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A JOURNAL FOR THE
DRAFTING ROOM



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CRAYON DRAWING BY HUGH FERRISS

Proposed Elevated Sidewalks for New York City

JUNE 1926

VOLUME VII

TWO DOLLARS A YEAR
25 CENTS A COPY

NUMBER 6

In This Issue—The Genesis of Measured Drawings;
Summer Sketching; Wrought Iron Precedent.

BUILD THE NATION SECURELY WITH
INDIANA LIMESTONE
The NATION'S BUILDING STONE

We discourage cleaning Indiana Limestone buildings, since the venerable antique effect produced by weathering is conceded to be one of the great charms of natural stone. However, anyone determined to clean a stone building may obtain complete information on methods that will not destroy the surface of the stone, by writing to the Indiana Limestone Quarrymen's Association, Service Bureau, Bedford, Indiana

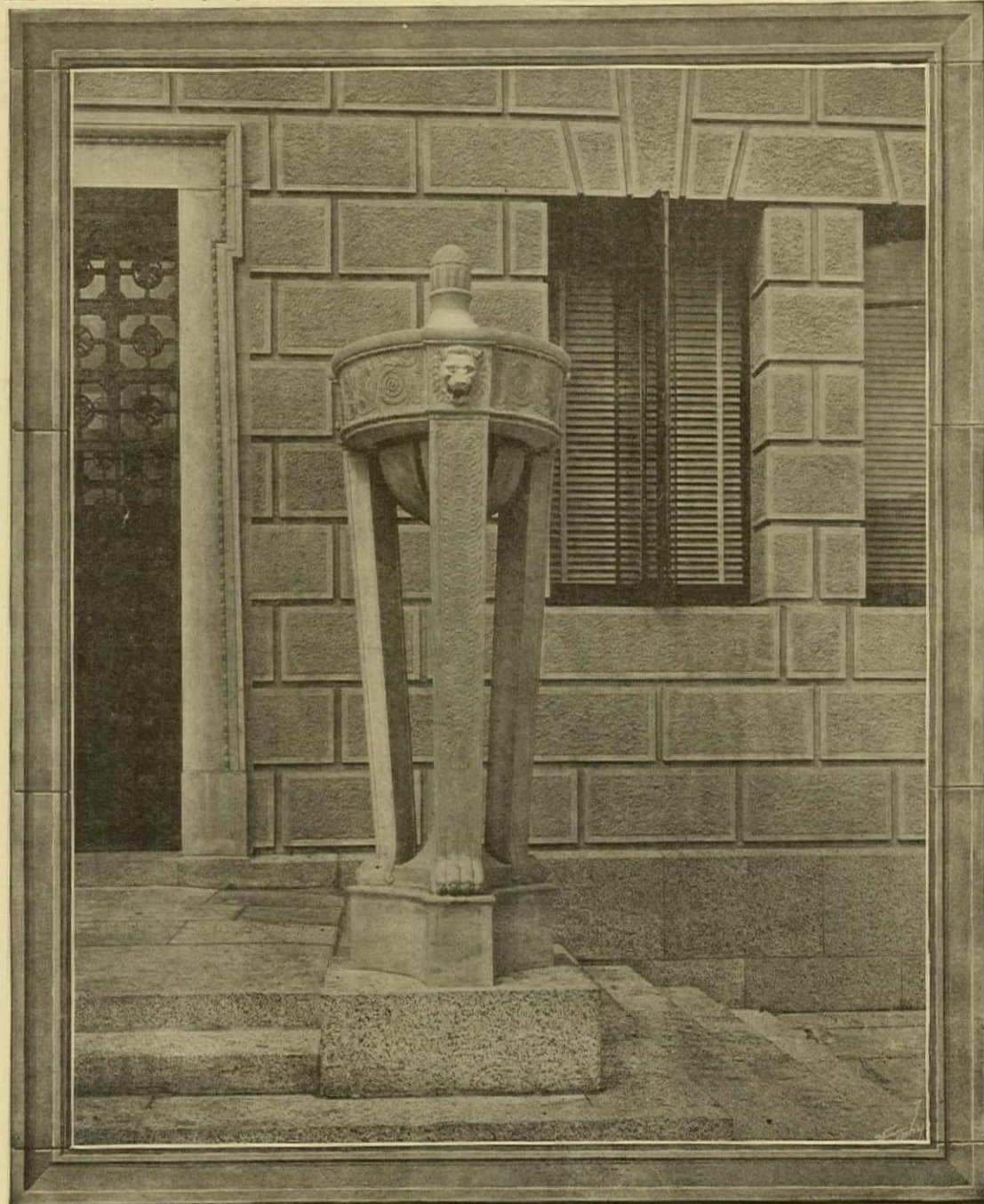
WHENEVER an unusual form of surface treatment for the walls of a building is desired, you will find Indiana Limestone readily adaptable to any one of a variety of finishes. The illustration below shows the beautiful effect obtained in the stone work in the first story walls of the Kansas City Life Insurance Company building; Kansas City, Missouri. An inch wide margin was left around each piece of stone in the rusticated work, the center being picked off by hand with an ordinary pick. The hardening of Indiana Limestone on exposure to the air assures the permanency of the novel effect thus produced.

Our handsomely illustrated booklet, "Indiana Limestone for School and College Buildings," will be sent you free upon request

INDIANA LIMESTONE QUARRYMEN'S ASSOCIATION
 Box 784, Bedford, Indiana Service Bureaus in New York and Chicago

Detail of stone work, Kansas City Life Insurance Co. building, Kansas City, Mo.

Wight & Wight, Architects





Evening Post Building, New York

Cyrus H. K. Curtis, Owner

Horace Trumbauer, Architect

Thompson-Starrett Co. Builders

Zone Designed

Emblazoned with panels of brilliant polychrome Atlantic Terra Cotta, with quoins, buttresses, cornice and coping of buff-gray Terra Cotta, the Evening Post Building is the latest to conform with New York's Building Zone Regulations.

Atlantic Terra Cotta in varying buff-gray is used to modify the abruptness of the set backs required by the regulations. The polychrome treatment of the upper stories is brilliantly effective.

Atlantic Terra Cotta Company

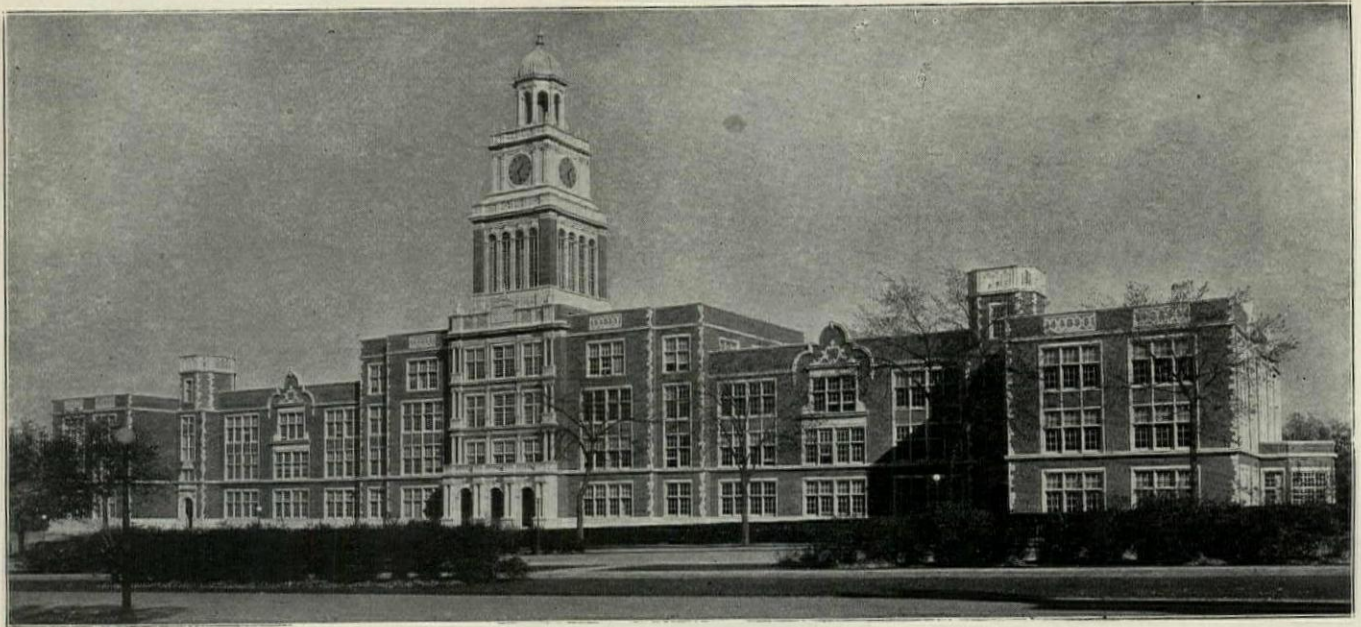
19 West 44th Street, New York

Atlanta Terra Cotta Company

Atlanta, Georgia

Largest Manufacturers of Terra Cotta in the World





East High School, Denver, Colo. Geo. H. Williamson, Architect

The value of Northwestern Terra Cotta for trim is strikingly illustrated in this photograph.

The beauty of the design is emphasized by the trim—the trim gives added dignity to the building.

Northwestern Terra Cotta

combines the beauty of plastic design with the infinite charm of color.

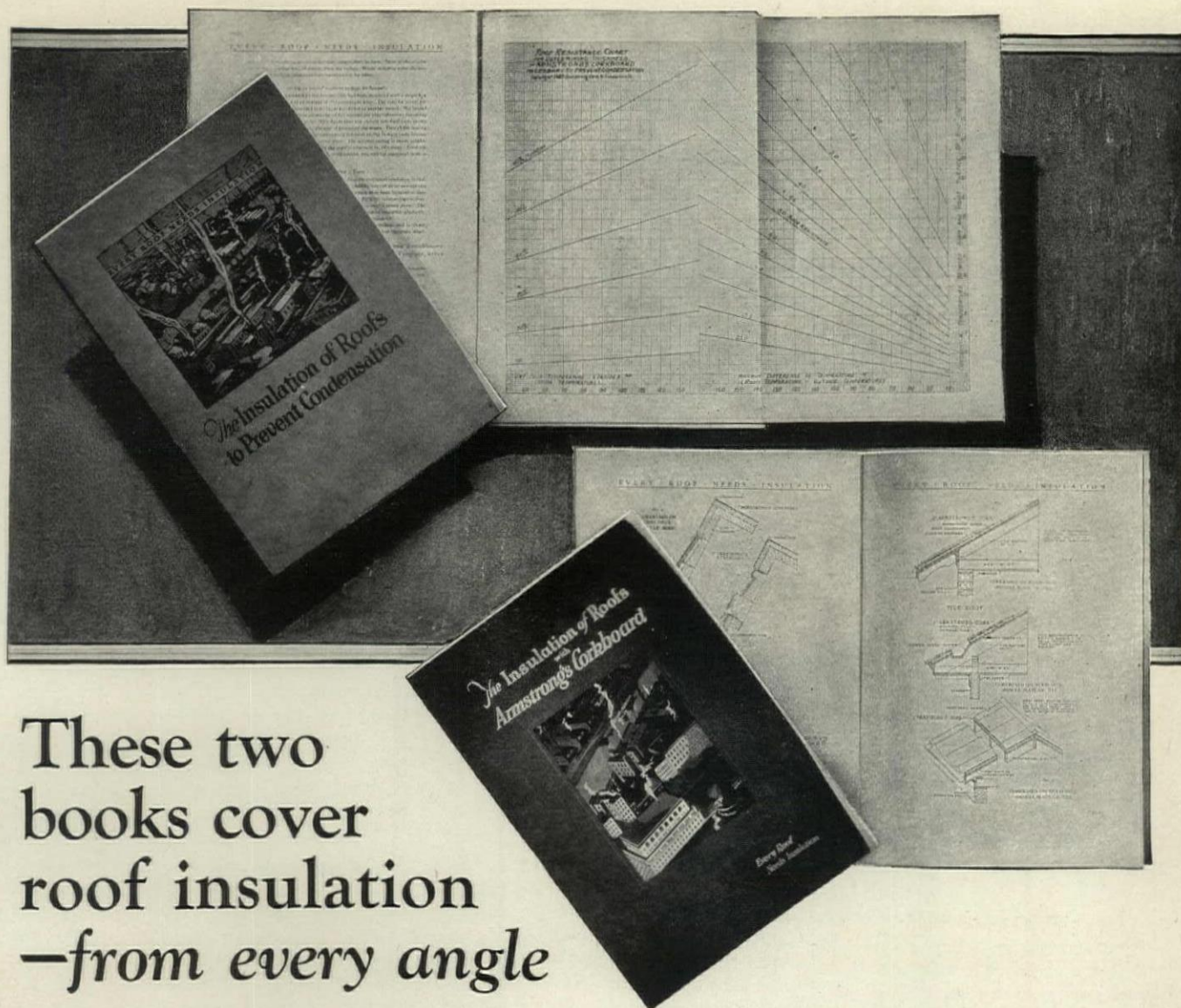
For either complimentary shades and tones, or for impressive contrasting color-schemes, no material equals Northwestern Terra Cotta for trim.

THE NORTHWESTERN TERRA COTTA COMPANY

Western Plant
The Denver Terra Cotta Company
Denver, Colo.

CHICAGO

Southwestern Plant
St. Louis Terra Cotta Company
St. Louis, Mo.



These two books cover roof insulation —from every angle

HERE is just the information you need in figuring insulation for the roofs of office buildings, factories, mills, and other structures of commercial or industrial character. "The Insulation of Roofs with Armstrong's Corkboard" and "The Insulation of Roofs to Prevent Condensation" are two practical books now available for the architect and specification writer interested in securing reliable reference matter on the subject of "heat-tight" roofs.

Based on the experience of Armstrong engineers, these books present

the increasingly important subject of roof insulation in so thorough a manner that proper calculations and specifications are made easy for you. They tell how to insure warmer buildings in winter, cooler buildings in summer; how to save fuel; how temperature may be more easily regulated and humidity more readily controlled; how sweating ceilings may be eliminated.

Sooner or later you will be confronted with a problem of roof insulation. Send the coupon for the two books now and have the necessary information on hand when you need it.

Every roof needs insulation

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A Heatproof Lining for Walls and Roofs

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GENTLEMEN:—You may send me free of charge your two new books on roof insulation.

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JUNE

*We advertise this way
to your clients —*

in Saturday Evening Post, June 12, 1926



How a 45-year record cured a spasm of false economy—

"Well, how'd you make out?"

Jim Madden closed the door and grinned down at his senior partner.

"They O.K.'d all our specifications for their new plant without batting an eye—until they reached the roof!"

"Then you struck a snag, eh?"

"Just at first, yes. Somebody had a sudden spasm of economy. 'Cut down costs' was the war cry. Somebody else knew of a 'fine' roof, a few dollars cheaper. I told them a roof was a poor thing to buy on the basis of *first cost*. But . . ."

"So we've got to substitute for The Barrett Specification Roof?" asked the senior partner.

"No, sir! Luckily, old man Roberts, the President, came in right there and read 'em a lecture on *real economy*. Seems he knew about the roof on that old warehouse* in Boston laid 45 years ago, which never cost a cent for repairs. That's the

kind of a roof he was going to have and nothing else but! And that was a Barrett Built-up Roof."

* * * *

Forty-five years of expense-free weather-tight service from a roof is a good record.

And there are many service records on file that show Barrett Roofs of this type, built 35, 40 and more years ago, which are still absolutely weather-tight—and not a cent spent on them. In addition—

Barrett Specification Roofs are guaranteed by a Surety Bond against repair or maintenance expense for a full 20 years.

Finally these roofs take the base rate of fire insurance.

You're interested? Then mail a brief note to The Barrett Company, 40 Rector Street, New York City. We'll give you the full story—promptly.

*For 45 years a Barrett pitch-and-felt roof has protected the old north building at India Wharf, Boston, Mass.—45 years of rain, sun, and snow—of racking vibration from docking steamers. And this roof is still staunchly weather-tight. In all this time no record of repair or maintenance expense.

Barrett

SPECIFICATION ROOFS

*—and here's your side
of this roof thing
(Re. the "or equal" clause)*

It's a trouble-maker—that loop-hole phrase "Or equal."

Should it be incorporated in your roofing specifications—or not?

Experience of leading architects says "Certainly *not!*" And for these reasons:

When you write "or equal" in your roofing specification you open the door to all types of competition—leave the high-grade roofing contractor to fight it out with the fly-by-night roofer. Result? Price wins the job—and you lose prestige when the "or equal" roof goes wrong.

A better way—a time-proved way—is this:

Write "Barrett Specification 20-year Bonded Roof" and break the pen *there*. You're then assured of these important facts:

- 1—Assured of the advantage of competitive bidding on an equal basis among roofing contractors who have earned a name for doing high-grade conscientious work.
- 2—Assured that a highly trained Barrett Inspector will inspect the roof and so make certain that The Barrett Specification (nationally accepted as standard for built-up roofs) is followed to the letter.
- 3—Assured that when this roof is O.K.'d by the Barrett Inspector (and his report checked and rechecked), the building owner will receive a Surety Bond guaranteeing him against repair or maintenance expense for 20 years. Supervision is off your mind—your responsibility is definitely underwritten.

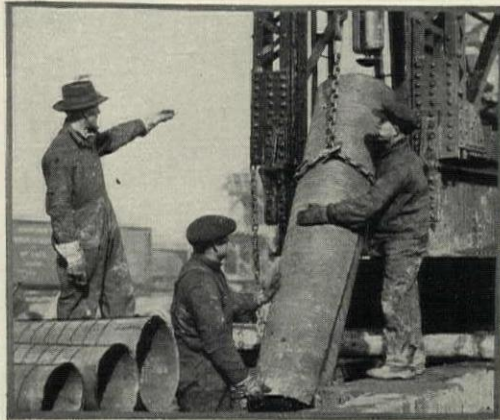
Service records prove that great numbers of roofs of this type have far outlasted the guarantee period. Many such roofs have stood absolutely weather-tight 30 and 40 years without one cent of repair expense.

THE BARRETT COMPANY
40 Rector Street, New York City

IN CANADA:

The Barrett Company, Limited
2021 St. Hubert Street, Montreal, Quebec, Canada

Raymond



—that's one section of a spirally reinforced steel shell for a Raymond Concrete Pile—every Raymond Concrete Pile is poured into a spirally reinforced tapered steel shell and the shell is left in the ground.

RAYMOND CONCRETE PILE COMPANY

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Chicago: 111 West Monroe Street

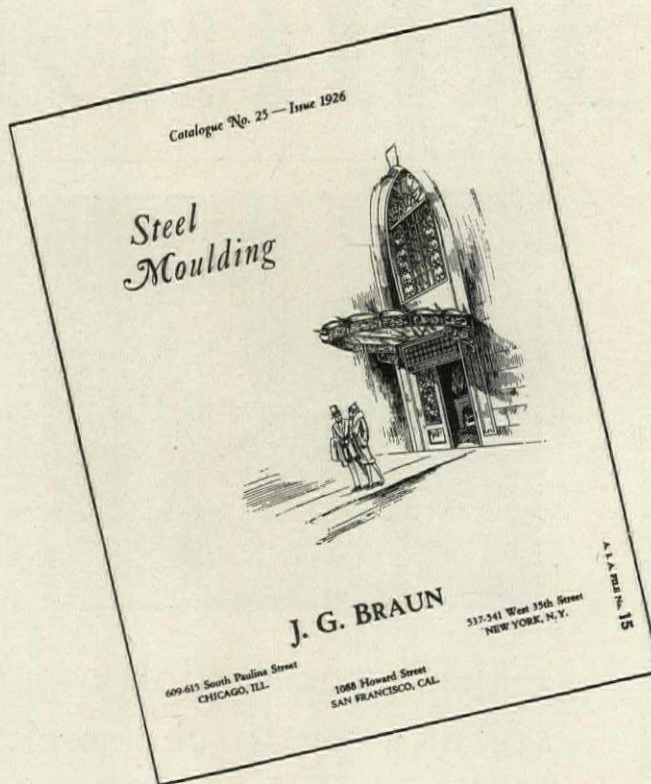
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A Form for Every Pile—

A Pile for Every Purpose





Announcing the Completion of

CATALOGUE NO. 25, (A. I. A. File No. 15, 72 pp. 8½ x 11)

STEEL MOULDING

This catalogue has been rearranged completely to be of utmost efficiency and help in designing Ornamental Iron Work. The Addition of 11 pages of exquisitely illustrated Ornamental Iron Detail is its greatest, though not only, feature.

If you have not received your copy, please request it of our nearest office.

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Hibbard, Spencer, Bartlett building, Chicago. Graham, Anderson, Probst and White, Architects. Wm. Murdock Co., Roofing Contractors. Henry Erickson, General Contractor. 135,000 sq. ft. of Celotex Industrial Board applied in two layers over concrete deck.

This roof insulation specified for the new Hibbard, Spencer, Bartlett building

Celotex Industrial Board offers architects and their clients unique advantages

THE architects and owners of this building realized the importance of roof insulation in modern construction.

They knew that proper roof insulation would: save fuel by reducing heat losses through the roof—reduce the amount of radiation required—permit the use of a smaller, less expensive heating plant—prevent condensation or ceiling sweating—reduce dangerous expansion and contraction of the concrete roof deck—and make the top floors of the building comfortable all the year 'round.

Celotex Industrial Board was specified for these purposes. It offers advantages found in no other roof insulation on the market.

This board, made from firmly interlaced and felted cane fibre, has an extremely high insulating value. Its thermal conductivity is 0.33 B. t. u. per hour, per sq. ft., per 1° Fahrenheit, per inch thickness.

OTHER CELOTEX PRODUCTS

Celotex Standard Building Board is used under plaster, for sheathing, and other structural purposes. Acousti-Celotex is used for Acoustical Correction and sound quieting. (Specifications and detail drawings free on request.)

Celotex also meets the important requirement of a firm, secure base to receive the roof covering. It is practically puncture-proof—safe from the damage traffic inflicts on less rigid materials. This board is one of the strongest commercial roof insulations (tensile strength 373 lbs. per sq. in.).

It is ideally adapted to all types of roof decks: concrete, steel, tile, wood, etc.

Inexpensive to apply

Celotex is exceptionally easy and economical to apply. It comes in 3' x 6' boards approximately 1/2" thick, that are easily handled and quickly mopped.

It will be to your advantage and to that of your clients to investigate this remarkable material. We have prepared complete specifications and detail drawings in A. I. A. file form. May we send you a copy?

THE CELOTEX COMPANY, CHICAGO, ILLINOIS—Mills: New Orleans, La.

Branch Sales Offices in many principal cities—(See telephone books for addresses)

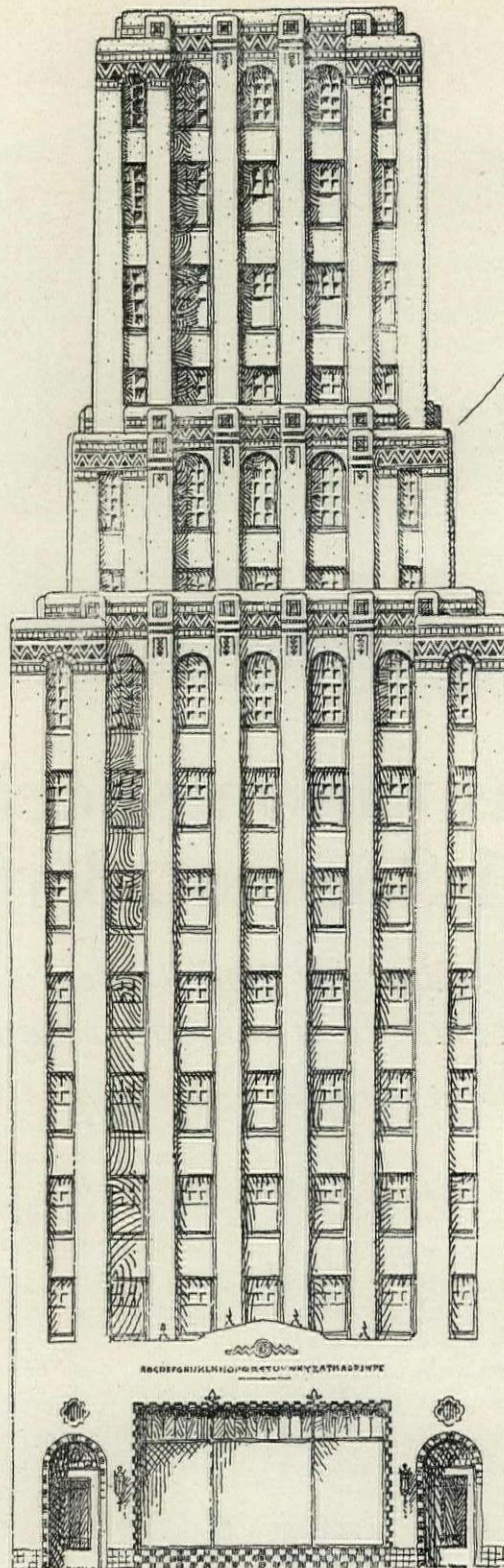
Canadian Representatives: Alexander Murray & Co., Limited; Montreal, Toronto, Halifax, Winnipeg, Vancouver

CELOTEX

INSULATING LUMBER

SCALE IN ARCHITECTURE

ARCHITECTURE exists because of its function in human life and living. In this sense it is a housing for the human frame and as such has had its proportions determined by the SCALE of the human form. The ARCHITECT at his work constantly refers his masses and their proportions back to the normal human figure as a measuring-stick. As long as our structures remained relatively small, the problem of correct SCALE was not so acute. Much of our modern work, however, is based upon a scheme out of all keeping with our elemental archi-



tectural conceptions. Thus, in our great skyscrapers, we frequently encounter "elements" and units, originally "in SCALE" with the human form, that, in the process of stretching out which our architecture has undergone, have become so tremendous in size as absolutely to belie their own dimensions and those of adjacent "elements." In such large units it is possible to "step down" to the SCALE of the human figure only by the use of units of construction or decoration which are sensible in terms of the human figure. In this connection the sense of SCALE that DECORATIVE CERAMIC TILES afford offers a sure means for evaluating these otherwise incomprehensible masses and areas.

ASSOCIATED TILE MANUFACTURERS

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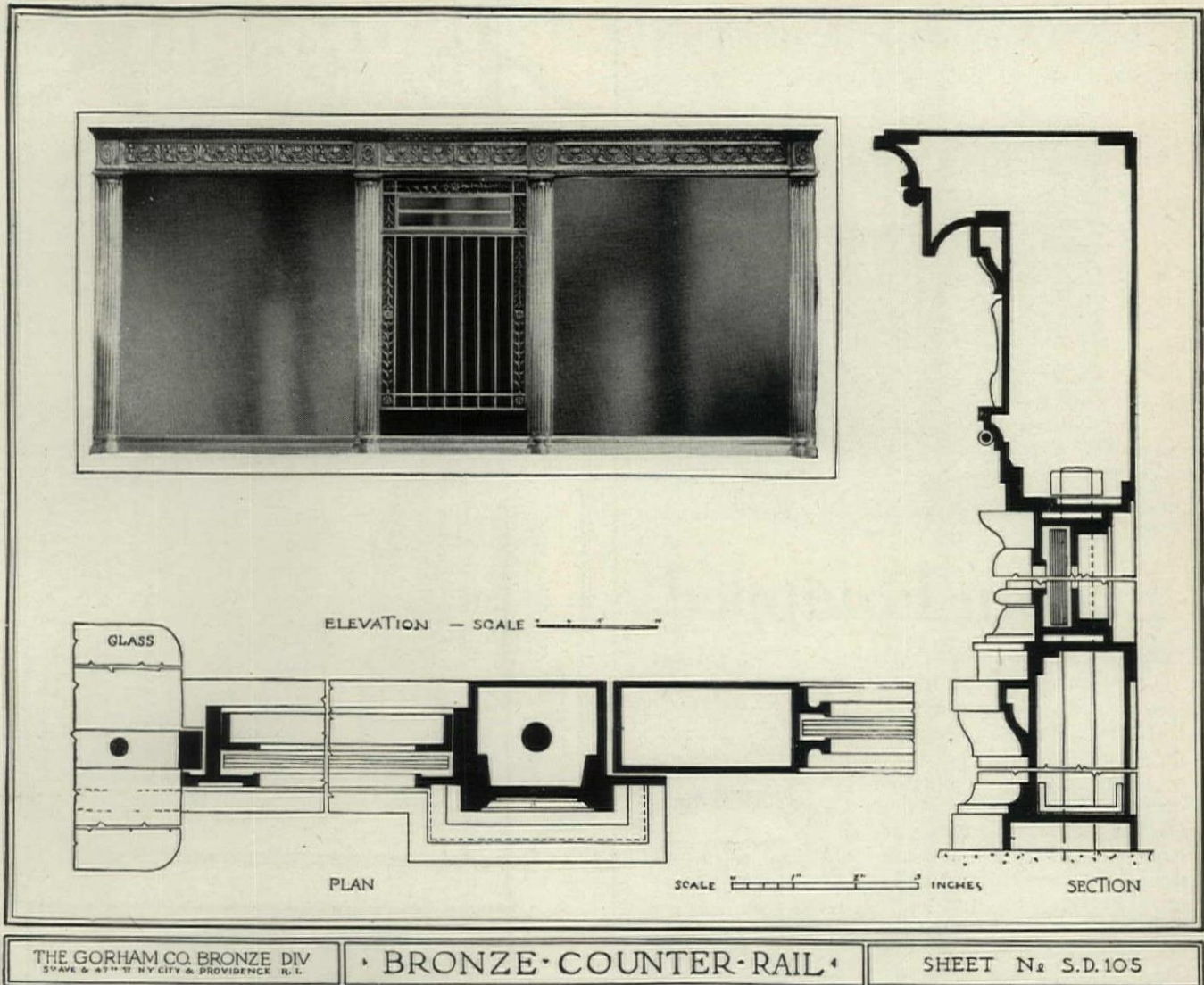
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USE ASSOCIATION TILES



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*The ARCHITECT desires FINE WORKMANSHIP
The CONTRACTOR demands PROMPT DELIVERY
The OWNER insists on a REASONABLE PRICE*

THE use of GORHAM STANDARD DESIGNS avoids the need of special detailing and special models, patterns and dies.

