-

mingo, the site for the proposed memorial. My own interest, awakened through a talk given by Mr. Kelsey before the Architectural League of New York, led me to decide to take a trip to Santo Domingo, thus combining a much needed vacation with the business of finding out all I could about the conditions which will confront the architects who enter the competition. Though each competitor will be furnished with a book (now being prepared by Mr. Kelsey) giving the



conditions affecting the program, I felt that a few notes compiled by an architect who proposes to compete might possibly give a different point of view and so be of interest and, I hope, assistance to others; hence this article.

Three of the important considerations which may affect the design of the

Memorial are: the history of the island and of its connection with Columbus, which has caused it to be selected as the site; the architectural character of the city of Santo Domingo which will, while being dominated by the lighthouse, act as a background; and the physical and meteorological conditions which are associated with the site.

The history may be looked up in books, without going near the island, so it is hardly necessary to go





PHOTOGRAPHS BY THE AUTHOR SHOWING SOMETHING OF THE ARCHITECTURAL CHARACTER OF THE BACKGROUND FOR THE COLUMBUS MEMORIAL CASA DE LAS ROPAS, SANTO DOMINGO HOUSE ON THE CALLE COLON, SANTO DOMINGO

THE BACKGROUND FOR THE COLUMBUS MEMORIAL

into detail here about it. Suffice it to say that Columbus visited this land on his first voyage of discovery and called it Hispaniola, though he landed first on San Salvador. Later, in accordance with his wishes, his remains were brought to Santo Domingo from Spain and laid in the cathedral, where they rest today. Spain always dominated the lives of the Santo Do-



THE HOMAGE TOWER—SANTO DOMINGO

mingans, in spite of a brief period of French occupation, up until the Republic was established in 1844.

Naturally, under these conditions, the architecture has been predominantly Spanish. The old city, founded in 1496 by the brother of Christopher Columbus, or Cristoval Colon as his name is in Spanish, was originally placed on the site where it is proposed to locate the lighthouse. Comendador Ovando, one of the first governors, moved it to the opposite bank of the Ozama River where the rocky promontory could be more easily fortified as a protection for the river-mouth harbor. This fortification, built in 1503, was the first monument to be built in the new city and is called the Homage Tower.

It is still standing in a state of fine preservation today and is used as the State prison. Behind it the town stretches out low and brightly colored until it is lost in groves of palms in the distance.

The town is entered through an old fortified gateway from the river bank and narrow streets, crowded with American automobiles, lead up into the center of the city which is the Cathedral Square or Parque Colon. The low houses stand aligned on either side in brightly colored stucco punctuated with an occasional bit of wrought iron or carefully moulded stucco or cut stone. The detail is crude, however, as would be expected in a place which was built

an occasional watertower rising above the general level. The Homage Tower and the Cathedral, of course, form the two principal exceptions.

The Cathedral is the chief architectural monument and is one of the most fascinating to be found in all the Americas. An architect, Rodriguez by name, came from Spain to design and construct the edifice which was begun in 1514 and dedicated in 1540. The nave is very beautiful and it is to be noted that here in America we have a Gothic vault which was built at the time when Gothic vaults were the accepted mode and not a revival of the religious enthusiast. The main façade and many of the chapels felt the influence of the Renaissance and so present an interesting study of the classic forms adopted to a Gothic com-

position. There are wonderful treasures in the Cathedral-gold and silver beautifully wrought, finely carved woodwork, and superb old paintings. The present resting place of the dust of the Discoverer of America is an elaborate structure of bronze and white marble enshrining a bronze casket and is placed in the center of the nave just inside the main portal. Its general character is florid Gothic with the influence of the "art nouveau."

chiefly by unskilled

Indian laborers who

were unfamiliar with the forms they were

The thing which

strikes one with par-

ticular force is the hori-

zontality of the city. I

have tried to emphasize

in the sketch at the be-

ginning of this article

the long straight lines of

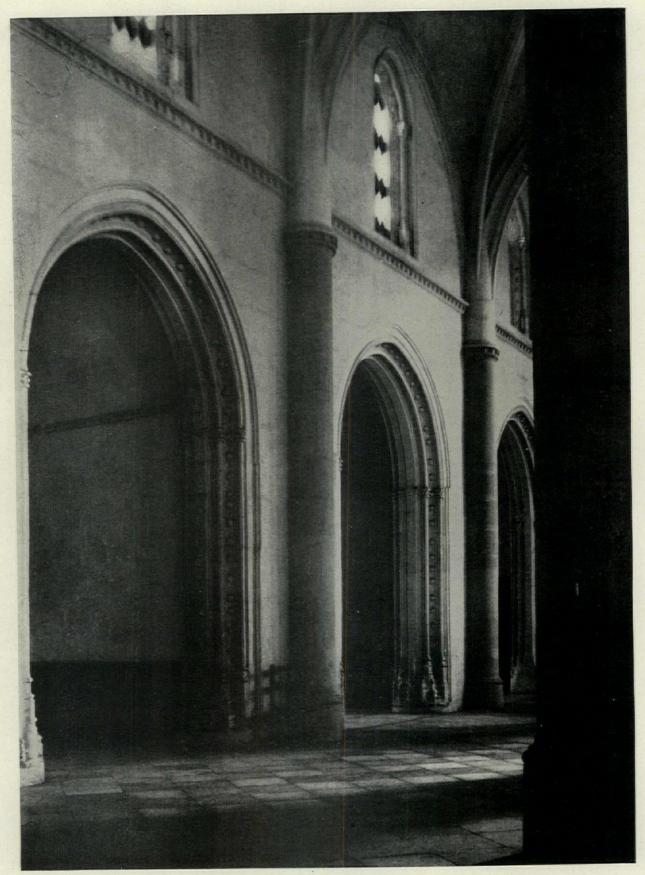
low buildings with only

copying.

The buildings of the city are all constructed of the coral limestone which forms the island. Their exterior finish is almost uniformly stucco which, as has been suggested above, is brightly colored. The whole effect of the



CAVE OF LAS TRES OJAS-SANTO DOMINGO



SIDE AISLE OF THE CATHEDRAL OF SANTO DOMINGO—BUILT 1514-1540
THE EARLIEST KNOWN GOTHIC CONSTRUCTION IN THE AMERICAS—PHOTOGRAPH BY THE AUTHOR



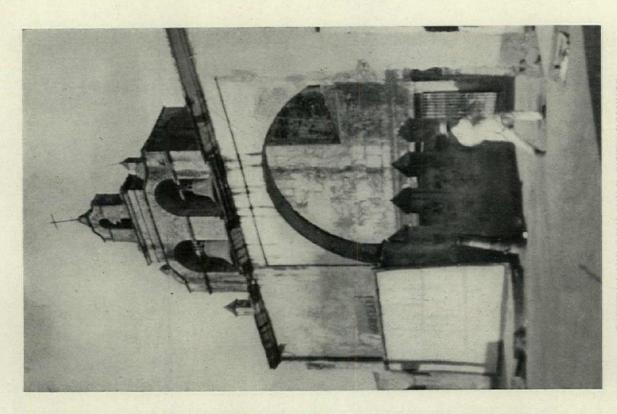
TYPICAL HOUSE IN BRIGHTLY COLORED STUCCO—SANTO DOMINGO

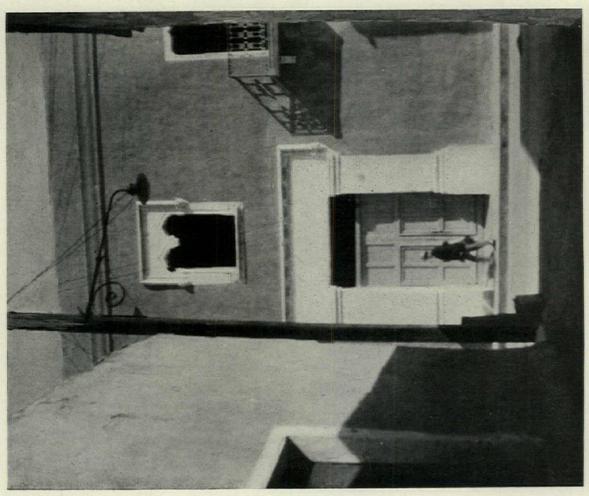
scene as you approach the island from the sea is so colorful—a turquoise sea breaking into white combers along the coral strand, the multicolored habitations, the exotic tropical greens of the foliage and in the distance, beyond the plain, a chain of purple hills—that it seems as though color must play some part in the design of the memorial.

The spit of land which is opposite the city, and the plain where the first settlement stood, are practically deserted save for a few small houses in the interior and the ruins of an old chapel on a slight hill. There are tall trees with small green leaves and great royal and date palms; the date palms grow with gracefully curving trunks but the royal and cabbage palms stand erect with trunks which swell slightly in the middle like large baseball bats. On the ground is a tangle of vines and cactus. The formation of the land is a series of coral limestone ledges and there are numberless underground caves carved beneath the hard top crust by subterranean rivers. One of these caves is very well worth a visit; situated about three miles east of the lighthouse site it is similar to the caves

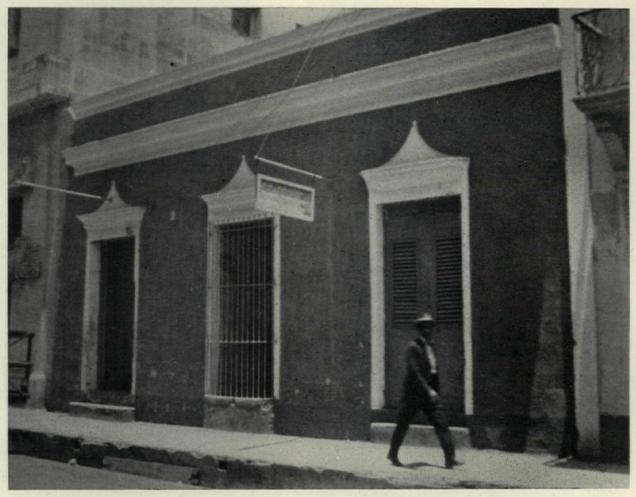
which, unexplored, are most probably beneath the surface where the great pile will rise. This cave, called Las Tres Ojas, the Three Eyes, is a weird place lighted through a hole in the roof where the hard crust has given away. A tangle of rubber tree roots and matted vines hangs down and sways gently in the breeze over the three startlingly blue pools which give the cavern its name. In one of these pools the current from the underground river, which feeds it, pulls the careless swimmer under to a certain death in subterranean depths. In some of these caves are to be found prehistoric sketches of the aborigines.

The climate is very even and very delightful except for the summer months when there is a tremendous rainfall and infrequently a hurricane or so. Haiti is near the center where the hurricanes, such as the one which recently swept Florida, originate. These storms move, rapidly rotating about a center, in a general northwestern direction following the course of the Gulf Stream, gradually weakening until they fall on Great Britain and Northern Europe as gentle rains. The designer of a monumental lighthouse must bear





AN INTERESTING DOORWAY DETAIL, SANTO DOMINGO



TYPICAL SMALL STUCCO BUILDING-SANTO DOMINGO

these violent winds in mind as they present the most serious wind stresses possible. If the center of the storm should come near the structure it would receive a possible one hundred and fifty mile an hour gale on one side and, as the center moved away, would receive the same gale upon the opposite side. (A certain architect has suggested that a tower be built of rubber; rubber trees abound in the neighborhood so it might be appropriate.)

Earthquakes are known to shake the island, although not frequently. The heavy masonry walls of the Cathedral and other old structures seem to have withstood the shocks of the past very successfully. The sun beats down at midday with a pitiless intensity and any iron becomes as hot as though it were in the fire, hence exposed steel in the construction of the lighthouse is out of the question. At noon the entire population retires indoors for a two hour siesta.

The use of airplanes is every day becoming more common and one can fly to Havana for one hundred dollars and to Porto Rico for fifty dollars. The competition includes a landing field as this city may some day become very important as a stopping place on the route to South America. The Dominican

Republic, of which the city of Santo Domingo is the capital, is very much interested in increasing the importance of the city as an airport, and has planned a series of lights stretching out from the proposed landing field, over the mountains to the north and as far as the west coast. The mountains are stretched in a long range running from east to west the full length of the island and give to its its Indian name of Haiti, meaning "mountainous country." The island is occupied today by two republics—the Spanish one of Dominican Republic and the Negro Republic of Haiti. Haiti is extremely interesting though as a political venture it has not proven an entire success and at present the United States Marines practically control the government.

Though the Dominican Republic is independent, there is an American in charge of the "Receptoria" or Customs House, placed there by a large bank of this country to insure the payment of interest on the government loans. The present office-holder has been largely instrumental in securing the selection of Santo Domingo as the site for the Columbus Memorial.

A new harbor is being constructed at the mouth of the Ozama River, the breakwater for which will

come out at an angle from the memorial side in order to cut off the heavy seas which come from the east with the prevailing winds. The stone for this is being quarried back of the city, a few miles to the northwest and is conveyed over an especially built railway to the river, whence it is floated out on barges to the work. The rock on the memorial site was found to be too porous and brittle for purposes of heavy construction. The work is being carried on under the supervision of American engineers.

Santo Domingo is not a difficult place to visit from New York; boats run there weekly and take five days allowing a day stop over at San Juan, Porto Rico. The minimum fare is \$125. on the Porto Rican Line which is passably comfortable. More than the day which the ship stops at Santo Domingo is needed, however, to see something of the city and the surrounding country, including the site of the memorial.

There are several good hotels in Santo Domingo

where one can live for from \$2.50 to \$5. a day for room and meals, the food is sometimes decidedly strange but entirely edible. Also the Dominican Republic apologizes for no Volstead Amendment.

The people are of varying colors from the pale tones of those who trace their ancestry directly back to the Spanish Conquistadores to the pure black of the African negro. Spanish is the tongue universally used, with English coming second and French third. To acquire any information or direction from the usual native, Spanish is absolutely necessary.

One brings back with one, from a visit to Santo Domingo, the memory of a vividly colored island set in a blue sea, a blue which only the Mediterranean equals, with wonderful architecture which was over a century old when the Pilgrims landed on our shores; one brings back visions of Columbus and the conquistadores, of freebooters and pirates—the heritage of the Spanish Main.



TYPICAL STREET IN SANTO DOMINGO—SKETCH BY E. L. HOWARD

A SCHEDULE OF INTERIOR FINISHES

By George S. Dudley

IN SMALL WORKS of domestic character it is always hard for the architect to make a reasonable profit and still devote enough labor to the job to produce a good set of plans and a complete and comprehensive set of specifications.

For this reason numerous architects have tried, with varying degrees of success, to standardize methods both in their drawings and in their specifications and to minimize the job costs.

One valuable timesaver, which also increases accuracy and reduces the chances of omissions, not only for the architect but for the contractors and the material men as well, is the "Schedule of Interior Finishes." It has other advantages besides those just mentioned, such as simplifying specifications and eliminating from the plans numerous notes which would otherwise be necessary.

As no two types of buildings have the same requirements it becomes necessary to make different schedule layouts for different jobs.

Each room or space on the plan having any finished materials in it is given a number which is shown in the schedule in the second vertical column preceded by the room name in the first vertical column. The main headings of finish are arranged across the top of the sheet and below them are placed their respective sub-headings.

By referring to the accompanying plan and schedule, the general method of procedure can be readily seen.

Where a mark is shown it indicates that the material or finish in that vertical column applies to the room in that horizontal column. For example, in Living Room No. 111 under "floors" we have an X in the "oak" column. In the specification oak floors will be covered in the customary manner as to materials, workmanship, etc., but instead of naming all the various rooms and spaces where these floors occur a concluding clause will be added stating that these floors will occur in all spaces as noted in the "Schedule of Interior Finishes," thus making this portion of the specification or any similar portion applicable to almost any building of a like nature.

Continuing with Living Room No. 111, our next heading is "Base" and then "Trim" and under their sub-headings of "oak" for each of these finishes we have an X, indicating that oak base and oak trim are to be used in this room.

For plastered surfaces we use three letters "A,"
"B," and "C" and specify "A" plaster as sand finish,
"B" as smooth putty coat and "C" as textured putty
coat. As under floors, the specification will not mention all the rooms or portions of floors to be plastered
but will simply refer to the schedule.

For painted surfaces we again have several letters. Let us say "E," "F," "G," "H," and "I" and specify "E" as three coats of lead and oil, "F" as filler, stain and two coats of varnish, "G" as size and three coats of wall paint, "H" as size and calcimine, and "I" as one coat of flat and three coats of enamel. These letters are used as are those for "Floors," "Trim," and "Plaster," again eliminating from the specifications the naming of rooms or parts of rooms to which the various paints are applied, and again referring to the schedule for their location.

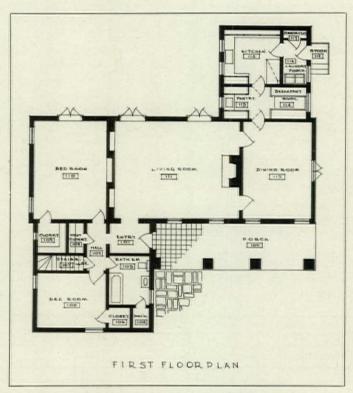
TRST FLOORS		BASE			TRIM			PLASTER		PAINTFINISH				REMARKS.			
RM NAME	МО	OAK	DINE	TILE	OAK	PINE	TILE	OAK	PINE	MOULD	WALLS	CLNGS	FLS.	WOOD	WALLS	CEIL- INGS	
PORCH.	100			X								maria.		00			
ENTRY	101	X			X			X			C	C	P	F	G	G	
HALL	102	X			×		la della	X			C	c	P	F	G	G	
BATH.	103			×			X		×		В	В		- 1	1	1	4'6' TILE WAINSCOT
SHOWER.	104			X			X				B	B			r	1	6.6" " "
BED ROOM.	105	X				X			X	×	C	A	F	1	G	н	WALLS ABOVE PICTURE MOULD APLASTER &H-PAIN
CLOSET	106	×				X			×		В	A	fr.	1	+	н	" " HOOK STRIP " " " "
STAIR.	107		X			X			×		A	A	15.	6	н	н	
COATCLO.	108	×				X			×		8,	A	F	1	i	H	WALES ABOVE HOOK STRIP A PLASTER CH PAINT.
CLOSET	109	×				X	100		×		В	A	F	1	T.	н	
BED RM.	110	×				×			×	×	c	A	F	1	G	. t	" PICT. MOULD" " " "
LIVING RA.	133	×			×		1	×			С	C	la.	F	G	G	
DININGRA	112	×			×			X			c	C	F	F	G	G	
PANTRY.	113		X			X		F	X		В	8	E	t	1	1	LINOLEUM BY OWNER
BK NOOK.	114		X			X			X		В	B	E	- 1:	1	1.	H 4 H
KITCHEN.	115		X			X			×		В	В	E	- 1	-	1	" "
LAUNDRY P.	116		X			X			X		В	В	В	t	1	1	" "
BROOM CLO.	117		×			×	150		X		В	В	В	1	t	1	" "
STOOP.	118		×			11/1							E	E.			

The last heading of "Remarks" takes care of the few special conditions not important enough to devote a special column to.

This example is a very simple one and gives only the general idea while for a larger and more complicated job various other headings and sub-headings might be added, such as "Wainscots of marble, tile or wood"; or "Furred ceilings on wood or on metal furring," etc.

A schedule of this kind is very applicable to small work but has its limitations. For large commercial work such as office buildings, hotels, lofts, and so on, it becomes too large and cumbersome to be practical. With this schedule the various finishes of all rooms are before us in systematic form, easy to find, easy to check, and in case of a change of any finish in the job neither the drawing nor the specifications are affected. Furthermore, if the schedule is kept in pencil until the drawings are ready for printing, a correction is a very simple matter.

Sub-contractors and material men can take off their quantities quicker and easier and with less chance of error with this system than they possibly could without it. Numerous good offices are using it now and those that I know of personally believe it invaluable.



PLAN TO ACCOMPANY SCHEDULE ON PAGE 427

BACK TO THE SHACK

AN APPRECIATION OF OUR LATEST REVIVAL

By Samuel G. Wiener

EDITOR'S NOTE:—The author of this article, a Shreveport, Louisiana, architect, feels that we have possibly overlooked something in our search for a truly American architecture. He presents it here for your consideration.



OW THAT THE FLOOD waters have subsided, and the railroad tracks and highways can be seen, touring has been resumed in this Southland with an added enthusiasm. It has not been a long time since Europe attracted the tourists of North America, and they gave themselves up to the beautiful an-

tiquities or opportunities of the other side of the Atlantic.

Recently attention has been drawn to the offerings of the South, and here we find our land crowded with strange outlanders from New York, Illinois, and California. Our best hotels no longer cater to the native patronage, and they make wholesale arrangements with Cook and Son to accommodate large parties of teachers, clubwomen, or students. Our old rendezvous, so well known for its piquant crab gumbo, has lost its flavor and the gumbo, in appealing to the uninitiated taste of its new found patrons, has lost its tabasco.

There is something more significant about the manner in which the art seekers have forsaken Europe for the treasures of the South. It has not been so long ago in the memory of any middle-aged draftsman since one of the prerequisites of architectural culture, or rather prestige, was a sojourn in Europe. This state of mind was reflected in the architecture of America, so that the appearance of our buildings was an outgrowth of the series of revivals of European styles. At last we have tried all the styles, grand and minor, and now there are no others left in Europe, for every building constructed before the 20th Century has been carefully documented by the academically inclined.

American architecture has always demanded inspiration which it has found only in borrowed sources. European sources have been exhausted. The Romanesque was about to have another relapse when the attention of the inspirationalists was focused on our Southern provinces.

The ateliers, the Home Charming and Garden magazines, the schools and wandering draftsmen have seen the possibilities of the native work in the South. Scholarships founded in the days of Bulfinch to send envoys to Europe have been revamped to give the ambitious holders a year in Louisiana or Georgia.



THE RIVERMAN'S HOUSE NEAR FORT HUMBUG—SKETCH BY SAMUEL G. WIENER
A LYRIC OF THE RED RIVER BANKS



THE BARN ON HART'S ISLAND ROAD



THE HOUSE THAT ONE-ARM SCULLY BUILT—A BIT OF OLD BRINNERTOWN SKETCHES BY SAMUEL G. WIENER

BACK TO THE SHACK

Art schools have established studios in plantation homes. Beautiful ante-bellum mansions have been modernized and enlarged to house visitors desirous of studying Afro-American architecture.

No one was more surprised to learn of the immense value of indigenous Southern architecture than the Southerner. We have always cherished what is left to us of the Colonial, and every

student is familiar with the majestic porticos of Greek and Italian inspired homes. The French Colonial houses of Louisiana and the Spanish Missions of Texas have also been catalogued in our older architectural guide books, and they often give charming backgrounds to cinema settings, or magazine illustrations.



STEWED HENRY'S HOUSE

At first we thought it was a passing fad of a few cranks. Students from far away combed the landscape searching for subjects to record with their pencils, water colors, or folding rules. Now we are no longer astounded when we see a serious minded man installed on a camp stool making a sketch of what we always called "nigger shacks." Indifferently they pass the old plantation

mansions which the Southern sentimentalists have always held close to their hearts, only to go into architectural ecstasies at the sight of the most dilapidated of the shacks where dwell our dusky inhabitants. The negroes are not alarmed, and are very little concerned about the "white folks drawen pitchers" of



THE HOUSE WHERE NERVEY BYNUM USED TO LIVE SKETCHES ON THIS PAGE BY SAMUEL G. WIENER

PENCIL POINTS



THE PRESSING CLUB HOUSE—SKETCH BY T. A. FLAXMAN



THE HAY-CRIB, STONER HILL—SKETCH BY SAMUEL G. WIENER NINETEENTH CENTURY PRECEDENT IN FARM HOUSE ARCHITECTURE

BACK TO THE SHACK



"UNCLE PLUVIE'S RESIDENTS"
SKETCH BY SAMUEL G. WIENER

their houses. Sometimes they will show enough curiosity to look over the shoulder of the artist, and if they feel complimentary they will say that it looks "natchal." Their greatest astonishment is that the artist does not know enough to select the more prosperous looking houses that have freshly painted siding, new shingles, and orderly fences.

To the serious students of architecture, calloused in the critiques of Beaux Arts trained professors, the surprise should be that this architecture was so tardy in attracting the attention of the lovers of fine building. These students were schooled in the theories which make architecture an idea which can seldom be accomplished except in theory. The expression of plan and function in design was always a desideratum, but possibly never obtained in modern work. Even the gems of Roman majesty and the Renaissance scholarship often prove false to the demands of the purists. Modern architecture with very few excep-



A CHOICE EXAMPLE—SKETCH BY S. G. W. "Old Black Joe, the man what fixes shoes, he lives here."



JEFF TURNER'S HOUSE SKETCH BY T. A. FLAXMAN

tions is ignored as unworthy of the consideration of those who look at a building through the lens of theory.

There is no wonder that these lovers of the ideal found the simple homes of the negroes the object of a most genuine admiration. Their enthusiasm was well founded, for these houses represented architectural expressions that would have been a joy to Guadet.

The disposition of the plan is always logical. The elements are few and simple and the solution would withstand the criticism of the most "hard boiled" jury. There is no classic of architectural history more perfect in plan than the typical country house of our negroes. Two rooms with the open "gallery" between describe a plan that it is impossible to improve upon from a standpoint of function, utility, or economy.

The treatment of the third dimension, that is



WESS JOHNSON'S STORE—SKETCH BY S. G. W.

A delightful example of Hamitic commercial architecture,
with no apologies to Vignola.

called elevation, is equally worthy of extravagant phrases. The walls, windows, and roof are handled in a manner so completely organic that the practitioner is disheartened when recalling his own compromising efforts at architectural expression. Wood is always selected as the building material and with the exception of the glass which should be in the windows and the clay of the chimneys, wood serves throughout. The structural members, which are usually two-by-fours, carry loads that defy what is written in hand-books, and reinforce our suspicions concerning the structural engineer.

The foundation usually consists of a few wood blocks, or stumps, placed on top of the ground at the corners of the house. Sometimes posts are driven into the ground to hold the sills. If bricks can be found in the neighborhood they may take the place of the blocks, and it is not considered necessary to worry about mortar.

Walls are invariably framed of two-by-fours, and the studs are run horizontally or vertically. When run vertically they are covered with almost any kind of wood siding, shingles, sheet metal, old tin signs, or anything that can be found to increase the protection against the rain and winter. When the two-by-fours are laid horizontally they are covered with vertical boards, and the joints of this siding are covered with battens. For some unknown reason this construction is called the "California System."

Fenestration is most interesting. Windows are not numerous and their size depends upon the luck of the builder in finding discarded sash. They are sometimes movable but not counterweighted. A broken glass remains broken or is replaced with tin or covered with a piece of linoleum. The interior of the wall is covered as smoothly as possible with boards, the result being rustic in a sense that is not desired by architects.

Papers cover the walls. Newspapers, comic papers, lovely pictures, and calendars make the interior a current library and an art gallery. There are no framed pictures,—but a lodge certificate, an insurance policy, or a diploma from a hair-straightening school always merits a frame.

Nothing is more fascinating than the roof, and here we have the ingenuity of the colored builder at his best. The roof is the result of an evolution dating back to its first covering of shingles and boards. When a leak occurs, a piece of tin tub, a Coca-Cola sign, or a piece of oil-cloth is added. The result is just as picturesque and more varied in texture than the well known tile or slate of Europe.

Landscaping effects are often given more consideration than the construction. The colored people have an inherent love for plants and flowers, and the most ramshackle house is often covered by a vine of blossoms, with flowers planted in lard cans and vines cultured in Mason jars filling the front yard and gallery. No yard is too small for a "Chinaberry" tree, and a Magnolia or Persimmon is a source of loving pride. Pink crêpe-myrtle, cock's-comb, lilac, or wisteria give the charm of color to the surroundings. Around the plot or only in front of the house is a collection of materials vaguely resembling a fence. Old planks, split logs, barbed wire, discarded blinds, fly-screens, and antiquated bed-springs combine to make a fence that is unique in its variety and appearance.

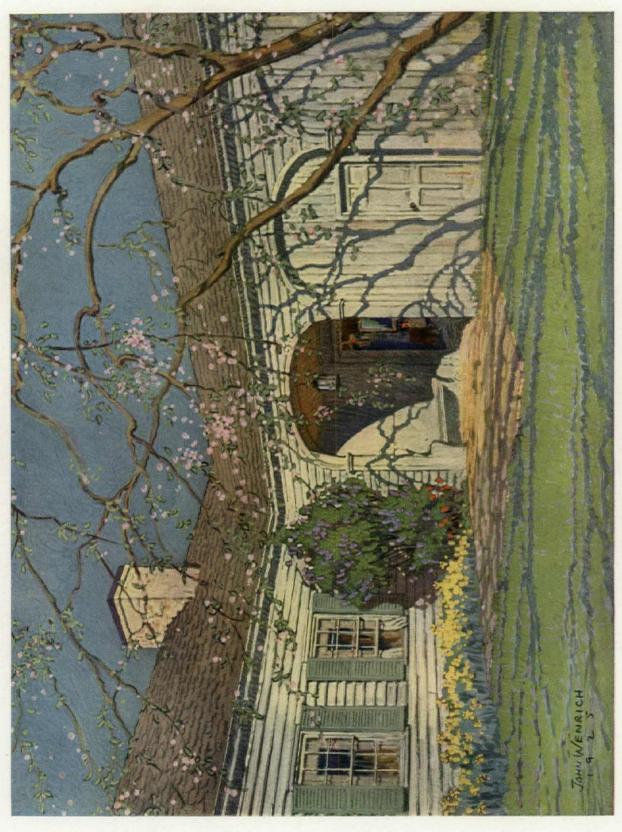
To this entourage, add an empty chicken-coop, a few stray chickens, a yellow-brown hound, a broken-down wagon or Ford, a clothesline bearing assorted colors, an aged darkey on the porch and a bevy of "pickaninnies" in the yard, and the crooning melody that others call "spirituals" and the picture is complete. The house is as natural if not as lasting as anything on the face of this planet.



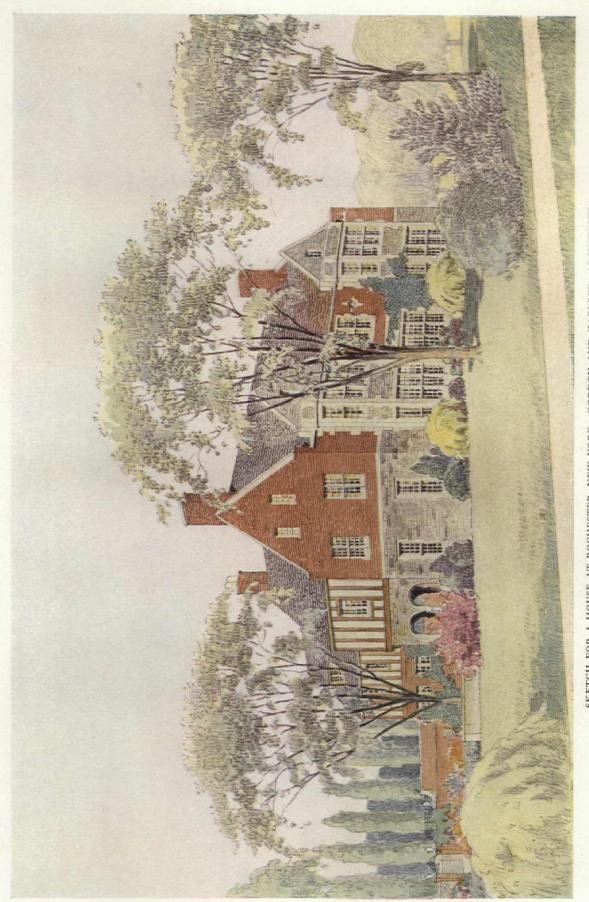
THE FLY-SCREEN HOUSE—SKETCH BY T. A. FLAXMAN

PENCIL POINTS SERIES of COLOR PLATES

This drawing by John C. Wenrich of Rochester, New York, is one of a series of renderings recording some of the older architecture of New York State. The original measured 17" x 13" and was made on a light brownish cardboard. A finished line drawing was first made with black crayon. The shadows were then washed in with transparent color, after which the sunlit portions and the sky were rendered with opaque color. This procedure might be employed to advantage on renderings of intimate domestic architecture and surprisingly good results can be obtained in this way by a man who knows how to use color.



OLD HOUSE NEAR EAST AVON, NEW YORK RENDERING IN TRANSPARENT AND OPAQUE WATER COLOR BY JOHN C. WENRICH



SKETCH FOR A HOUSE AT ROCHESTER, NEW YORK—GORDON AND KAELBER, ARCHITECTS RENDERING IN PENCIL AND WATER COLOR BY JOHN C. WENRICH

PENCIL POINTS SERIES of COLOR PLATES

This rendering is notable for its excellent expression of materials. The brick, stone, half timber work and slate are shown for exactly what they are and are in the proper relation one to another. The drawing was first made with a B pencil on illustrators' board and was then rendered completely in transparent water color. It measured 19½" by 12½". The trees and planting are indicated simply and effectively and are placed so as to form a natural setting for the building.



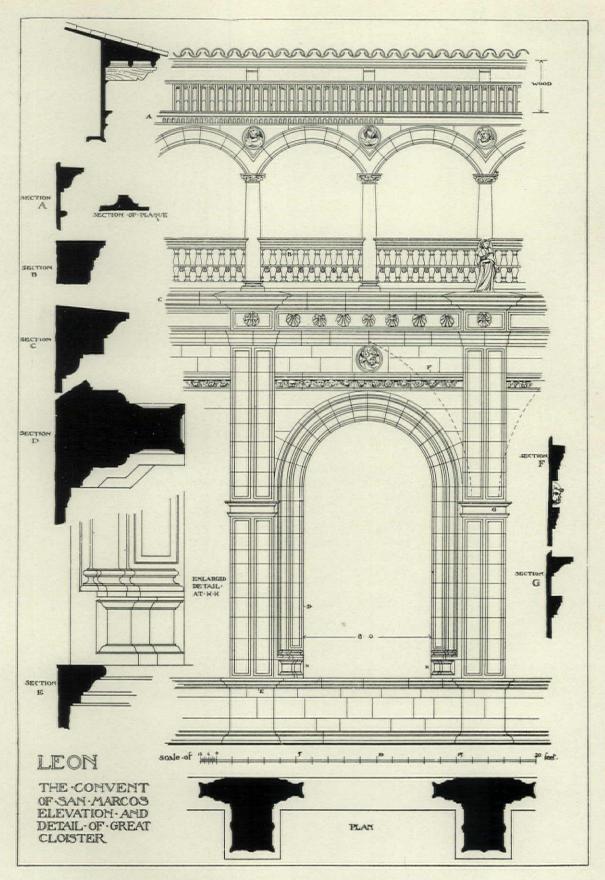
WATER COLOR MONOTONE RENDERING BY EDWARD DIXON McDONALD OF CLEVELAND PROPOSED OFFICE BUILDING, S. H. WHITE, ARCHITECT

PLATE XXV

VOLUME IX

NUMBER 7

This plate shows an effective type of rendering for a modern city office-building. It was made entirely with water colors over a preparatory pencil perspective line drawing.



RENAISSANCE ARCHITECTURE AND ORNAMENT IN SPAIN
A PLATE FROM THE WORK BY ANDREW N. PRENTICE

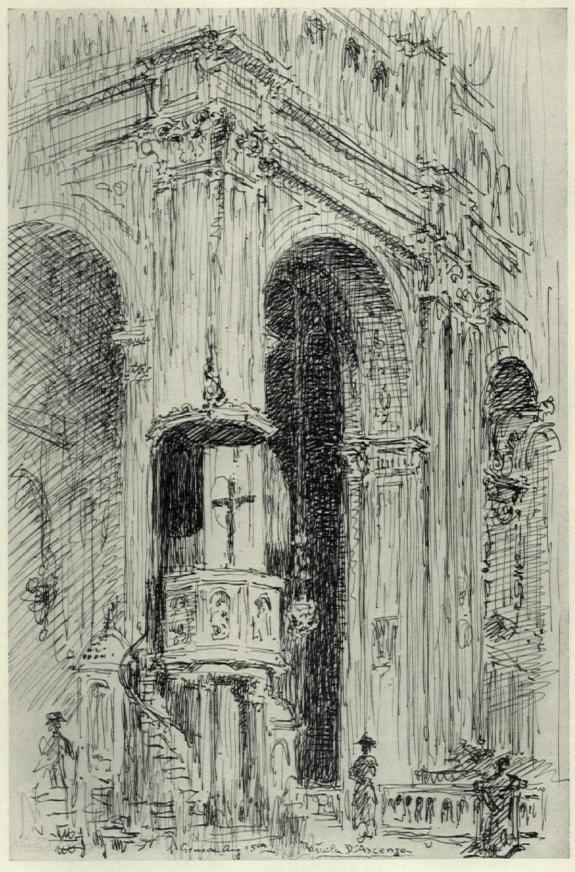
PLATE XXVI

VOLUME IX

Number 7

"The Great Cloister, also designed by Juan de Badajos, has a very striking appearance when seen in perspective, with its projecting wooden cornice and rich Gothic groining on the ground story, which is indicated by dotted lines on the plate. The projecting buttresses terminate at the firstfloor level."

A. N. PRENTICE



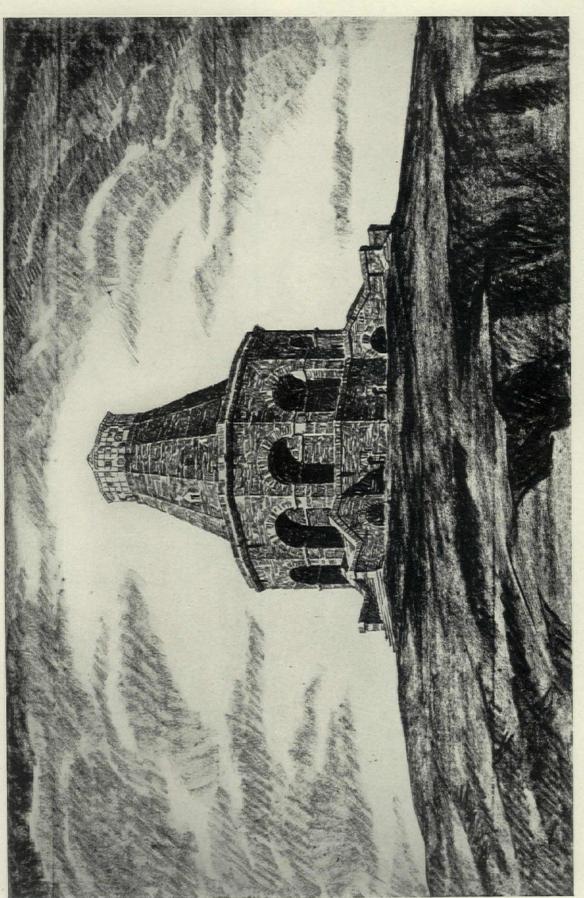
IN THE CATHEDRAL AT GENOA FOUNTAIN PEN SKETCH BY NICOLA D'ASCENZO

PLATE XXVII

VOLUME IX

NUMBER 7

This sketch by Nicola D'Ascenzo, who is well known as an artist in stained-glass, shows the possibilities latent in the ordinary fountain pen as an instrument for pictorial expression.



COMPETITION DESIGN FOR A WAR MEMORIAL BEACON AT FREDRIKSVARN, NORWAY RENDERING IN CHARCOAL BY JOHN FINSETH, ARCHITECT

PLATE XXVIII

VOLUME IX

NUMBER 7

This rendering was made with compressed Russian charcoal on tracing paper. It is strong and vigorous in technique and well suited to express the design.

WHITTLINGS

Dr. Samuel Johnson,

Writing in the "Rambler" of April 30, 1751, on "Garrets," evolves an ingenious argument which might be applied to explain the temperament of the modern American dweller in skyscrapers:

"Another cause of the gayety and sprightliness of the dwellers in garrets is probably the increase of that vertiginous motion with which we are carried round by the diurnal revolution of the earth. The power of agitation upon the spirits is well known; every man has felt his heart lightened in a rapid vehicle, or upon a galloping horse; and nothing is plainer than that he who towers to the fifth story is whirled through more space, by every circumrotation, than another that grovels upon the groundfloor. The nations between the tropics are known to be fiery, inconstant, inventive, and fanciful; because, living at the utmost length of the earth's diameter, they are carried about with more swiftness than those that nature has placed nearer the poles; and therefore, as it becomes a wise man to struggle with the inconveniences of his country, whenever celerity and acuteness are requisite, we must actuate our languor by taking a few turns around the centre in a garret."

"BUILDING ECONOMY,"

Publication of the Common Brick Manufacturers' Association of America, comments editorially on the social effects of the architect's activities:

"Many of you can recall the old-time parlors, places held sacred to special occasions, punitive retreats to the youngsters, severe in their horsehair upholstered furniture and uncomfortable straight-back chairs, and decorated with pictures of spade-bearded, grim-faced grandfathers who might have been royal executioners.

"Contrast that memory with the big living rooms of today where the whole family listens in and enjoys life, with no curfew and no bed at 8 o'clock.

"Verily the architects are the least understood and appreciated of all men."

HEYWOOD BROUN,

Columnist (until recently) of the New York World, remarks on the excellence of Puritan architecture in New England:

"In architecture, at least, the Puritan has prevailed and the modern generation owes him an apology. It is conventional to say that he lived sourly and quite divorced from beauty. Maybe so, but why do his houses look so well? Drive through New England, and preferably Connecticut, which is the best of the lot, and you will rarely see an old house which has not taken on some aspects of fineness. Compare the true colonial with the later imitations which our bright young men are making and you will have to admit that the old boys did it better. I'm not speaking of cheap and shoddy new colonial, but the very best that modern architecture affords. Even so, it falls short."

PROFESSOR WILLIAM A. BORING,

Head of the School of Architecture at Columbia University, writing in the Journal of the American Institute of Architects anent the Architect's Fee, advances an interesting idea:

"In theory the artistic success of a design should be rewarded in proportion to its merit. This seems impossible to evaluate on a business basis but a great architect, like a great lawyer or surgeon or portrait painter, could properly charge more than good practitioners whose work does not carry distinction.

"If this discrimination were usually acknowledged the beauty of architecture would increase and the architect would get his just reward."

DWIGHT H. PERKINS,

Past president of the A.I.A., speaks to the Rotarians of Chicago at a recent luncheon:

"Chicago is tough, that is admitted, but the city is worth saving.

"The newness of the place and the inherent, inevitable power attract me irresistibly to continue to live and to work here.

"What sight on earth inspires one more than a walk along our lake front, which is beginning to show signs of permanence."