These Standard Details may be widely varied in profile and ornament, producing individuality of character to suit architectural requirements. A large stock of component parts assures prompt delivery.

Send us a plan of your intended Banking Room and let us demonstrate the helpful value of this service.

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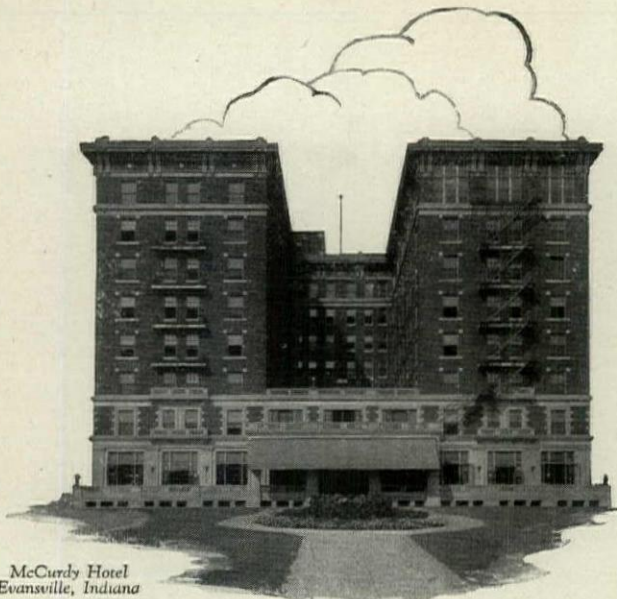
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PROVIDENCE, R. I.



Combination Calendar and Check Rack
GORHAM STANDARD DESIGN

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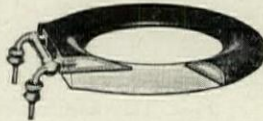
McCurdy Hotel
Evansville, Indiana

Evernu Equipped

THIS fine hotel, operated by the Van Orman Hotel Company, nationally known hotel operators for many years, is equipped with Evernu Hard Rubber Toilet Seats. By this selection the management has combined fine appearance with exceptional economy. Costing no more than ordinary seats, Evernu seats last forever. And although they are everlasting, they always look new. There is no finish to wear off. The hard rubber, highly polished, is impervious to acids and cleaners. The hinge is as durable as the seat.

For permanent economy and permanent beauty, Evernu is the seat to specify.

Specifications will be found in Sweet's catalog. Write today for the new Evernu catalog.



Evernu is the perfect seat. The interior wall of special hard rubber of great strength and the outside surface of solid color hard rubber are vulcanized under hydraulic pressure into one lasting piece.

No finish to wear off. No joints to open up. The hollow center provides lightness with strength. The hinge is as durable as the seat.

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C. A. DUNHAM CO.

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Over sixty branch and local sales offices in the United States and Canada bring Dunham Heating Service as close to your office as your telephone. Consult your

telephone directory for the address of our office in your city.



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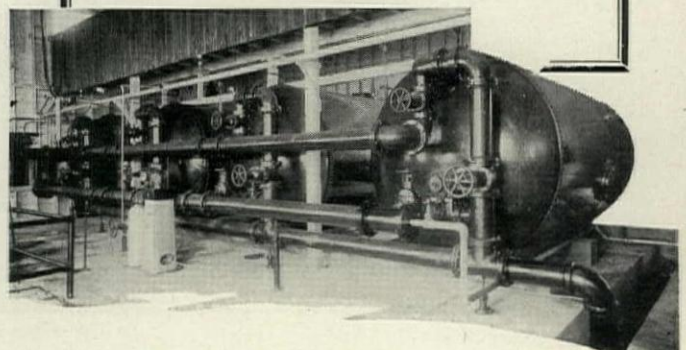


An Indispensable Asset in Public Buildings

In hotels, clubs, outdoor pools—wherever the public health must be protected by uniformly pure water in swimming pools—SCAIFE FILTERS play their part. They can be had in various sized vertical or horizontal types and are scientifically designed to give the greatest degree of purity at the lowest possible cost of operation.

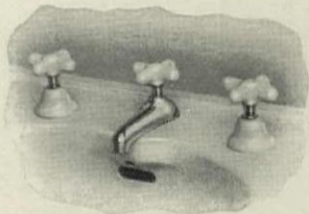
WM. B. SCAIFE & SONS CO.
Pittsburgh New York Chicago

The illustration shows four 8' x 18' Scaife Filters, installed for an outdoor pool in Pennsylvania.

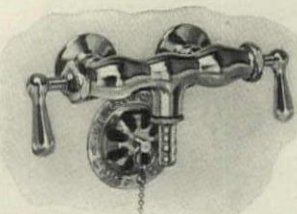


"TRIUMPH" BRASS TRIMMINGS

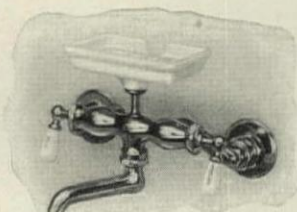
Standardized—tested the equal of fifteen years of service—of typical Clow quality—at popular prices



Clow "Triumph" Compression Stops for lavatory—with four arm china indexed handles—fitted into combination supply and waste fixture.



Clow "Triumph" Compression Bath Cock with hose connection—as it appears on the tub.



Clow "Triumph" Combination Faucet with swinging spout, china-tipped index handles and china soap dish

Some of the fittings that complete the "Triumph" Line are shown above. Have the Clow Man in your territory show them to you.

PREFERRED FOR EXACTING PLUMBING SINCE 1878



Tested to the Equal of Fifteen Years of Service

Before the new Clow "Triumph" Brass Trimmings were put on the market they were tested to the equal of fifteen years of service.

Faucets were opened and closed, under city water pressure, more than 200,000 times.

After the test, wear on the valve seats and other working parts was measured. It was found to be so slight that the faucets looked good enough for another "fifteen years" test.

As a result when an architect specifies, or a plumber installs, Clow "Triumph" Brass Trimmings he is assuring his customer of long, trouble-free service.

And should any trouble develop, Clow "Triumph" Fittings can be quickly and

easily fixed. The working units of most of the fixtures are standardized to such an extent that they are readily interchangeable.

So Clow "Triumph" Brass Trimmings do three things:

They give the user long, trouble-free service.

They give the architect a reliable method for freeing his clients from leaky, troublesome, brass goods.

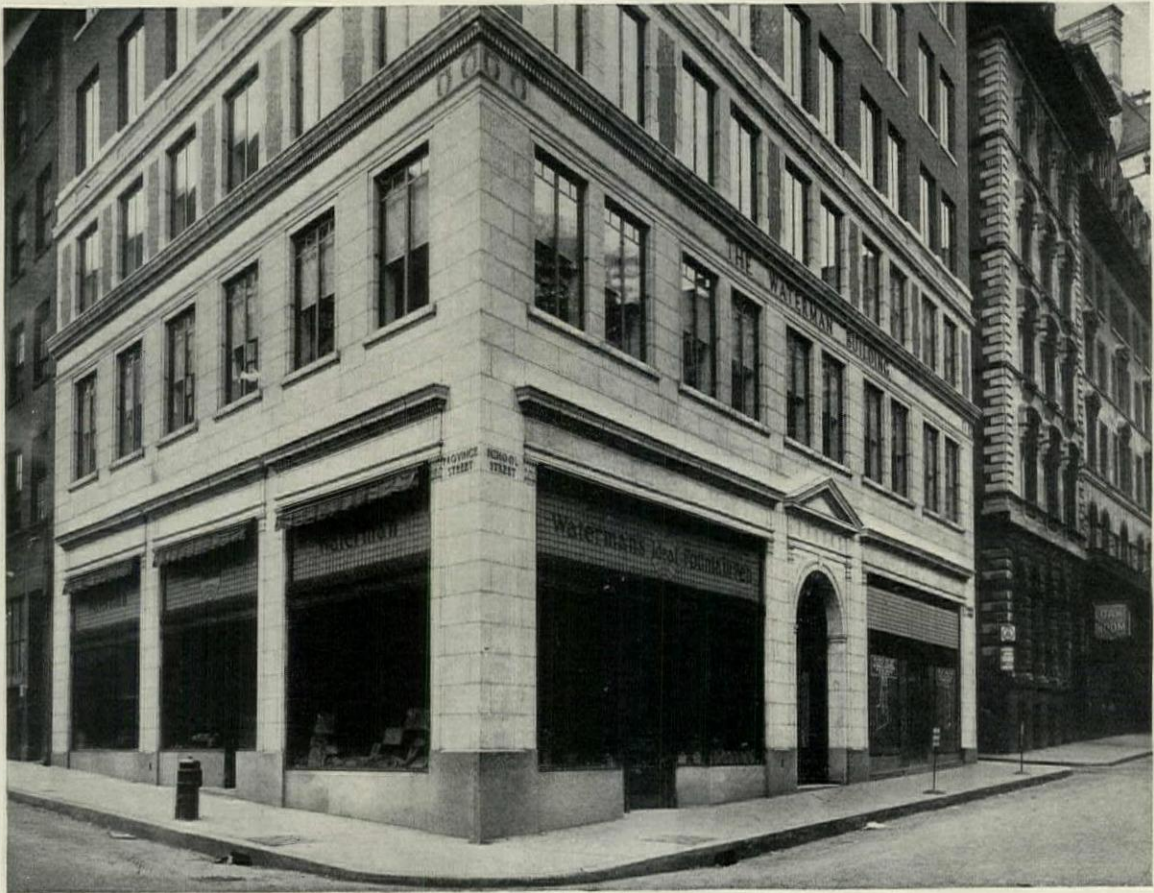
They give the plumber a line of brass trimmings that wins customers for him—and a line that is easily handled.

And, this new Clow "Triumph" Line of Brass Compression Trimmings sells at popular prices.

JAMES B. CLOW & SONS, 201 to 299 N. Talman Avenue, CHICAGO
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TRIUMPH [The working units of "Triumph" fittings are readily interchangeable] BRASS



Putting Beauty Into the Streets

Ramsay MacDonald, speaking in Liverpool, declared that "the architect must surround people with influences which compel them to look upward. He must put beauty into the streets and inspiration in the houses."

In these pictures, marble is applied in ways that are quite different. Yet, in each case the quarries have helped the builders to enrich the street. Above, is the Waterman Fountain Pen Building, Boston. Imperial Danby marble. F. H. Colony and The Thomas W. James Company, architects. Below, the Owl Drug Company Store Front, San Francisco. Vermont Verde Antique marble. Oliver Duval, architect.

VERMONT MARBLE COMPANY - PROCTOR, VERMONT



The rich effect of gumwood paneling, matched for pattern, and so-called plain wood, is a decorative triumph in these two Memphis homes. Residence of Mrs. R. L. Brown, below; Martin J. Condon, at right.



Color plates show Gumwood Finishes

QUARTER sawn figured gumwood, matched for pattern, natural finish; plain sawn figured wood, natural; plain and quarter sawn figured wood, stained, in full page color plates give an accurate idea of the beautiful effects that are obtained from this exquisite hardwood for paneling and interior woodwork of all kinds. Architects will find this book, "Beautiful American Gumwood," most valuable and informative.

Interiors of great architectural beauty illustrate the text, which deals with gumwood for residence and hotel work, its widespread use in public buildings, and tells the interesting story of the elusive figure which nature grows in gumwood. How the mystery of growth produces delicate and intricate patterns continuous throughout the log. How with wide boards still obtainable in gumwood it is possible to carry out a harmonious treatment for rooms of large area in which a distinctive decorative pattern will duplicate itself around the entire wall.

For a hundred conveniences

Built-in household conveniences are one of the most useful attributes of a modern home. Breakfast nooks, service accessories in dining room and

pantry, kitchen compartments and cabinets, window seats, cozy corners in living room or library, sunporch fittings, innumerable conveniences upstairs, are all advantageously made from gumwood, using mostly the sapgum grade. This is the outer portion in which growth in the tree occurs, and contains the live sap. The coloration is different from the heartwood, known as red gum, and is entirely suitable whenever gray, white, or ivory enamel is to be used.

Gumwood takes a perfect finish. Its cell structure is so uniform that it does not absorb too much of any staining or enameling material, and there is no resin to come through and spoil the finish.

MAIL THIS COUPON! Send for this valuable book, and call on our service department for detailed information on the many uses and advantages of gumwood, without obligation.

GUMWOOD SERVICE BUREAU

of the Hardwood
Manufacturers Institute
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Gumwood Service Bureau, Bank of Commerce Bldg., Memphis, Tenn. Please send booklet—"BEAUTIFUL AMERICAN GUMWOOD"

Name.....

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Note the exquisite shading and high-lighting on the carved legs and solid parts of this modern buffet, effects obtained through the use of gumwood.

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904

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700-L. S.

203-L. H.

701 B2-S. L.

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303

100

101

102

103

500


400

401

402

600

601



Arlington Mills
Lawrence, Mass.

Engineers, C. R. Makepeace & Co. Builders, B. F. Smith Construction Co.

For Power Houses— “AMERICAN” ENAMELED BRICK

THE walls of the building illustrated above are finished in enameled brick of our manufacture—the most satisfactory material made for this purpose.

White and solid colors may be used in attractive combinations but the mottled brick treatment recently adopted for the power houses of the Edison Electric Light and Power Company is recommended for consideration.

Enameled Brick in all colors for all types of buildings can be promptly shipped. Distributors in all parts of the United States and facilities for handling export business to all parts of the world.

Let us send you a copy of our Data Sheet for your files. Diagrams showing special shapes and other useful information.

AMERICAN ENAMELED BRICK & TILE COMPANY
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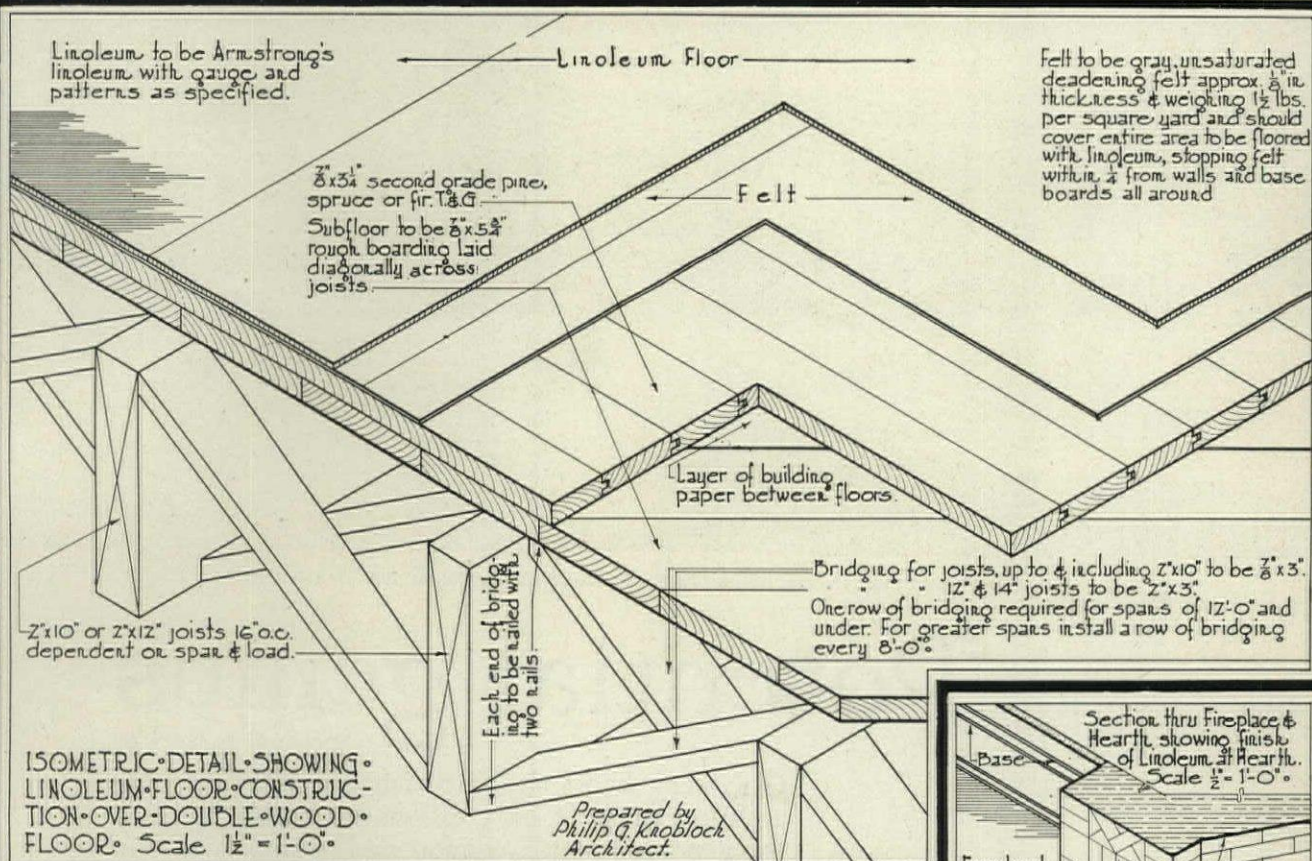
202

200

300

Armstrong's Linoleum

for Every Floor in the House



For Greatest Floor Strength

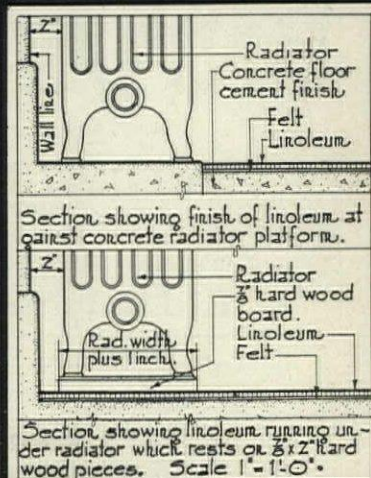
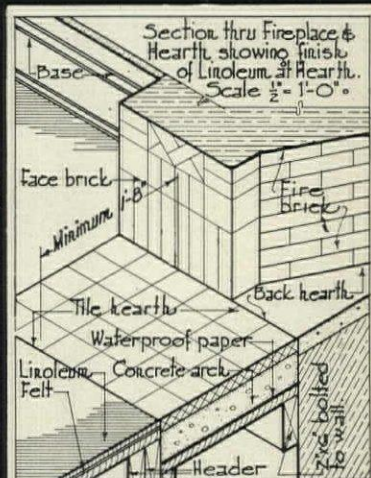
Armstrong Details of Floor Construction No. 4

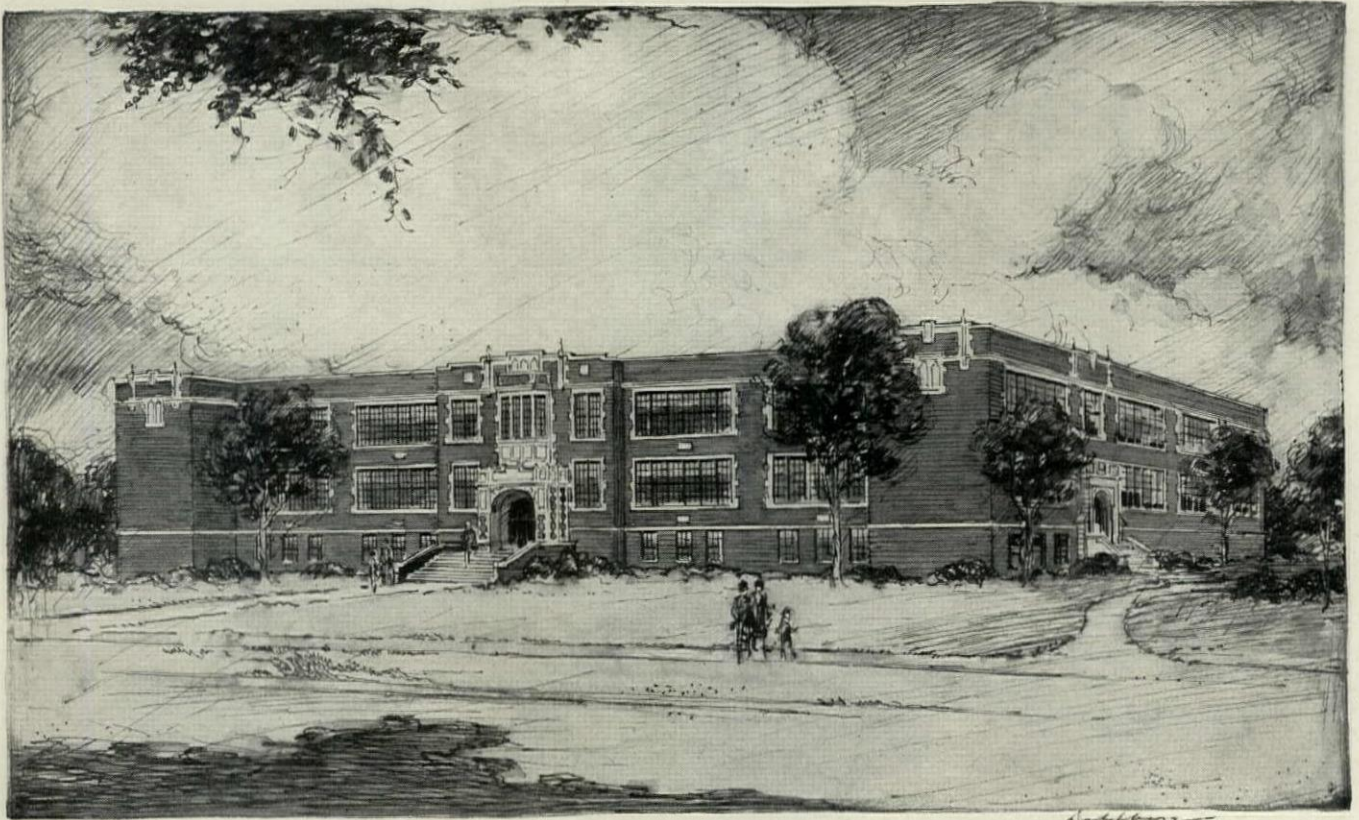
THE large drawing indicates a linoleum floor construction of greatest strength and rigidity. This double wood subfloor is necessary only where the traffic or furniture load is exceptionally heavy. For the average residence a single wood subfloor laid at right angles or diagonally to the floor joists (see Details Nos. 1 and 3) is sufficient and saves money.

The finished subfloor is covered with a single thickness of heavy deadening felt, pasted down. The linoleum is then pasted to the felt. All seams and other openings in the linoleum must be sealed with waterproof cement. Finish by waxing and polishing. Installed in this way and properly cared for, linoleum is a lifetime floor. Its beauty increases as its tone mellows with age.

Complete specifications are contained in our *Architect's Portfolio*, free on request, and in *Sweet's Catalogue*, 20th Edition, pages 574-579.

Armstrong Cork Company, Linoleum Division, Lancaster, Pa.





Elementary Grade School, Decatur, Illinois. Brooks-Bramhall & Dague, Decatur, Illinois, Architects

Potential genius

On every hand the imperishable genius of the architect lives. In his creations are largely founded the improved health, comfort and prosperity of our country. The architect, always looking forward, has courageously led in the face of disheartening indifference until his ideals became accepted practice. There is still work to be done.

In the hands of the school architect of today rests the potential genius of tomorrow; the minds and health of the little children upon whom the Nation counts for her future progress and greatness. Shall the developing intellect and growing bodies start and end in apathy—or be fostered in the clean pure air of a modern schoolroom? The architect largely decides.