TROY KINNEY,

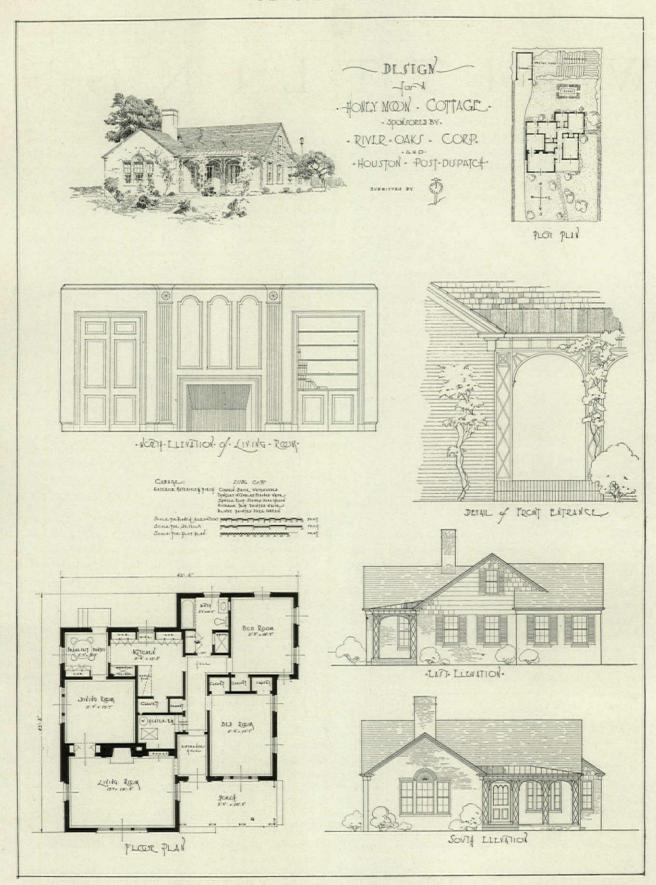
Noted etcher, speaking before the Architectural League of New York at an evening of Spanish Dances, draws an analogy between the two arts of dancing and architecture:

"The League's experience with the dance in the past years has made it unnecessary for me even to refresh your memory on the kinship of that art and those we practice six days a week. Many of you remember Roshanara's demonstration here—the last appearance she ever madeand how clearly she emphasized that, like an edifice, a worthy dance has its interest of floor plan; how the tracery of its movements through the air draws a façade, none the less strong because it is ethereal; how the body of the dancer makes a series of statues on the surface. Nor need I freshen your memories as to the fact that in the dance-I am not talking of Broadwayism, but of an art—the matter of theme of shape has exactly the same relationship that it has in, say, a mural painting. Spicy, frisky motive-sharp, slim, angular figures; gracious sweetness; softly curving figures. And the type of figure, of course, is carried out in floor plan of movements and movement through the air."

Dr. J. W. G. WARD,

Of the First Congregational Church, Detroit, uses Architecture to point a moral:

"The architecture may be irreproachable, stresses carefully calculated, the steel and stone the finest procurable, yet all go for nothing unless the foundation is adequate. To sustain buildings of such mammoth proportions, it is absolutely necessary that they be built on the rock itself. The same thing is true of national and personal life."



FIRST PRIZE DESIGN, BY VANCE D. PHENIX AND E. M. SCHIWETZ HONEYMOON COTTAGE COMPETITION

PENCIL POINTS



MEMBERS OF THE HOUSTON ARCHITECTURAL CLUB AT A DINNER GIVEN IN HONOR OF THE WINNERS OF THE HONEYMOON COTTAGE COMPETITION

Seated immediately behind the drawings are J. W. Northrop, Jr., President of the Houston Chapter of the A. I. A., and J. T. Rather, President of the Houston Architectural Club.

THE HONEYMOON COTTAGE COMPETITION

THE HONEYMOON COTTAGE COMPETITION was sponsored jointly by the River Oaks (Texas) Corporation and the Houston Post-Dispatch. The competition was instigated with the idea of securing small houses of good design that could be built at a minimum cost of \$7,000 and sold for between \$10,000 and \$12,000, which would appeal particularly to young married couples. It was open to everyone residing in the State of Texas excepting employees of the sponsors or the judges. The program stated that the house should be planned for a minimum size lot of 65' x 125' or a maximum size of 75' x 150', the house itself to set back at least 35' from the property line and have at least 10' of ground on each side. More than eighty entries were received and the judges were gratified at the high standard of the designs.

The First Prize of \$500 was awarded to Vance D. Phenix and E. M. Schiwetz, of Houston, Texas, whose winning design is shown opposite. Roy Ainsworth was awarded the Second Prize of \$100, and another design submitted by Vance D. Phenix and E. M. Schiwetz won the Third Prize of \$75.

Honorable mentions were given to the designs submitted by L. M. Wirtz and H. E. Calhoun, Gordon M. Smith, and J. G. Buvens, whose designs are reproduced herewith, and to Carl A. Mulvey, J. Gammill, Mrs. Robert Pentz, and Claude E. Hooten.

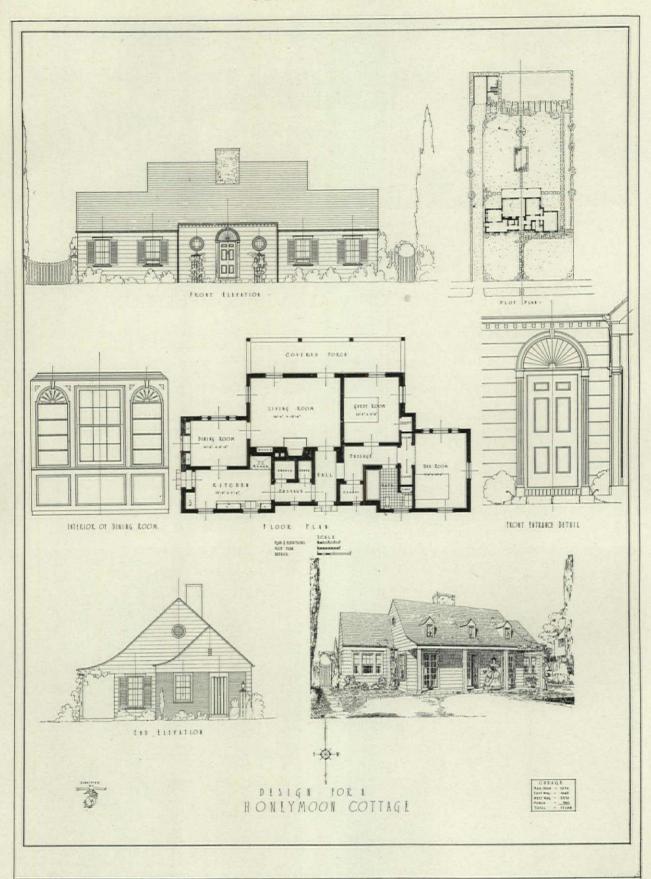
The prize winning cottage will be erected by the Houston Post-Dispatch and the River Oaks Corporation. The Report of the Jury stated that the winning design (Continued on page 458)



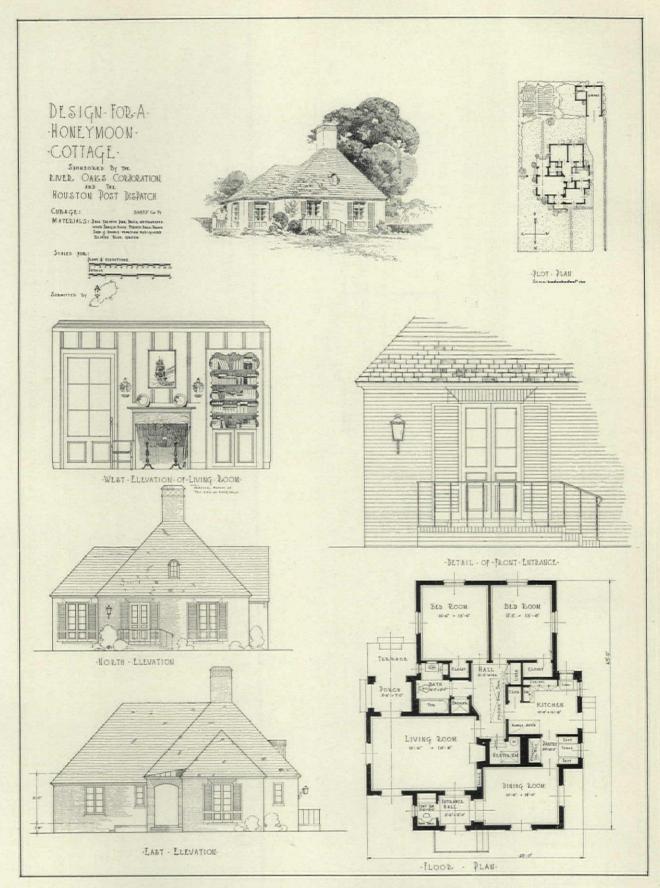


E. M. SCHIWETZ AND VANCE D. PHENIX-PRIZE WINNERS IN THE COMPETITION

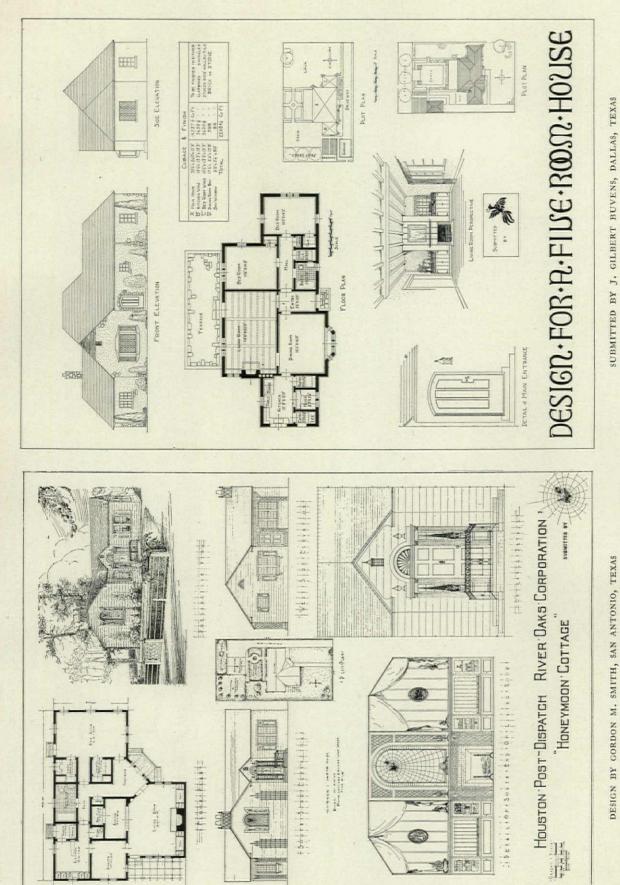
PENCIL POINTS



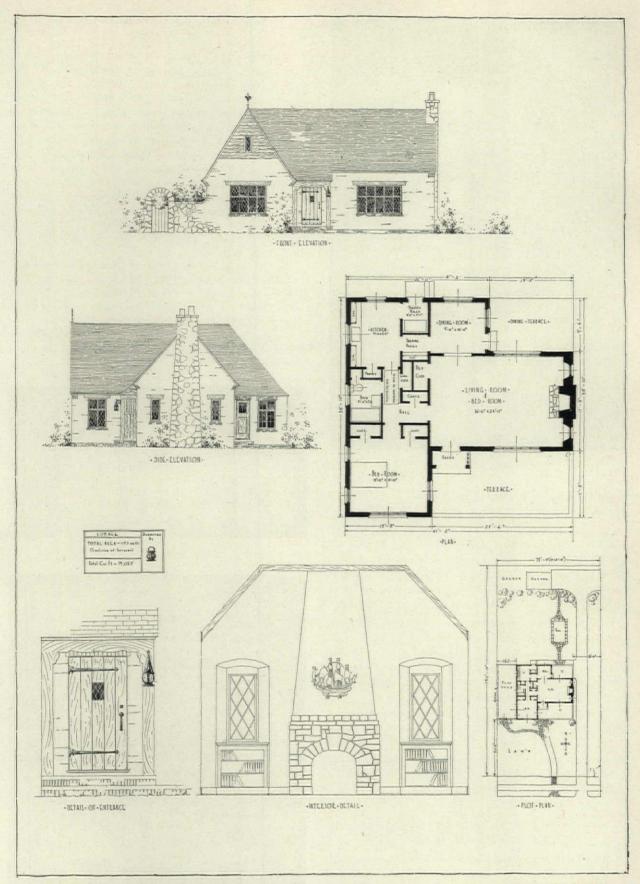
SECOND PRIZE DESIGN BY ROY AINSWORTH HONEYMOON COTTAGE COMPETITION



THIRD PRIZE DESIGN, SUBMITTED BY VANCE D. PHENIX AND E. M. SCHIWETZ HONEYMOON COTTAGE COMPETITION



HONORABLE MENTION DESIGNS IN THE HONEYMOON COTTAGE COMPETITION



HONORABLE MENTION (HORS CONCOURS), DESIGN SUBMITTED BY L. M. WIRTZ AND H. E. CALHOUN HONEYMOON COTTAGE COMPETITION



KARL J. BELSER

BOOTH FELLOWSHIP AWARDED TO K. J. BELSER

THE GEORGE G. BOOTH Travelling Fellowship competition in architecture for 1928 has been awarded to Karl J. Belser. The problem was *The Home of a Musical Society*. First mention was awarded to Verne H. Sidnam, and second mention to Robert J. Aitken. The jury consisted of a number of Detroit architects and members of the architectural faculty of the University of Michigan.

The winner of the competition graduated from the University of Michigan in 1925 and was a member of Tau Sigma Delta at Michigan. He went abroad after his graduation and subsequently did graduate work at Harvard University. At the present time he is employed by Kendall and Kendall, Architects, of Boston.

The George G. Booth Travelling Fellowship in Architecture was endowed in 1924 by Mr. George G. Booth, of Detroit, who is an honorary member of the American Institute of Architects. The stipend of the fellowship is \$1,200 and practically no restrictions are placed on the holder in his choice of itinerary.

PEST CLUB OF ROME

MEMBERS OF the Pest Club of Rome will be interested to know that the Grand Pest, Raoul Du Fail, has just sailed to address a World Conference of Pests, to be held at the Café des Deux Magots in Paris on July 13-14-15. From there the meeting will be transported by a fleet of fast taxicabs to Rome, where appropriate ablutions will be performed at Albrecht's.

STRUCTURAL ENGINEERS SOCIETY OF NEW YORK

At MEETINGS HELD during the past few weeks, a group of the active structural engineers specializing in building work in New York have formed a society to be known as the Structural Engineers Society of New York. The general aims and purposes of the organization are set forth in the Preamble of the Constitution as follows:

"The object of this Society shall be the creation of a better understanding and bond between individuals engaged in this Profession, the elimination of practices which are injurious and the promotion of those which are beneficial to the true service of the Structural Engineer, and the upholding of proper standards for the Engineer in his relation to other members of the Building Industry and to the General Public, who look to him for the safety and integrity of building."

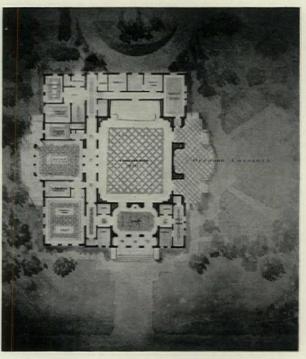
The Officers of the Society are: F. A. Burdett, President; L. A. Ball, Vice-President; N. A. Richards, Vice-President; E. E. Seelye, Secretary; and H. R. Burroughs, Treasurer. The Board of Directors is composed of the Officers

together with Charles Mayer and A. N. Van Vleck.

Anyone desiring further information regarding the Society may obtain the same by communicating with the Secretary at 101 Park Ave., New York.



"THE HOME OF A MUSICAL SOCIETY"



WINNING DESIGN BY KARL J. BELSER BOOTH TRAVELLING FELLOWSHIP IN ARCHITECTURE, 1928

HOW YOU LOOK TO THE LAYMAN

A syndicated editorial which has appeared in a number of newspapers throughout the country gives such a cynical view of the architect that it may be of interest to our readers. It was brought to our attention first by S. L. Hatfield of Waggoner, Oklahoma, who spotted it in the "Muskogee Daily Phoenix." We later found the same editorial in the "Baltimore Evening Sun" and the "Omaha World-Herald." Read it and weep!

ARCHITECTS

Architects are men who build houses for other people to live in. This gives them much greater leeway than if they had to live in the houses they build. Of course, architects do not do the actual construction. They long ago discovered that it was much easier to draw a design and leave the heavy work to others. Then after a time they discovered that drawing, too, was tedious, so today as a rule the best architects, like captains of industry, confine themselves to conferences and gestures.

The architect's design is known as a blueprint. The blueprint is to architecture what the brief is to law. It makes something simple look very difficult and thus discourages the hoi-polloi and upholds the professional standard. As few clients can read blueprints, the architect usually furnishes a sketch with several thousand dollars' worth of trees and shrubbery thrown in and all the surrounding eyesores left out. A human being or two drawn a little below the normal size add greatly to the grandeur of the building. Grass always grows luxuriantly in an architect's sketch, and every one observes the zoning laws.

Very naturally serious architects do not like to be mere copyists. They are artists who strive to put their personality into a building. Frequently they are so successful that the owner has many occasions to remember them in years to come. It is, however, a little hard on the owner that he should be required to stub his toe or butt his head indefinitely in order to realize that his architect was a genius.

The best architects concern themselves with artistic effects such as lines and surfaces. It is well to understand this when searching fruitlessly for a closet or wondering why on earth they placed the bathroom where they did. It is also consoling when you have little inconveniences to put up with to know that the architect was most successful in "handling his masses."

However, the architect's life is not without its burdens. Long after he has completed a house he can count upon the owner inviting him regularly to tea in order to tell him what is wrong with it.

DETROIT ARCHITECTURAL BOWLING LEAGUE

AFTER SEVERAL MONTHS of discussion about increasing the size of the League, we have finally decided to continue with ten teams as in the past, but will bowl four rounds instead of three. This ought to satisfy the ambitious element of our crowd, at least.

On June 19th we held a very informal golf tournament. Under the direction of J. J. Kahl, a very enjoyable outing was reported, even if some of the boys had scores which sounded more like bowling averages. We must keep in trim, you know.

And we haven't heard from Cleveland since our last match with them!!!



JOHN NOBLE RICHARDS

JOHN NOBLE RICHARDS has been awarded the John Stewardson Memorial Scholarship in Architecture for the year 1928-1929. Mr. Richards is a graduate of Scott High School, Toledo, and is now a student in the University of Pennsylvania's School of Fine Arts.

The scholarship is valued at \$1000 and the holder is required to study architecture abroad under the direction of the Managing Committee in charge of the award.

Richards, who is the son of Dr. and Mrs. Charles J. Richards, of Toledo, was graduated from Scott High School in 1921 and entered the employ of Mills, Rhides, Bellman and Nordhoff, architects in Toledo, where he remained until 1924, when he enrolled at the University of Pennsylvania to take a special course in the Department of Architecture.

After taking the special course, Richards became a candidate for a degree in the department, and last year he was awarded the second prize in the annual competition for the Samuel Huckel, Jr., Architectural Prize.

In addition to being active in undergraduate organizations at Pennsylvania where he is Vice-President of the Architectural Society, a member of Tau Sigma Delta, an honorary fraternity among students in architecture and the allied arts, Richards also has been employed in Philadelphia by Ritter and Shay, architects.

Under the terms of the competition for the Stewardson Scholarship which has now been awarded to a University of Pennsylvania student for the fourth time in the last five years, each contestant is obliged to work under the supervision of a recognized art critic. Jean Hebrard, Professor of Design at the University, supervised Richards' work.

INTERNATIONAL POSTER COMPETITION

For the Chicago World's Fair

THE PRESIDENT and the Trustees of the Chicago World's Fair announce to artists and designers that, as a preliminary to the World's Fair which is being planned to be held on the Lake Front of Chicago commencing in the Spring of 1933, there will be an international competition for the best posters illustrative and indicative of this World's fair.

The judges for the competition will be the following: Honorable Charles G. Dawes, Vice-President of the United States of America; Jules Guerin, Chief of Color, Panama-Pacific International Exposition; Dr. Robert B. Harshe, Director of The Art Institute of Chicago; Eugene Francis Savage, Professor of Painting, Yale University; and Lorado Taft, Member National Commission of Fine Arts for the United States of America.

- 1. Any artist or designer who shall submit one or more posters in accordance with these rules, shall be eligible to compete. Artists and designers of all nationalities, and wheresoever residing, are now invited to compete. The prizes and Honorable Mentions to be awarded in this connection will be as stated in Rule 12.
- 2. All posters submitted must bear the competitor's name legibly signed to the poster, or set forth on a card firmly fastened to the poster.

No anonymously submitted posters will be considered. The Trustees assume no responsibility to competitors whose names have become detached or separated from the posters they submit.

- 3. All posters submitted must bear the following legends: "CHICAGO WORLD'S FAIR" and also the date "1933" with the words "Centennial Celebration" as a subordinate legend, all in such form as the competitor may adopt, provided that a type or style of lettering legible by English and American readers must be employed for this purpose.
- 4. All submissions must be on stout paper and the poster itself shall have a width of eighteen inches and a height of twenty-four inches.
- No poster submitted will be considered if executed in a greater number than eight colors.
- 6. Posters submitted shall be indicative, illustrative or significant of the Chicago World's Fair in 1933, and also of the City of Chicago in that year, but shall be otherwise unrestricted as to subject.
- 7. All posters will be submitted at the competitor's risk and no posters will be returned except as stated in Rule 11.
- 8. All posters submitted by competitors who reside within the United States or its insular possessions, or in Canada, or elsewhere in the Americas, shall be carefully packed and shall be addressed as follows: Poster Competition, in care of the Director of The Art Institute of Chicago, Chicago, Illinois, and may be sent by any means the competitors shall select, but must be sent in such time and manner that they will be delivered and received at the Chicago address mentioned in this rule on or before September 15, 1928.
- 9. All posters submitted by competitors residing in Europe, Asia, or elsewhere in the eastern hemisphere, may be sent directly, in the manner mentioned in the preceding rule, in time to arrive on or before the date there mentioned,

or, at the competitor's option and risk, may be delivered on or before September 1, 1928, to any of the following: R. Lerondelle, 76 rue Blanche, Paris, France; Arthur Dicksee & Company, 7 Duke Street, St. James, London, England: Wetsch & Company, Mobilientransport, Zweigstrasse 1, Munich, Germany, who will, without further expense to the competitor but at the competitor's risk, forward the same to Chicago for the competition. Competitors availing themselves of this forwarding convenience shall address the posters they submit to the nearest forwarder, clearly marking them for the Poster Competition of the Chicago World's Fair. All posters received by any of the forwarders designated in this rule on or before September 1, 1928 shall, if packed and if marked as indicated in this rule, be considered as duly received at Chicago for the competition.