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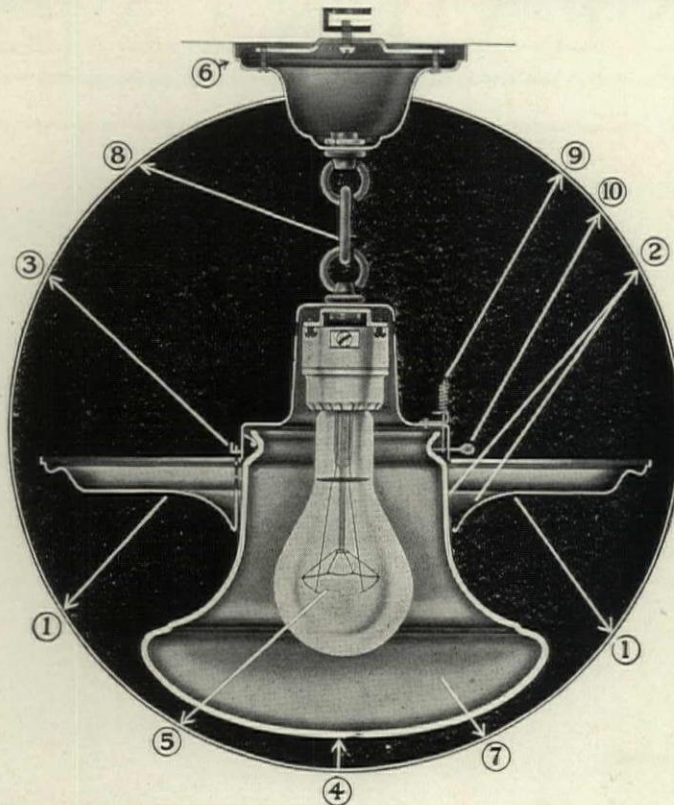
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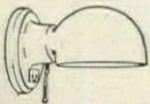
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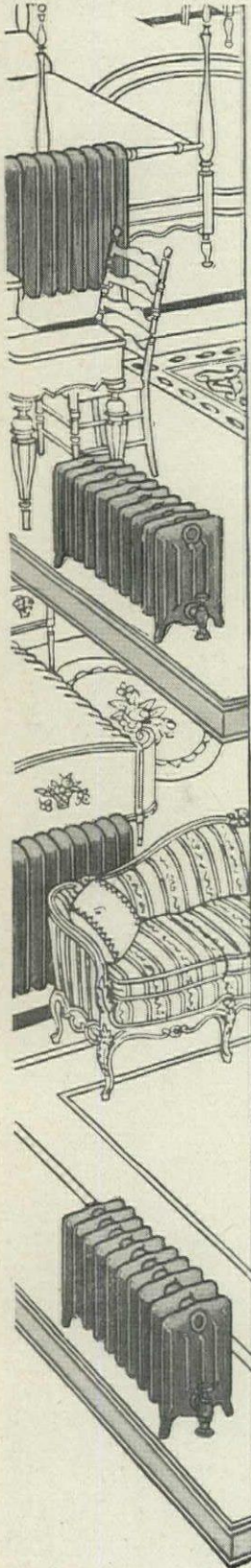
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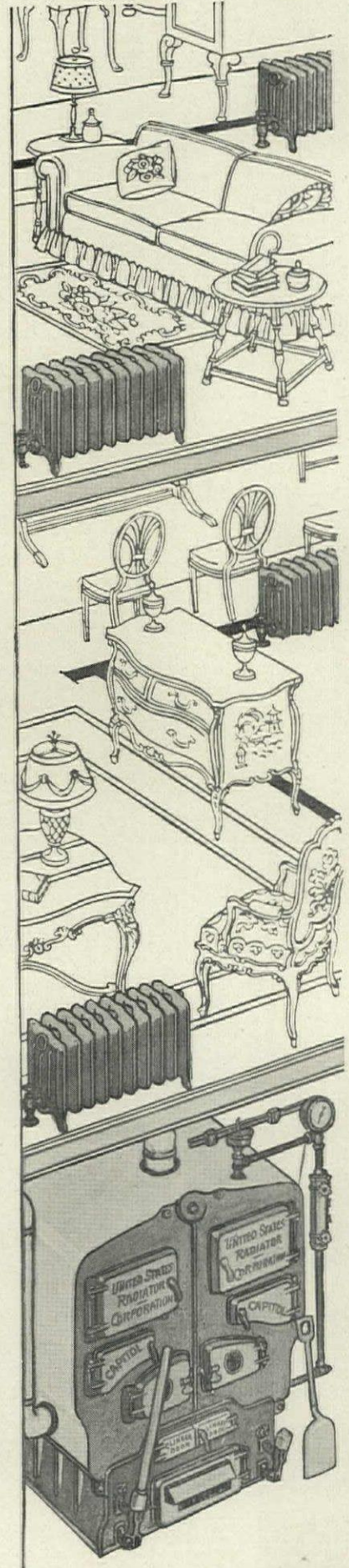
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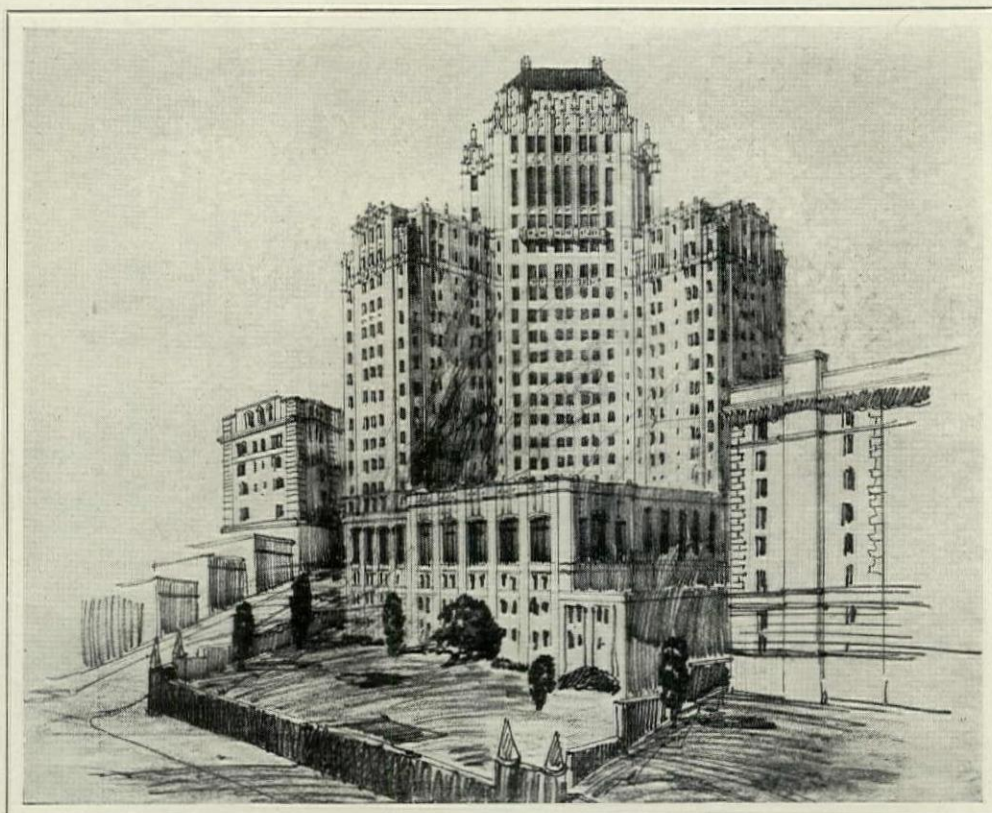
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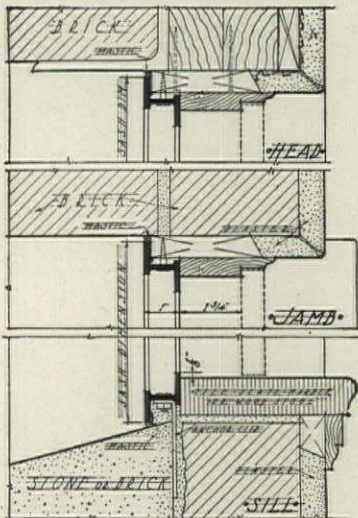
Plumbing Fixtures

Fenestra Casements in solid brick



Fenestra Casement Windows

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Details of Fenestra Casements installed
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PARTICULARLY adapted for use in prepared window openings, Fenestra Steel Casement Windows are exceptionally easy to install in solid brick.

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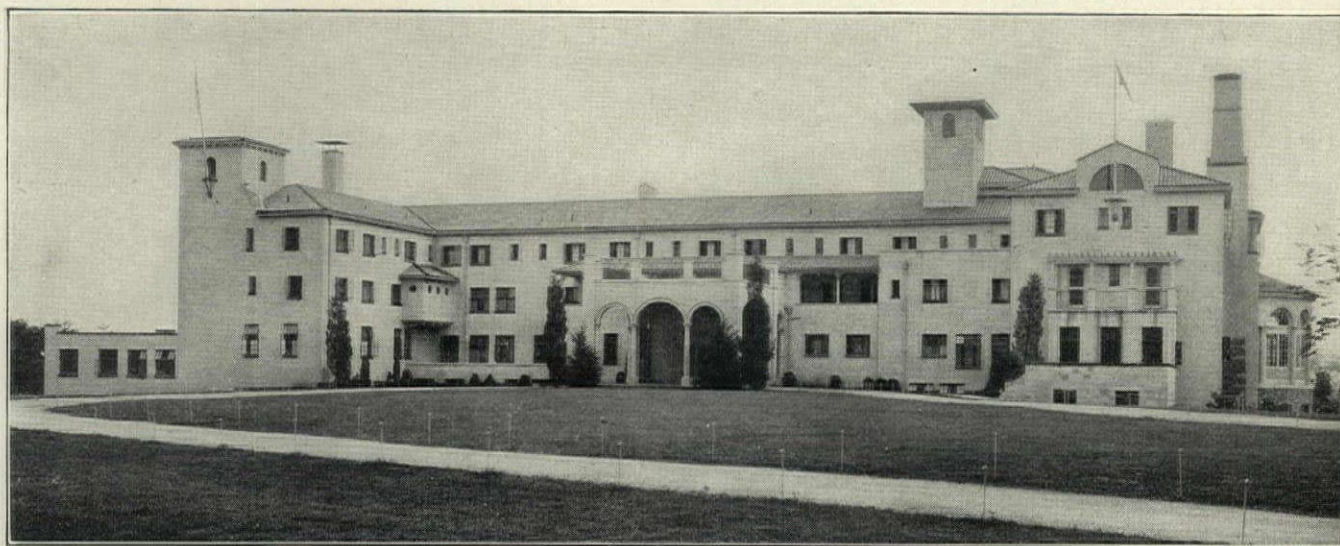


Photo by Leet Bros., Washington, D. C.

*Congressional Country Club, Washington, D. C.
Contractor, M. Serretto, Washington, D. C.
Architect, Philip M. Jullien, Washington, D. C.*

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The concrete floors of this Washington Country Club
will never dust or wear

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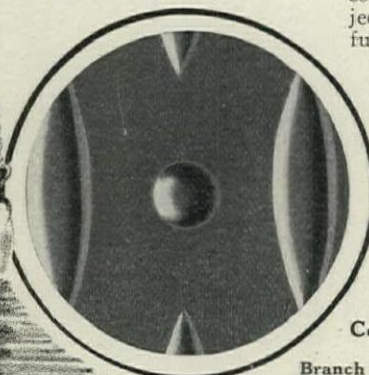
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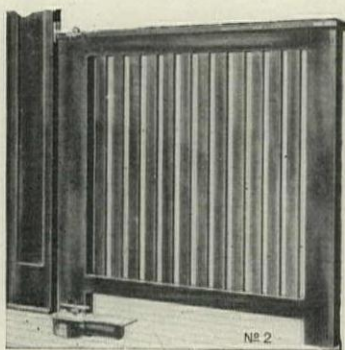
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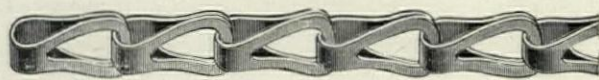
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WHERE HEALTH AND SERVICE
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THE USE OF THE BEST—THE SHADES
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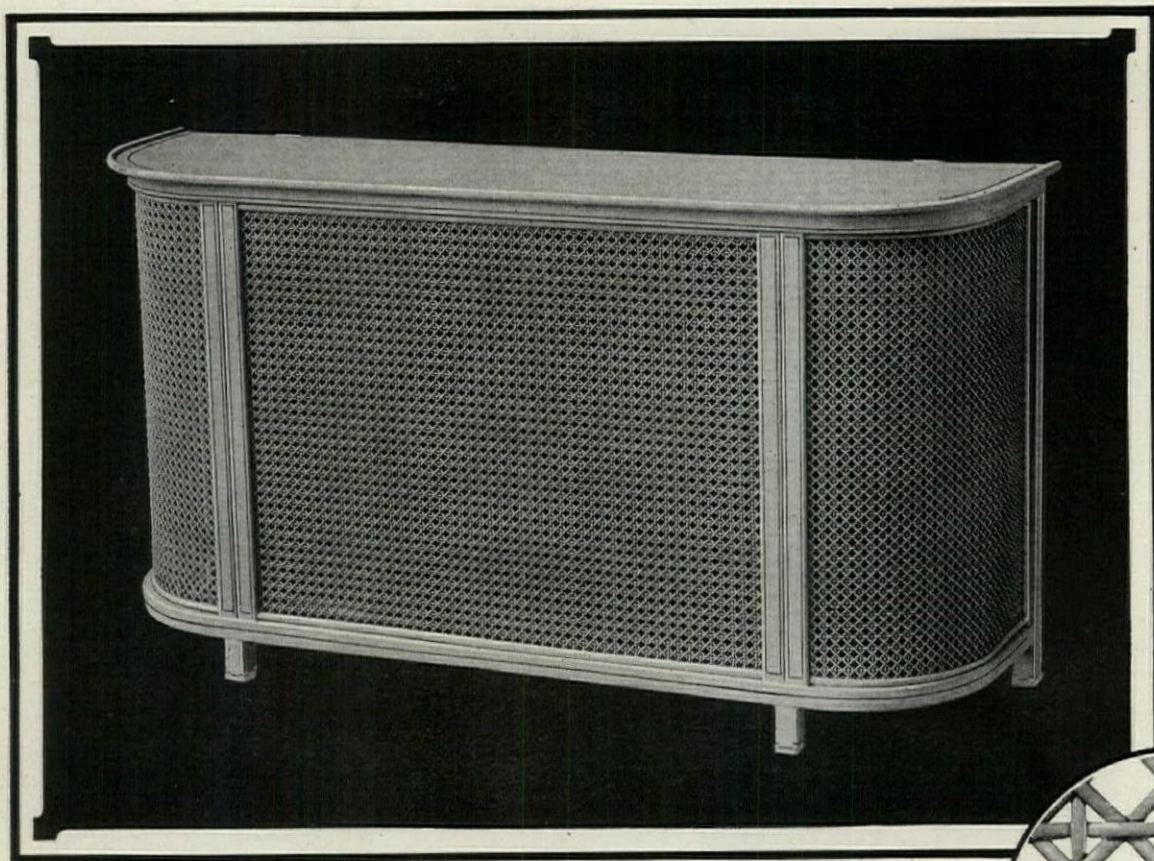
The high regard that architects have for du Pont Tontine is the direct result of Tontine's unusual, and unique, qualities. DuPont Tontine

is made on an entirely new principle: impregnation of the shade material with pyroxylin. As a result, Tontine does away with all the weaknesses of the old type, perishable window shade cloth. Du Pont Tontine does not check or crack, it does not fray or fade; its original beauty can be restored after long use by washing with soap and water and a brush. These factors result, moreover, in impressive savings on upkeep and replacement expense.



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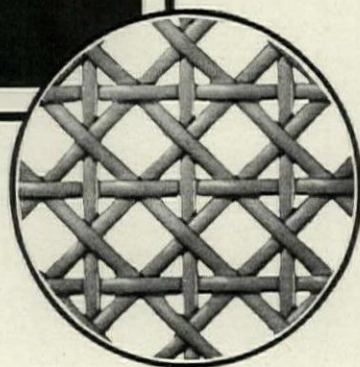


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Union Metal Columns Roman Doric Type, Design 246 on Sigma Phi Epsilon Fraternity House, Oregon Agricultural College, Corvallis, Oregon. Architects: Freeman and Struble, Salem, Oregon

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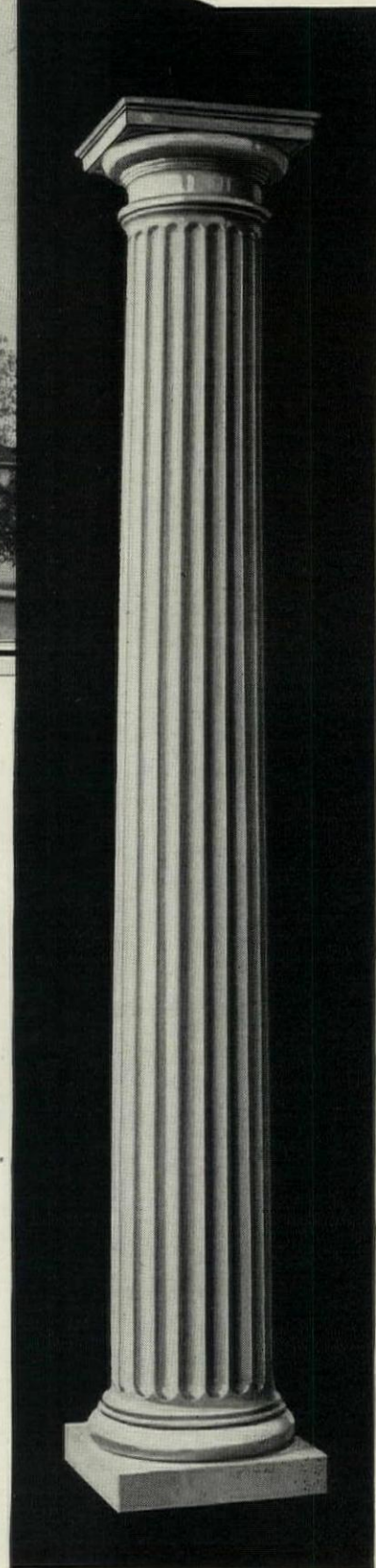
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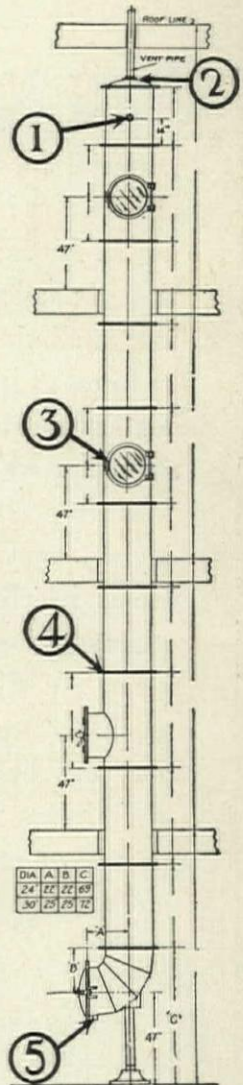
—include the following:

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- St. Vincent's Hospital,
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THE drawing at the right
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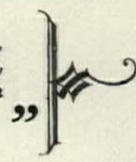
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glass lined



"What I like best about the men who make up the Murphy Varnish Company is the sane way in which they look at their own job—not the largest varnish



makers in the world, not the only makers of good varnish, but merely the determination that all the varnish they make shall be good."



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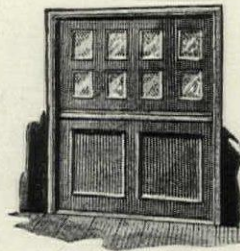
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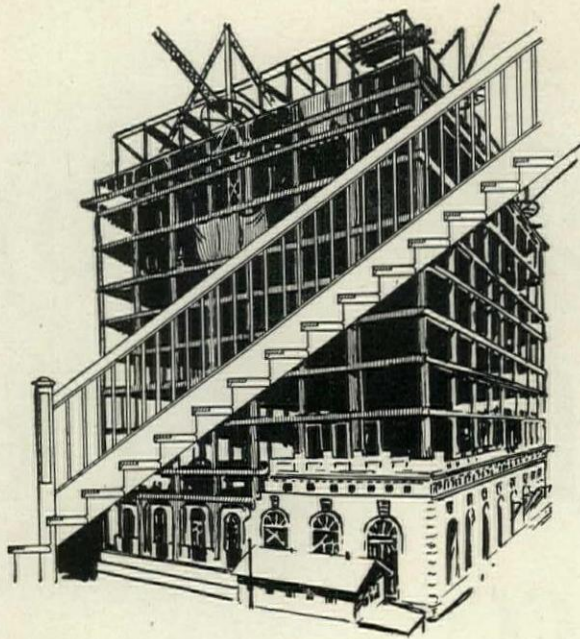


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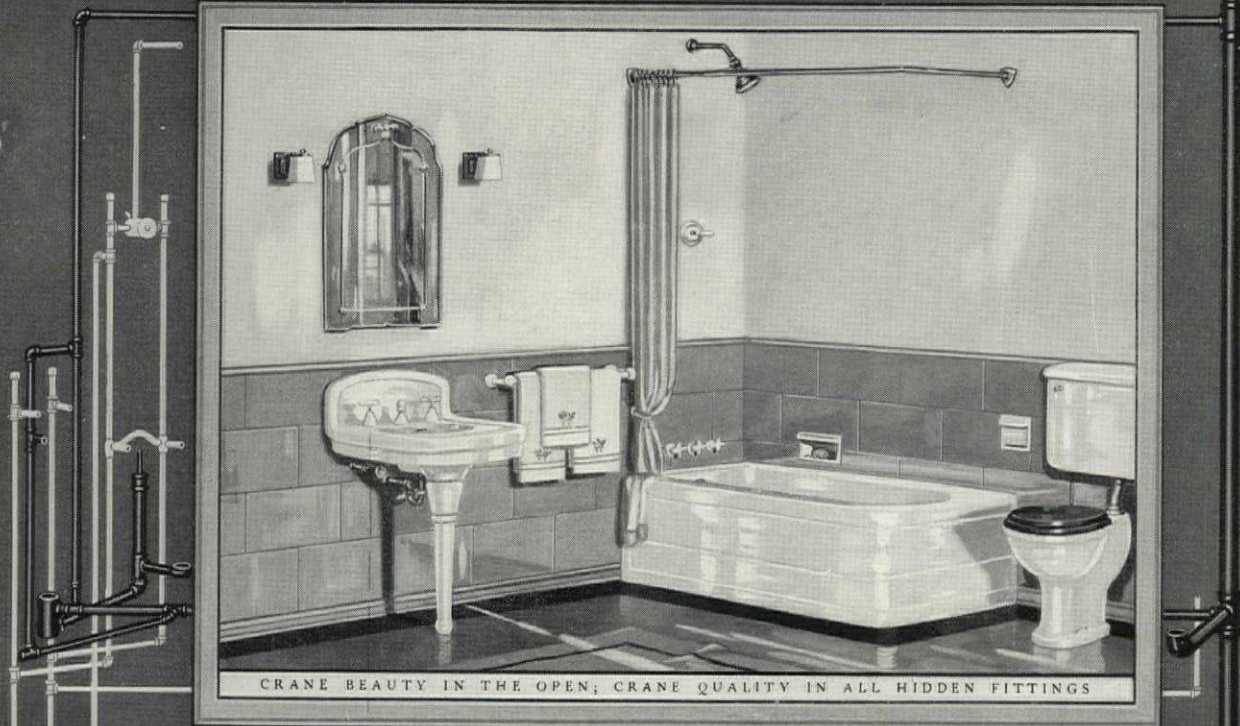
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Many hundreds of Hughes-Keenan installations like this one in the Perrysville School, Perrysville, O., have been made all over the country. Note the clean cut appearance, both of face and under side.

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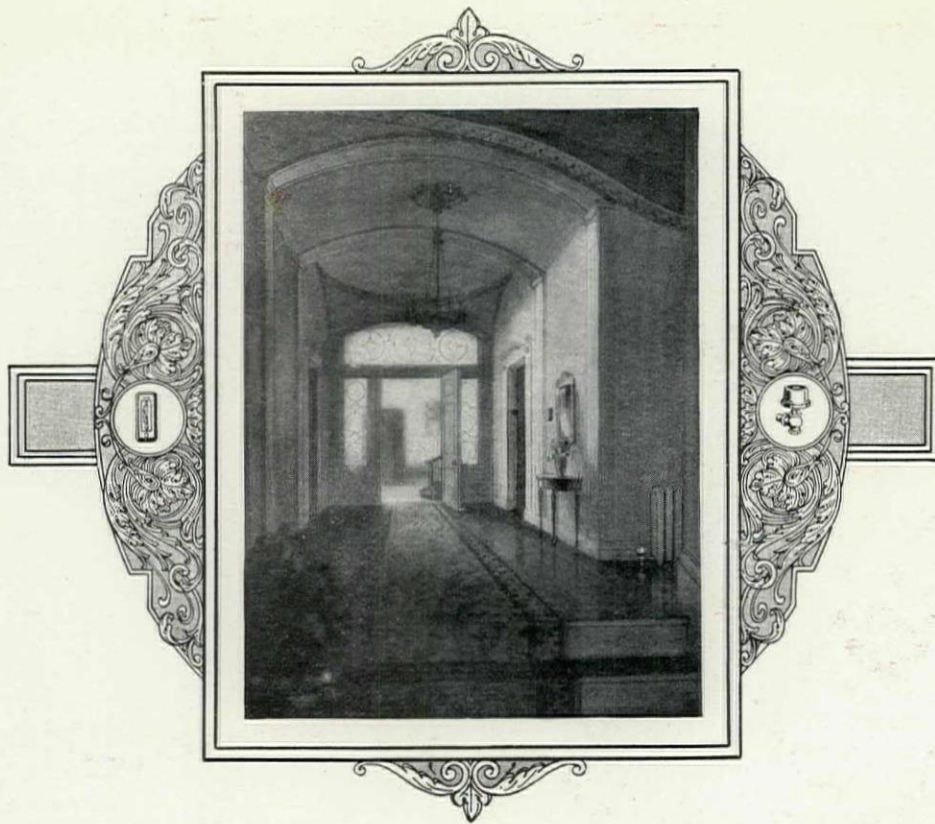
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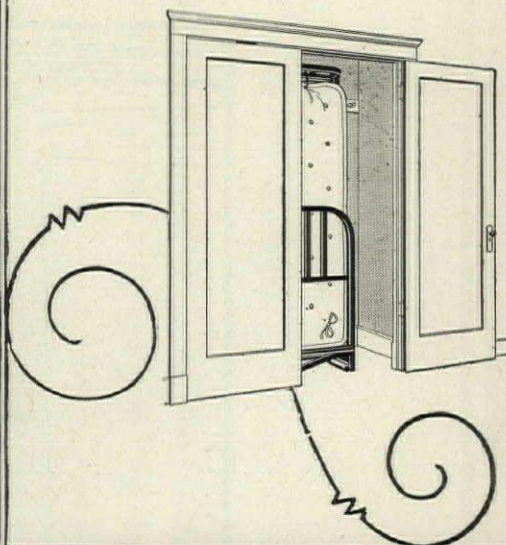
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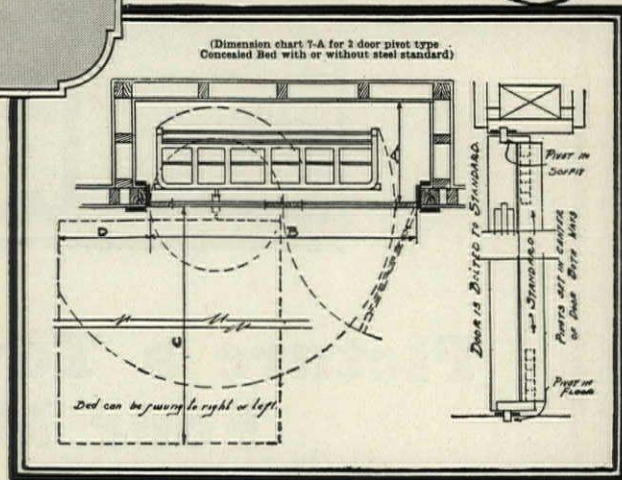


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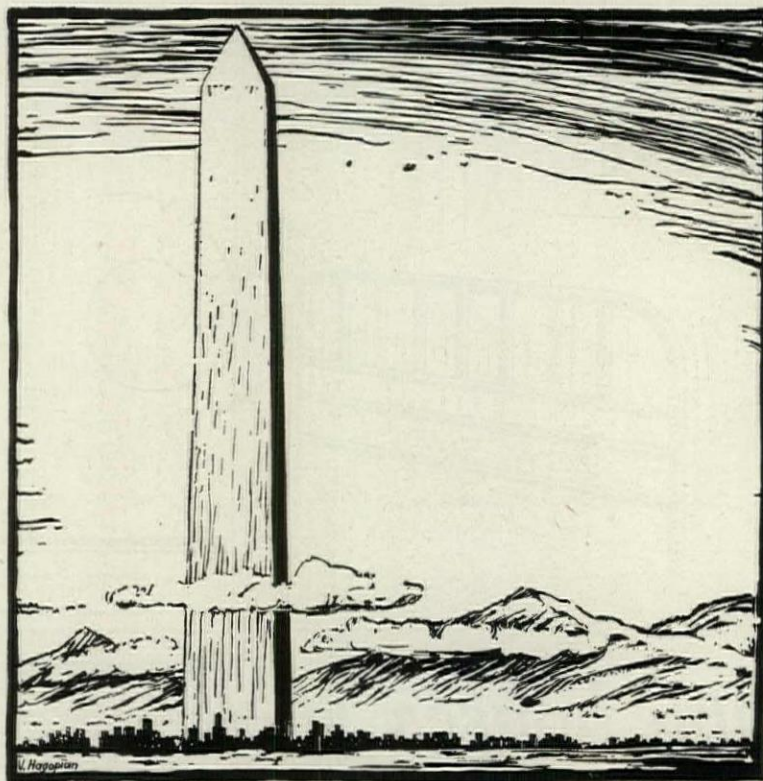
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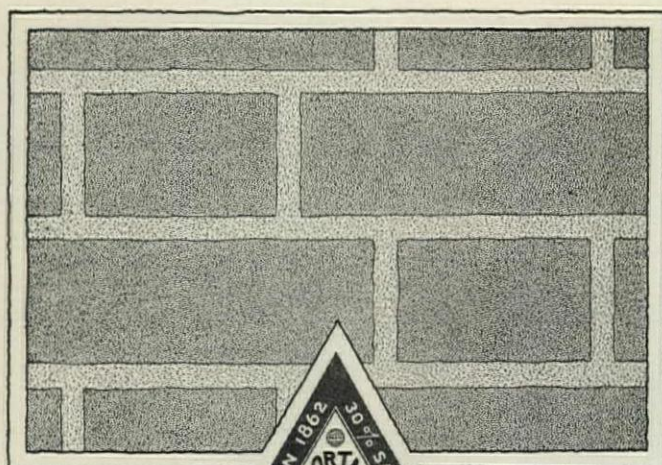
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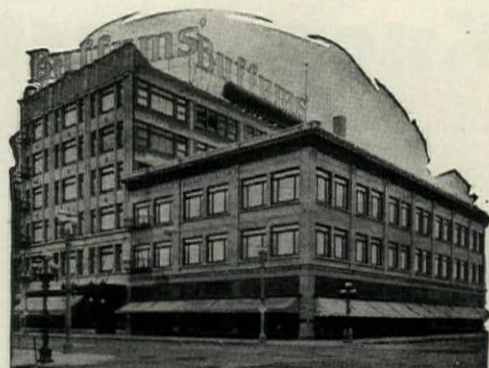
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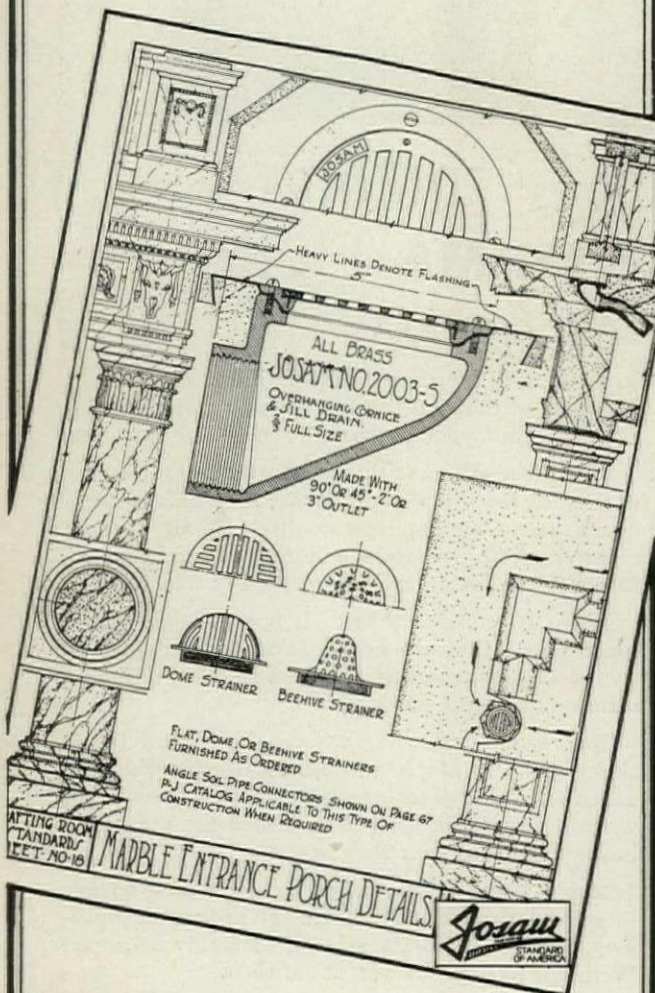
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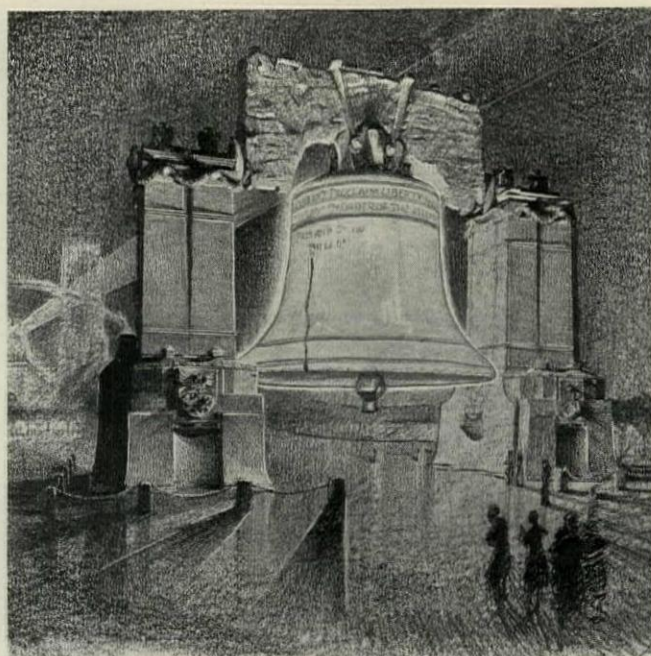
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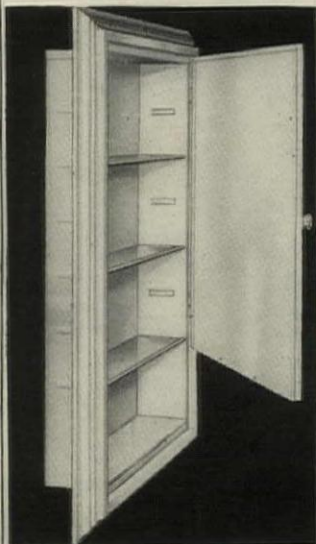
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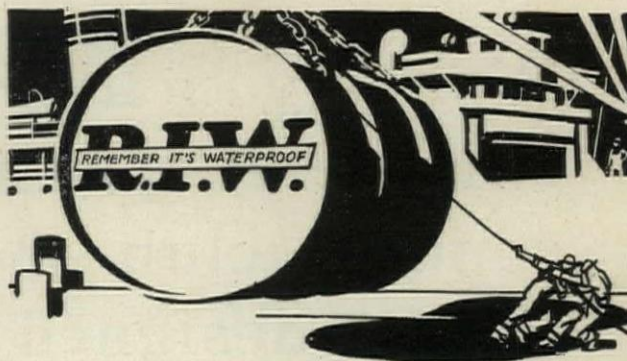
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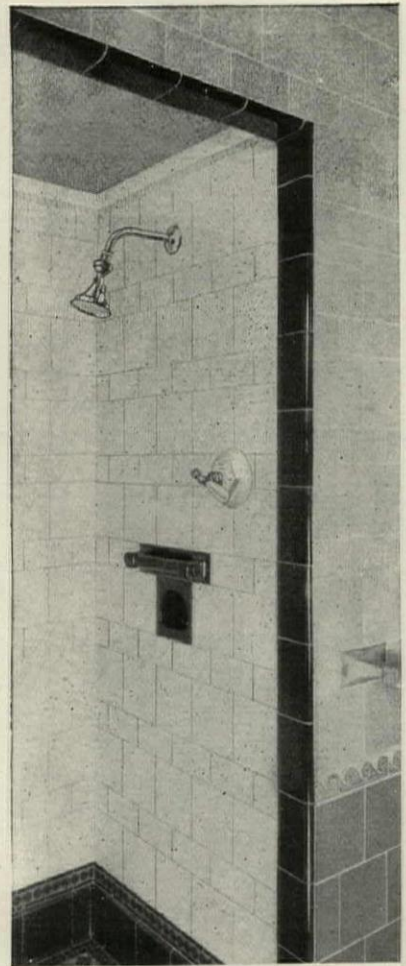
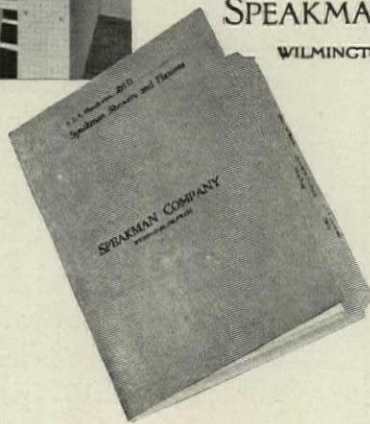
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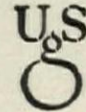
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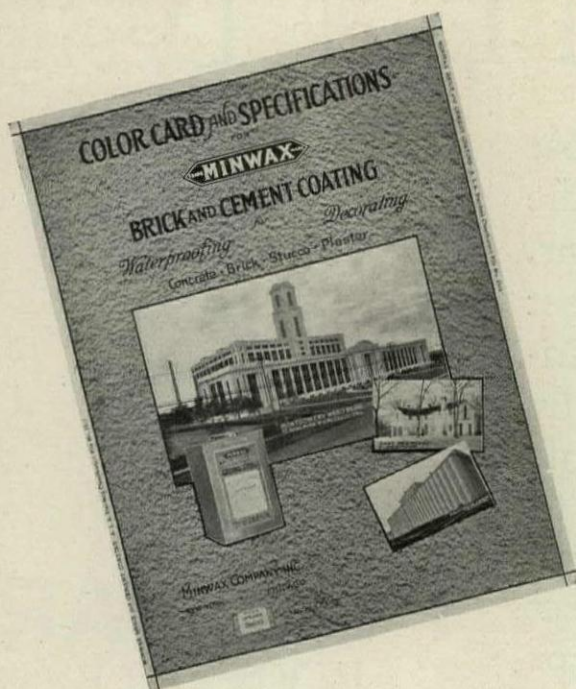
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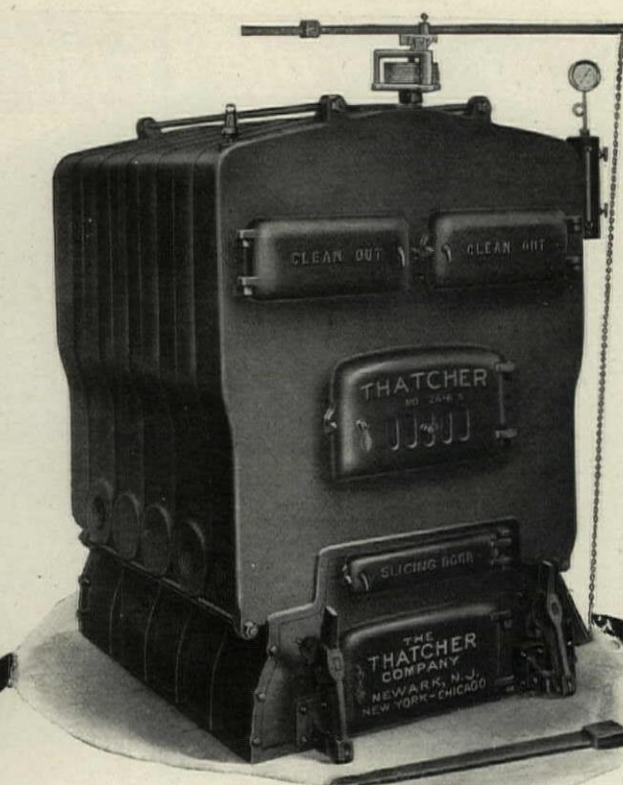
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Announcement of An Architectural Competition

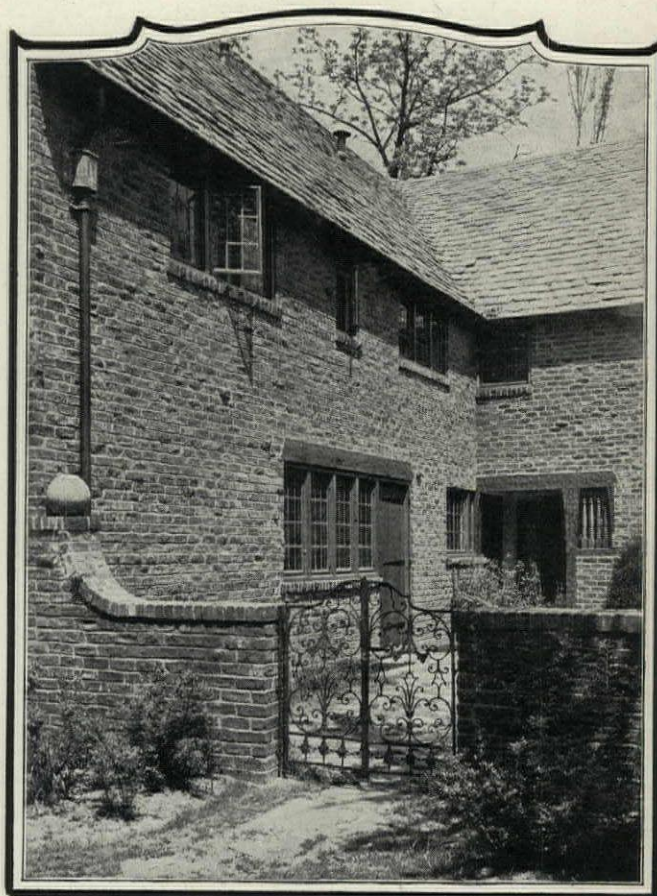
Photographs and Plans of Common Brick Houses

THIS competition has been simplified to an unusual degree. It is open to any architect, architectural firm or designer. It requires no sketch plans. It calls only for photographs and plans of houses or bungalows already constructed—or completed before the contest closes November 16, 1926.

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The purpose of this competition is to bring together a collection of the best among the many houses being built with Common Brick exteriors. Whenever these photographs are published, the name and location of the architect will be given.

Full details of this competition may be secured by writing the COMMON BRICK HOUSE COMPETITION, care of The Architectural Forum, 383 Madison Avenue, New York.



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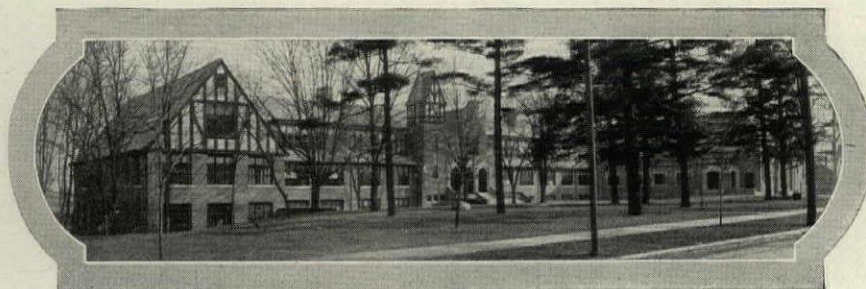


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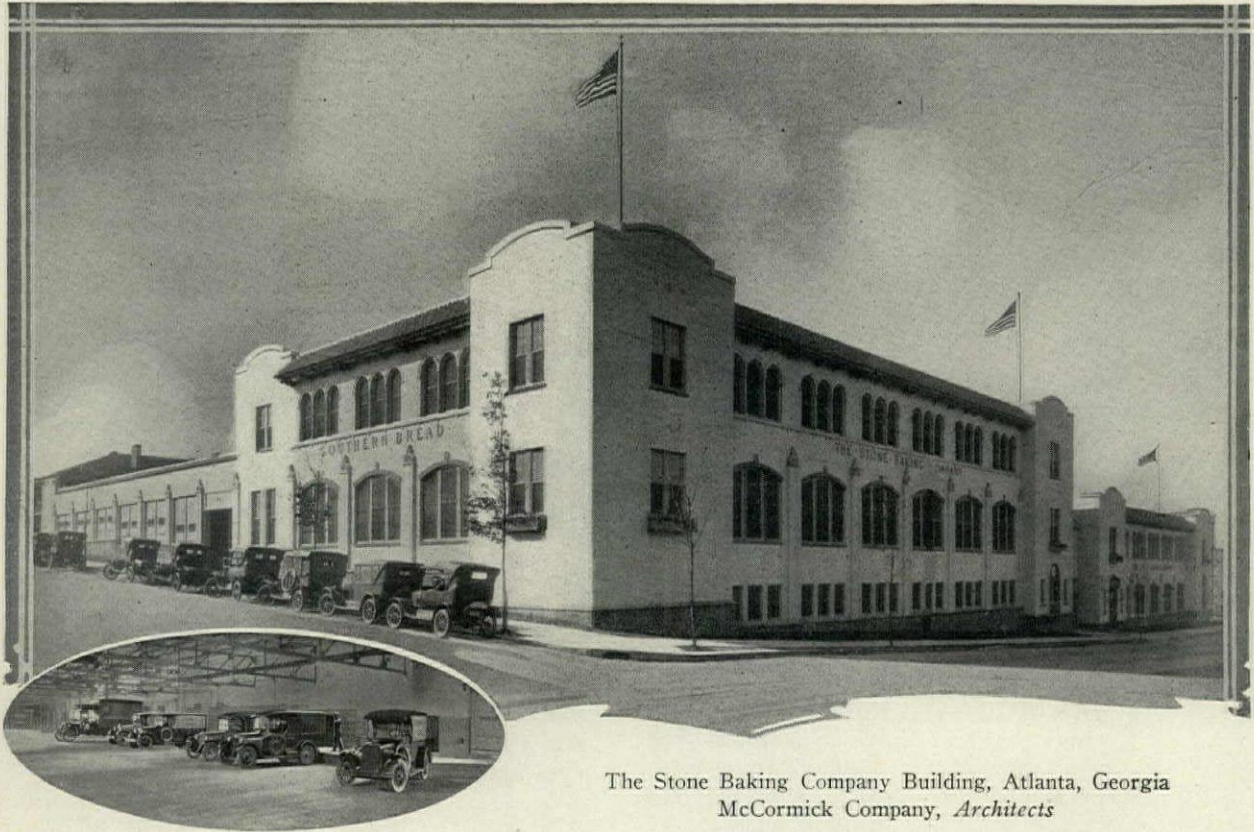
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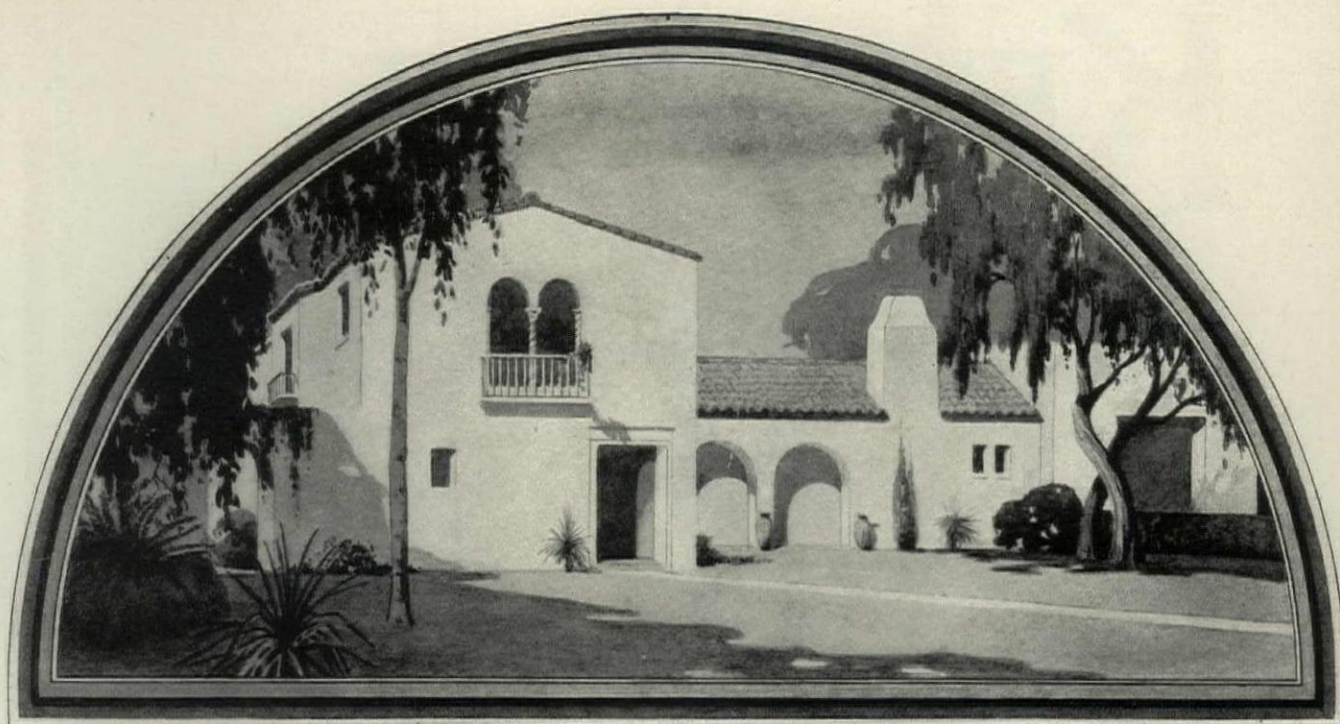


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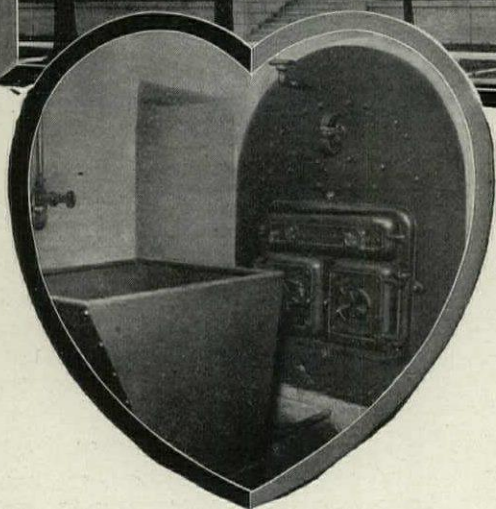
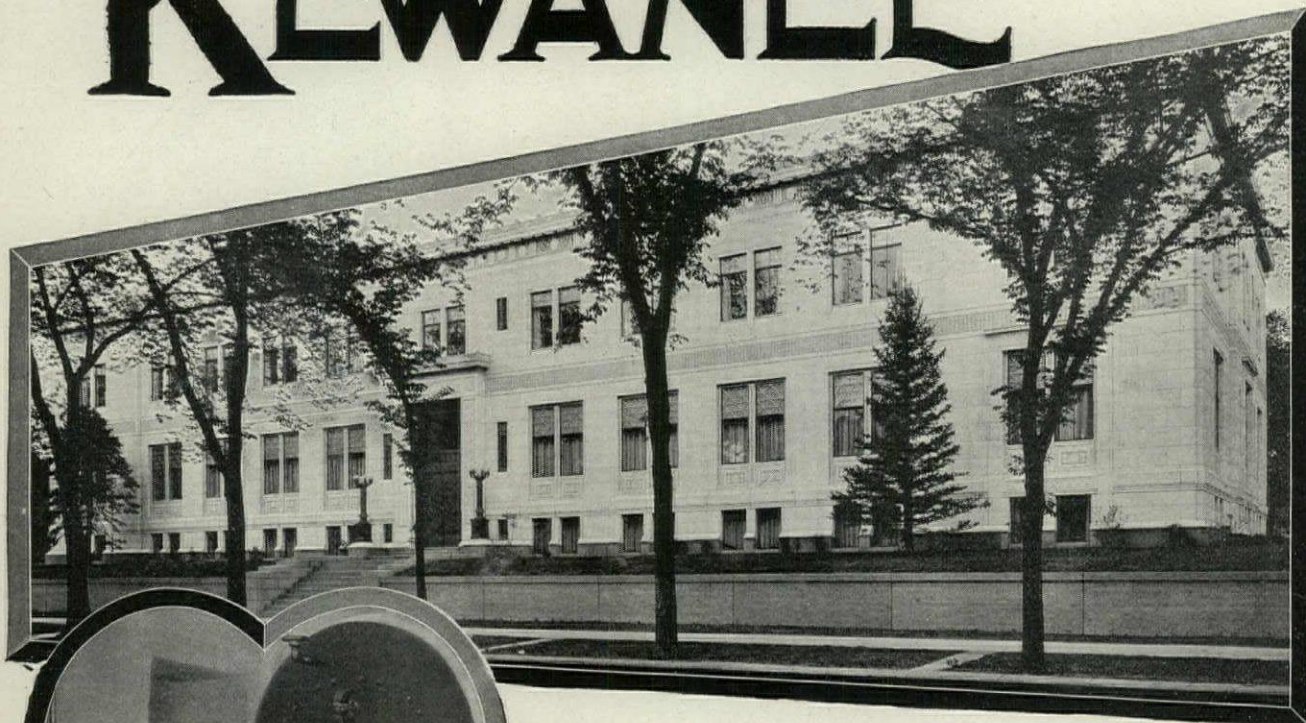
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DRAW, DRAW, DRAW!

IN THE WORDS OF "Ding", the incomparable cartoonist, "draw, draw, draw". Most of the wise men who have contributed to the advice for the young architect and artist seem to agree on this point. The schools of architecture lead the pupil to believe first of all that architecture is properly to be practiced by those who have a talent for drawing pictures and plans; second, that the basis of their education should be familiarity with classic forms and buildings and training in "design", and finally an understanding of the principles, (unfortunately not always the details,) of construction.

Mere facility in drafting, however, without imagination, the ability to conceive forms, and the generalship to carry out ideas, will not produce a real work of architecture. It is a fact that in rare instances vital American architecture has been produced by men who have little or no aptitude for drawing; these might be called "the exceptions that prove the rule". Ideas are essential; the ability to explain them by the skilful use of pencil and paper is a valuable accomplishment. In the language of the day, "be yourself". Imitate the masters to gain technique and understanding. When it comes to creating, all you have to draw on is your own personality. Unless you trust it you have little to give to the world. By accepting your individual slant upon life you pursue the only possible route by which you can add the essential factor that makes of a building an original and fresh creation.

The cultivation and development of the faculty of observation is one of the great essentials in education. If you observe with a pencil in your hand, you really see and understand the reason for specific things that have been introduced into the plan or the essential forms of the design.

Schools and colleges generally close in June, and it has become a popular idea with the student that

with the closing of educational institutions, education ceases for the months during which they are closed. In some professions this may be accurate, but for the architectural student it most certainly is not. He should spend his vacation drawing. This may be recreation or work, according to his aptitude, but it is essential to his growth. He should make sketches, measure buildings, jot down bits of detail and ornament that may catch his eye—his note book should be the sketched record of his months of vacation from academic study.

The man who is through school and does not have from June to September for vacation may think, "this does not apply to me", but it does. He works most of the year expressing someone's else ideas; when vacation comes it should be a time of re-creation, of re-exploring himself and adding up what gains he has made in the past year. The draftsman will not accomplish this by introspection—he must draw, use his faculties for all they are worth. He will, of course, find himself working "on his own," and it is in this way that he will find where he has grown into new power, overcome or out-grown old faults, and so forth.

The habit of drawing is one of immense value, as a means of developing the powers of observation, of improving the technique, and of broadening one's horizon. It will be found that the majority of architects still do summer sketching, carrying on a custom begun in their student and apprentice days, because they find it excellent training and great fun.

Most of this issue has been planned to act as a spur to the laggard, as incentive to the industrious and a help to both. We have assembled most enticing sketches, preceded by a comprehensive and practical treatise on the making of measured drawings, to carry our point, Draw, Draw, Draw!

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PENCIL POINTS

Volume VII

JUNE, 1926

Number 6

THE GENESIS OF MEASURED DRAWINGS

SUGGESTIONS AS TO THE MEANS AND METHODS OF THEIR PREPARATION

By Kenneth Clark

THE ONLY WAY TO CONVERT an existing building into terms of drawings when the original drawings from which it was built are non-existent, is to measure the building itself and set the results down in the proper manner to allow of their study or use for other purposes.

If the student or draftsman who is about to measure a building will think of the process as merely a revision of the original procedure, i. e., the making of a set of working drawings from the building rather than the making of a building from a set of working drawings, he will be more likely to tackle the task with the necessary seriousness.

It should not be a case of getting a few general dimensions which are easily accessible and then supplying the balance and the details from a vivid imagination. If you are going to deal with concrete facts and reproduce or publish them as such, facts you must have, and the only way to obtain them in this case is with measuring tools of accuracy and precision.

The instruments necessary to execute the usual measuring job consist of the following: one fifty-foot steel tape, one six-foot pocket tape (steel), one six-foot folding rule, one three-foot folding rule, plumb-bob and line, one large (10") and one small (4") 45-90 degree triangle. Steel tapes are the only ones worth using, for all woven and cloth tapes stretch and become inaccurate after a little use in spite of all selling talks to the contrary. This applies to the six-foot pocket type as well as to the longer ones. Included in this list of instruments should be a camera, a good one, preferably of the film pack-plate type with ground-glass back for focussing, and it should be accompanied by a steady, substantial tripod. For making sketchy notes of interesting bits along the road during a sketching tour, the snapshot method is all right, but to bring back a real photographic record to supplement measured drawings requires more than this, of which more anon.