- 10. Each competitor who submits one or more posters, by that fact expressly agrees that the competitor
 - (a) Assumes all risk in connection with the shipment, carriage to or from destination or points of exhibition, delivery, care, and, in case of return, in connection with the return of same;
 - (b) Expressly waives all right to copyright, show, exhibit, reproduce or publish the same, within the United States, in the competitor's name, and expressly, unequivocally and unconditionally assigns all such rights to the Trustees of the Chicago World's Fair, until such time as same shall have been received back by the submitting competitor;
 - (c) Consents that the same may be shown and exhibited at Chicago and elsewhere, in such places and at such times as the Trustees of the Chicago World's Fair, or their nominees or permittees, may hereafter in anywise indicate or approve;
 - (d) Waives all right to demand or have the return of the same before the time when the Trustees of the World's Fair shall decide or consent to return the same.
 - 11. The return of posters will be made only as follows:
 - (a) All posters awarded prizes shall automatically become the property of the Trustees of the Chicago World's Fair, and no competitor submitting the same shall be entitled to the return, withdrawal or use of the same;
 - (b) No posters submitted by competitors residing in continental or insular United States, or elsewhere in the Americas, will be returned except on the request and at the expense of the submitting competitor, and if so returned, shall be returned in any manner the Trustees of the World's Fair may select but without risk on the part of or expense to the latter:
 - (c) Posters submitted by competitors residing outside of the Americas who shall request return of the same, will be returned by the Trustees of the World's Fair at the latter's expense, but at the competitor's risk, but then only to such of the above mentioned forwarding concerns as the Trustees of the World's Fair may select, and to it merely with directions to forward to final destination at the expense of the competitor.

12. Prizes, totaling \$4,000, will be awarded, as follows:

One prize of \$1500.
One prize of 500.
One prize of 250.
One prize of 150.
One prize of 100.

In addition to the foregoing, an additional prize of \$1500. will either be awarded to one or more competitors who reside outside of the Americas if, in the opinion of the majority judges, the posters from such competitors warrant such an additional award, or the sum of \$1500. will be used to augment prizes awarded in such manner and amounts as the Trustees of the World's Fair, on recommendation of the judges, shall direct.

The judges will award prizes in accordance with the decision of at least four of the five judges.

The Trustees of the World's Fair reserve the right to award Honorable Mention to such competitors as the judges may select and to confer medals, of such character as the Trustees may decide, on any one or more of the prize winners or recipients of Honorable Mention.

13. Prize winners and recipients of Honorable Mention will be formally announced to the Press by the decision of the judges not later than January 1, 1929, and such announcement shall be the only formal announcement to be made.

14. All communications in regard to the Poster Contest shall be addressed to Poster Contest, Care of Dr. Robert B. Harshe, Director of The Art Institute of Chicago, Chicago, Illinois.

Poster Contest Committee

Chauncey McCormick, Chairman

Daniel H. Burnham
Charles F. Glore
Robert B. Harshe

Frederick Hodgdon
Charles F. Kelly
Walter B. Wolf

POSTER COMPETITION

THE SANTA BARBARA SCHOOL of the Arts has announced a competition for a poster featuring the City of Santa Barbara. The poster is to be used during the Annual Old Spanish Days Fiesta which takes place in August. At this time the citizens wear Spanish costumes, dance the old dances, and sing the old songs.

The posters may suggest any phase of the history or present life of the city.

The contest, which is open to everyone, closes August 1, 1928, and entries must be received in Santa Barbara on or before that date.

First prize will be a choice of (1) a tuition scholarship valued at \$150 for the term of 1928-1929 in the Santa Barbara School of the Arts, and \$100 cash; or (2) \$200 in cash.

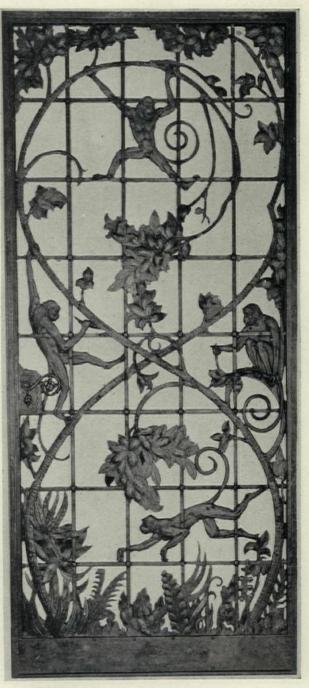
Second prize will be a choice of (1) a tuition scholarship valued at \$150 for the term 1928-1929 in the Santa Barbara School of the Arts; or (2) \$100 in cash.

Further information regarding the conditions of the competition may be obtained from the Secretary, Santa Barbara School of the Arts, 914 Santa Barbara Street, Santa Barbara, California.

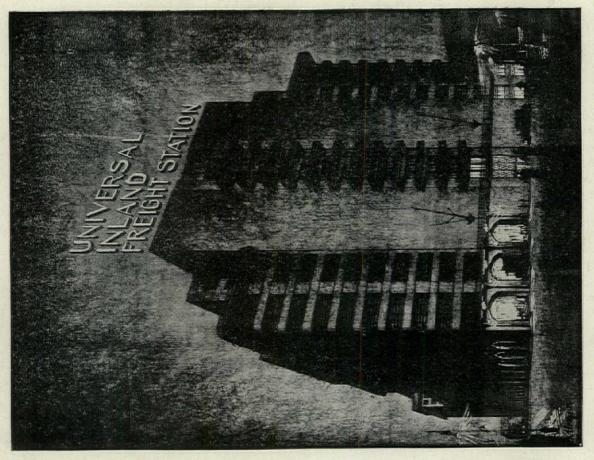
A SMALL HOUSE COMPETITION

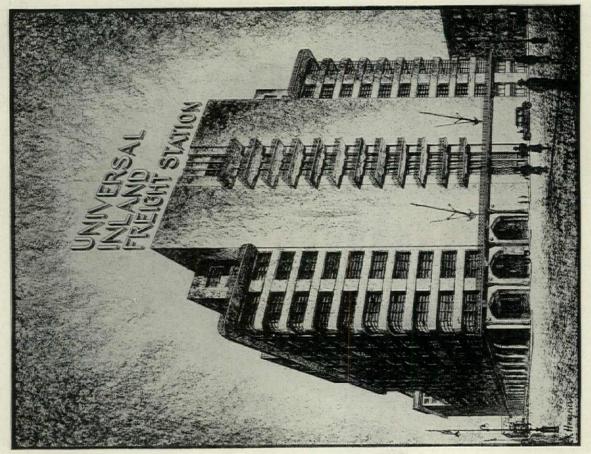
A SECOND COMPETITION for small houses is announced by The House Beautiful Publishing Corporation. There will be two prizes: \$1,000 for the best small house of five to seven rooms, inclusive, and \$1,000 for the best small house of eight to twelve rooms, inclusive. The houses submitted may be of any style and of any material, and must have been built (not remodeled) recently in any part of the United States. The competition closes November 9, 1928.

Send for the complete announcement, with rules for presentation of photographs and plans, to *The Small-House Competition Committee*, 8 Arlington Street, Boston, Massachusetts.



ENTRANCE DOOR TO A CONSERVATORY
DESIGNED AND EXECUTED BY OSCAR B. BACH





TWO PRINTS MADE BY LITHOPRINT PROCESS FROM SAME ORIGINAL DRAWING—RENDERING BY E. K. HENGERER FOR NEW YORK PORT AUTHORITY THE BRIEF ARTICLE OPPOSITE TELLS HOW THIS UNUSUAL RESULT WAS ACCOMPLISHED. THE SIZE OF THE PRINTS WAS 27" x 36"

AN UNUSUAL RENDERING TECHNIQUE

By E. K. HENGERER

A PERSPECTIVE accomplishes two different tasks. First, it shows the designing architect what effect his design will produce, and second, it gives to the layman a picture of the building which he cannot visualize from plans and elevations.

It is often desirable, or even necessary, that multiple copies of the rendering shall be made. If the drawing is made in pen and ink, or even with a good black pencil on vellum, prints may be made by the ordinary Vandyke process. The prints can then be rendered.

This process is unsatisfactory for reproducing drawings made with charcoal, chalk, crayon, and so on, since it is nearly impossible to bring out the medium and very dark tones. The result is usually flat and dead. Reproductions made in this way are also limited to sensitized paper which is not always ideal for further work.

A very satisfactory way of reproducing pen and ink and chalk drawings is by lithoprinting. Every architect and engineer is acquainted with lithoprints. They are used largely for reproducing maps, plans, etc., which are drawn in line, but their use for reproduction of rendered perspectives is very infrequent. Where the process is employed, ink is used on the original line drawings if they show many details while large scale drawings with few details may be easily drawn with pencil.

Lithoprinting is done by specialists. The printer first makes a negative from the drawing in the same way as for a Vandyke print. Then, to transfer this negative to a kind of jelly, which has been poured on to a marble slab and partially dried, the negative print is laid face down on the jelly and after a short time removed. The jelly negative is next inked with lithographic ink, in the same manner as that in which a lithographic stone is inked. The prints are made by rolling the paper over the negative on the slab and stroking it gently with the hand. The prints are then dried and finished. The tone is the same as in lithographs, since lithographic ink is used, and it is a very lively black.

In rendering the drawing to be reproduced, one has always to bear in mind that every black spot will print, and that the drawing has to be printed through the tracing paper. In chalk drawings a solidly closed dark surface will print absolutely black, even though it looks gray on the original. Dark parts have to be produced by drawing many fine lines close together, always keeping small spaces between the lines where the chalk has not touched the surface of the paper. A line which looks gray on the original will either not print at all, or print black. A chalk drawing has to be done in the same manner as with pen and ink. Renderings in pencil or charcoal will not give satisfactory prints.

A great advantage of the lithoprint technique is that any kind of paper having suitable grain for printing can be used, from the finest tracing paper and cloth to Whatman and colored papers. The paper (or cloth) is used just as it comes—it does not need to be sensitized or treated in any way. The process being a dry one, there is no danger that the paper will stretch, while the points can always be matched with the original construction sheet. This is a very desirable feature. The lithographic ink stands coloring even better than Chinese ink.

One interesting feature of the photoprint technique is that the tone of the print can be varied through a wide range. If the negative is exposed for a very short time only, the print comes out very dark, as the grain and texture of the tracing paper used for the original will print. High lights can be obtained by stopping out the spots on the paper negative with varnish.

The perspectives reproduced on the opposite page are printed from the same drawing. Night pictures are exposed for only a very short time; and the high lights stopped out. Day pictures are exposed for a long time.

Sometimes it is difficult to finish construction of perspectives with many small details on the same paper. Usually the tracing paper will be so worn out, brittle and dirty after a short time that it will give only a very poor print. In making a perspective of the Hudson River Bridge foundation, that part of the framework inside of the coffer-dam was extremely difficult to construct because the lines came so close together that it was very hard to tell where they belonged. I therefore finished a part of the framework in ink, had it lithoprinted on a vellum paper, and finished the construction on the print. The resulting drawing was again lithoprinted, and this lithoprint rendered. The saving in time was so outstanding that the price of the lithoprints (only slightly higher than that of ordinary blue prints) was of no moment.

LETTERS OF AN ARCHITECT TO HIS NEPHEW EDITOR'S NOTE:—This is the eleventh of a series of letters by William Rice Pearsall, Architect, of New York, addressed to young draftsmen and students about to take up the study of architecture. Mr. Pearsall, who may be addressed at 527 Fifth Avenue, New York, has expressed his willingness to answer any questions which may be addressed to him by our readers.

June 8th, 1928

DEAR GEORGE:

You have heard me talk about the incompleteness of drawings and why it is a fact that the person of experience will notice almost immediately any omission on a drawing, particularly dimensions which have been left out. The draftsman can make himself more useful and will advance more rapidly if he will keep in mind the needs of the man who is to read the drawing and give him the full information, not just in the drawing as a picture, but in notes describing what certain lines are. The thoughtful draftsman will give dimensions from a definite line, accessible at the building, to that which he wishes to locate and for which he is making the drawing.

To illustrate: if your drawing shows a curved groin ceiling, the spring line should be dimensioned from the finished floor line, the height of rise should be given and, if the curve is formed as the arc of a circle, the radius should be included. If it is an ellipse give the curve at full size or at large scale with exact dimensions by which the curve can be established.

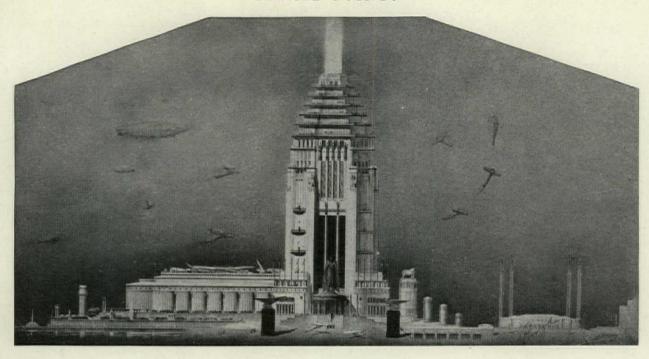
Do not leave the drawing without dimensions, trusting the other fellow to do the guessing. Make your drawing accurately to scale and have faith enough in yourself to put down the dimensions as you know them. Do not omit the connecting link between the work that you are detailing and the adjoining work already established.

You may be detailing an exterior door which sets in a stone jamb, it is to have a trim inside of marble, all of which is detailed. Do not guess. Ask for this information, and make your drawing fit or call attention to conditions that seem wrong and may have to be changed.

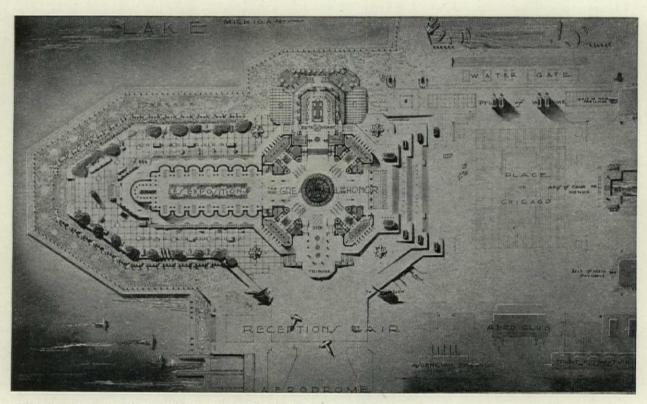
Time is wasted and many drawings have to be remade due to carelessness. Do not wait for the busy chief to get you this information—hunt it up yourself. You will be surprised how much more interesting your work is and how much more rapidly you will advance in your work.

Sincerely, Your Uncle.

PENCIL POINTS



ELEVATION



WINNING DESIGN FOR "CHICAGO BUILDING FOR THE 1933 WORLD'S FAIR AND EXPOSITION," BY LOUIS PIROLA COMPETITION FOR THE ANNUAL FOREIGN TRAVELING SCHOLARSHIP OFFERED JOINTLY BY THE ARCHITECTURAL SKETCH CLUB OF CHICAGO, CHICAGO CHAPTER, A. I. A., AND ILLINOIS SOCIETY OF ARCHITECTS

(See text opposite)

THE CHICAGO ARCHITECTURAL TRAVELING SCHOLARSHIP

THE TWENTY-EIGHTH Annual Foreign Traveling Scholarship offered jointly by the Architectural Sketch Club, the American Institute of Architects—Chicago Chapter, and the Illinois Society of Architects was awarded to Louis Pirola, whose winning design is shown opposite. Eleven men completed drawings out of twenty-four who originally entered the competition. The jury which made the award consisted of Charles Biersman, *Chairman*; Edward H. Bennett, Gilbert Hall, Frederick Hodgdon, and George Robard.

The subject of this year's program was the Chicago Building for the 1933 World's Fair and Exposition. The site is made land on Chicago's water front, adjacent to the proposed Aviation Field. The building is to contain a grand entrance hall, restaurant, and dining terraces, exhibition hall, and combination observation tower and aviators' beacon light. This building is to serve two purposes; during the Exposition as a place of meeting and registration to house exhibits and provide an information bureau, and after the Exposition to serve as a Recreational Building. It is to be a permanent building built of enduring materials. The competitor was given the opportunity of establishing the general character of the Exposition and reminding the citizens and visitors to Chicago years hence of the other demolished buildings. The winner of the prize receives \$1,000 for six months' study and travel abroad.

Mr. Pirola began his study of Architecture in the Atelier Parsons, which is now known as Atelier Parsons, Adams, Deam. The Atelier is the design school of the Chicago Architectural Sketch Club. In 1924, while in the Atelier, Mr. Pirola, along with a fellow student, Donald S. Nelson, entered the competition for the two annual scholarships offered by the Massachusetts Institute of Tech-The Scholarships were won by Mr. Pirola and Mr. Nelson. Mr. Pirola spent the following two years at "Tech" as a special student under Professor Jacques Carlu. Upon leaving school, he gained valuable experience in the New York office of Bertram G. Goodhue Associates, and the office of H. C. Stearns. Returning to Chicago in 1927, he worked in the office of David Adler and Robert Work, where he was employed before going East, and later entered the office of Armstrong, Furst & Tilton. He was elected to the position of director in the Sketch Club and Massier in the Atelier of the Club. Mr. Nelson, winner of the 1927 Paris Prize, is pursuing his studies in Paris and Mr. Pirola expects to spend much of his time traveling and studying with Nelson.

ATELIER OF THE AMERICAN ACADEMY IN ROME

THE AMERICAN ACADEMY in Rome calls attention to the fact that it has opened an Atelier at 72 Via S. Nicolo da Tolentino, in the center of Rome and conveniently near good inexpensive pensions, for the assistance of both short and long term students in architecture, painting, and sculpture.

Satisfactory credentials must be presented. Holders of traveling scholarships from accredited institutions are eligible; also architectural draftsmen with letters of introduction from a Fellow or member of the American Institute of Architects.

The Atelier is furnished with such materials, as drafting table, drawing boards, T-squares, model stands, etc.;

it has two large studio windows, is provided with electric light, and is heated in winter.

In addition to the facilities for making drawings, and so on, the following advantages are offered:

- Criticism, if desired, from the professors of the Academy.
- 2. Assistance in obtaining permission to measure buildings and in hiring ladders.
- Use of the library at the Academy of about 30,000 volumes.
- 4. Advice in planning itineraries in Europe.
- Access to a book of addresses of good but inexpensive pensions in Europe.
- Access to a book on the best Italian villas, indicating how they are reached, how permission to enter them is obtained, etc.
- Association with other artists and opportunity for common travel.
- A charge of three lire (16 cents) per day is made.

THE ARCHITECTS LEAGUE OF NORTHERN NEW JERSEY

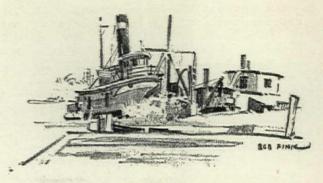
AT THE LAST meeting a Constitution and By-Laws were finally shaped to the satisfaction of those present and

adopted, the following being part thereof:

"The object of this association is to quicken and encourage the development of the art of architecture, the arts and crafts allied thereto, and to unite in fellowship the practitioners of these arts and crafts; to further the ethics of the practice of architecture as laid down by the American Institute of Architects, and other organizations working in harmony therewith, to protect the interests of the architects and to stimulate the interest and appreciation of the public in the profession."

Membership in the association consists of two classes, Active and Associate. A candidate for membership in either class must be of good character and standing in the community. Active members of this association must be registered architects of the State of New Jersey, New Jersey Registered Practicing Architects may be Active Members only. Associate members shall be those engaged as architectural draftsmen, or in architects' offices in other architectural work, architectural sculptors, mural painters, structural and mechanical engineers. Only active members are to be eligible to hold office or act as chairman of any committee, or be eligible to election on the Executive Committee. All members in good standing may vote or serve on any other committee.

For further information write Harry Lucht, Temporary Secretary-Treasurer, 432 Palisade Ave., Cliffside Park, N. I.



LITHOGRAPHIC PENCIL SKETCH BY BOB FINK



ONE OF THE CHICAGO OFFICES OF C. W. AND GEO. L. RAPP, ARCHITECTS

HONEYMOON COTTAGE COMPETITION

(Continued from page 445)

is a modified Colonial type cottage, south front, of whitewashed brick and shingle gable construction, with a delightful trellised porch facing the southeast. The shutters and roof are of dark green stain. The balance of the exterior woodwork is white.

The Jury of Award was composed of: Mrs. Ernest Alexander, C. C. Maes, Don Cave, C. W. Oliver, and J. W. Northrop, Jr. Mr. Northrop is President of the Houston Chapter of the American Institute of Architects and was Chairman of the Jury. The announcement of the awards in the Competition was made at a dinner given by the Houston Architectural Club; a photograph of this party is reproduced on page 445.

The competition showed that a house need not be large to be beautiful—that a small home could and should be as carefully planned and as well constructed as the more pretentious residence.

THE NEW YORK ARCHITECTURAL CLUB, INC.

This organization has now completed its third year of existence and shows promise of existing a good many more years. The past year has been a very active one and the coming year promises to be even more active.

At a meeting on June 12th of the Board of Directors, whose names were listed in the June issue of Pencil Points, the following Committee Chairmen were appointed: Organization Committee, G. A. Flanagan; Financial Ways and Means Committee, S. Checkow; Membership Committee, I. H. Elliott; House Committee, H. Sasch; Associate Members Committee, E. Burger; Social Committee, C. L. Elliott; Publicity Committee, J. M. Murray; Employment Committee, H. C. Nancken; Educational Committee, C. Gilbert, Jr.; Atelier Committee, W. E. Herrick; Athletics and Games Committee, M. L. J. Scheffer; Musical and Dramatic Committee, H. Poll; Benevolent and Grievance Committee, E. Babbs; Life Class Committee, T. B. Voyvodick; House Games and Amusements

Committee, C. L. Elliott; Delinquent Members Committee, H. Sasch.

A very successful dance given by the Board of Directors on June 9th marked the beginning of the many activities planned for the summer months.

Members are urged to take advantage of the many features of the Club at all times. The Life Class, the Atelier, the Tennis Tournament, the Lunch Room, the Dances, the Lectures, the Games Nights, etc., are all in need of the patronage of the membership.

The Club Rooms at 118 East 42nd Street are open from 10:00 A. M. to 11:00 P. M. Architects, Engineers, Draftsmen and Allied Tradesmen are cordially invited to visit the Club Rooms during these hours.

The Club is very desirous of expanding and is continually accepting membership applications.

EDWARD F. CLAPP, President.

ALABAMA POLYTECHNIC INSTITUTE

Following the recommendation of the American Institute of Architects and the Association of Collegiate Schools of Architecture, a degree course in Applied Art will be offered by the School of Architecture of the Alabama Polytechnic Institute at Auburn, Alabama, for the coming college year.

The course in Applied Art at Auburn offers a ground-work in drawing, painting, modeling and the history of art. Design courses and electives of the later years provide opportunity to specialize in several branches, such as commercial art, design of furniture, costumes, textiles and wall paper, interior decoration, and landscape. Other lines will be offered as demand develops.

In addition to the course in Applied Art, the School of Architecture offers degree courses in Architecture and Architectural Engineering. The former specializes in planning, design and the allied arts. The latter specializes in advanced construction and related studies.

For further information in regard to any course offered by the School of Architecture address Dean Frederic Child Biggin.



This department conducts four competitions each month. A prize of \$10.00 is awarded in each class as follows: Class 1, sketches or drawings in any medium; Class 2, poetry; Class 3, cartoons; Class 4, miscellaneous items not coming under the above headings. Everyone is eligible to enter material in any of these four divisions. Competitions close the fifteenth of each month so that contributions for a forthcoming issue must be received by the fifteenth of the month preceding the publication date in order to be eligible for that month's competition. Material received after the closing date is entered in the following month's competition.

PRIZE WINNERS in our regular monthly competition are as follows:

Class I-Albert S. Goleman of Beaumont, Texas.

Class II-Ruth Mason Rice of New York.

Class III-Stephen D'Amico of Pittsburgh, Pa.

Class IV-Lawrence Wright of Liverpool, England.

READERS of this department will be interested in seeing a photograph of Mr. E. M. Schiwetz of Houston, Texas, a frequent prize winner in Class I of the HERE AND THERE Competitions. As such, he needs no further introduction to Pencil Pointers. His photograph is reproduced on page 445 as prize winner in the Honeymoon Cottage Competition. Our hearty congratulations to Mr. Schiwetz and his associate, Vance D. Phenix.

WE WISH to call particular attention to the competition which is being offered to contributors and readers of this department. The program is printed in full on page 461. Additional copies of this program may be had up application to R. W. R.

Traver Varies

Pencil Sketch on Cameo Paper by A. S. Golemon (Prize—Class One—June Competition)

A JAPANESE PRINT

(PRIZE—Class Two—June Competition)
By Ruth Mason Rice

A curve for the shore,
A line for the sea,
A tint for the sky
Where the sunrise will be.

A stroke for a gull,
A sweep for the main,
The skill to do more
With the will to refrain.

CLEANING OAK FLOORS

OAK FLOORS and other woodwork can very easily and economically be cleaned and polished by the use of equal parts of vinegar, sweet oil and turpentine. These ingredients can be purchased at any paint store.

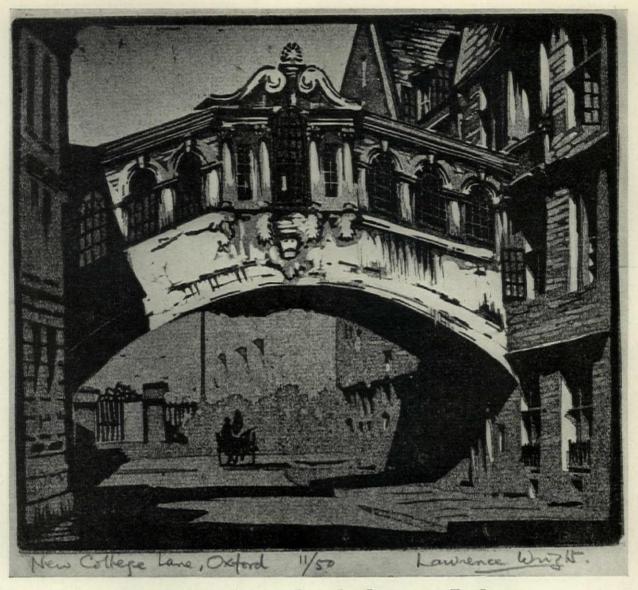
The object of this preparation is that the vinegar eats the dirt, the sweet oil adds lustre and the turpentine acts as a dryer.



PENCIL SKETCH BY CLINTON F. LOYD, BRONXVILLE, N. Y. "Bruges"

HEY! HEY! AND HOW!!! AND HOW! THAT AND HOW AGAIN HEY! HEY! HEY! AND HOW! AND HOW! AND HOW" AGAIN 3000 HEY! HEY! AND HOW! AND HOW! AND HOW! BELIEVE ME! MR. ARCHITECT! EVEN IN THE OFFICE I'M SICK AND ALLOW ME TO SHOW YOU OUR NEW BOOK ON THE WORK OF TIRED OF HEARING THAT DARN PHRAJE "AND HOW MELLOR, MEIGS-0 YES? HAT'S SETTLED, AND -AND HOWE! THEN I'LL CALL IT THE FUN BEGAN

CARTOON BY STEPHEN V. D'AMICO, OF PITTSBURGH, PENNSYLVANIA (PRIZE—Class Three—June Competition)



LINOLEUM PRINT IN BLACK AND BROWN INK, PRINTED FROM TWO BLOCKS,

BY LAWRENCE WRIGHT, OF LIVERPOOL, ENGLAND

(PRIZE—Class Four—June Competition)

COMPETITION FOR A SUBURBAN LOVE NEST OR "SNUGGERY"

Our competition for a Built-In Ash Tray was so enthusiastically received by the architectural world at large, by which we mean the readers of Pencil Points, that we are encouraged to offer another competition covering a problem which, so far as we know, has never received the attention from the architects which it merits. The tabloids have familiarized us with the love-nest. We have even seen pictures of them but the opportunity for developing a specialized type of architecture which would in all respects be suitable has never been grasped by our designers. So we offer a competition under the following conditions:

PLOT: 100' x 100', an inside lot on a side street.

DRAWINGS REQUIRED: Plot plan with landscape features indicated; plan and elevation of "snuggery," drawn to any scale, in any medium. PAPER: Pink, white, or blue, any size.

MANDATORY: Building shall suitably accommodate two people and no more, lighting optional.

ANONYMITY OF DRAWINGS: Upon each drawing the competitor is to place a device for purposes of identification. A card bearing the name and address of the competitor is to be sealed in a plain envelope bearing the competitor's device on the outside.

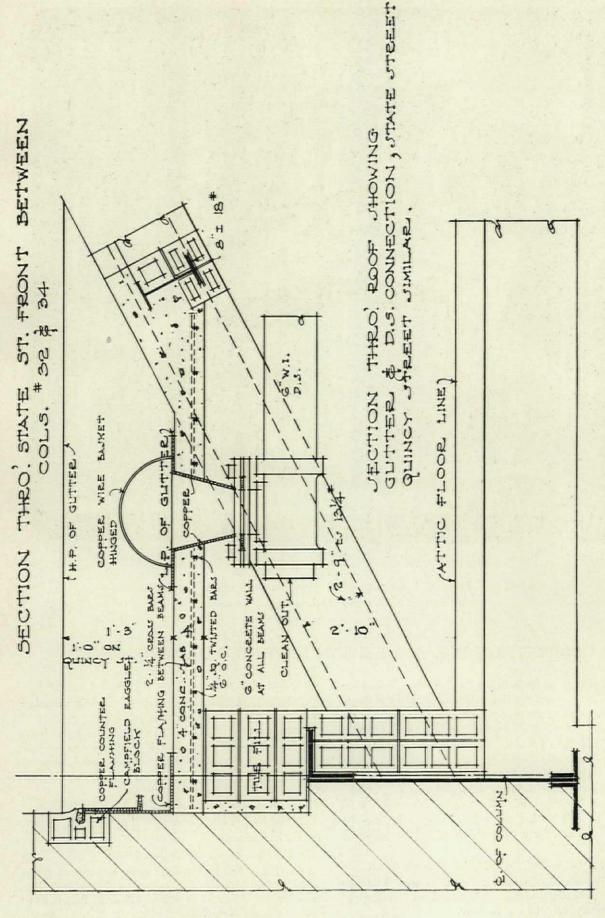
THOSE ELIGIBLE: Anyone.

ENTRANCE FEE: None.

PRIZES: Suitable.

JURY: The editors of this department.

CLOSING DATE: Drawings must be received on or before five o'clock on August 18th, 1928, addressed to Suburban Love-Nest Competition, Pencil Points, 419 Fourth Avenue, New York.



DETAILS OF CONSTRUCTION—OFFICE BUILDING FOR MR. JACOB I. KESNER, CHICAGO, ILLINOIS JENNEY, MUNDIE & JENSEN, ARCHITECTS



THE SPECIFICATION DESK

A Department for the Specification Writer

SPECIFICATIONS IN THE OFFICE OF GEORGE D. MASON & CO.

By A. W. Luckham

EDITOR'S NOTE:—Mr. Luckman writes the specifications in the office of George D. Mason & Co., Architects of Detroit, Mich. In this little article he tells briefly how he goes about the preparation of his specifications.

This office is one of the older offices of these parts, established by Mr. Mason and now conducted by him and the other members of the firm. Under Mr. Mason's guidance many have obtained much of their training and gone forth with a deep appreciation of the many kindnesses shown them by him and a very high regard for him as a man. It can also be said that the specification writer in this office is extremely fortunate through being able to draw upon Mr. Mason's broad experience and to learn from one who has a clear understanding of specifications, their full meaning and the part which they must play. While current specifications of this office may be compiled by an individual, they nevertheless represent the efforts of an entire organization over a period of years.

In running over my part of the work, which is chiefly the preparation of specifications for the architectural trades, I have selected some forms used as a basis for all specifications. Briefly these consist of a specification outline, information to engineers, schedule of rooms, and form of

The specification outline consists of a number of letter size sheets, upon which have been typed the general subdivisions of a specification by trades, with headings to facilitate obtaining the preliminary information. These sheets are clipped together ready for filling-in as soon as a job is started in the office, very often at the time sketches are prepared, and continuing until the specifications are completed. It merely serves as a place to jot down all notes and reminders received from all sources and for noting under each trade heading the various items which affect that trade. It is particularly helpful in case considerable time elapses between the preparation of sketches and working drawings, or when the completion of specifications takes place some time after the drawings are finished. It relieves the mind too, since the filling-in can be done and the form laid aside during the preparation of another specification which may also be in progress.

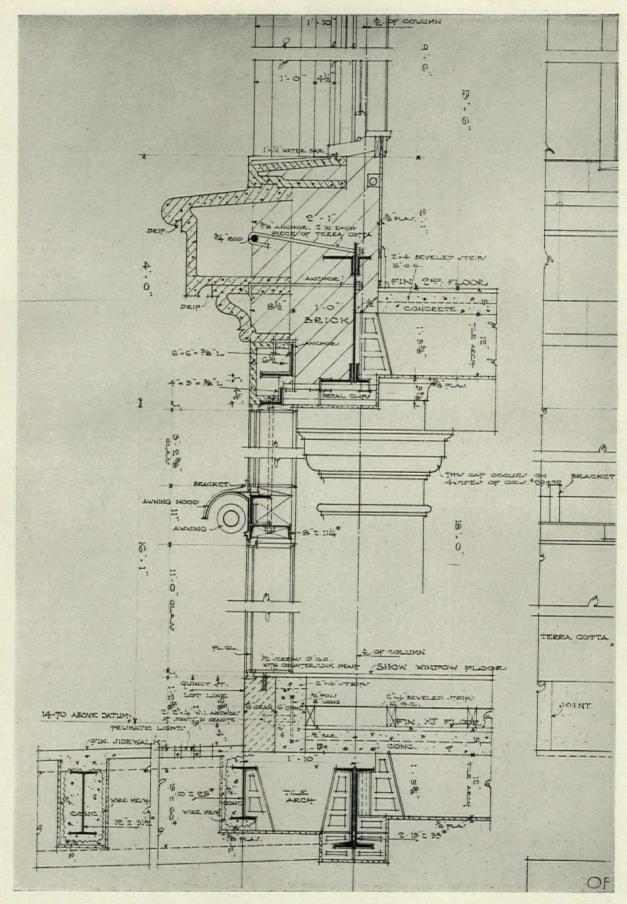
Following the outline comes the form for information to engineers. While much of this form is fixed for all work and seems a bit unnecessary in case the same engineers are retained for most of the work, still it does serve as a place for drawing attention to special conditions and variations from the usual practice as may be necessary. Also by merely filling it out for each building one is more apt to bring the architectural and mechanical specifications together and have everything provided for. At any rate it seems more satisfactory than verbal instructions or letters.

As soon as working drawings have reached the stage of interior design we make a schedule of rooms in which are listed all interior parts of the building with a description of materials for floor, walls, ceiling, wood finish, and decoration. This schedule is made up jointly by the chief draftsman and specification writer who consult with the design room for special parts. Sometimes preliminary copies of the schedule are typed and distributed in the drafting and design rooms for general reference, and revisions are noted before the final copies are typed for binding as part of the specifications. In each specification cover, whether for one or more trades or the complete work, one copy of the schedule is bound following the instructions to bidders and general conditions. Many offices make such a schedule a part of the drawings but we have found it more convenient to place it in the specifications. In this way revisions may be made easily after drawings have been completed, either by correcting the specifications before same are issued or by bulletin if the changes occur later, making the issuing of revised drawings unnecessary. It has been pointed out to us many times by estimators that, for their use, the schedule in the specifications is more convenient since it can be opened at the proper place and kept near at hand while the take-off is made on an entire floor plan without having to continually leaf through the drawings to refer to a schedule appearing on but one sheet. Of course a schedule on each floor plan would accomplish the same thing, but we feel this would involve more work and not lend itself to revisions so readily.

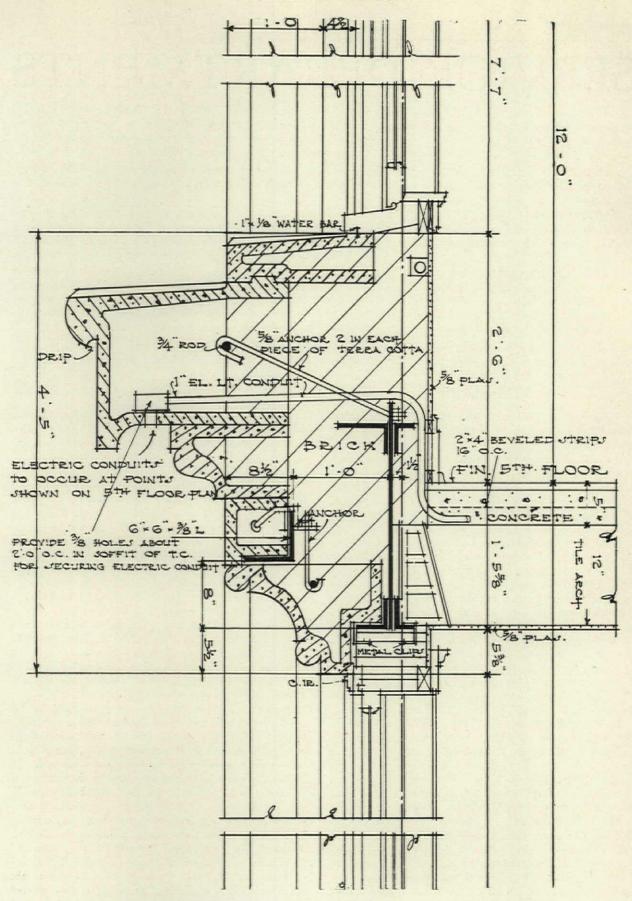
After having been convinced that the schedule of rooms as a part of the specifications satisfied the contractors and served us well for office reference and detailing, we also found that the preparation of it assisted in establishing the line of demarkation between the drawings and specifications—a troublesome problem in most offices. It is comparatively simple, during the preparation of the schedule, to determine just where the drawings are to leave off and the specifications start in. For this reason it is important that the schedule be the work of the chief draftsman as well as the specification writer.

During the bidding period, usually about five days prior to date for receiving proposals, the customary form of proposal is issued. It has been found advisable to distribute the forms just before the due date in order that any bulletins issued during bidding may be listed and thus be definitely included as part of the documents upon which proposals are to be based. Also in case an alternate on some portion has been requested during the bidding period, this too can be incorporated and brought to the attention of each bidder.

I may appear to be "sold" on the specification schedule above outlined, but this is due chiefly to the fact that it works in the case of this office. The scheme is not new but may carry some little points not generally employed.



DETAILS OF CONSTRUCTION—OFFICE BUILDING FOR MR. JACOB L. KESNER, CHICAGO, ILLINOIS JENNEY, MUNDIE & JENSEN, ARCHITECTS



DETAILS OF CONSTRUCTION—OFFICE BUILDING FOR MR. JACOB L. KESNER, CHICAGO, ILLINOIS JENNEY, MUNDIE & JENSEN, ARCHITECTS



SERVICE DEPARTMENTS

THE MART. In this department we will print, free of charge, notices from readers (dealers excepted) having for sale, or desiring to purchase books, drawing instruments and other property pertaining directly to the profession or business in which most of us are engaged. Such notices will be inserted in one issue only, but there is no limit to the number of different notices pertaining to different things which any subscriber may insert.

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.

QUERIES AND ANSWERS. In this department we shall undertake to answer to the best of our ability all questions 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.

FREE EMPLOYMENT SERVICE. In this department we shall continue to print, free of charge, notices from architects or others requiring designers, draftsmen, specification writers, or superintendents, as well as from those seeking similar positions. Such notices will also be posted on the job bulletin board at our main office, which is accessible to all. Owing to the very large number of advertisements submitted for publication under this heading we are asking those desiring to use this service to make their advertisements as short as possible, in no case to exceed forty words.

Notices submitted for publication in these Service Departments must reach us before the fifteenth of each month if they are to be inserted in the next issue. Address all communications to 419 Fourth Avenue, New York, N. Y.

THE MART

Frederic W. Striebinger, 1900 Euclid Avenue, Cleveland, Ohio, has the following copies of Pencil Points for sale: complete sets of 12 volumes for the years 1923, 1924, and 1925; also June and September, 1920; October, November, and December, 1921.

Richard F. Lufkin, 414 Chamber of Commerce Bldg., Federal Street, Boston, Mass., wants copies of Pencil Points for June, July, October, December, 1922; March, April, May, September, 1923; and August, 1926.

Chas. D. White, Lockwood, Greene & Co., Inc., 24 Federal Street, Boston, Mass., has a complete set of Pencil Points, for sale, from No. 1, Volume 1, to and including May, 1928. The copies for the first four years are bound in three volumes in gray buckram. They are in perfect, unsoiled condition. To be sold to the one giving the best offer.

Meyer Fisher, 404 Dahill Road, Brooklyn, New York, has for sale copies of Pencil Points from July, 1924, to June, 1928.

Don P. Smith, 107½ N. Seville Avenue, Huntington Park, Calif., has for sale a complete set of Pencil Points in good condition. To be sold for the best offer.

D. Busse, P. O. Box 247, Brooklyn, New York, has for sale a ten volume I.C.S. Course which cost \$135.00. (Complete Architecture.) Will sell reasonably; just like new.

Harry W. Iverson, 673 76th Street, Brooklyn, N. Y., has for sale a complete set of Pencil Points from June, 1920, to December, 1927, inclusive, in perfect condition.

Harry H. Bond, 393 7th Avenue, New York, N. Y., has for sale plates from the following magazines: The Inland Architect & News Record; Architecture and Building, 1895; Building; American Architect and Building News, 1881-1887; The Architectural Era, 1890.

Fred J. Schmidt, 4924 10th Avenue, Los Angeles, Calif., has for sale a copy of *High and Late Renaissance in Italy*, by Corrado Ricci. Brand new—purchase price \$10.00, will sell for \$6.00.

PERSONALS

Louis H. Goettelman, Architectr, has opened an office for the practice of architecture at 402 Chestnut Street, Brooklawn, N. J., and would like to receive manufacturers' samples and catalogues.

GERARD LINDSLEY, ARCHITECT, is maintaining an office at 20 Washington Place, Newark, N. J. This is the former address of the recently dissolved firm of Lindsley & Ferris, Architects, of which he was the senior member. Will manufacturers kindly change their records?

WARNE, TUCKER, SILLING & HUTCHISON, ARCHITECTS, Charleston, W. Va., are revising their files in accordance with A.I.A. document No. 172, and would be pleased to receive manufacturers' catalogues.

SCHMID & RYAN, ARCHITECTS, have moved to 180 No. Michigan Avenue, Chicago, Ill.