Notebooks for the recording of data in the field may be of almost any kind of paper or make up, to suit the personal taste of the operator. One requirement is imperative however; they should have stiff board covers to form a firm surface to draw against

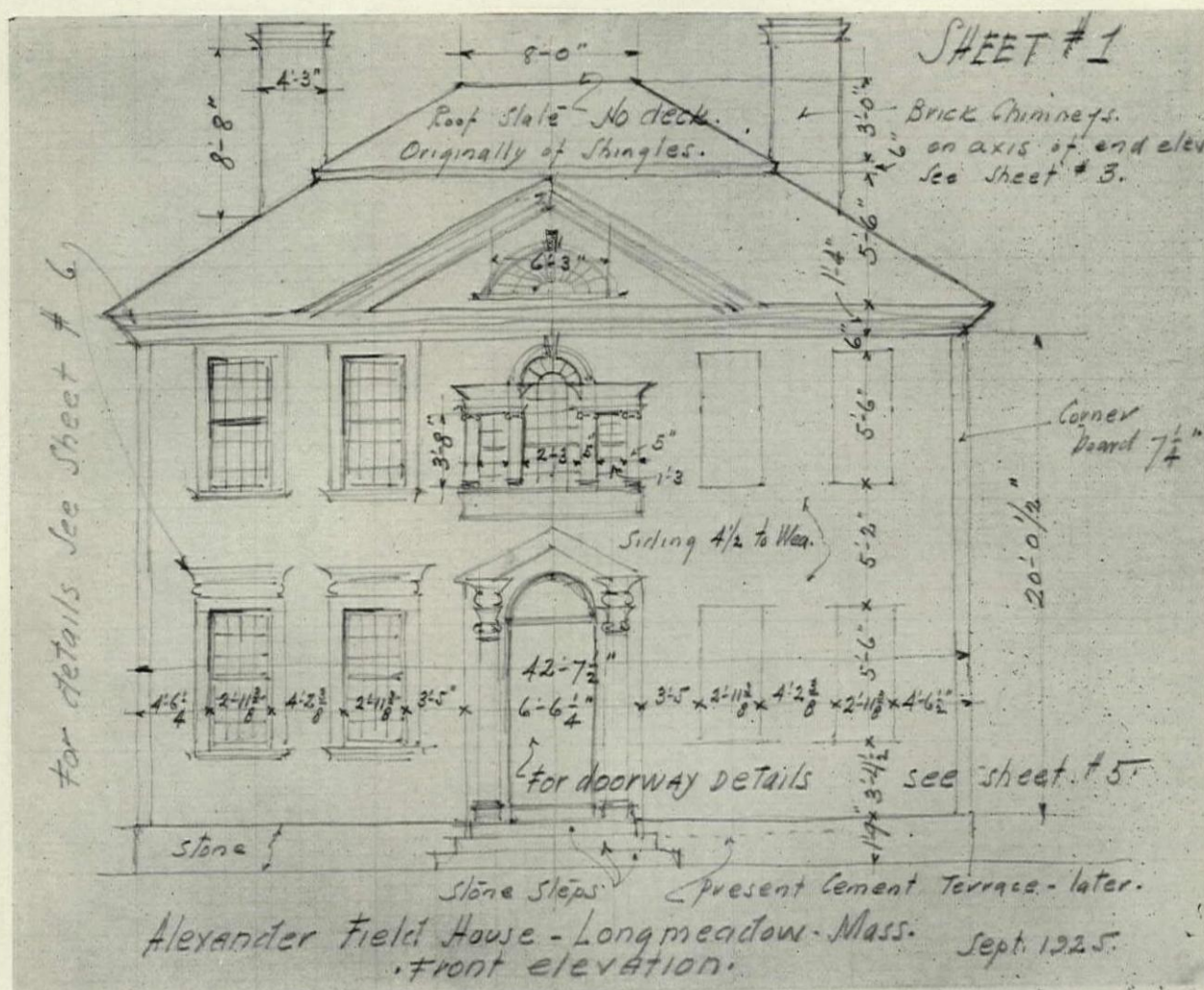
while holding the book in the hand, for most of the work will be done standing up, on ladders, roofs, and other precarious footholds where a floppy-back notebook is a curse to be avoided. If you prefer cross-section paper, use it, as it assists in making it easier to draw straight lines and lines at right angles hurriedly. The 8 division to the inch type seems to work out best and 8" x 10" pads of this paper can be obtained at any architectural drawing supply store. Personally, I prefer plain notebooks with blank bond-paper leaves bound in, so that the crucial sheet of a set of measurements cannot be found missing when you have returned from the field, a characteristic occurrence with loose sheets. If you wish to be particularly "Ritzy," have notebooks made up, using metallic or "Cameo" paper. If you are a champion pencil-pusher you may get away with it and the drawings will look like steel engravings, but you cannot then make erasures, and a line put in is in to stay. Most of us, including the author, will prefer, I think, to stick to a paper that permits the referendum of the rubber, leaving the trick papers to the Chamberlains and Eggers who can draw a line once and for all time.

As my experience has been given principally to the measuring of examples of Early American Architecture for study and magazine reproduction, perhaps a description of the procedure gone through on a job of this kind will best serve the purpose of conveying any helpful hints which can be applied to measuring in general, irrespective of the subject.

First, ask permission to make your measurements, don't assume that no one will object; if you don't ask, some one always does the objecting. If it's a house, ask the owner; if a public building or church, find the one in charge with authority to give the run of the premises, and seek the permission from him. I don't know of a case where permission has been refused where a plausible reason for doing the work has been given, but I do know of an instance where no permission was asked, a course which resulted in the seeker after Colonial beauty being assisted to the street by a number ten Walkover reinforcing the foot of a very irate New England farmer.

To reach many otherwise inaccessible points on the job, ladders will be necessary. If you are lucky enough to find them on the place in the cellar or

PENCIL POINTS



SKETCH DIAGRAM OF ELEVATION WITH MEASUREMENTS, DRAWN BY KENNETH CLARK

barn, well and good; otherwise the local painter or general contractor or carpenter will loan or rent you one and deliver it at the job for a reasonable fee.

The first thing to do at the building is to draw, in the notebook, diagrams of the elevations and plans on which to enter dimension figures. Don't try to draw them accurately to scale, just sketch them approximately, putting in dimension lines with arrow-heads covering every figure you want, heights, horizontals, small plans through offsets, and so on. Doing this, helps at the last in checking to see that you have taken everything, for a blank dimension line is easy to pick up when the rest are figured.

Take the over-all measurements first. It's a great temptation to start off with some lovely piece of detail and leave the more uninteresting things for the last, but to get the data completely and with thoroughness it must be done systematically and to a fixed schedule. After the over-alls are recorded, take the window and door widths and the distances between openings, then the heights. A long stick is a help here. If you fasten the ring of the tape to the end of the stick, many points can be reached with it that would otherwise necessitate much climbing

up and down and moving of ladders. For heights never depend on measuring a few accessible brick courses and getting the upper heights by counting courses. The assumption that all courses are uniform is seldom true. The same warning applies to siding; in most early American examples the siding graduates in width from top to bottom of the elevation and a single course is useless as a unit of measurement.

In recording old work it will be found that few verticals are truly so; the old houses settle and lean, door heads take on a slant, posts are out of plumb, and many other deviations occur. In these cases it is best to assume the building to be as intended by the builder, i. e., truly rectangular, and so show it. Ceilings are sometimes two or three inches lower at one point than at another; take heights at several points and average them. Don't measure to sixteenths when the variations in a feature at different points may run to half an inch. Measured drawings of Colonial work have been published giving dimensions figured to sixteenths, and on re-measuring the job I have found that a figure for the same feature at a point a couple of feet away would vary half an

THE GENESIS OF MEASURED DRAWINGS

inch from the figure given. A little common horse-sense in the person attached to the reading end of a six-foot rule is a great help. In measuring columns it is best to take the circumference, with the pocket tape if under two feet diameter, and with the long one if over, and then get the diameter by dividing by 3.1416. In cases of engaged columns or small ones the diameter may be taken directly by folding the six-foot rule into the form of a pair of callipers and measuring the distance between the tips with another rule.

When the over-alls and their main divisions are recorded, make detail diagrams, of the same type as before, of the principal features,—main entrance door, minor doors, typical window, and so on,—and measure the general dimensions of these. Take over-all heights of cornices and door heads, column bases and caps, over-all widths of trim, and similar detail, but no profiles. To take heights of cornices place a straight edge under the bottom molding at the end of the building and let it project beyond the overhang of the crown mold above, then measure down from the top.

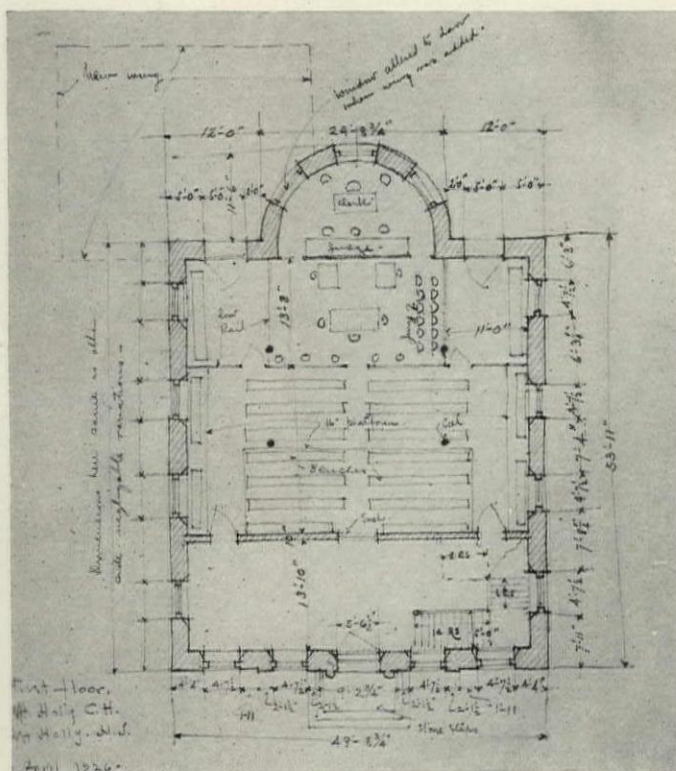
For cornice or other projections, drop the plumb line over the edge of the greatest projection and measured from it back to the frieze or wall. Get all these *general* dimensions on paper before attempting to measure individual moldings or profiles.

All the work up to and including the last stage has been purely mechanical measuring of vertical and horizontal straight lines; now comes the recording of the curved molding profiles which is a quite different matter, full of subtleties, challenging the draftsman to show his skill and ingenuity. All sorts of strange and wonderful instruments have been devised to transfer the profile of a molding accurately from a building to black lines on paper but so far as I know all are dismal failures. Theoretically they may look perfect, but practically, in use on the job, they are pests. One method of taking profiles from stone moldings has possibilities; i. e., the lead strip. This strip of pure lead about $\frac{1}{16}$ " thick and $\frac{1}{2}$ " wide may be hammered on to the moldings so that after it has assumed the profile it may be laid down on paper and a pencil run along it to record the section. This

method in theory is well enough, and some mechanical genius yet undiscovered may perfect it so that it is practical as well. To make the lead strip assume a perfect profile, however, requires not much less than a kit of tools, with snippers to cut with and hammers and chisels to force it into small crevices, not to speak of a certain amount of leadsmithing ability on the part of the user. If it sounds interesting, try it. I did, once, and the outfit still lies, I presume, in the middle of a large green field where it was heaved with great gusto followed by a heart-felt curse. The practical method and the one that seems to answer all requirements is as follows: determine by measurement the horizontal and vertical positions of the start and finish of the molding, set them out with a scale, or on cross section paper which is of assistance here, and then draw in the profile as accurately as possible by eye, noting particularly any unusual variations from the standard academic form of the molding in question.

It is remarkable what accuracy can be gained with practice. Here again the futility of working to a hair line will become apparent on the job, for even stone profiles, especially in old work, vary considerably at different points on the same molding. Furthermore, even without the variations caused by the action of time and weather, a perfect profile taken at any one point and transferred to paper with absolute accuracy would be correct at that one point only. The mark to shoot for is the general *character* of the profile; if this is obtained and recorded, all usual needs are answered.

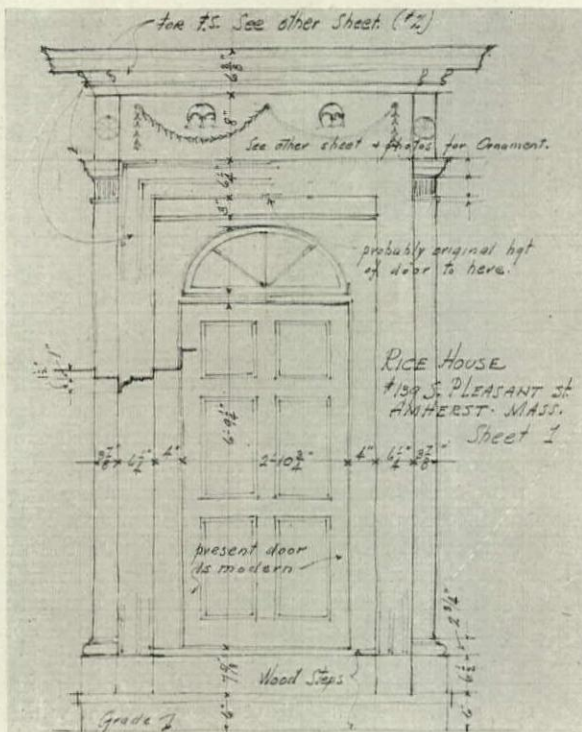
In transferring profiles of wood moldings from old work, the matter of paint has a decided bearing on the result; all small fillets originally crisp and sharp have become rounded, small channels and flutes tend to fill up, and the moldings as we see them are in no way a true example of what they were originally. Allowance must be made in measuring, for these deceptive conditions. Here, as always, mix practical considerations with your deadly accuracy and get the feeling of the work as it was conceived by its designer and craftsman, rather than a painfully accurate transcription of what a molding looks like when seven coats of paint have made it appear as it was never intended to be.



FIELD SKETCH DIAGRAM OF PLAN
MEASURED BY KENNETH CLARK

PENCIL POINTS

When all figures are complete and the last profile recorded, set up the camera previously mentioned on the tripod, opposite the center and parallel to the face of each elevation measured. Level it accurately, preferably with a small pocket spirit level, and focus sharply on the building with the aid of the ground-glass back. Stop the diaphragm opening down to at least F.16 and give a full exposure, say $1/5$ th second for white buildings in sunlight and double or triple that for brick walls. Before exposing, attach to the building at some point near the center of the elevation, a scale, made on white paper with black ink, two feet long and divided into inches with good fat lines so that they will be readable in the enlargement of the negative later. If, when you get home, any question comes up as to heights or widths, they can be

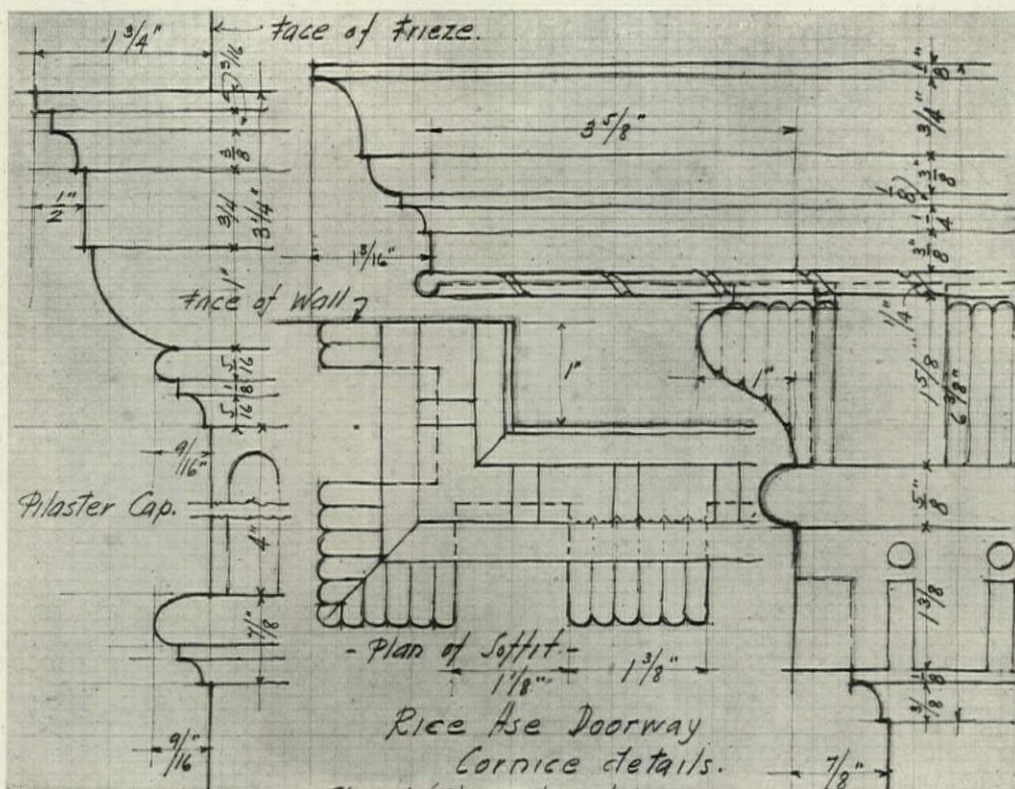


FIELD SKETCH OF DOORWAY
MADE BY KENNETH CLARK

verified easily from an enlarged print. With a pair of dividers and the scale on the building, measurements can be checked or missing ones obtained. In cases where an elevation above the reaching point is inaccessible, very accurate drawings can be made by this method, but the negatives must be made carefully, needle-sharp, and with a truly level camera.

To measure heights of roof ridges and points that cannot be reached with ladders, it is necessary to take a photograph of the building from an angle and to lay out the perspective points on an enlargement of this. It is then a simple matter to project heights at any point up to a plane where known vertical dimensions exist so that the missing figures can be scaled.

If a panel of ornament has to be reproduced, get the over-all dimensions with a rule, take a direct



DETAILS OF DOORWAY, SKETCHED IN FIELD
FROM NOTEBOOK OF KENNETH CLARK

THE GENESIS OF MEASURED DRAWINGS

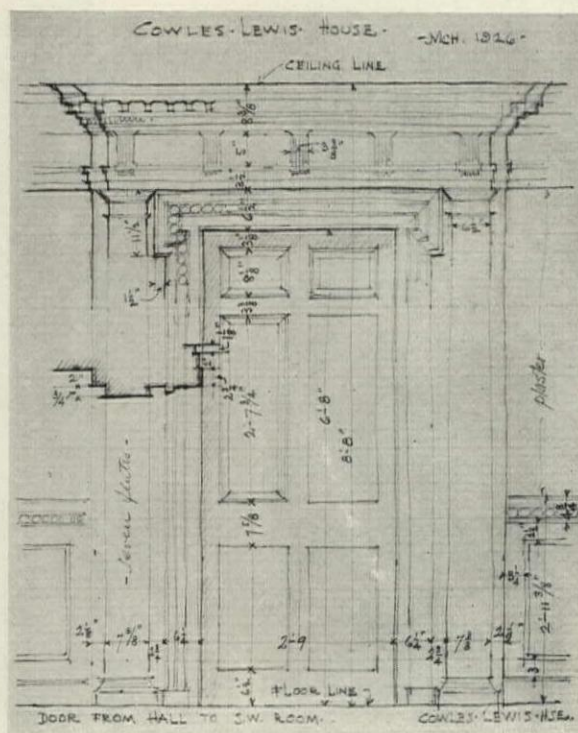
elevation photograph of it, and then in comfort at the drafting board make the drawing. It is much easier and more accurate to employ this method, than to attempt to reproduce the detail on the job by some complicated system of measured points, especially when you are standing on a precarious perch with hands full of notebook, rule, cigarette, and pencil, to say nothing of holding on.

The whole field of this photographic measuring deserves more investigation and utilization. Recently in experimenting I measured a building completely by taking photographs of every part, including details, profiles, and so on and reducing them to drawings. When all dimensions had been determined in this way I went to the building and checked them with rule and tape. The variations from the photograph between the results of the two methods were not figured in the sketches.

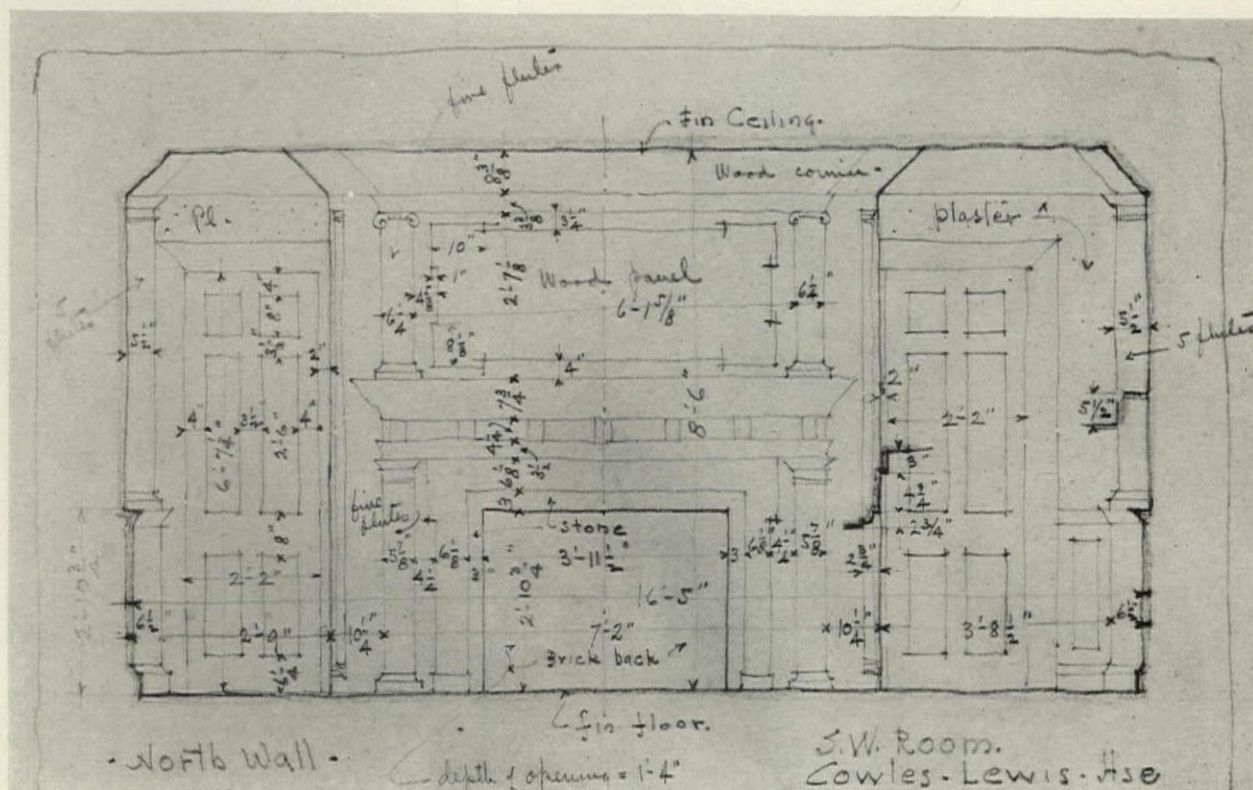
more than, if as much as, the difference that would naturally occur if the same job were measured by two individuals. To all intents and purposes one method was as accurate as the other, with the photographic method leading in the matter of speed and convenience.

Aside from their use in actual measuring, photographs furnish a quick and efficient means of securing permanent notes of a number of things that take time to draw when at the building. Such things, which can be obtained as easily and definitely from photographs as by measuring direct, include, for instance, the number of modillions in a run of cornice, the spacing of ornaments in a frieze, and the number of brick courses and vertical joints. These can be counted

These can be counted and drawn in the spaces

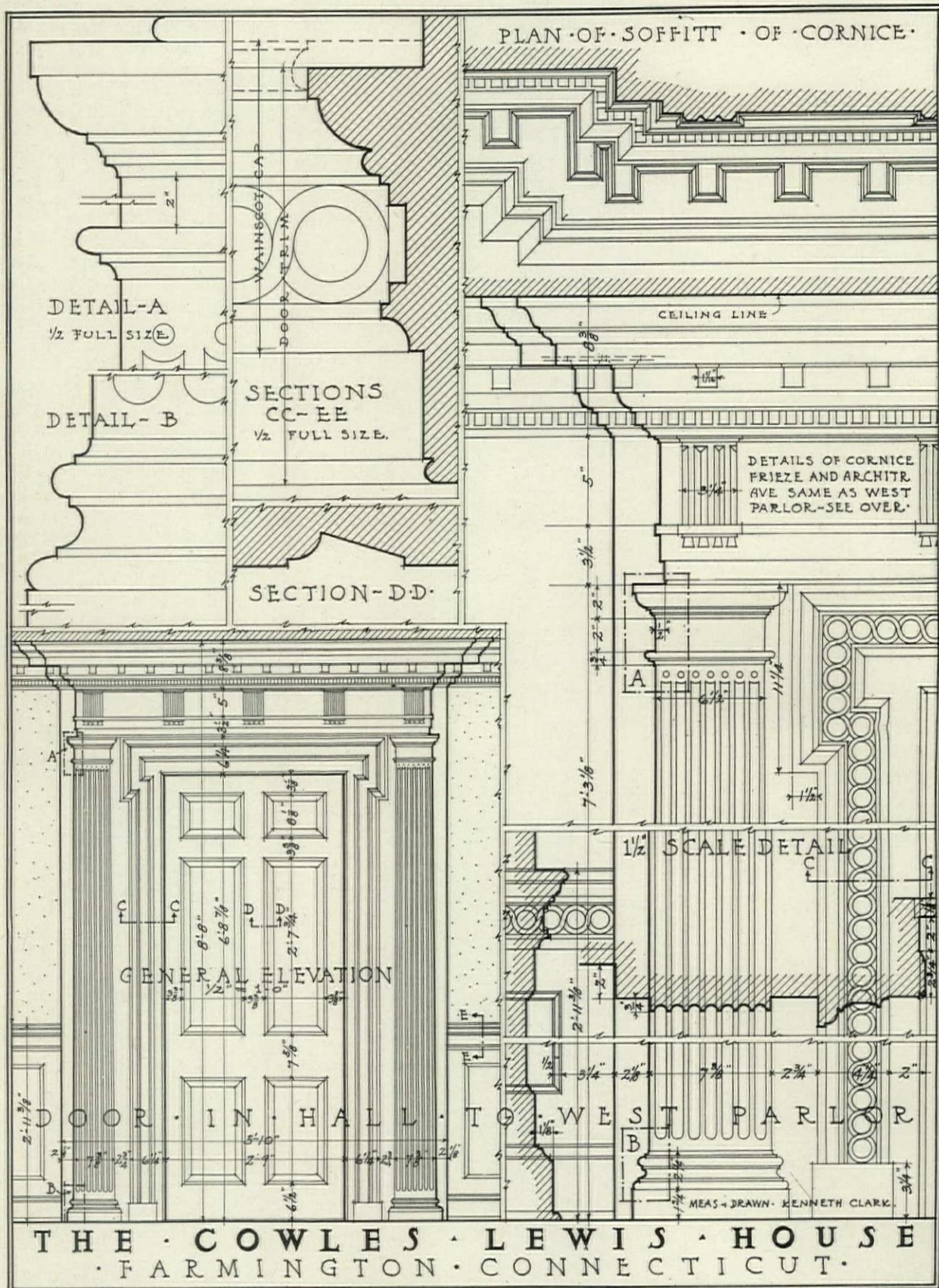


FIELD SKETCH OF DOORWAY
MADE BY KENNETH CLARK



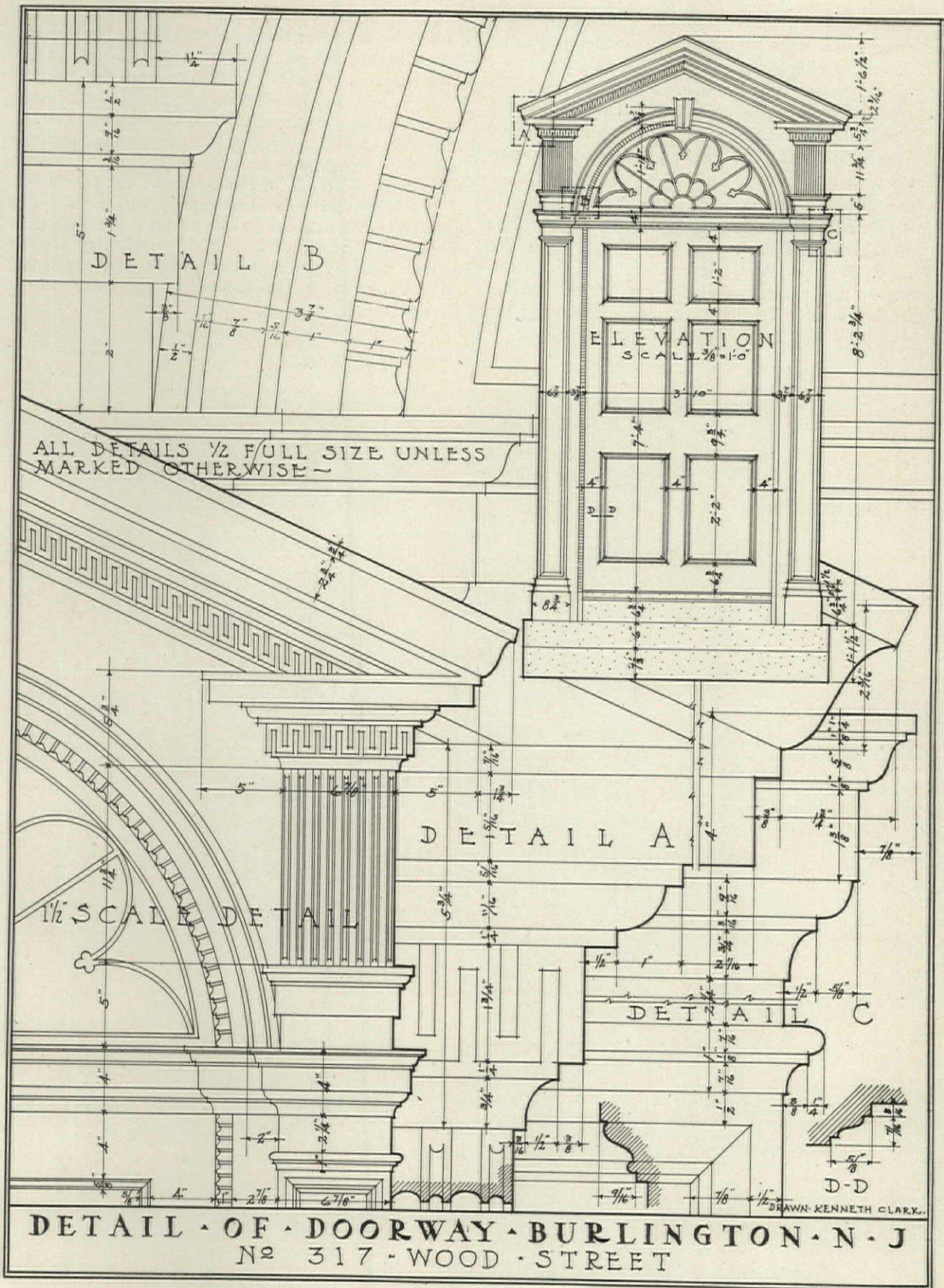
SKETCH DIAGRAM OF INTERIOR WALL, MADE IN FIELD
FROM NOTEBOOK OF KENNETH CLARK

PENCIL POINTS



FINISHED DRAWING WORKED UP FROM FIELD SKETCHES
MADE BY KENNETH CLARK FOR GEORGE F. LINDSAY COLLECTION

THE GENESIS OF MEASURED DRAWINGS



FINISHED DRAWING WORKED UP FROM FIELD SKETCHES
MADE BY KENNETH CLARK FOR GEORGE F. LINDSAY COLLECTION

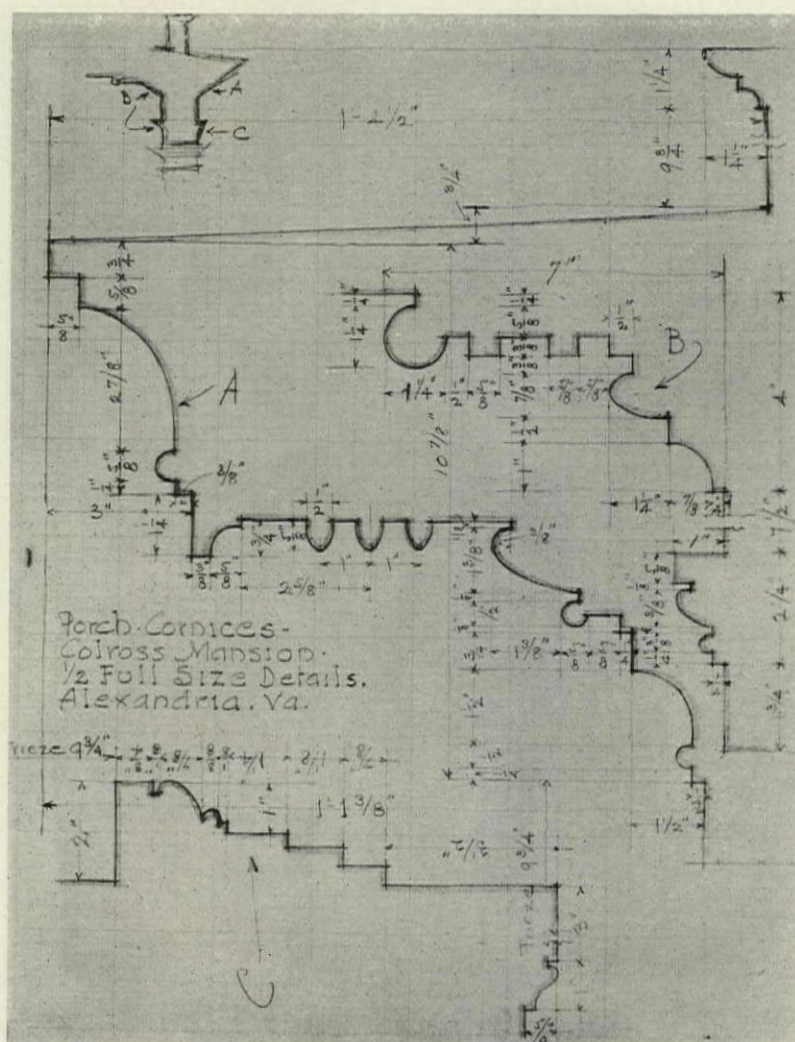
PENCIL POINTS

All these uses of photographs are to be considered separate and distinct from their great pictorial value in showing the building in perspective as the eye sees it. Such photographs are always a distinct addition as supplements to a set of measured drawings, for they provide a means of studying the finished effect in conjunction with the drawings which show how it was achieved.

The ultimate use to which the drawings are to be put determines the type they shall be when drawn up in their final form from the data secured in the field. If for personal use and study they can be merely set up accurately on tracing paper to the scales desired. If for publication, the requirements of the

magazine or book fix the medium in which they are to be finished. For the usual magazine zinc line cut, which is the type of illustration generally used for such subjects, a method which answers the requirements is to draw the sheet on paper and then trace it in ink on cloth, using only black ink without dilution. Line cuts cannot reproduce any variation of color in line, everything must be true black, and any variations must be made in the width of the line itself.

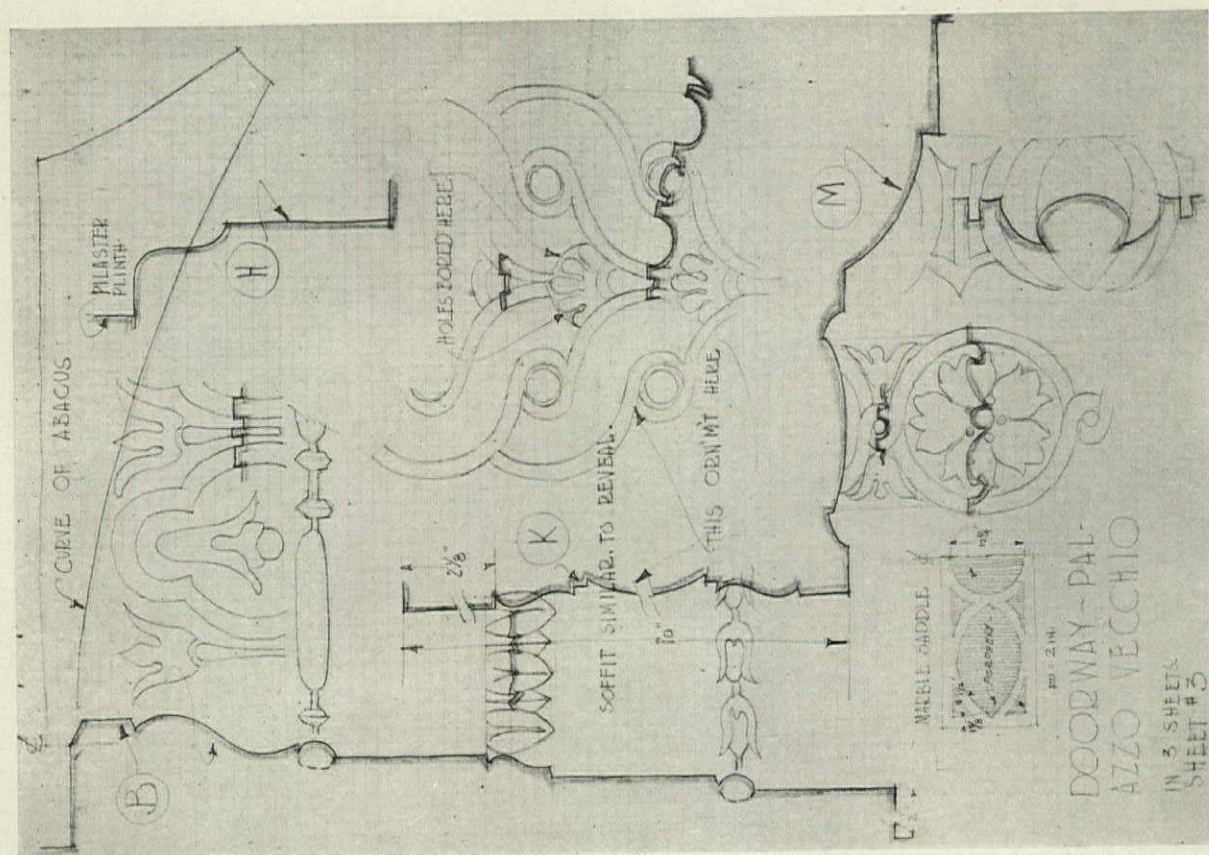
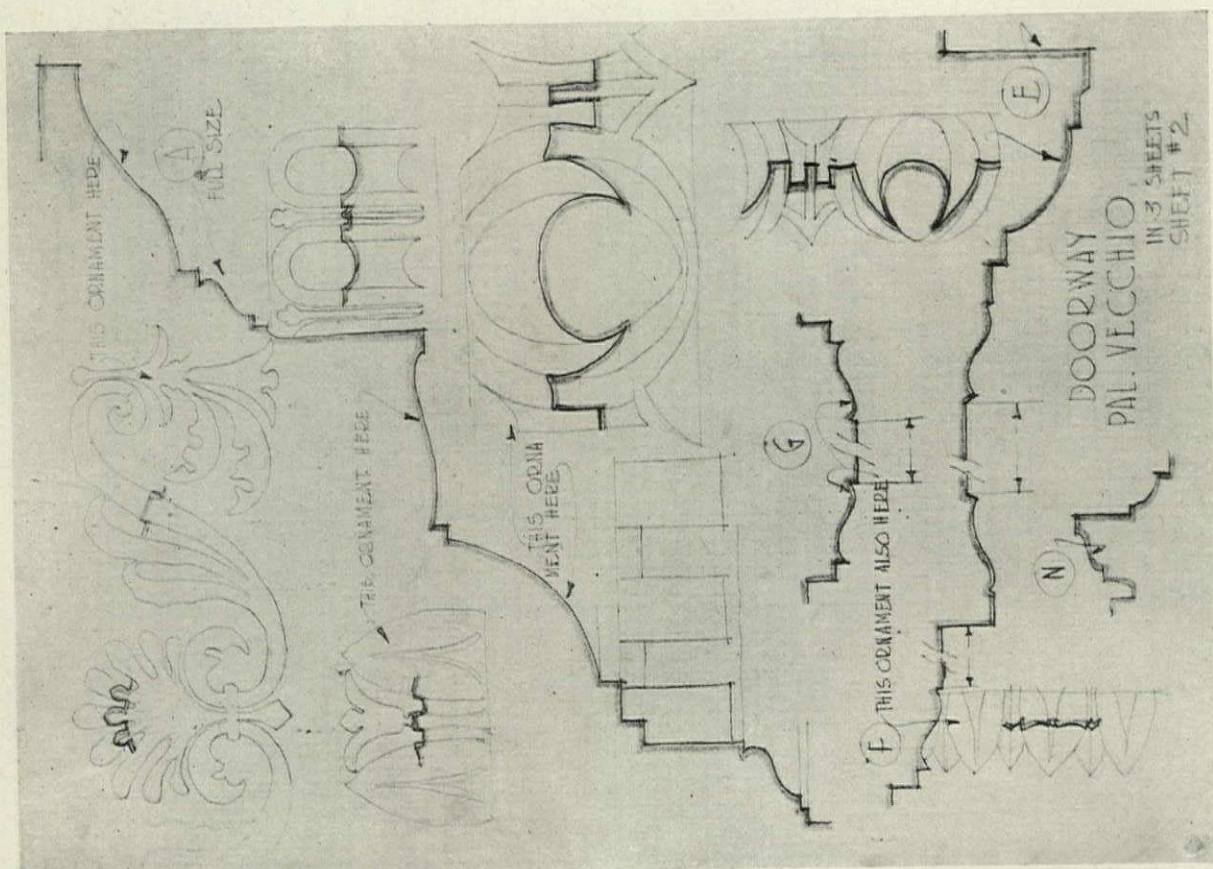
The illustrations accompanying this article are extracts from field notebooks and are not shown as models of draftsmanship. They merely indicate the method used by the author in field notes, which has proved, over a rather extended experience, to be satisfactory.



FIELD NOTES OF DETAILS OF CORNICES
MEASURED BY KENNETH CLARK

SEE PHOTOS





DETAILS OF ORNAMENT ON DOORWAY IN PALAZZO VECCHIO, FLORENCE, ITALY
MEASURED AND DRAWN BY ERNEST A. GRUNSFELD, JR.



"MISTER JOHNSON'S HOUSE—ANN ARBOR," BY PERCY DANFORTH

SUMMER SKETCHING

(EDITOR'S NOTE: This modest symposium upon Summer Sketching was contributed by one architect, one artist-illustrator, and one editor, each of whom nurses the hope that what he has to say, reinforced by the illustrations, may serve as a stimulus to the production of more and better sketches this summer by the draftsmen of America.)

TO SKETCH OR NOT TO SKETCH?

WITH THE ADVANCE OF SPRING one of our great out-door pastimes, Sketching, is again at hand, and the artists are figuratively, if not actually, sharpening their pencils in anticipation of the great event. The young-and-hopefuls are wondering what kind of paper they should buy, and how many dozen sheets will be enough, while the confirmed ones are examining the sketching-stool to see whether it will bear its ever increasing burden safely for another year. At any rate we all are ready to go, with some, however, lacking just that little bit of assurance that a few words of counsel might give.

All the advice and well-wishes in the world will, in themselves, never make an artist, but there is much in being told

which road to take. The sketches reproduced herewith, show what it is possible to do on a Saturday afternoon or a Sunday, and the following will in some manner indicate how they were made.

Of course, neither these sketches, nor any words can describe the various little histories connected with each. And it is really surprising how many and varied these are; strange and inane remarks by people who will have "just one little look", words of criticism cruel but sometimes only too true, from the mouths of children, or advice sought by a fond parent for a daughter who is now at a milliner's, but who wants to make "big" money, in high art. That is the personal side of it. To the impersonal, belong the things that happen around you, and to which you become a



NORMAN CHURCH IN RAVELLO
PENCIL SKETCH BY SAMUEL V. CHAMBERLAIN

silent spectator. In the city there are often annoyances, but I can recall of no instance in which there was not some redeeming feature.

My advice is to avoid all possibility of drawing a crowd, and that is best done by going out alone or in small groups,—never more than three,—making one's sketch not too ambitious in size or character, and having done with it in one sitting. That advice will hold, I think, even if there are no disturbing factors present. It is strange, but axiomatic, that the enthusiasm of the beginner always sets him the hardest task. He includes too much in his picture, and tries to show everything in detail.

Of materials I will say that they are not a primary consideration, except that water-colors and brushes ought to be of the best. Pencils and papers, however, often serve to best purpose when they are least expensive.

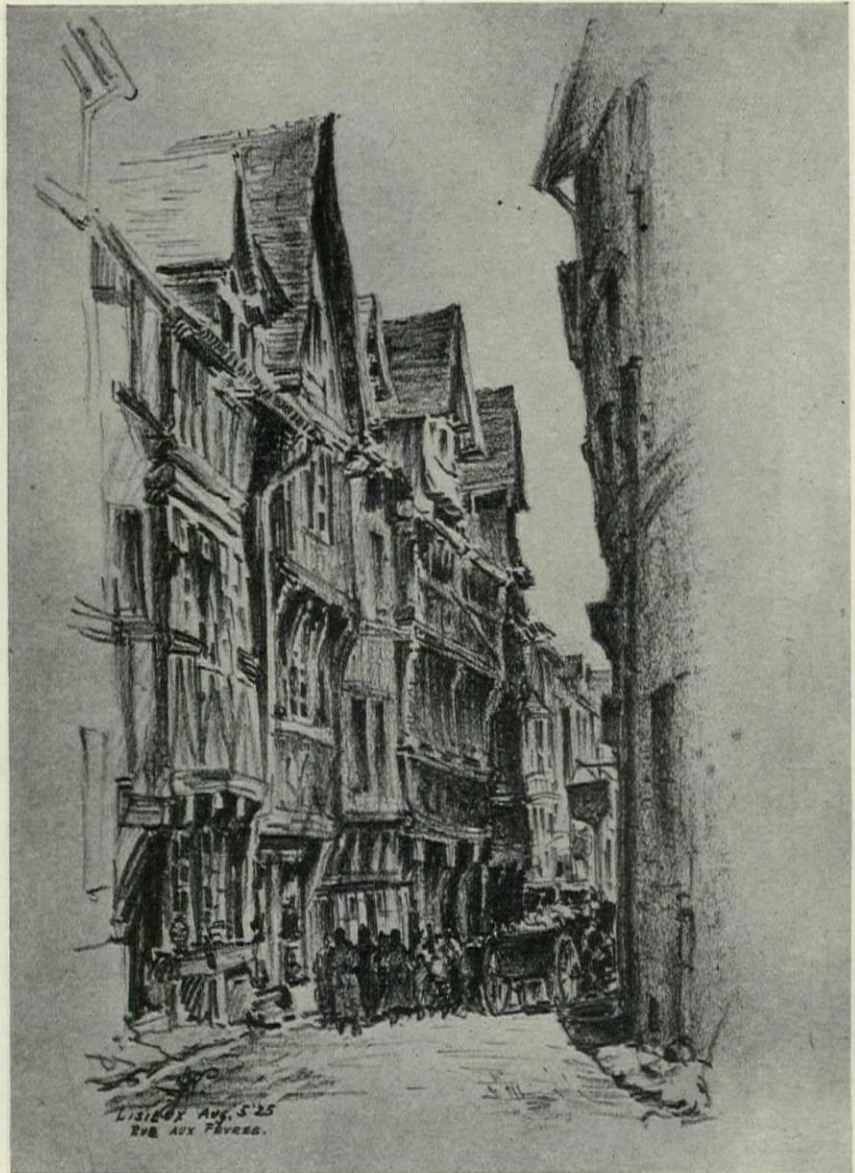
There is one plea which I should like to make with some emphasis, and that is not to treat sketching too casually after you have once decided to go out for an afternoon. I have, myself, gone out with friends who went out walking, as it were, but took a sketch book along with the idea of using it, if they happened to see something that inspired them.

Needless to say, they found so many things which interested them that they wasted most of their time trying to decide what to draw.

The best games are not played by those who carry their clubs or racquet with the idea of using them, should they happen upon the proper golf-course or tennis-court; neither are sketches produced in this spirit anything but failures or sad memories.

The best way, I think, is to indulge in a separate reconnoitering tour, to note the subjects, conditions for locating one's self, lights and shadows, etc., and then later on to go directly and immediately, to do or die while the inspiration lasts.

Otto F. Langmann



CRAYON DRAWING BY RUDOLPH J. NEDVED

Original on light brown paper, size 10" x 14"

AN ILLUSTRATOR'S POINT OF VIEW

IF ANYONE SHOULD ASK ME, "What would you rather do or go fishing?", on the instant I would answer, "Sketching." For it is a truism that "the joy of the sketcher no man knoweth but he who sketches." With sketching, unlike fishing, you are always sure of getting a bite, especially in summer. You may get caught in the rain, the sun may be too hot for comfort or the mosquitoes and flies too friendly, and you may sometimes fail to catch the "moment of interest" in the mood of the day; but when you bring in a "go",—a success,—there is a quiet and satisfied joy that has no substitute,—you have lived!

I have been out in all weathers and in all sorts of odd places, and I usually bring back permanent



PENCIL AND WASH DRAWING BY SAMUEL V. CHAMBERLAIN

Original on rough water-color paper, size 7¾" x 10½"

impressions of them in sketch form. I therefore know the satisfaction of catching that "moment of interest" which comes at some time, suddenly and without warning, into every scene in Nature, and which the watchful sketcher seizes upon for his picture. I have caught the transient shift of the sun, that comes when the storm is breaking over a mountain, in rain and in snow. I have sat among ruffians on a knock-about boat in the tropics and have made the scene mine in a sketch. I have been in mills and shops, and on farms, following plough-horses for action. I have done figures, the sea, the shore, and the mountains with their dells and glens, in oils, water-colors or in pencil. Sometimes it's a note, sometimes a finished water-color that goes to an exhibition, and sometimes a pencil sketch that quickly records a bit of action. Needless to say,

my pleasure has been intense in the doing of them all. Furthermore they have turned to profit, for I think I have made use of almost everything I have done out-of-doors to build up compositions done in the studio. My tastes have been catholic and I have chosen widely varying types of subject to sketch, but some of the things jotted down for data have been used over and over again.

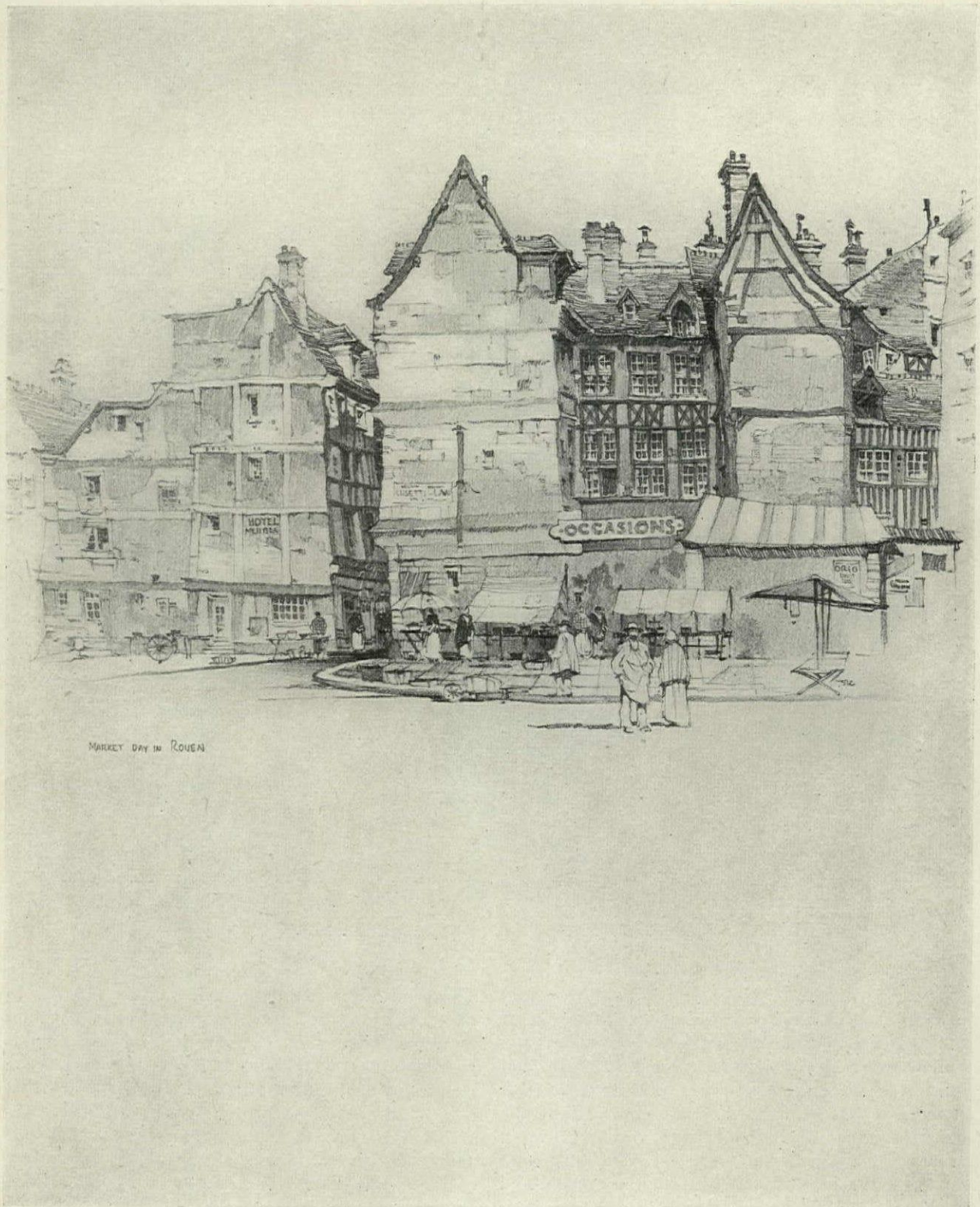
I would suggest to sketchers not to use a camera. It's lazy and does not train the eye for drawing. Draw incessantly, especially when you are young, —that's the time to burn the faculty in.

Mr. Harvey Corbett said to me the other day at lunch, "If an architect is to be a master designer he must also be an artist." I realize what he meant, and one of the ways for the draftsman to become an artist is for him to learn to see accurately what is about him. He will see most keenly when he has a pencil or brush in his hand and is in the act of making a sketch. Until he does try to draw a thing he will not really see it at all.

It is not necessary for the architectural man to confine himself to architectural subjects when sketching, nor is it even advisable. In the first place, by drawing landscapes involving rocks, trees, animals,

ships and any other things not entirely familiar to him, he is forced to exert his powers of observation to a much greater extent than when sketching buildings or groups of buildings with which he has become well acquainted during long hours over the drafting board. Moreover, he is forced to draw with greater freedom of line to interpret these natural forms and is thereby encouraged to extend his vocabulary of the elements of delineation beyond combinations of straight lines and geometrical curves. All of which makes him a better draftsman and a better architect. The man who has to think of architecture all day long in an office should relish the opportunity of sketching out of sight of anything that reminds him of his daily work. And where should he turn for true recreation but to Nature?