E. D. Parmelee, Architect, has moved to First Mortgage & Title Bldg., 260 North Avenue, New Rochelle, N. Y.

ARCH. L. GEMMILL, architectural draftsman, 2702 No. Sixth Street, Harrisburg, Pa., would like to receive manufacturers' samples and catalogues.

ETHELBERT E. FURLONG, LANDSCAPE ARCHITECT, has moved to 44 Commerce Street, Newark, N. J.

Leslie E. McCullough, student of architectural Engineering, 309 West Erie St., Missouri Valley, Iowa, would like to receive manufacturers' samples and catalogues.

GEORGE JACKSON has opened an office for the practice of architecture at 31 Seaside Park Colony, South Beach, S. I., New York, specializing in design and decorative work—apartment houses, stores, residences, moving picture theatres, etc. Manufacturers' samples and catalogues are desired. Ernest B. Hays has opened an office for the practice of architecture at 516 Milam Bldg., San Antonio, Texas.

W. Marshall Hughes, formerly office manager in the architectural offices of Ritchie & Eiler, has now entered independent practice with offices on the second floor of 147 N. 5th Street, Reading, Pa. Manufacturers' samples and catalogues are desired.

PERSONALS (Continued)

GRANGER & BOLLENBACHER, ARCHITECTS, have moved to 333 North Michigan Avenue, Chicago, Ill.

HARVIN F. HUNTER, ARCHITECT, has moved to 633 Rives-Strong Bldg., 9th & Spring Sts., Los Angeles, Calif.

NICHOLAS R. MASTRANGELO, ARCHITECT, 750 Avenue A, Bayonne, N. J., is starting a manufacturers' catalogue filing system and would appreciate samples and catalogues.

SWARTZ & RYLAND, ARCHITECTS AND ENGINEERS, have moved their offices to Rooms 530-533, Brix Building, Fresno, Calif. They would like to receive manufacturers' samples and catalogues providing that the same complies with the A.I.A. recommendations.

GEORGE J. BLAKE, 6535 Cedros Avenue, Van Nuys, Calif., Instructor in Adult Evening Class of Domestic Architecture, would like to receive manufacturers' samples and catalogues.

HERMAN METZGER, ARCHITECT, has moved to 31 Elizabeth Avenue, Newark, N. J.

HARRISON E. BALDWIN, ARCHITECT, has moved to Trust Company Bldg., 205 Church St., New Haven, Conn.

KNAPP & CHANDLER, ARCHITECTS AND ENGINEERS, Dermon Building, Memphis, Tenn., would like to receive manufacturers' samples and catalogues.

FRANK F. SMITH AND SPENCER J. WARWICK have formed a partnership for the practice of architecture under the firm name of Smith & Warwick, with offices at 23 Lincoln Ave., Youngstown, Ohio. Formerly known as F. F. Smith & Company.

BEN STEIN, architectural draftsman and student, 98 Huntington Avenue, Suite 4, Boston, Mass., is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

GABRIEL A. DIMARTINO, ARCHITECT, has moved to 369 Lexington Avenue, New York, N. Y.

GEO. LEON KENDRICK, architectural student, 794 East 4th Street, Pomona, Calif., would like to receive manufacturers' samples and catalogues for an A.I.A. file.

S. V. Ottuso, architectural student, 56 Oak Street, New York, N. Y., would like to receive manufacturers' samples and catalogues.

GORDON E. MAYER, ARCHITECT of Miami, Fla., is now specializing in mausoleum work on the West Coast. He will be glad to receive manufacturers' catalogues and data on all building materials for his new files, at his new address, Box 508, Whittier, Calif.

ERICH A. COEBLER, architectural draftsman, White House Station, New Jersey, is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues.

CHAS. R. JOHNSON, architectural draftsman, 2120 Harford Avenue, Baltimore, Md., is starting an A.I.A. file and would like to receive manufacturers' samples and catalogues, including structural steel and concrete ornamental work and details.

FREE EMPLOYMENT SERVICE

(Other items on page 122 of the Advertising Section)
Position Wanted: Architectural draftsman, 22 years old, would like position with contractor in office or field.
Cooper Union Graduate, 2 years' experience in small New York City office doing all branches of work. Can do typing. Will go anywhere. Box No. 88, care of Pencil Points.

PARTNER WANTED: Architect located in Northern Ohio, capable of procuring good work, desires either to associate with another good architect who is a good designer and is located in the same section, or will take into partnership a good architectural designer. Reply giving details of practice, experience, age and date available. Box No. 86, care of Pencil Points.

Position Wanted: Registered architect, 25 years' practice, general experience, superintendent of construction, wishes to make part time arrangement with another architect to supervise high class work in or around New York City. Box No. 89, care of Pencil Points.

FREE Lance Artist, young woman, desires work sketching, interior decorations, furniture, research sketching and copying of decorative themes. Samples. Reasonable rates. New York and Vicinity. Box No. 90, care of Pencil Points.

Position Wanted: Young man, architectural student, studying evenings, desires permanent position with architect or builder as beginner. Some experience on inside and outside work. N. N. Sherman, 130 Herzl St., Brooklyn, N. Y.

Position Wanted: In New York, Philadelphia, Baltimore, or Washington, by practicing architect, Chapter member A.I.A., 24 years' experience including 10 years' practice on banks, schools, and public buildings. Squad chief, outside contact man or office manager. Preliminary sketches to finished building, capable designer, excellent draftsman and conscientious superintendent. Age 43. Married. Box No. 91, care of Pencil Points.

Position Wanted: Draftsman with 6 months' experience desires position in New York City. Neat tracer. Henry Hunink, 2396 Valentine Ave., New York, N. Y.

Position Wanted: All-round experienced as architect with building laws, coordination, construction supervision, inspection and finals, details, appraisals, specifications and contracts, desires connection with architect, building, industrial or mercantile firm, city or country. Box No. 92, care of Pencil Points.

Position Wanted: Architect, registered N. Y., holding degree of B. Arch., 8 years' general practice, is moving this fall to California in the vicinity of Pasadena and desires to communicate with an architect there who needs a reliable assistant or office manager. Has previously spent two winters in California. Box No. 93, care of Pencil Points.

Position Wanted: Young man, 28, practical carpenter and graduate of Cooper Union in Architectural drawing, desires a position in architect's or builder's office. Box No. 94, care of Pencil Points.

Position Wanted: Architectural designer and senior draftsman, 20 years' experience best New York offices, capable of assuming complete charge of large projects. Now engaged. Desires to make connection with reputable New York office. Box No. 95, care of Pencil Points.

RENDERING expertly and promptly done by college trained renderer. \$30 to \$50 according to time. Mail drawings and directions to *Renderer*, 406 Douglas St., Syracuse, N. Y.

Position Wanted: Draftsman would like to connect with an architectural or an engineering concern. Several years' experience in architecture and also knowledge of surveying. Willing to start at bottom. Box No. 96, care of Pencil Points.

PUBLICATIONS

OF INTEREST TO THE SPECIFICATION WRITER

Publications mentioned here will be sent free unless otherwise noted, upon request, to readers of Pencil Points by the firm issuing them. When writing for these items please mention Pencil Points.

Faïence Tile.—A portfolio of 24 blue prints showing stock designs of decorated insert and border tiles, and a large number of other items generally used. 10 x 17. The Mosaic Tile Co., Zanesville, Ohio.

Remote Control Equipment.—Bulletin No. 10. New publication dealing with remote control switches of various types for different uses. Also many other modern devices having wide application in buildings of the better class. 32 pp. 8½ x 11. Hart Manufacturing Company, Hartford, Conn.

Johnson System of Temperature and Humidity Control.—A.I.A. File No. 30-f-2. A complete and attractive handbook on the subject with layouts and complete information for the draftsman and specification writer. 80 pp. 8½ x 11. Johnson Service Co., Milwaukee, Wis.

Co., Milwaukee, Wis.

The Spanish Motif in Roofs.—Brochure in color dealing with roof tiles of the Spanish type uncopper. Standard filing size.

Milwaukee, Commercial Co., Milwaukee Wise.

Milwaukee Corrugating Co., Milwaukee, Wis.

Steel Strengthened Plastering.—A.I.A. File No. 20-b-1.
Looseleaf document with complete practical information on the subject. Drawings, tables and specifications, together with samples of the complete North Western line. Standard filing size. North Western Expanded Metal Co., 407 So. Dearborn St., Chicago, Ill.

Porcelain Enameled Bath Room Trimmings.—Looseleaf portfolio in binder showing complete line of bathroom trimmings and accessories, including medicine cabinets. Standard filing size. American Enameled Products Co., 2011 Michigan Ave., Chicago, Ill.

Concerning the Infiltration of Air through Windows.— Treatise on the subject with drawings and engineering data, together with complete information regarding the Campbell Metal Window, prepared especially for the drafting room. Specifications. 30 pp. Standard filing size. The Campbell Metal Window Corporation, Pershing Square Bldg., New York, N. Y.

Fenestra Casements.—A.I.A. File No. 16-e-1. Gives views of typical installations in attractive houses, together with data on basement windows. Drawings, details, etc. Standard filing size. Detroit Steel Products Co., Detroit, Mich.

Viking Signs.—New publication devoted to the subject of modern signs for both exterior and interior use with especial reference to stores, hotels, theatres, banks, gasoline filling stations, garages, etc. Standard filing size. Viking Products Corporation, 422 W. 42 St., New York.

Tapered Asbestos Shingles.—A.I.A. File No. 12-F-1. New brochure in color showing tapered shingles in various treatments. Color charts, specifications, method of application, etc. Standard filing size. Mohawk Asbestos Slate Co., Utica, N. Y.

The Fandolier.—A.I.A. File No. 31-f-23. New document explaining fully this type of equipment which combines a fan with a chandelier for use in restaurants, hotels, stores, private offices, banks and many other places where good light and good ventilation are essential. 16 pp. Standard filing size. Safety Car Heating and Lighting Co., 75 West St., New York, N. Y.

Scammell's Fibre-Back and Plain Metal Lath.—Catalog No. 3. A.I.A. File No. 20-b-12. Sets forth the advantages of these products together with specifications and much useful information for the architect and draftsman. 20 pp. Standard filing size. Charles H. Scammell Co., Inc., 1 Madison Ave., New York, N. Y.

Six Ways to Make the Cellar More Attractive.—New booklet in color showing six different plans and layouts for using the cellar of the residence as a play room, workshop, billiard room, etc. The Thatcher Co., 39 St. Francis St., Newark, N. J.

Crittall Standardized Casements.—A.I.A. File No. 16-e-1. Data sheet on the subject. Specifications, detail drawings, quarter full size setting details, etc. Standard filing size. Crittall Casement Window Co., Detroit, Mich.

The Ambassador and The Nubian.—A.I.A. File No. 29-h-3. Data folders in full color showing these new and attractive bath and shower fixtures available in a wide range of colors. Standard filing size. Republic Brass Co., Cleveland, Ohio.

Scioto Quarry Tile.—A.I.A. File No. 23-a-12. Brochure and data sheet in full color showing this material which is suitable for a variety of uses. Drawings of special shapes. Notes on random effects. Standard filing size. The Carlyle-Labold Co., Portsmouth, Ohio.

Window Beauty.—A.I.A. File No. 16-E. Devoted to Truscon Standard Casements, Model No. 5. Specifications, drawings, photographs, details of attractive window treatments, etc. 24 pp. Standard filing size. Truscon Steel Co., Youngstown, Ohio.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen, the May 1928 issue of which is devoted to the subject of night architecture and shows various interesting flood lighting effects. Details of ornament, etc. Atlantic Terra Cotta Co., 19 West 44th St., New York, N. Y.

Glasiron Roofing Tile.—Data folder for architects devoted to this new and interesting product which is available in a full range of colors. Drawings, methods of laying, specifications, etc. Standard filing size. Glasiron Products Co., Detroit, Mich.

Beautiful Waxed Floors.—Illustrated data sheet describing the Minwax method of treating floors, either natural color or stained effects. Standard filing size. The Minwax Co., 11 West 42nd St., New York, N. Y.

Incor Cement.—Document announcing a new high early strength Portland Cement. Of interest to all who use concrete. Standard filing size. International Cement Corp., 342 Madison Ave., New York, N. Y.

The Gospel of Fresh Air.—A.I.A. File No. 12-k-1. 12th

The Gospel of Fresh Air.—A.I.A. File No. 12-k-1. 12th Edition. Document devoted to the subject of ventilation with blue prints and special notes on various types of buildings, specifications, engineering data, etc. 40 pp. Standard filing size. The Swart-wout Co., Cleveland, Ohio.

As Permanent as the Cornerstone.—A.I.A. File No. 35-d-4. Booklet on the subject of glass lined laundry chutes. Drawings, typical installations, etc. The Pfaudler Co., Rochester, N. Y.

Sewage Ejectors and Pumping Machinery.—A.I.A. File No. 29-c-1. A collection of bulletins in looseleaf binder covering pneumatic sewage ejectors, water supply pumps, centrifugal pumps for all purposes. Illustrations, sizes, capacities and ratings. Standard filing size. Yeomans Brothers Company, 1433 Dayton St., Chicago, Ill.

Benjamin-Starrett Panelboards and Steel Cabinets for Light and Power.—Catalog S-5. A complete handbook on the subject. 80 pp. Standard filing size. Benjamin Electric Mfg. Co., 120 South Sangamon St., Chicago, III.

Lally Column Handbook.—10th Edition devoted to the subject of concrete-filled steel columns. Contains all necessary information on this subject. 85 pp. Convenient pocket size. Lally Column Co., 211 Lombardy St., Brooklyn, N. Y.

Wrought Iron Ornaments.—A.I.A. File No. 15-d. Catalog No. 18 illustrates an extensive line of wrought iron ornaments, hand forged lanterns, hinges, rosettes, etc. 50 pp. Standard filing size. J. G. Braun Co., 537 West 35th St., New York, N. Y.

Moulding's Flooring.—A.I.A. File No. 24-b-2. Characteristics, specifications and uses. Color, patterns and designs. Drawings. Standard filing size. Thomas Moulding Brick Co., 151 W. Wacker Drive, Chicago, Ill.

Outdoor Lighting.—Booklet on the subject of lanterns for the home, garden and grounds. Artistic Lighting Equipment Association, 420 Lexington Ave., New York, N. Y.

Industrial and Driveway Doors.—A.I.A. File No. 17-a. Data sheet on subject indicated with tables of sizes, etc. Standard filing size. Richmond Fireproof Door Co., Richmond, Indiana.

A Sleeping Porch for Your Home.—Attractive booklet

A Sleeping Porch for Your Home.—Attractive booklet devoted to the subject with illustrations of many houses in which the sleeping porch is a feature of importance. 32 pp. Exchange Sawmills Sales Co., Kansas City, Mo.

Specifications for Enamel Paint.—Document containing 20 specifications and other items with especial reference to Ripolin. Standard filing size. The Glidden Co., Cleveland, Ohio.

Standard filing size. The Glidden Co., Cleveland, Ohio.

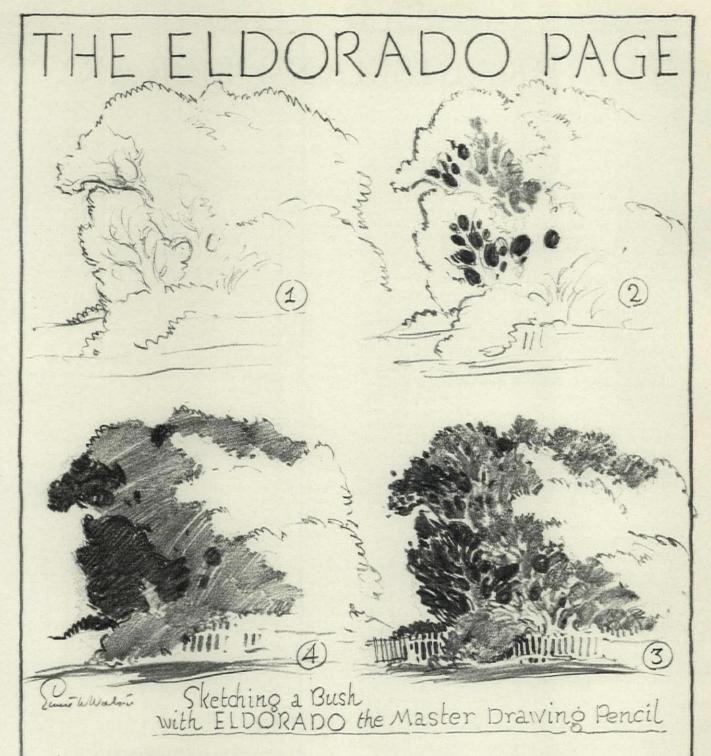
Facts for Architects about Screening.—A.I.A. File No.
19-e-15. Filing folder with samples of screen cloths, specifications, etc. Standard filing size. American Brass Co., Waterbury, Conn.

Stable Fixtures.—Very complete catalog on this subject. Fully illustrated. 115 pp. Standard filing size. J. W. Fiske Iron Works, 78 Park Place, New York, N. Y.

Architectural Details.—A.I.A. File No. 16-c. Devoted to continuous windows and mechanical operators. Drawings and specifications, details, 30 pp. Standard filing size. Genfire Steel Co., Youngstown, Ohio.

Ornamental Filling Stations and Lighting Equipment.— Catalog on the subject. 32 pp. Standard filing size. Union Metal Mfg. Co., Canton, Ohio.

Degraco Paints.—A.I.A. File No. 25-c. Standard filing folder on the subject of technical paints and painting. 32 pp. 8½ x 11. Detroit Steel Products Co., Detroit, Mich.



In all sketching from nature, the student should realize that the forms of trees, bushes, and other landscape details seldom happen to be exactly as the artist would have them. The artist applies his sense of design in drawing from nature. He modifies the shape of the mass, changes the pattern of the branches and otherwise uses his skill in an effort to produce greater beauty.

In indicating the contours of foliage, (1) the proportion of the mass enclosed, and the flow of line are carefully studied. The trunk and branches are indicated with light strokes, an effort being made to secure grace and rhythm in these lines.

Before proceeding with (2) a simple light and shade analysis represented by (4) is important. Such

a diagram is not suggested as a step in the drawing, but as a step in *thinking* which must precede all tone work in the sketch.

Having the light and shade effect in mind, proceed as in (2), indicating the tone surrounding the branches.

In laying in the tones (3) it will be found helpful if the pencil strokes are made to take the direction of the growth. This will keep you constantly thinking growth and should result in a more lifelike and spirited expression.

Mr. Watson made these sketches with Dixon's Eldorado, "The Master Drawing Pencil." Are you fully acquainted with Eldorado? If not, send for samples to the Joseph Dixon Crucible Company, Pencil Department 167-J, Jersey City, New Jersey.



THE DRAFTSMAN'S LIBRARY

Models of Buildings, by William Harvey; 136 pages 43/4" x 71/4"; price 7/6; published by The Architectural Press, Westminster, S. W. 1, London.

This little book is the only one of which we know which explains the mysteries of making architectural and other models. It is plentifully illustrated by photographs of models and by drawings showing how they are made. It takes up paper models, wooden models, and plaster models as they are made by architects in Great Britain. While the subjects illustrated are almost entirely buildings in England and in the British Empire, the principles are equally applicable to conditions in the United States.

Old Plantation Houses in Louisiana, by William P. Spratling and Natalie Scott; 160 pages 7" x 93/4"; price \$5.00; published by William Helburn, Inc., New York.

Occasionally the draftsman wishes to invest a few dollars in a book which, while not of direct assistance in his daily work, has yet some bearing on architecture. Here is a volume which will add to his acquaintance with American architecture,—the architecture of a section of this country which has not heretofore been written about and illustrated so sympathetically.

Mr. Spratling's sketches are well known to readers of architectural periodicals. The illustrations for this book were drawn by him with brush and India ink, and he has achieved with this medium an exceedingly pleasing and appropriate expression of his subjects. His technique is admirably free, and his sense of black and white composition is unerringly good.

To these illustrations there is added a fascinating, as well as informative, text describing the various old plantation houses and conveying something of their history and stately tradition. The whole is printed on an antique paper and is most attractively bound, to complete a fine piece of book making, as well as an enjoyable piece of reading matter.

Handbook of Architectural Practice; 203 pages 8" x 105/8"; price \$5.00; published by The American Institute of Architects, Inc., Washington, D. C.

This book should be in the hands, not only of every member of the American Institute of Architects, but of every architect who is practicing or who hopes to practice in the United States. The author was one of the leaders of architecture in America, and this volume represents one of the many services he undertook to perform for the profession.

It contains practically everything the young architect needs to know concerning the conduct of an office, and includes all the forms and typical documents with which he must have acquaintance. It has just been issued in a second printing, and we advise every practitioner who is not yet supplied with a copy to secure one at his earliest convenience. Architectural Design in Concrete, by T. P. Bennett; text and 100 plate pages 8½" x 11"; price \$10.00; published by Oxford University Press, American Branch, New York.

The most important portion of this volume is the plate section, which contains examples of work done in reinforced concrete, not only in the United States, but in England and on the Continent. It cannot fail to be of interest to the architect or draftsman who is designing reinforced concrete structures, for it contains a wealth of stimulating ideas and shows buildings in which the material is used in the modern manner as well as those which follow classical precedents.

A few of the more important buildings shown are: The Centennial Hall at Breslau, Germany; The Fair Exhibition Hall for the Association of German Tool Manufacturers at Leipzig; The British Empire Exhibition Buildings at Wembley; The Church at Le Raincy, France; The Church of St. Denis, Paris; The Hollywood Terminal Building at Los Angeles; a number of houses in Paris by Andre Lurcat; and a group of buildings and monuments in the Scandinavian countries.

There are many others not named here, but those listed will give a sufficiently good idea of the variety of subjects covered.