J. Scott Williams



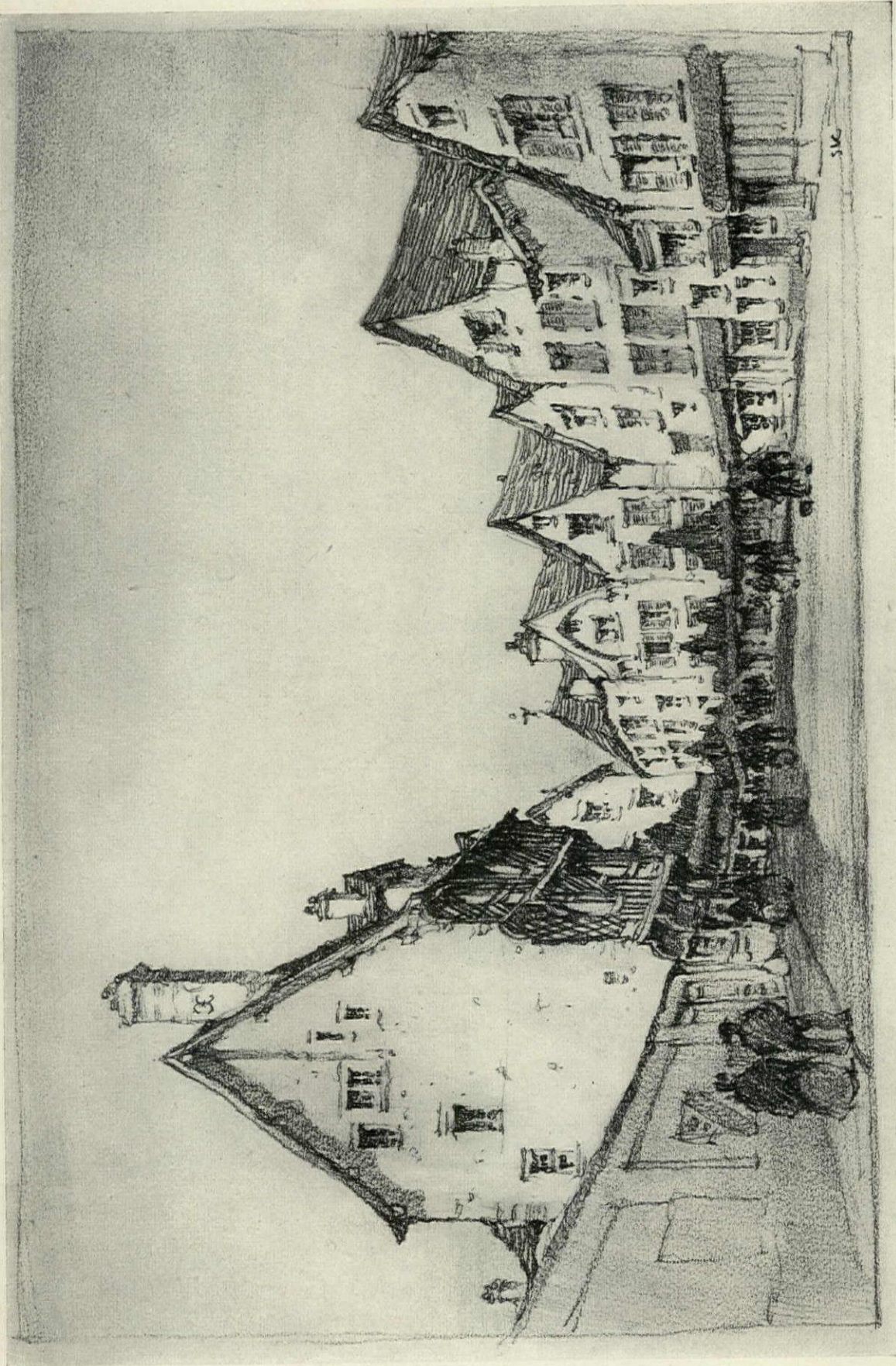
MARKET DAY IN ROUEN

"MARKET DAY IN ROUEN", SKETCH BY SAMUEL V. CHAMBERLAIN
Drawn in Pencil on Cream Paper—Size 10¾" x 13"

SUMMER SKETCHING



"WALLABOUT MARKET, BROOKLYN," SKETCH BY OTTO F. LANGMANN
Made on light brown paper with black, white, and colored pencils



"THE FISH MARKET," CHARTRES,—WOLFF PENCIL DRAWING BY SAMUEL V. CHAMBERLAIN
Size of Original 11" x 7¼"



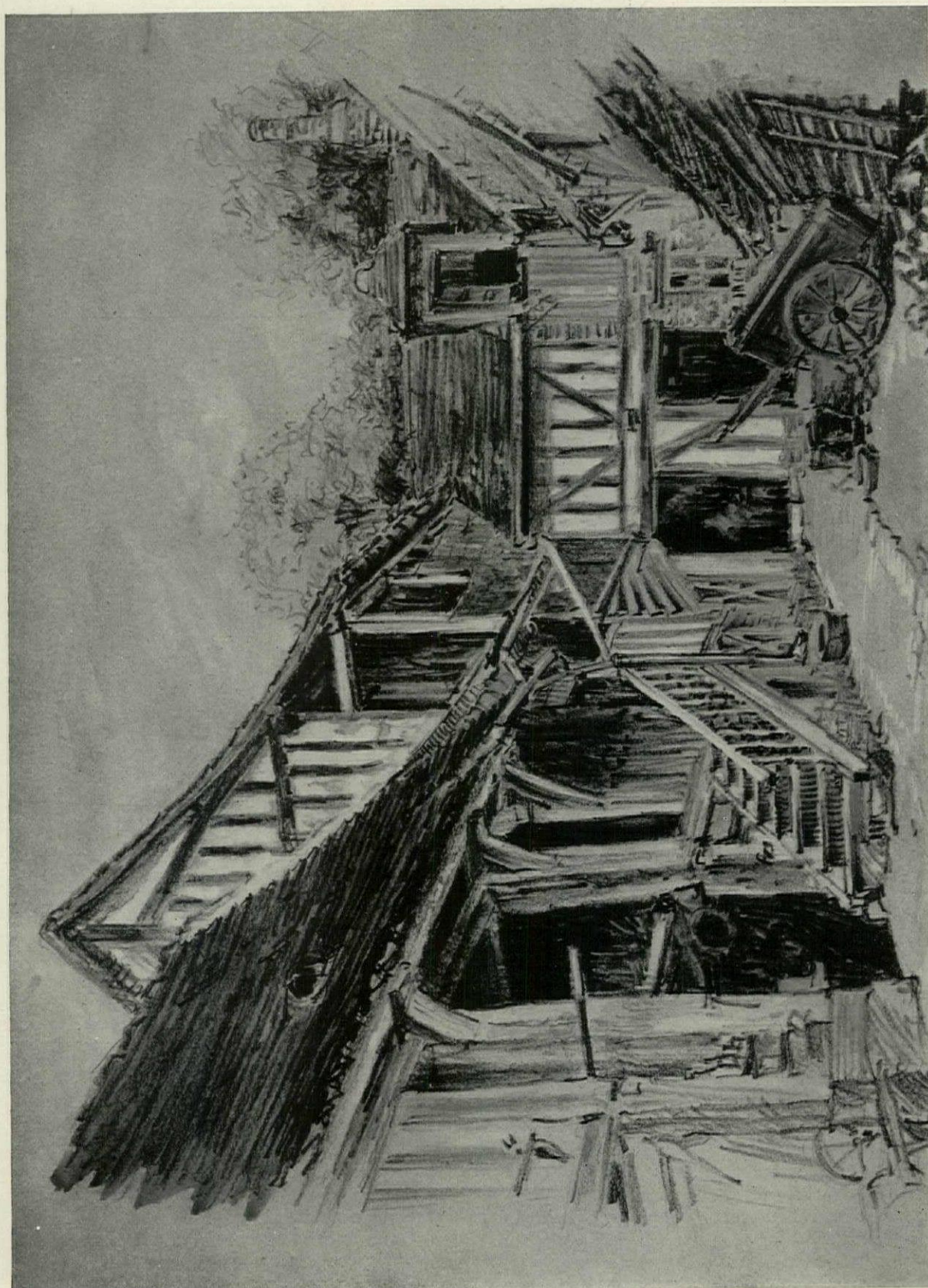
"A BIT OF OLD ANN ARBOR," PENCIL SKETCH BY PERCY DANFORTH

A FIG FOR YOUR CAMERA!

WITH SUMMER TREADING on the O'Sullivans of Spring, Nature has already sounded the call to sketchers, both veteran and novice, to be abroad in the sunshine, pencil, or pen, or brush, or perchance etcher's needle in hand, ready to record impressions as they may appeal. Why sketch? Well, why not? The camera, you may say, provides a much more rapid and easy way of collecting pictured information about architecture, or landscape, or ships and shoes and sealing wax, than do the implements of the artist. Granted, but is it Art? and does it satisfy? He who believes that "kodak as you go" is a slogan more conducive to pleasure and profit than that well known plea of the drawing teacher, "A sketch a day keeps sclerosis away" is, of course, entitled to his belief, and will undoubtedly cover a lot of ground and come home from his vacation

with a delightful collection of snaps. If, however, a man can draw recognizably what is about him, it is the thought of this pencil-pusher that he is foolish not to develop his talent by regular and continued practice. He will at least learn to observe more closely than his neighbor the kodaker, and in the making of pictures will have the tremendous advantage over him of being able to leave out objectionable or extraneous matter and concentrate his attention on the essential elements of his composition.

The systematic sketcher may be likened unto the traveller who goes abroad and spends enough time in each locality he visits to give him a fairly thorough acquaintance with it, while the prolific kodaker is as the tourist who rushes from place to place, "covering" everything, allowing a few days to a city or town, an hour to the Louvre or the Pitti Galleries, doing Europe up brown, and returning



A COURTYARD IN LISIEUX, DRAWING IN PENCIL AND GOUACHE BY RUDOLPH J. NEDVED

Made on rough, light-brown paper



"HAY-TIME," LITHOGRAPH SKETCH BY J. SCOTT WILLIAMS

home with an entirely superficial set of ideas of a number of things but no comprehensive or accurate information about any of them. Perhaps there are good points about each method of travel, possibly a combination of both is most educational. Analogously it may be best for the sketcher to have his camera at hand, loaded and ready to shoot at some transient picture, too fleeting to catch with his drawing tools. It seems to be generally accepted, though, that the more competent one becomes with the instruments of any graphic medium, the more one scorns the mechanistic method of the camera. The joy of the craftsman asserts itself in him who makes a good sketch "with his two bare hands," a joy which is infinitely keener than any which can conceivably be drawn from the routine of setting and clicking a kodak. The thing to do is to become that craftsman, and the way to do that is to sketch and sketch and sketch. The first hundred are the hardest.

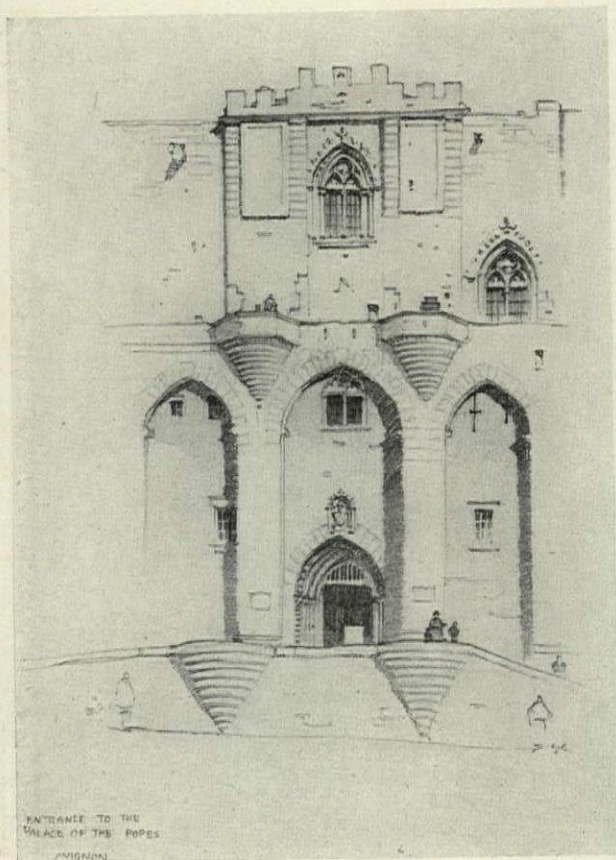
Aside from the pleasure to be derived from sketching, which we will assume for the present to be its main incentive, there can be certain profitable by-products. If one is sufficiently vain of his pretty pictures, he may prevail upon his friends to accept them, suitably framed, as gifts. He may go further and, if they're good enough, achieve no-

toriety by having them published in PENCIL POINTS. Having thus established his reputation he may even be able to find someone gullible enough to purchase them for real money. If the sketches won't go, it is always possible to translate some of them into etching during the long winter evenings and thus multiply their potentialities as merchandise. These suggestions are, it is true, just a little mercenary, but even a sketcher has to have pin money.

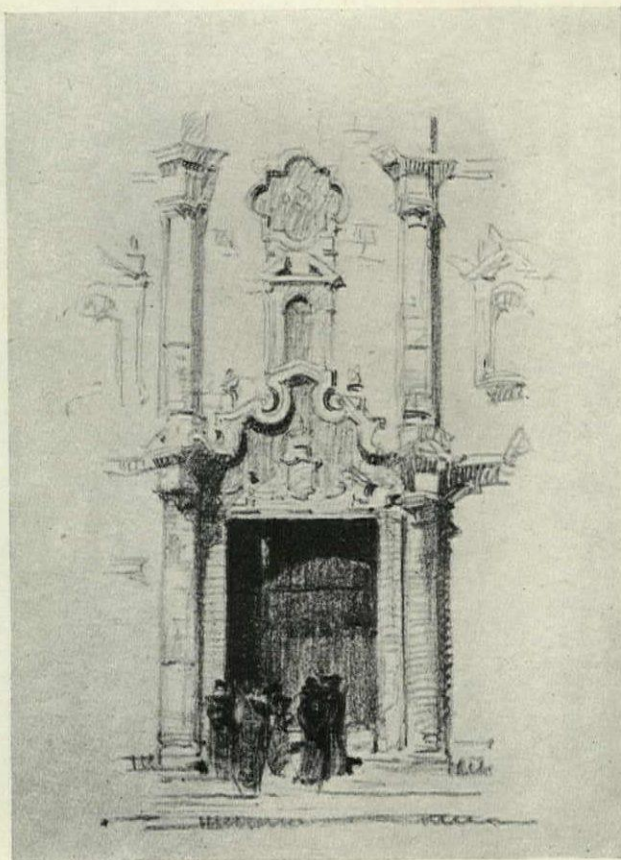
The most real value of sketching to the architectural draftsman or student is, however, not so tangible. It is based on the information accumulated and on the training of hand and eye and artistic judgment. The young man, setting out on the long road to becoming a master architect, can in no other way so successfully as by sketching learn how things are put together, how materials are chosen to produce different effects, how mouldings and cornices and the myriad details that go into buildings are designed to perform their functions of use and ornament. He learns, further, through the constant exercise of his critical and selective faculties, the principles of composition,—that fabric upon which is woven the tapestry of architecture, no less than those of all the other arts.

It is not the province of this short essay to delve into the mysteries of technique. Each man must

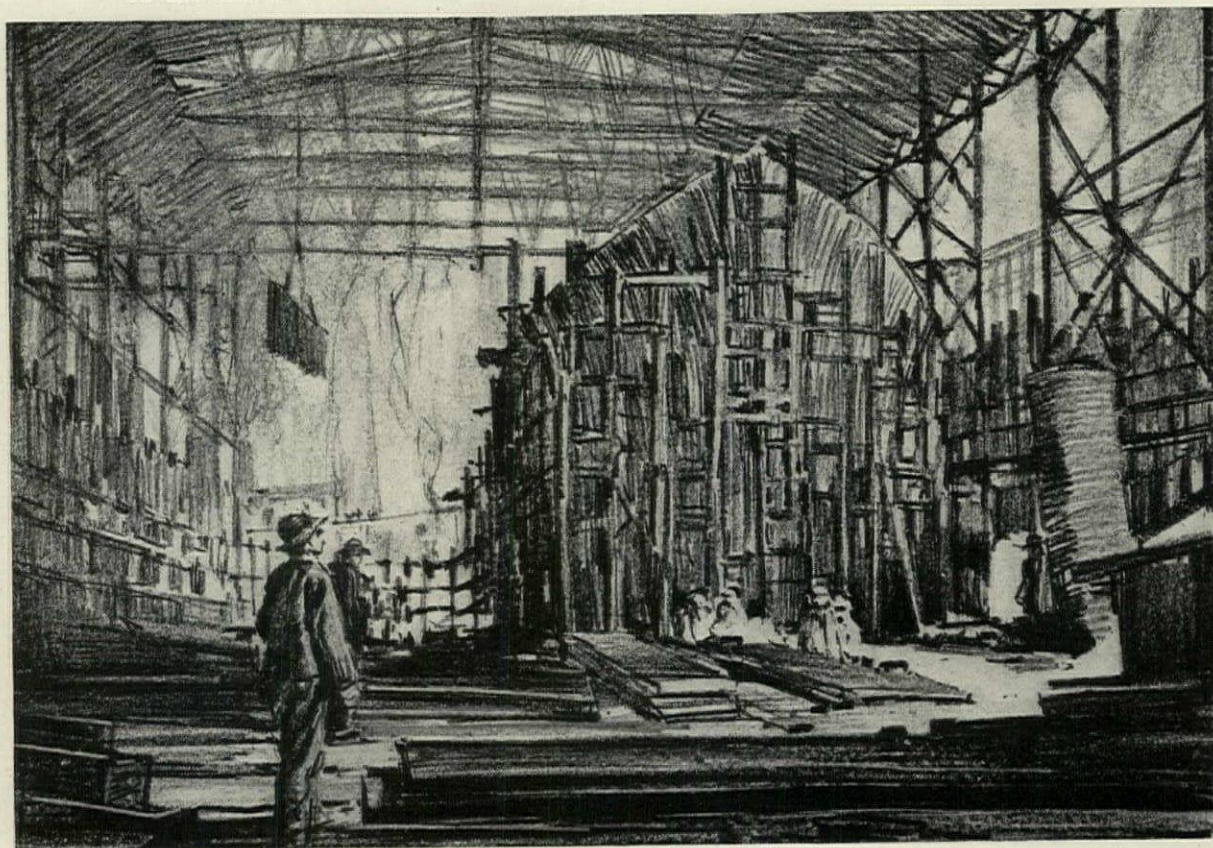
PENCIL POINTS



ENTRANCE TO THE PALACE OF THE POPES
BY SAMUEL V. CHAMBERLAIN

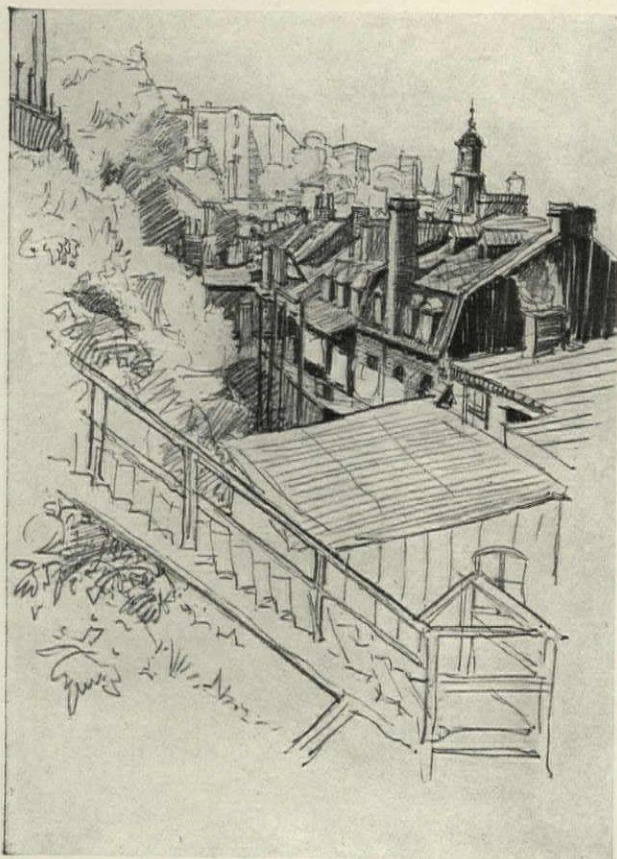


DOORWAY TO CATHEDRAL, HAVANA
BY OTTO F. LANGMANN

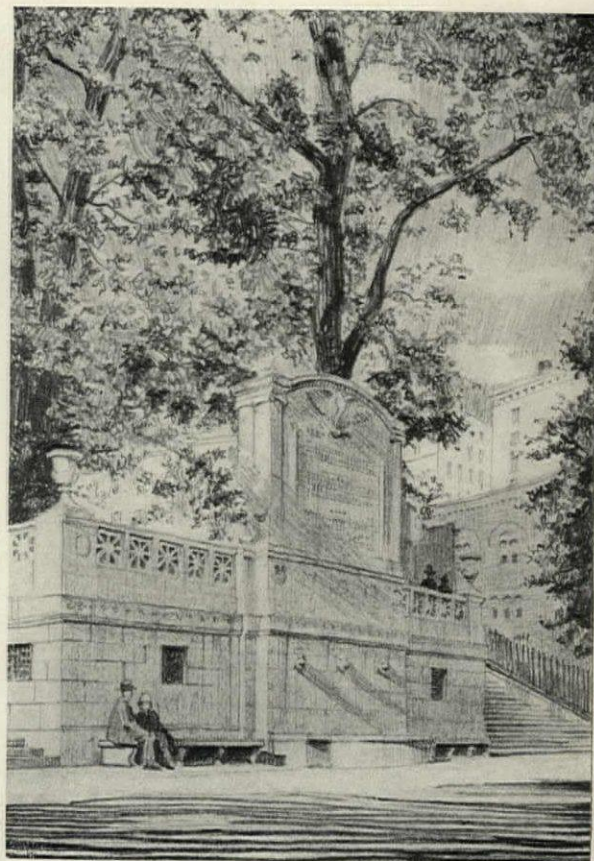


"ON THE WAYS," LITHOGRAPHIC PENCIL SKETCH, BY J. SCOTT WILLIAMS
Drawn on Cameo paper

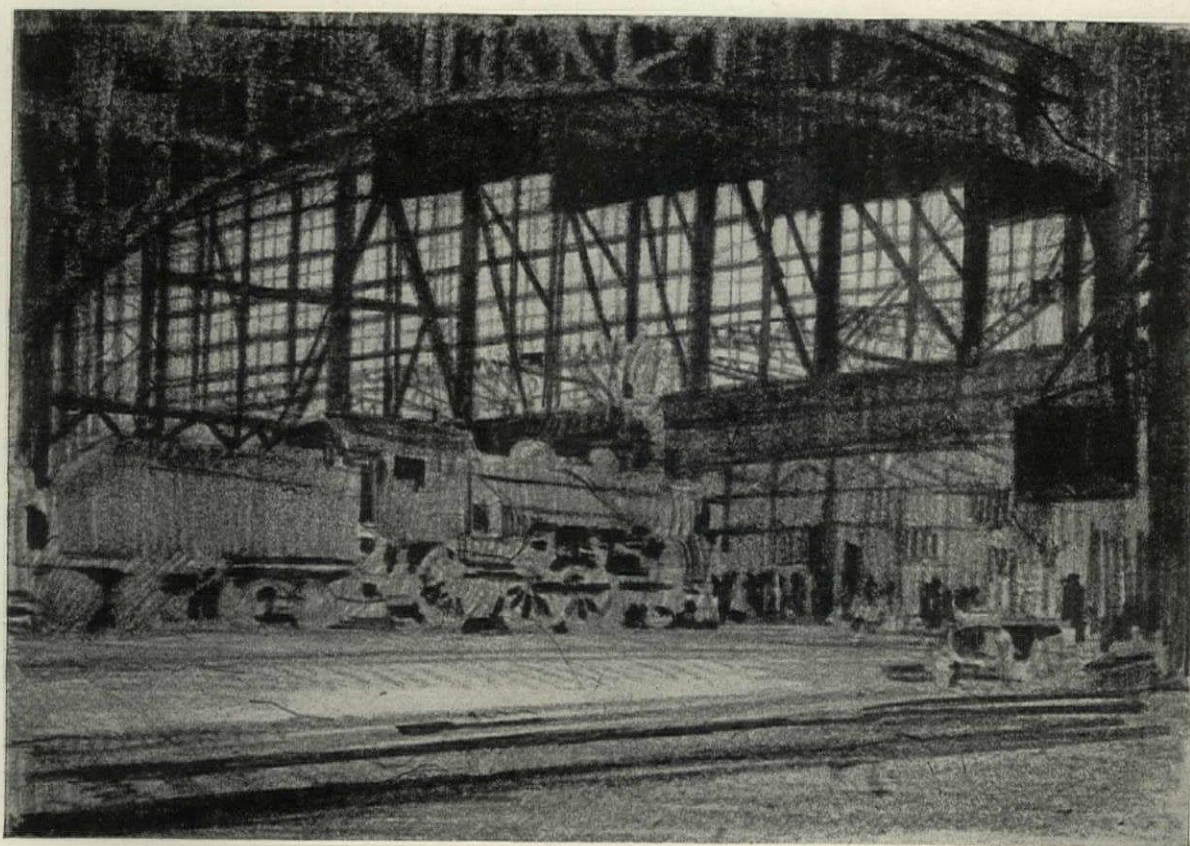
SUMMER SKETCHING



ALONG THE OLD CITY WALL, QUEBEC
BY OTTO F. LANGMANN



THE SHAW MEMORIAL, BOSTON
BY KENNETH REID



"SOUTH STATION, BOSTON", MARKING CRAYON DRAWING BY OTTO F. LANGMANN
On Japanese hand-made silk paper

PENCIL POINTS

choose for himself the kind of paper, pencils, colors, and brushes most fitting for his peculiar style of self-expression, and decide how it is best for him to use them. Experimentation is good to indulge in at first but it may be carried to excess. It is better to find a satisfactory medium fairly early in the game and to stick to that until it is mastered. Then go on and find new fields to conquer. Do not strive for technique; it will come inevitably of itself as you progress. Indeed, it is most interesting to speculate upon the mysterious way in which each artist's individuality makes itself felt in even the merest sketch. Examine a set of pencil sketches by Eggers, Rosenberg, Chester Price, or Chamberlain. Each builds line upon line to produce a finished result which is a satisfying work of art, yet how differently each man speaks to us. Their work is not consciously mannered but each man's sketch is as naturally distinctive as his chirography. This

distinction is born only of confidence acquired through practice, just as individual handwriting develops through repeated early attempts to follow the example in the copy-book.

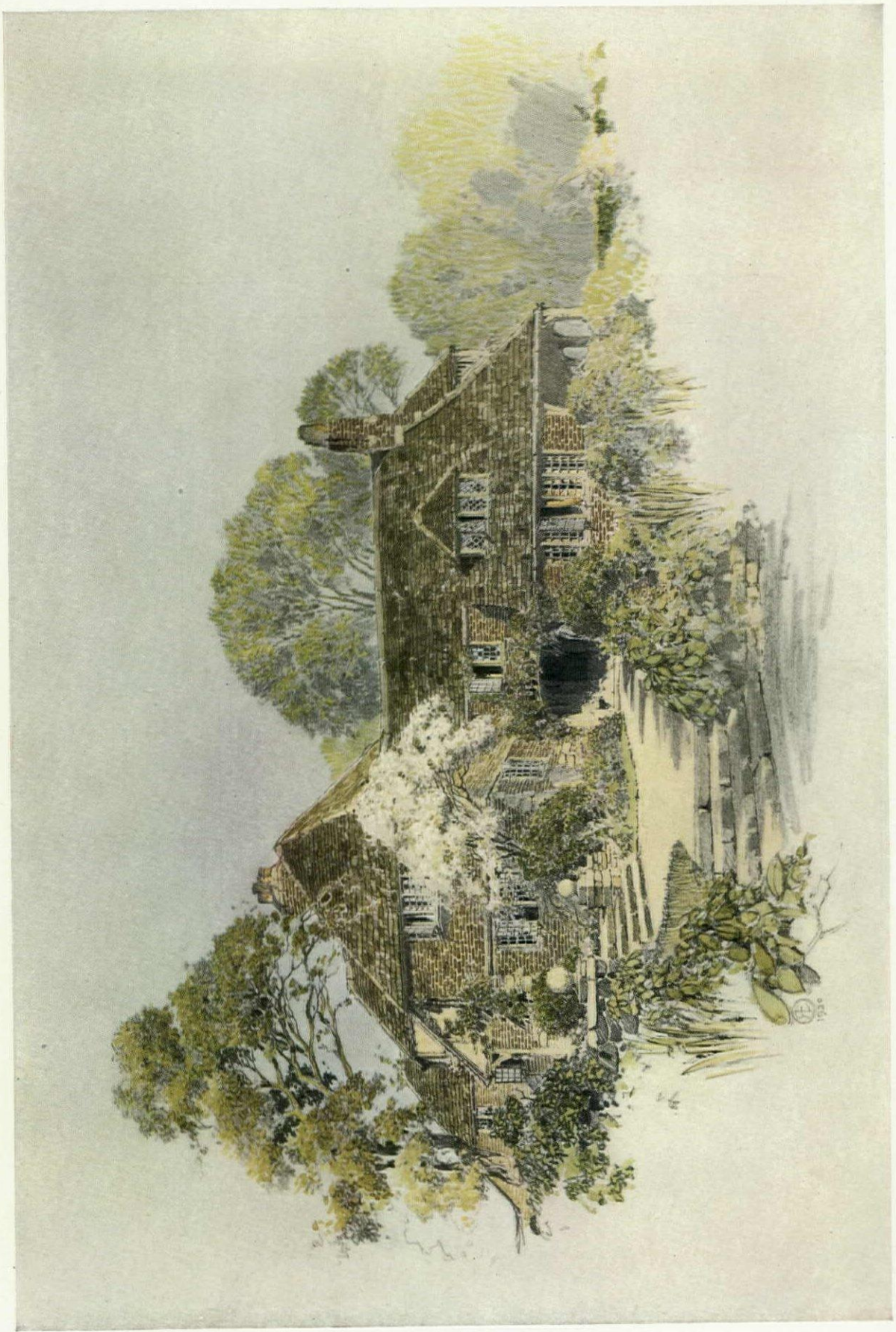
In choosing your subject, the particular type of thing does not greatly matter; it should appeal to your sense for the picturesque and should not be too extensive. "Hop" Smith once laid down as a principle, that you should "confine yourself to all that the eyes see at one glance and no more, or, in other words, that portion of the landscape which you could cut out with the scissors of your eye and paste on your mind". Good advice that, and strikingly stated. Follow it and you will find less difficulty with your compositions. And remember the other epigrammatic pronouncement of that same Mr. Smith, to wit, that "it takes two men to paint an outdoor picture: one to do the work and the other to kill him when he has done enough."

Kenneth Reid



WATER COLOR SKETCH BY J. SCOTT WILLIAMS

PENCIL POINTS
SERIES
of
RENDERINGS
IN
COLOR



RENDERING IN WATER COLOR AND COLORED PENCIL BY OTTO R. EGGERS

Size of Original 21 $\frac{3}{4}$ " x 15"

House in Westchester County

Otto R. Eggers, Architect

WROUGHT IRON PRECEDENT

By Gerald K. Geerlings

(Editor's Note: This article is introductory to a series on the subject of wrought iron. The author spent a generous fraction of a year's foreign travel in making photographs, drawings and notes on the subject in its application to modern practice and will present in the series much material heretofore unpublished.)