The book might have been improved by the addition of an index to the plates which would have greatly simplified its use for reference.

The Romanesque Architecture of Western Europe, by Ralph Warner Hammett; 200 pages 9½" x 12½"; including 145 plates with explanatory text; price \$12.50; published by The Architectural Book Publishing Company, New York.

The value of this volume to the architect or student of architecture lies principally in the fact that the author has here made for them a judicious selection of plates covering Romanesque architecture as found in the countries where it flourished. Any individual provided with the opportunity to travel might have collected as much or even a great deal more material on the subject. Much of it is already familiar to the student who has taken a course in Architectural History. Mr. Hammett, however, has combed over the available photographs that he and others have collected and has discriminatingly picked out the views essential to an understanding of the style as practiced in the various countries. He has included a number of useful details, as well as general views of the monuments, so that the designer may catch the spirit of the ornament. A few measured and rendered drawings made by the author and by other travelling students serve to give more definite architectural information about some of the more important examples.



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- (7) Nationally distributed.
 (8) Dependable because guaranteed by a reliable manufacturer.
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See Sweet's Architectural Catalog, page B 1160 for frames, page B 1785 for pulleys

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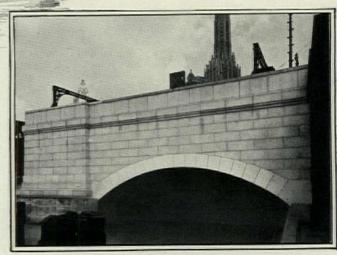
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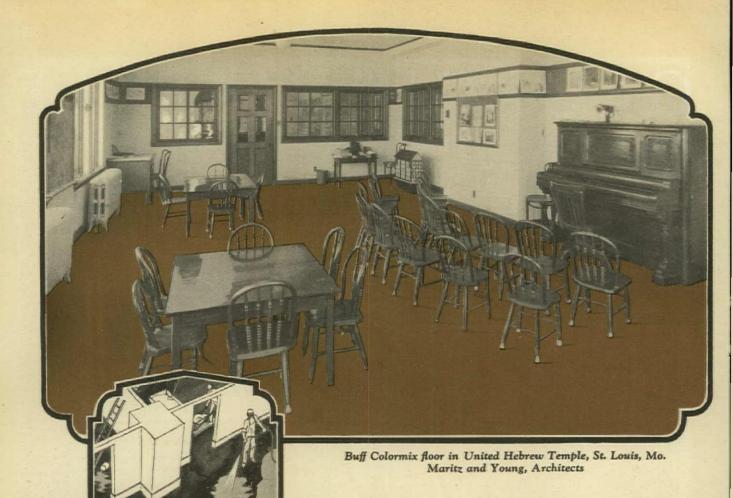
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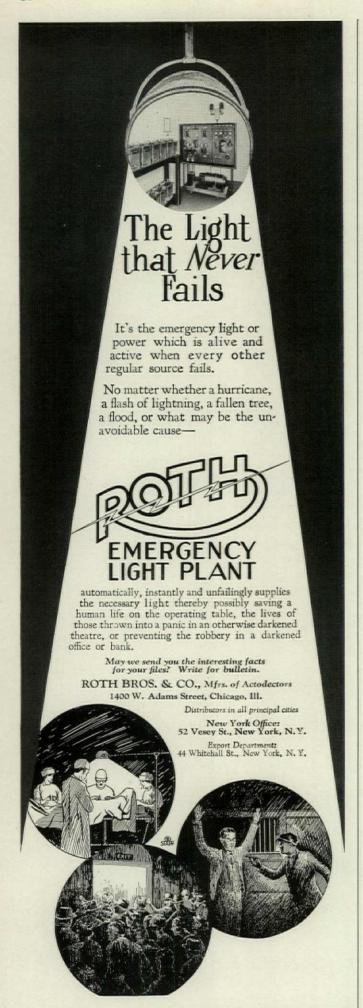
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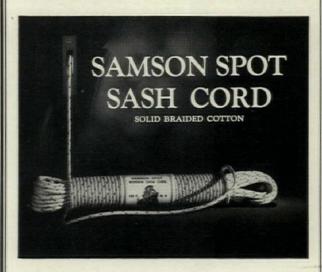
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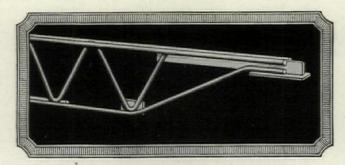
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New York

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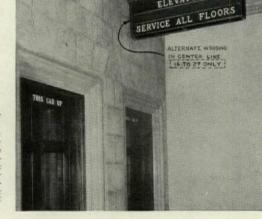
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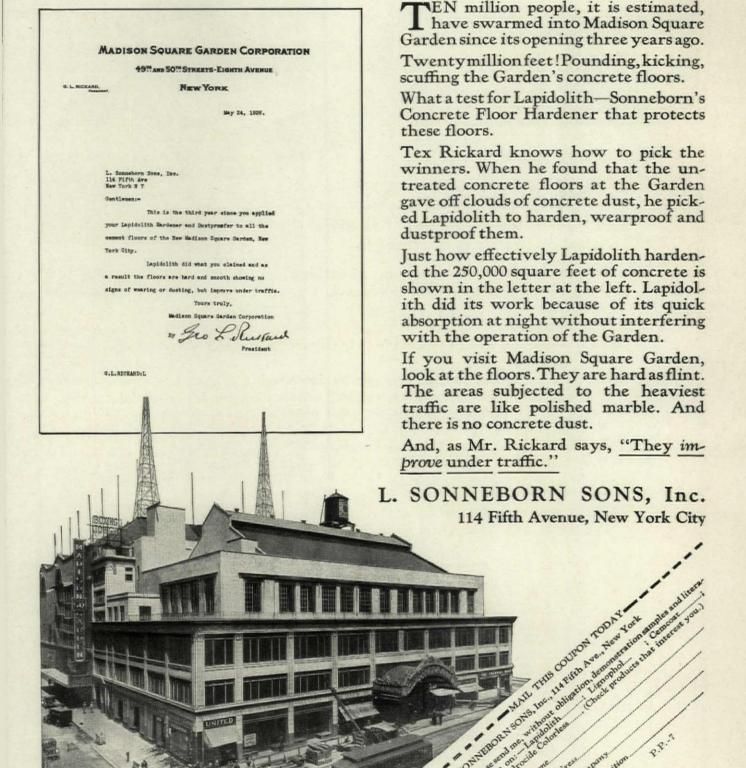
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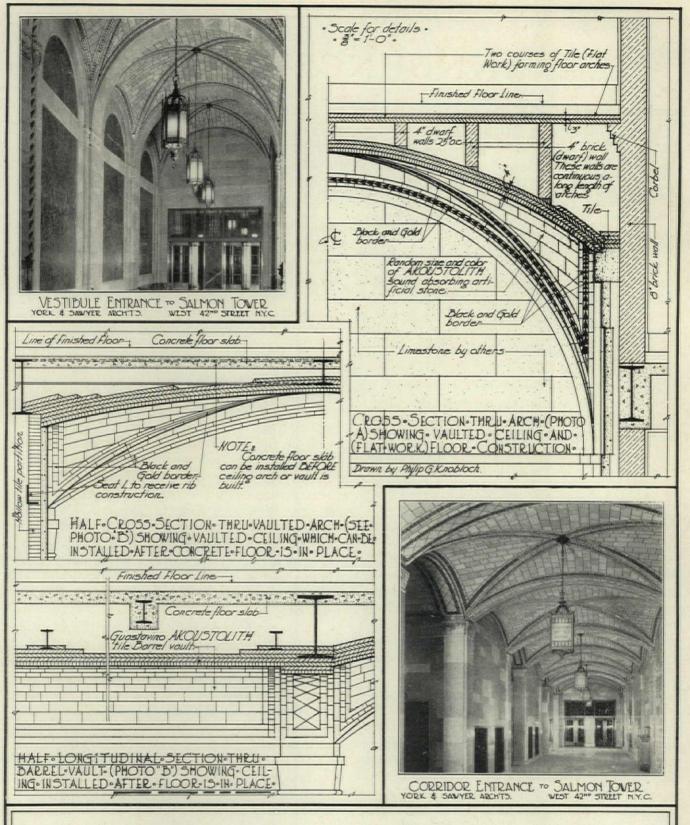
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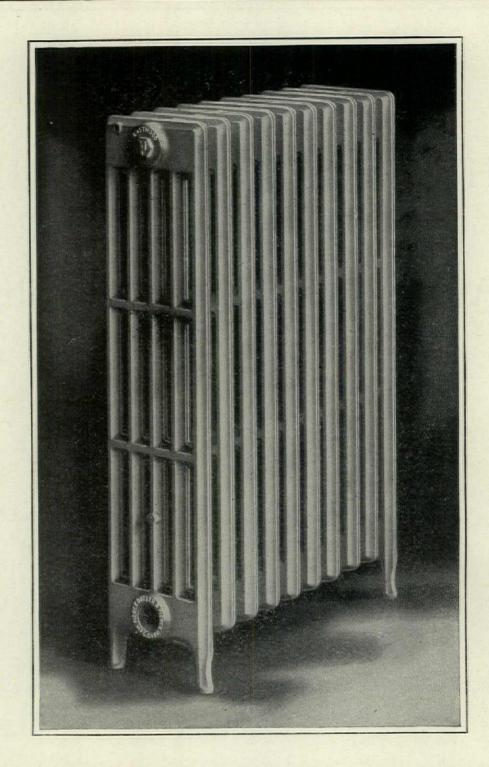
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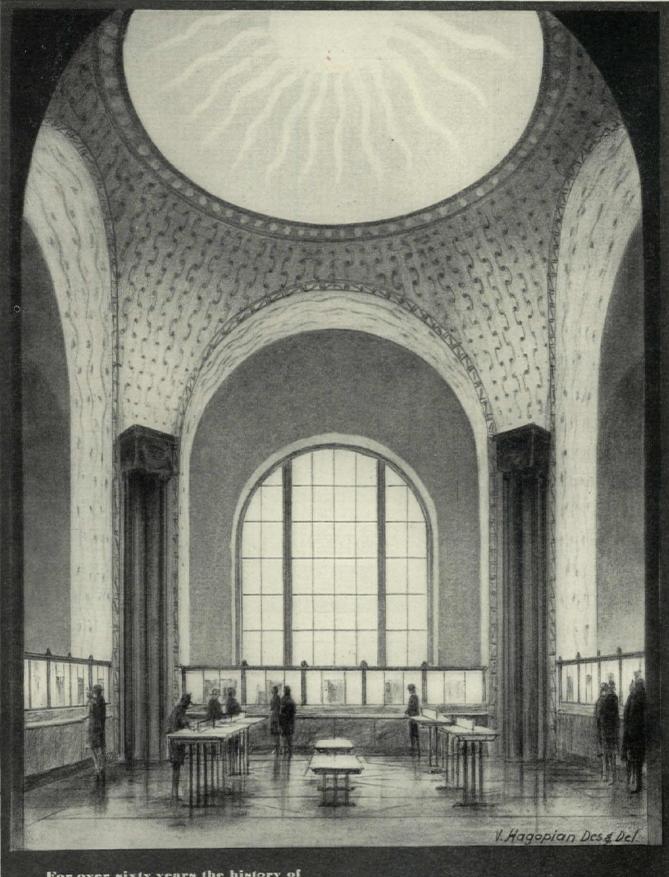


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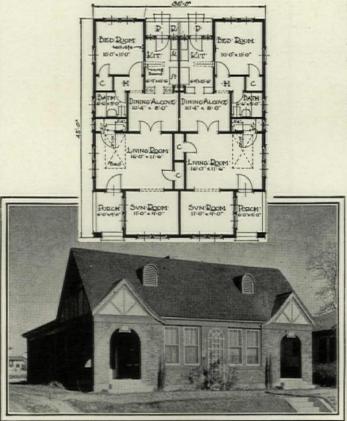
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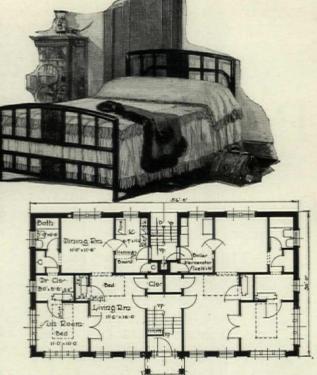


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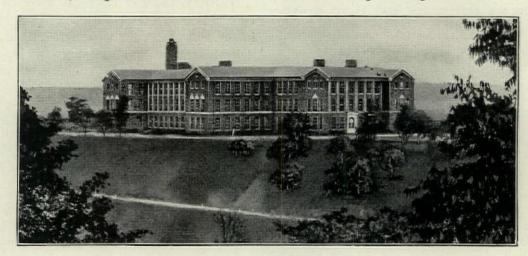
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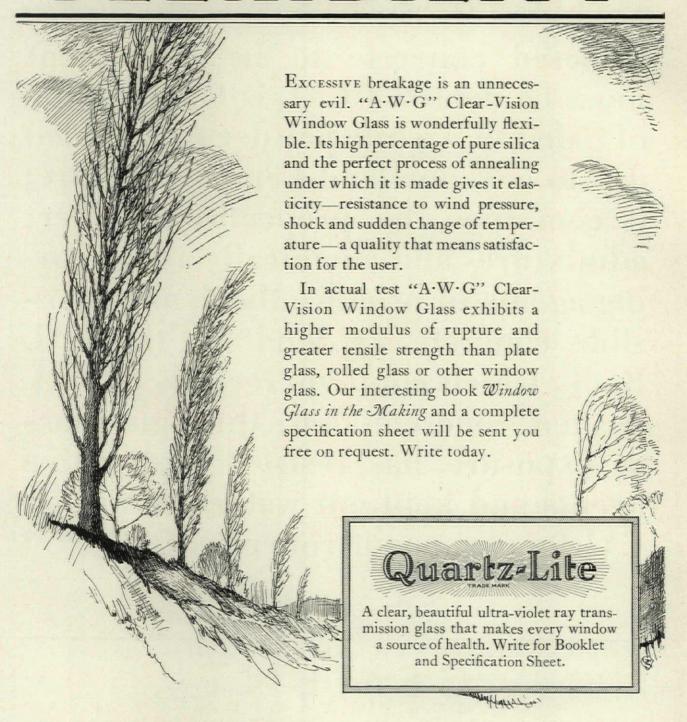
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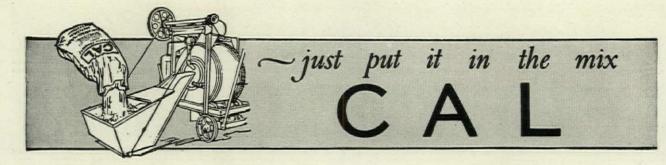
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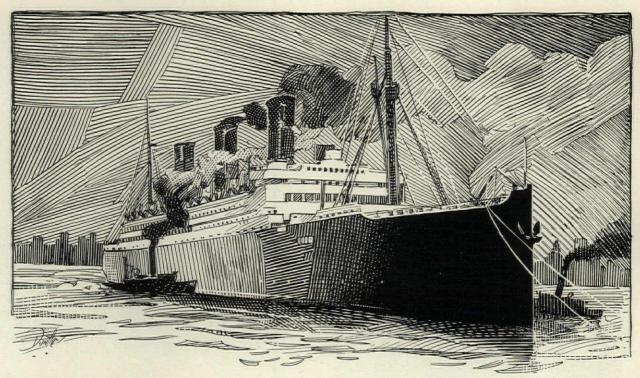
Exposed concrete to be permanent must be dense. ¶CAL is Oxychloride of Calcium, a white powder to be added dry to any Portland Cement mixture; it combines the properties of inert admixtures and chemically active curing agents to produce the densest possible concrete. ¶Send for the CAL Book, which contains records of CAL treated concrete that, through years of exposure, has resisted destructive agents and kept out water. ¶Specify CAL for permanent concrete. ¶See our Catalog in Sweet's.



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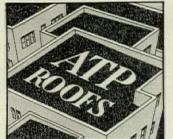


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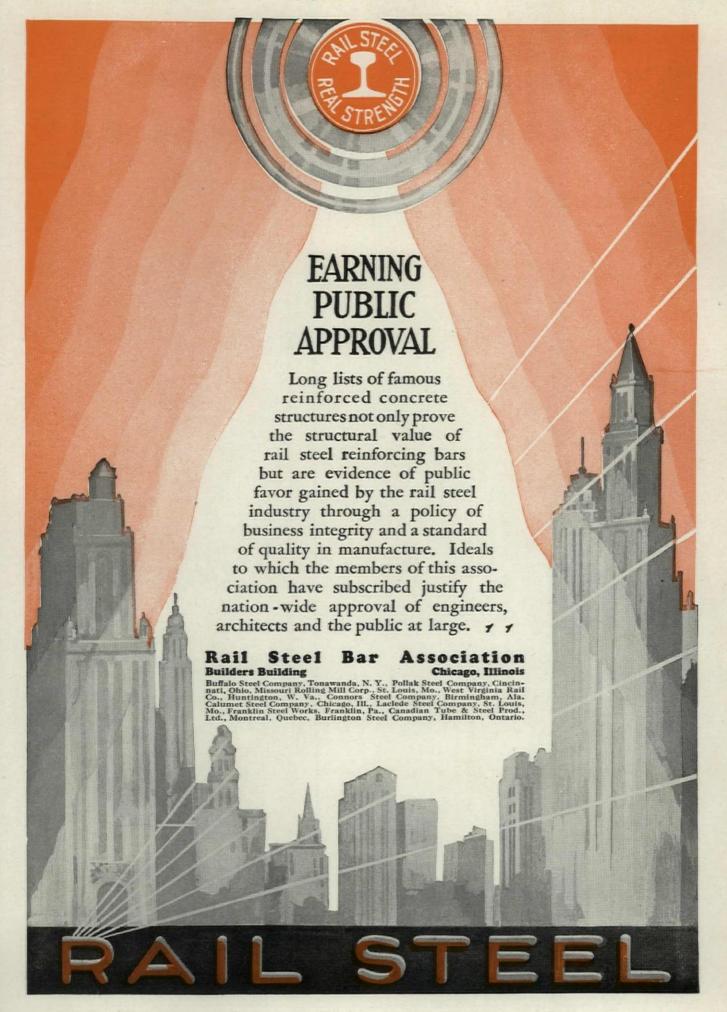
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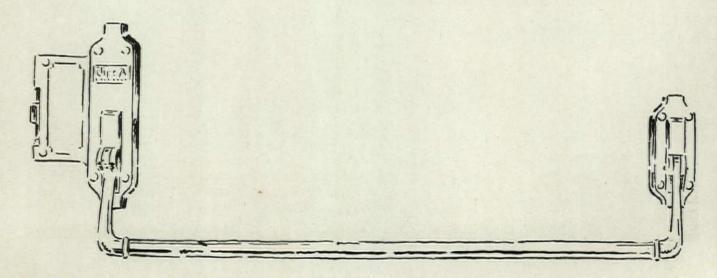
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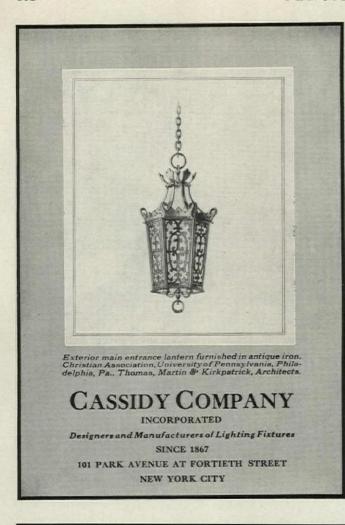
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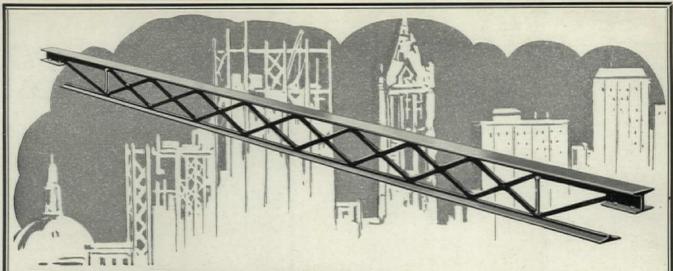
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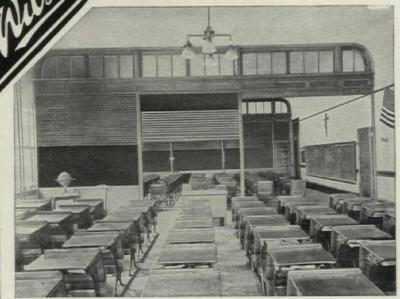
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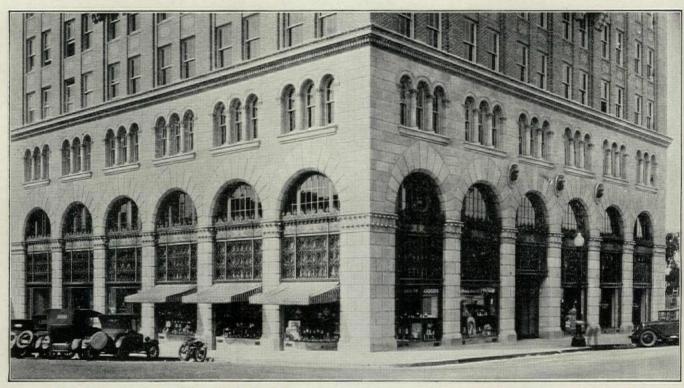
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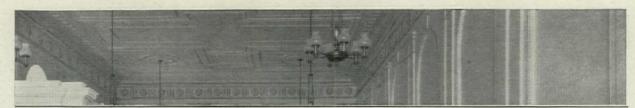
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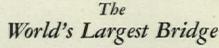
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(Above) One of the two great towers of the Hudson River Bridge.

(Center) Cofferdams for New Jersey tower footings. Silas Mason, Inc., N. Y., Contractors.

(Below) As bridge will look when completed.

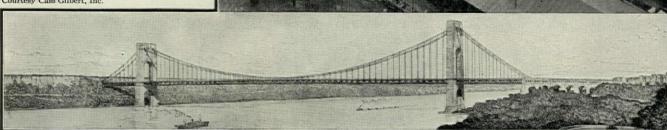
Total length, including approaches, 9,000 feet.

Total cost, about \$75,000,000. Built under jurisdiction of Port of New York Authority.

Othmar H. Ammann, Bridge Engineer Cass Gilbert, New York, Architect Work Started, May, 1927

Anticipated Completion, 1932

Courtesy Cass Gilbert, Inc.





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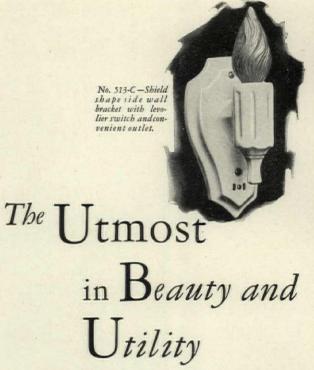
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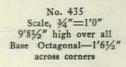
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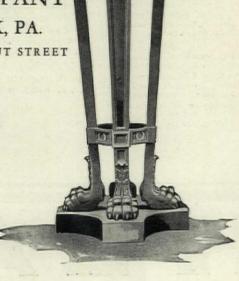
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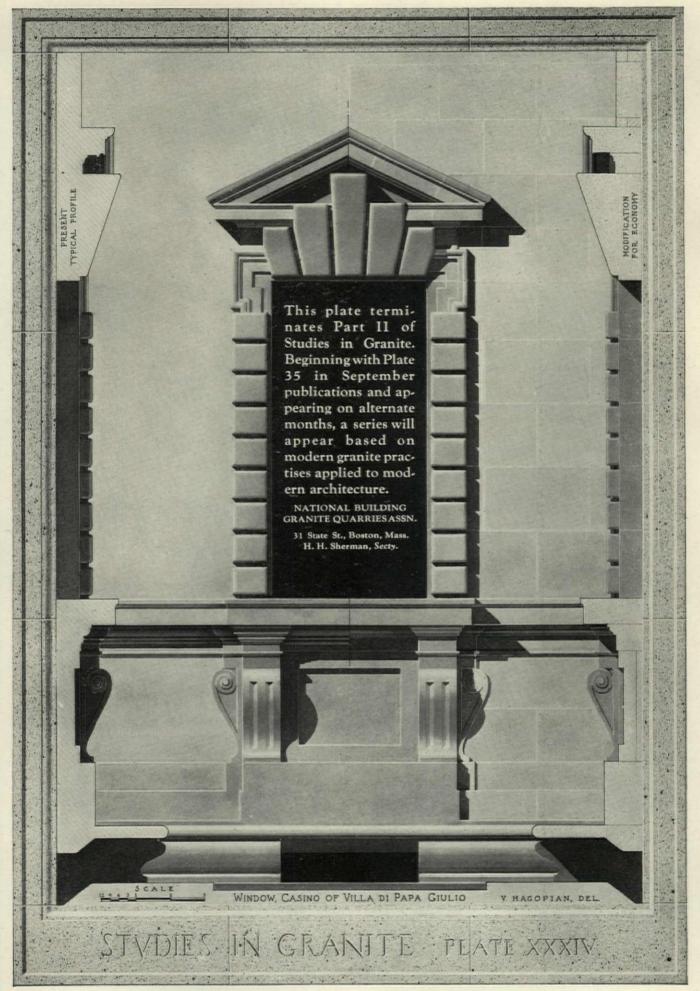
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(Other items on page 467, of the Editorial Section)



A First Prize Winner

Drawn by R. G. Vasey of Jacksonville, Ill.

The Judges—Franklin Booth, C. E. Chambers, Walter Whitehead selected by EBERHARD FABER to make awards in the

RAINBOW COLORED PENCIL COMPETITION

after having examined the many drawings entered, have awarded prizes to the following High School students:

FIRST PRIZE—A Beautiful Embossed Leather Writing Case, containing a complete set of Eberhard Faber Rainbow Colored Pencils, Van Dyke Drawing Pencils, and Van Dyke Erasers.

Vasey, R. G	Jacksonville High School	Jacksonville, Ill.
Kelley, James A	Arlington High School	
Sanders, Everett	Bloomington High School	Bloomington, Ill.

SECOND PRIZE—A Writing Case of Brown Leather, containing one each of the twenty-four colors of Eberhard Faber Rainbow Colored Pencils and other drawing requisites.

Bolnis, Alexander	Maynard, Mass.
Bradbury, Edith	Iowa City, Ia.
Converse, Frances	Arlington, Mass.
Gebiner, Frieda	Brooklyn, N. Y.
Hunter, Helen	Arlington, Mass.
Lallie, Michael	Rochester, N. Y.
Miller, Eunice V	Bloomington, Ill.
Prybil, Grace E	Iowa City, Ia.
Reynolds, Marguerite	Arlington, Mass.
Shaw, Eleanor	Arlington, Mass.
Smith, Wila R	Dalton, Mass.
Wild, Ruth N	Buffalo, N. Y.

THIRD PRIZE—A Writing Case, containing an assortment of Rainbow Colored Pencils, Van Dyke Drawing Pencils and other useful drawing articles.

Batitis, Anna	Norwood, Mass.
Bennett, Ruth	
Bofird, Ann H	
Cochones, Irene	Hoboken, N. J.
Gringer, Lillian	Iowa City, Ia.
Hager, Marion	Arlington, Mass.
Hosmer, Eleanor	Arlington, Mass.
Kuzlie, Charles	Cranford, N. J.
Miller, Margaret	Arlington, Mass.
Quinn, Aline	Trenton, N. J.
Taylor, George L	Glassboro, N. J.
Williams Wesley	Weymouth Mass.

The Judges were unanimous in their praise of the general high calibre of the drawings submitted and their decision was reached only after due deliberation and consideration of the many fine points of art involved.

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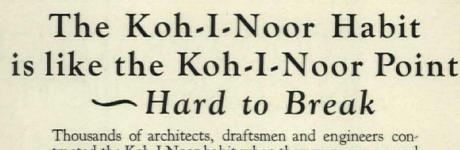
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GOOD PRACTICE IN CONSTRUCTION

By PHILIP G. KNOBLOCH

PART ONE

ORE than 200 subjects have been presented by Mr. Knobloch in this book of 52 full-page plates of construction details, each plate is printed on one side of heavy paper with tinted background to bring out every line to advantage. These details have been worked out carefully in consultation with numerous architects and engineers in order to secure the best selection in each case. The construction shown has been tested and built, and there is not a line in any

of the drawings representing a theory unsupported by practical demonstration. The drawings were made on a scale large enough to show clearly all of the details, to which are added explanatory notes. The rendering of the drawings and style of lettering are models of draftsmanship. The scope of these details embraces practically every element of building construction.

The aim of this work has been to present a series of details representing good, modern practice in building construction for use in the drafting room and in the school.

While the material upon which these plates are based was drawn from the files of architects' drawings of buildings actually constructed, no feature that was due to special conditions has been retained. Furthermore, ideas from different offices have been combined and the shop drawings have been made to contribute to the practical value of the plates. Then, too, a score or more of men, each of whom is especially well informed on some one branch of building construction, or some one class of materials, gave their criticisms and suggestions. In short, the effort has been to combine the methods of numerous architectural offices of recognized standing with the special knowledge of men of long experience in the several branches of the building industry in a work of great usefulness that has proven itself to be a valuable contribution to the practice of architecture.

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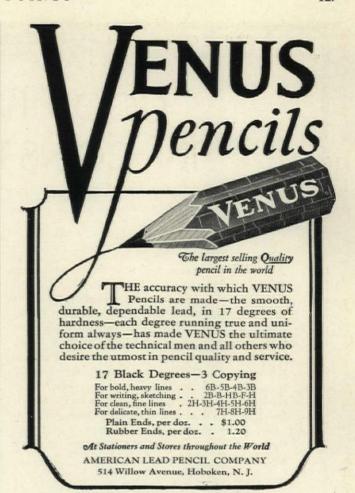
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GOOD PRACTICE IN CONSTRUCTION

By PHILIP G. KNOBLOCH

PART TWO

IN THE preparation of this, the second part of "Good Practice in Construction", the aim has been to present further useful details in convenient form for use in the drafting room. Details that the architect and draftsman are most likely to have occasion to employ in their work have been selected rather than those of a special character. Though many of the plates embody special knowledge, such as the details for theatres, store fronts, log cabins, etcetera, all are for buildings that are constantly being built in most, if not all, parts of the country and that may well come within the practice of any architect.

The daily use of "Good Practice in Construction, Part One", in architectural offices throughout the country has shown clearly that material of the kind it contains meets the requirements of architects and draftsmen, and since it was possible to cover but a portion of the subject within the limits of a volume of the convenient size adopted for the books of "The Pencil Points Library," the publishers have recognized the desirability of making available additional material of this nature. Also, a desire for a second volume of Mr. Knobloch's work has been expressed in many letters from users of Part One.

PART ONE and PART TWO of "Good Practice in Construction" have become indispensable in the practice of architecture, and every architect, draftsman and student needs and should possess these valuable books.

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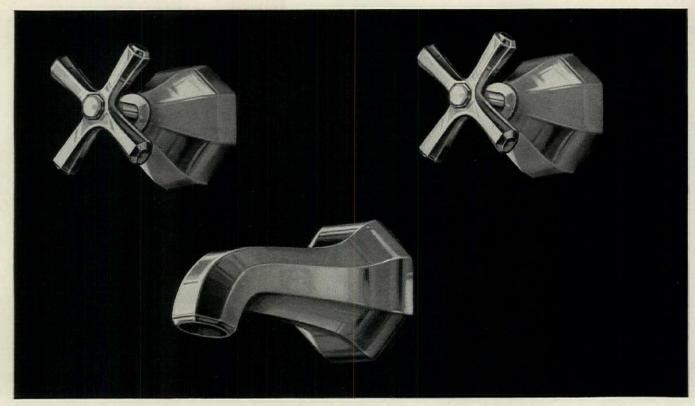
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Stanley Half-Surface Template Ball-Bearing Butt No. BB163.

Butts for Kalamein Doors

1 Half-Surface and Full-Surface Butts. The "filler" of a Kalamein door rarely provides sufficient anchorage for the wood screws of a full-mortise butt. The bolts and grommet nuts with which half-surface and full-surface butts are applied fasten through the door, as is shown in the illustration at the right, and will not loosen or pull out.

2 Ball-Bearing Butts. Kalamein doors as a rule are subjected to high-frequency service. To avoid sagging or binding of doors, ball-bearing butts should always be used.

3 Wrought-Steel Butts. Butts made of wrought steel are recommended as the best type to withstand the extreme conditions to which the doors and butts may be subjected in case of fire.

4 Template Butts. Since the majority of jambs for use with Kalamein doors are made of pressed steel, the screw-holes for the butts are drilled at the factory. It is therefore essential that the butts be made to template to guarantee their proper application at the building.

The surface leaves of Stanley Ball-Bearing Half-Surface and Full-Surface Butts are beveled to present a neat appearance when applied. When desired these butts can be furnished for painting. When so furnished, the inner edges of the leaves are milled back so that the paint will not be scraped off the barrel of the butt when the door is operated.

Kalamein doors with Kalamein or Pressed Steel jambs require HALF-Surface Butts.

Kalamein doors with Channel Iron jambs require FULL-Surface Butts.

The Stanley Architects' Manual explains fully the proper equipment for all usual and unusual door conditions. It gives standard specifications for applying butts to Kalamein doors. Let us send you a copy.

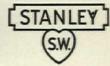
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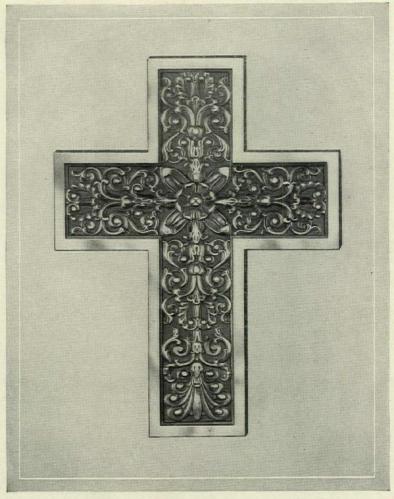
Half-surface and full-surface butts are attached with bolts and grommet nuts which fasten through the door.



Half-surface and fullsurface butts are easily applied and presentaneatfinished appearance.



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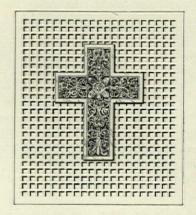
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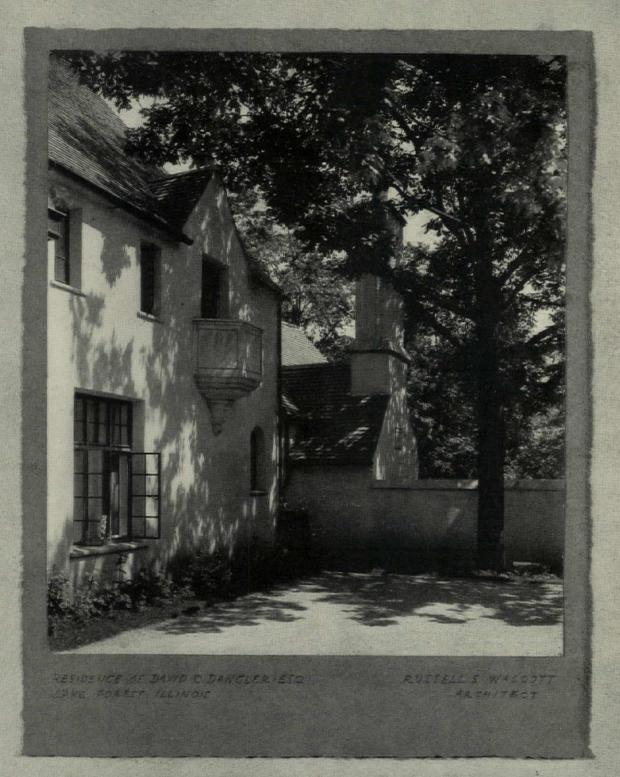


The Style "08" Ornament as it appears when attached to our Style "01" plain lattice grille.

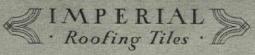
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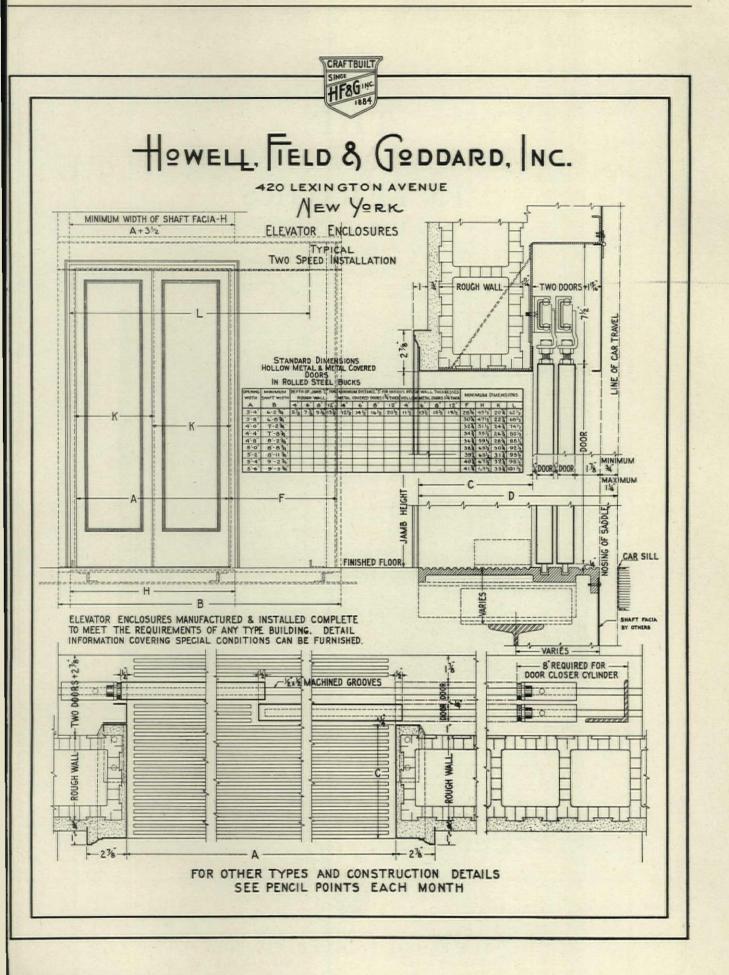
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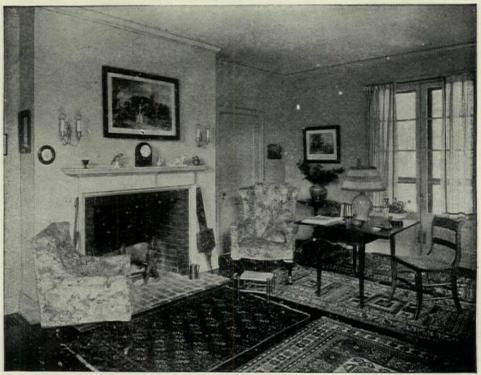
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Eberhard Faber announces the appointment, as Advertising Manager, Mr. John W. Desbecker. Mr. Desbecker has had a wide experience in advertising affairs and brings to his present position a well rounded experience.

Effective June 1, 1928, Philipp Moll, formerly Sales Manager of C. H. Boehringer Sohn, Hamburg and Nieder-Ingelheim on Rhine, and more recently Vice-President and Sales Manager of Dissosway Chemical Co., became associated with The Roessler & Hasslacher Chemical Company as Assistant to Manager of Sales.

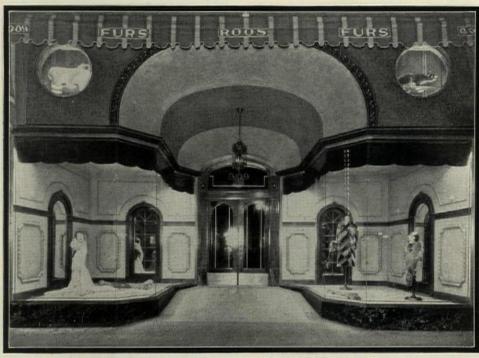
We wish once more to urge upon all manufacturers the extreme desirability of standardizing their printed matter intended for distribution to architects' offices.

Even though the American Institute of Architects and other organizations have for years been constantly advocating the standard $8\frac{1}{2}$ x 11 size, and although many leading manufacturers are following these recommendations, it is nevertheless true that hundreds of thousands of dollars' worth of printed matter is being produced annually in all kinds of odd sizes and shapes, and which stands little if any chance of finding a permanent place in the files maintained by architects and specification writers.

It costs no more to follow the standard size recommended. It costs no more to place the proper A.I.A. classification numbers on every piece of printed matter intended to be filed, and to those architects who maintain the A.I.A. system this makes a lot of difference. If the architect wants printed matter in standard form let's give it to him. It saves him a lot of trouble and increases the efficiency of every dollar spent for material of this kind.

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Nailcrete Corp., The National Bldg. Granite Quarries Association National Fireproofing Co. National Lumber Mfrs. Assn. National Mortar & Supply Co. National Terra Cotta Society National Tube Company North American Cement Corp. Northwestern Terra Cotta Company, The	30 121 8 97 88 103 113 100 77
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Store Front Effectiveness with EXTRUDED BRONZE



AIA 26 B-1

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Our new Extruded Bronze sash section (mouldings that retain plate glass) is constructed so that no screws are visible. It is possible to construct an entire front without unsightly screw heads appearing. This is very desirable.

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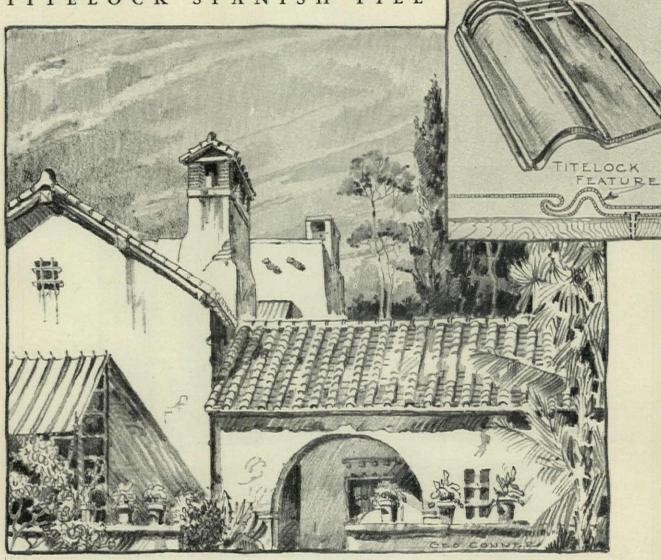
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Standard Store Front Construction Co.
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Names on Request

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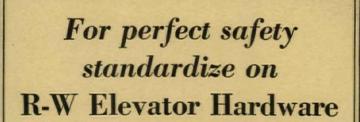


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For further details concerning Titelock Spanish Tile consult the Milcor Architectural Sheet Metal Guide. Copies of this book, quantity surveys and estimates, may be had upon request.. write

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If you are in the habit of using ordinary anchor bolts, you will readily appreciate the advantages of Ankyra, which combines the principle of toggle and expansion bolts with the added feature of a nut which is an integral part of the sleeve. This integral nut permits of the repeated insertion and removal of the screw without damage or disarrangement.

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