IN THE NEXT ERA when histories have us properly cataloged and pigeon-holed we will no doubt be derided for causing such bitter diversion of opinion in getting relegated to an exact age. Perhaps we shall be favorably compared with the Stone Age—or the Golden. Fragments of discovered building reports will be quoted to prove we belong to the first, and radio company dividends that we were in the second. But some hawk-eyed archaeologist, greedy for fame, will attempt to settle the dispute by producing a Fifth Avenue fragment of our monumental débris. With a becoming gesture he will declare we belong to neither, but dub us creators of the "Cast Stone Age," or the "Age of Imitations."

As a matter of fact, we may as well admit in a stage whisper to each other in the building profession (architectural or otherwise) that we spend a good share of our energy making things "look like what they ain't." A flimsy curtain wall is palmed off on the unsuspecting public as an honest-to-goodness Florentine palazzo made of real stuff. The walnut paneling in its lobby is nothing more than plaster with enough faked worm holes to house a million mythical colonies. The ashlar sandstone in the monumental halls has been poured from sacks labeled "Caen Stone", without an idea that there is such a place which lent its name to that creamy stone which makes the Loire architecture immortal. The rubber floors are given vibratory color treatment to make Botticino marble turn verd antique with envy. All to what purpose? Our archaeologist is certain he is correct—we are the Age of Imitations.

There is one ray of hope. The villain archaeologist who would despoil our vanity by perfect proof of hundred per cent use of heinous imitations, trips on a piece of a wrought iron grille. His hopes are dashed—here is a material used as it was meant to be. It is no virtue of ours, however, because for all its good-nature and accommodating spirit, wrought iron asserts a seeming puritanical conscience by looking and acting only what it is. Nor can anything steal its copyrighted traits.

We may fashion plaster like Caen stone, rubber flooring like marble, composition sawdust like carved wood, but in the craftsman's use of the term "wrought iron", we can make nothing imitate it. In commercial efforts to be "arty" and turn out hand made articles in gross production with the much-vaunted "American efficiency", one sees such pathetic attempts as to make imitation wrought iron bridge-lamps out of cast iron. Thumb marks on applied putty are supposed to represent hammer marks, while a silver and black finish completes the texture. By the time that process is perfected the cost will no doubt exceed that of the genuine article. But no matter. We enjoy our little jokes.

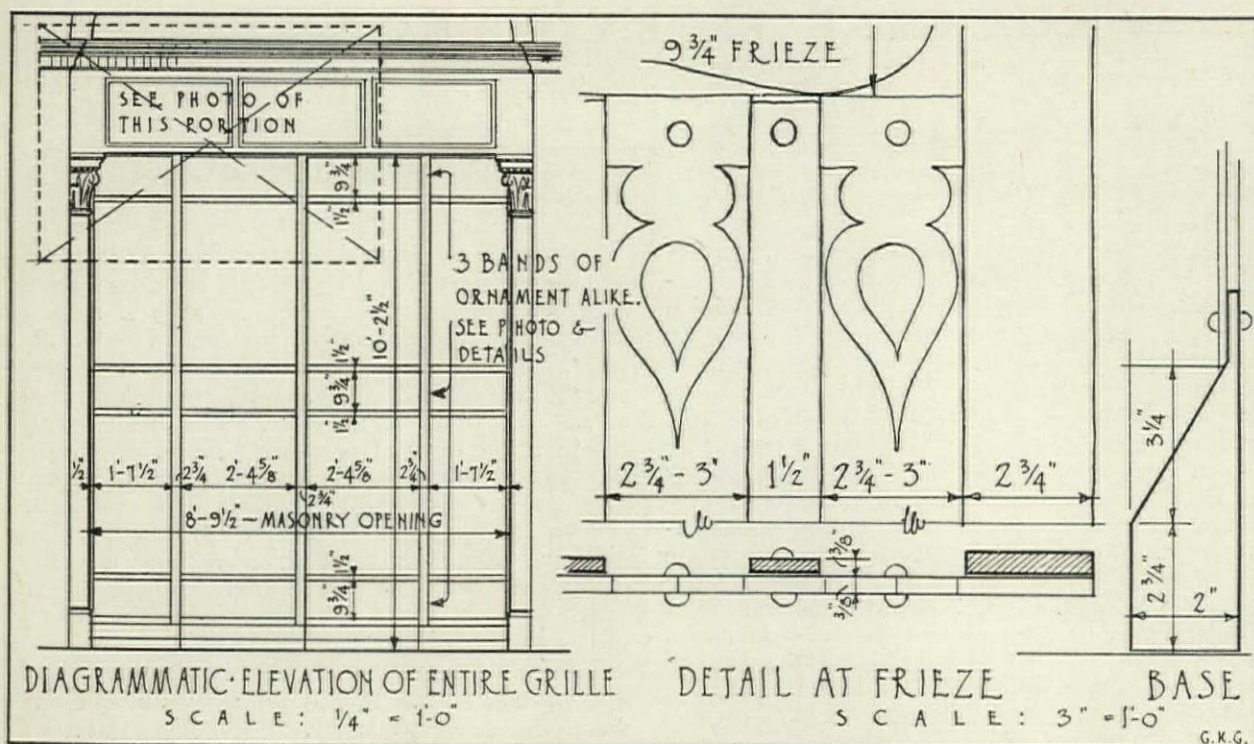
Apparently we have no such definite ideas about wrought iron distinguished from cast iron as we have concerning the differences between stone and terra cotta. We understand the limitations of the latter well enough, both in the differences in cost and the method of detailing. But as to wrought iron versus cast iron, we know only that the latter is cheaper. By force of habit we decide the wrought article is a rather indefinite quantity, so why jeopardize a client's interest! And cast iron gets itself written into the building. Not that anything is wrong with cast iron, any more than anything is amiss with terra cotta. But just as stone can gain effects which terra cotta cannot because of natural endowments, so also with cast iron's cousin, wrought.

To define "wrought iron" is at once a simple and a complex matter. In this sense it is simple—its name is self-explanatory. "Wrought" iron is "worked" iron, which is worked on the anvil by hammering while it is hot, cooling, and, sometimes, cold. "Cast" iron, on the other hand, is "cast" in moulds and not worked beyond the point of having itself poured. The more complex task about defining wrought iron lies in explaining how it can best be worked, and in what capacity it makes itself most advantageous and adaptable. Stress the latter in this age when architectural design is determined almost entirely by cost!

At the present time not a great deal is accessible either graphically, literally or photographically on the subject of wrought iron. There is the invaluable "Il Ferro," by Giulio Ferrari, with numerous photographs illustrating the well-known iron classics, but only few drawings showing the family life of wrought iron and a tantalizing text in Italian. A. N. Prentice in his "Renaissance Architecture and Ornament in Spain" gives some excellently presented examples of the luxuriant and majestic Spanish *rejas*, while the comprehensive "Rejería of the Spanish Renaissance" and "Spanish Ironwork", both by Byne and Stapley, blazes the glory of the *coro-rejas* (choir grilles). These three books on Spanish iron-work concern themselves principally with the monumental achievements in cathedrals which are on a scale in size and magnificence greater than America yet possesses. In addition there are scholarly books on Spanish and Italian details which often include a few well selected and presented examples of iron-work. Add Uhde and you have almost completed the list of usual and usable office material.

In all humility the author is therefore setting out to illustrate by photographs, known and unknown, and detail drawings of parts of many of these photographs of genuine and excellent wrought iron, which can readily be applied to modern practice.

PENCIL POINTS



MEASURED AND DRAWN BY GERALD K. GEERLINGS

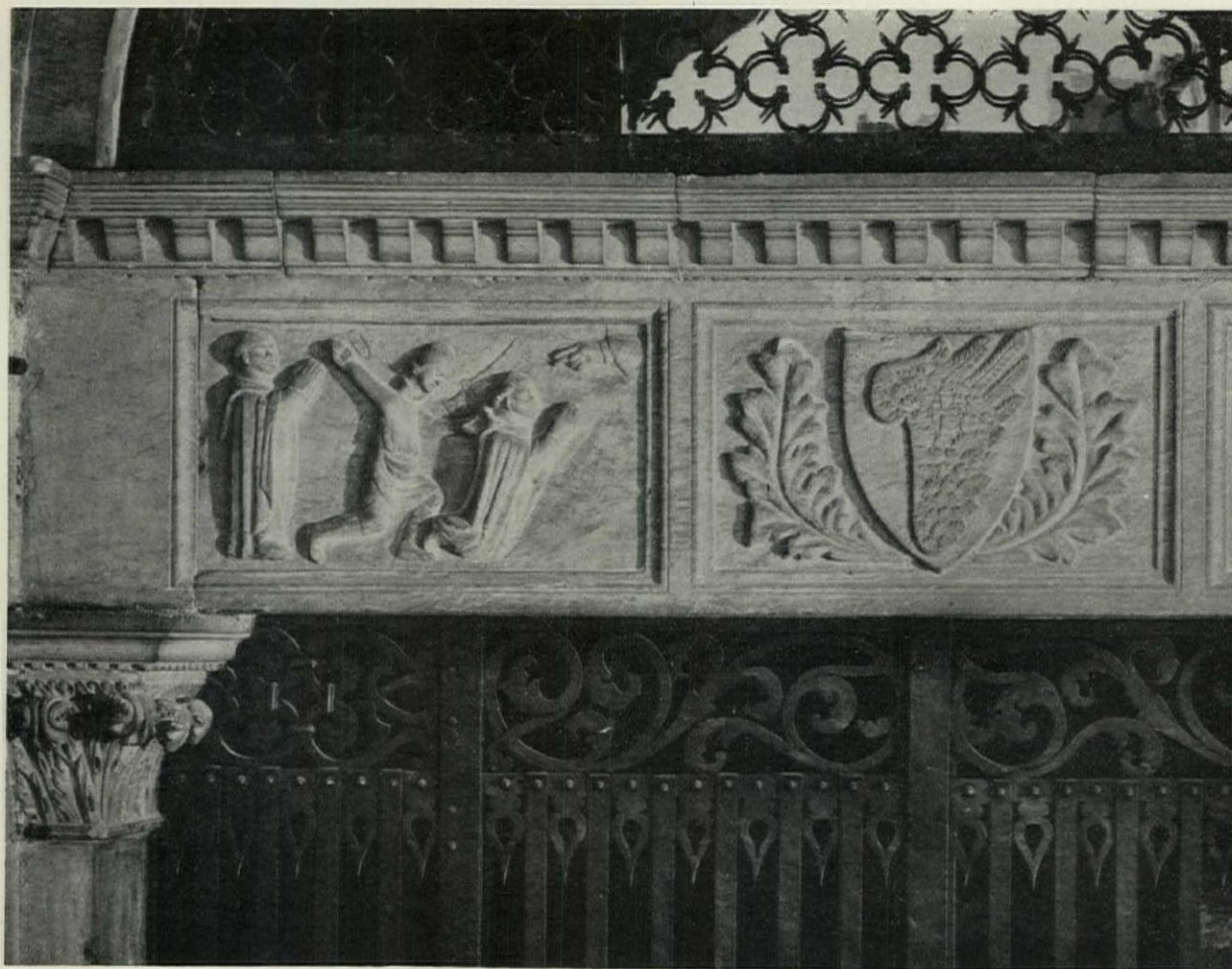
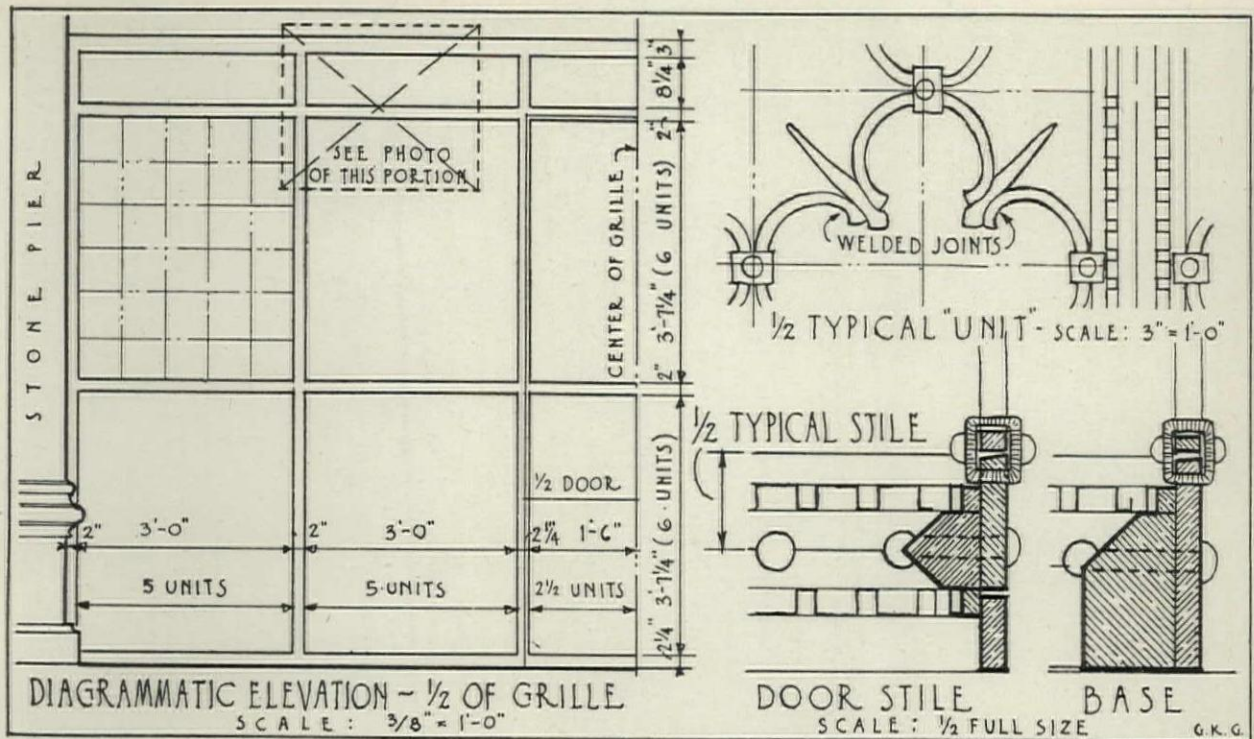


Photo by Alinari

GRILLE IN CLOISTERS OF S. MARIA NOVELLA, FLORENCE

WROUGHT IRON PRECEDENT



MEASURED AND DRAWN BY GERALD K. GEERLINGS



Photo by Alinari

GRILLE TO "CAPPELLA BARTOLINI-SALIMBENI," S. TRINITA, FLORENCE



GRILLE OF THE PORCH TO THE MAIN PORTAL, CATHEDRAL OF BRAGA, PORTUGAL

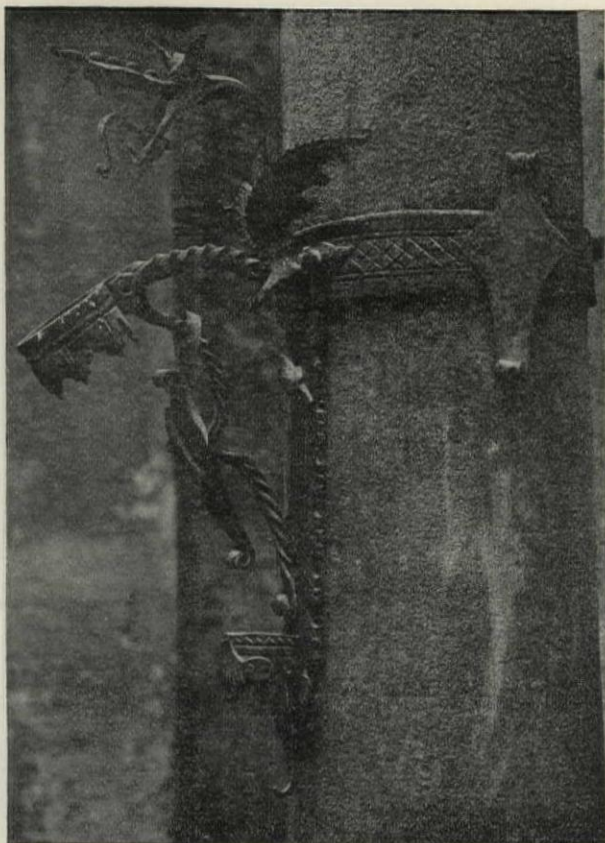


Photo by Alinari

FLAGPOLE SOCKET IN WROUGHT IRON

The majority of the metal work examples will be furnished by Mediterranean countries, selected with an eye for present-day limitations of finance. No attempt will be made to compete with the publications of monumental Spanish work already on the market. The emphasis will be on the intimate types of wrought iron, rather than on the grandiose monumental.

Chaperoning the illustrations will be a conscientious attempt to discover by analyzing the best examples of wrought iron what its characteristics are. The forms best suited to the material will be tracked down and contrasted with its related arts, bronze and cast iron. Following that, the dangerous subject of wrought iron design will be attacked bearing indelibly in mind the Russian adage: "In color and design there are no friends." In the invasion of such precarious territory we trust to wound no one mortally. Under this subtitle will range illustrations from work by the Spanish, Portuguese and Italian, while by way of variety there will be a small smattering from the Czecho-Slovakian, Austrian, English and Early American. Finally there is an intended scrutiny into the subject of good craftsmanship, pursued by a finale on working drawings and specifications on wrought iron.

As a salutatory gesture it may not be amiss to say something about the "wrought-ing," and this is simplest done by begging the indulgent reader to conjure up the village smithy. The essentials are all there: the raw iron, forge, anvil, array of ham-

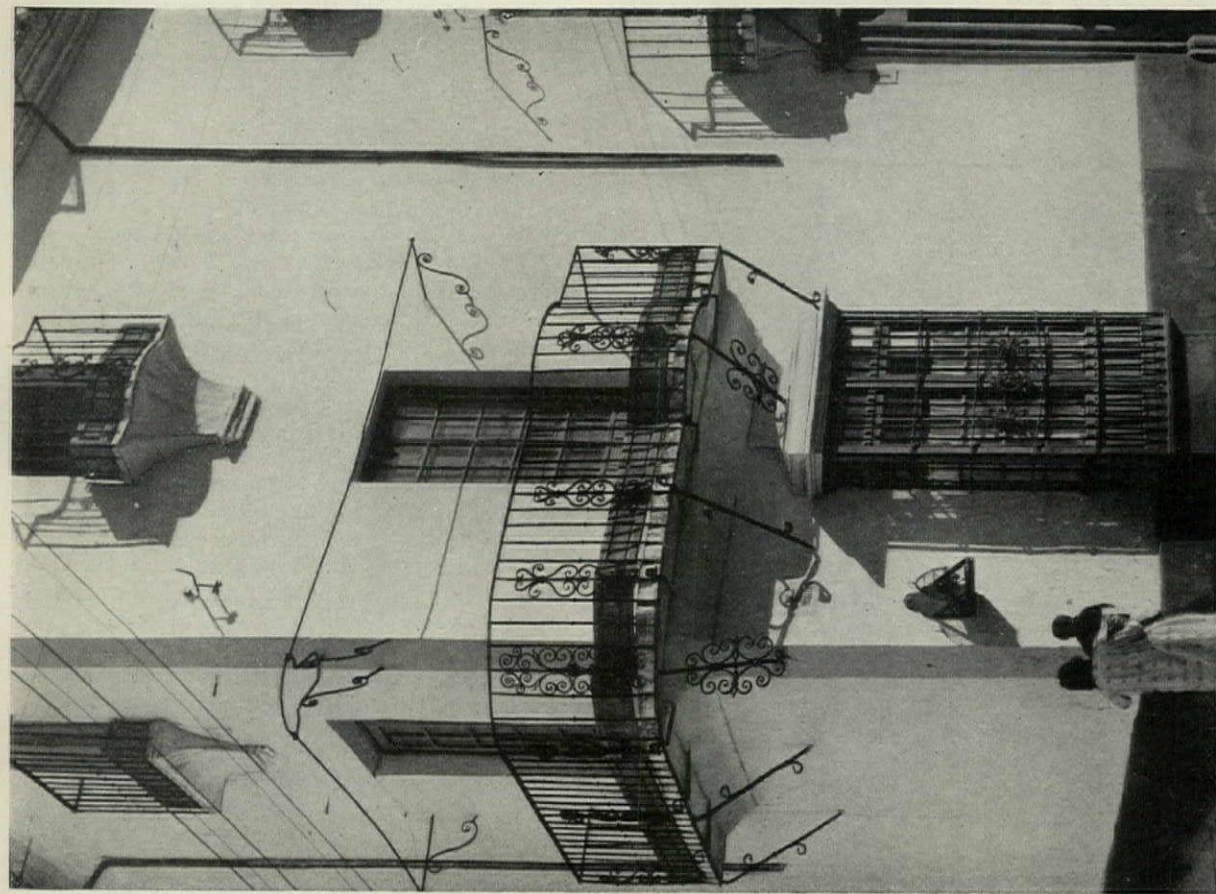
mers, tongs, swages, fullers, and other tools,— and the blacksmith. To produce wrought iron artistry, give the smith a vigorous imagination, imbue him with an enthusiastic love for his work and that is all there is to it.

The raw material comes in the form of iron rods of various diameters, bars square in section, or plates with a large range of widths and thicknesses. Whatever sized or shaped piece is selected to be operated on, is firmly gripped in the jaws of a pair of tongs and poked into the heart of the forge fire. A bellows or a blower contributes the forced draft which helps to bring the iron speedily to a lemon glow. Then, taking the hot member from the fire and holding it on an anvil, (the tongs contributing a certain amount of comfort), the master craftsman boldly and confidently pounds while the pounding is good. In the case of large or heavy pieces a helper mans the tongs while the master manipulates the hammer. If he is a real craftsman he has thought out in advance the several steps in the operation. Thoroughly familiar with his material, he knows just how many blows he must strike to produce the desired effect and how hard each blow must be; when he must twist or bend the iron and when he must split it to produce the multifarious leaves, rosettes, spirals, and geometric or naturalistic forms involved in the design. Merely to pound a hot bar so as to obtain a uniform effect with successive blows is itself a complicated problem, for it is obvious that while the metal is at a yellow heat a

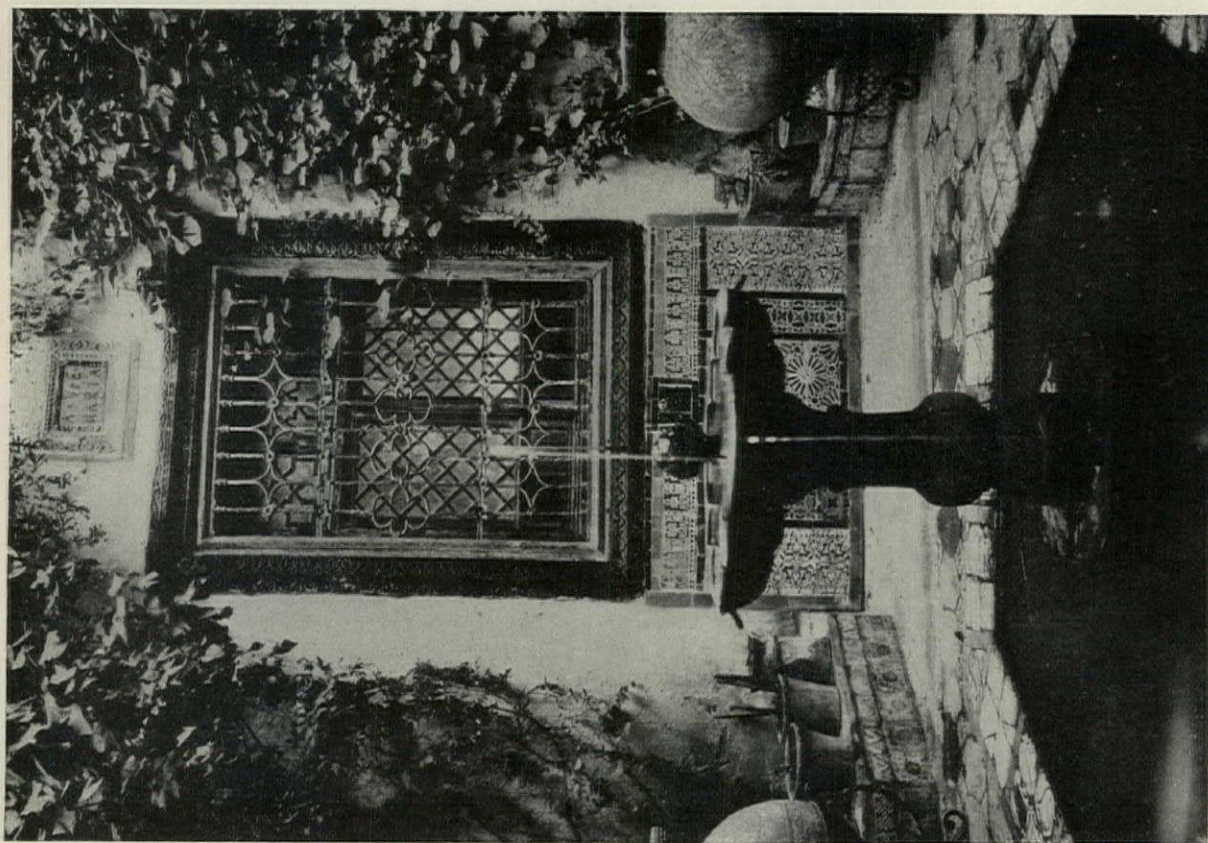


Photo by Alinari

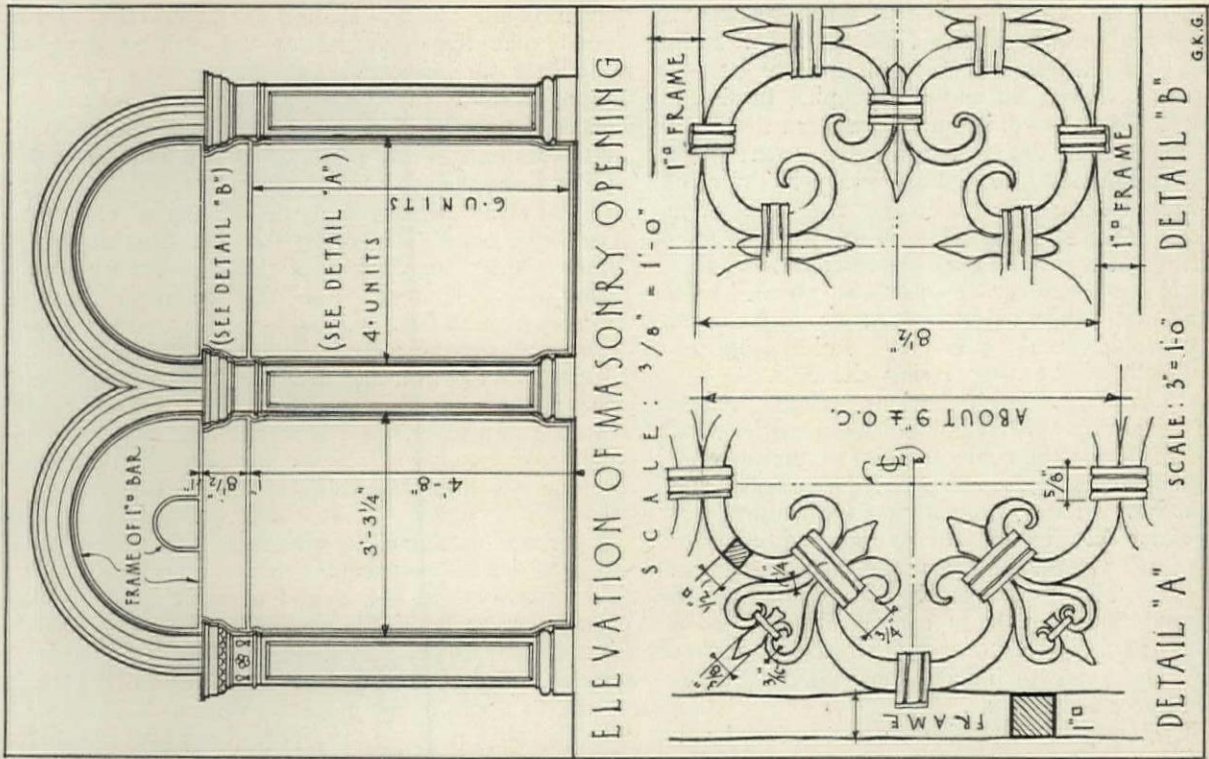
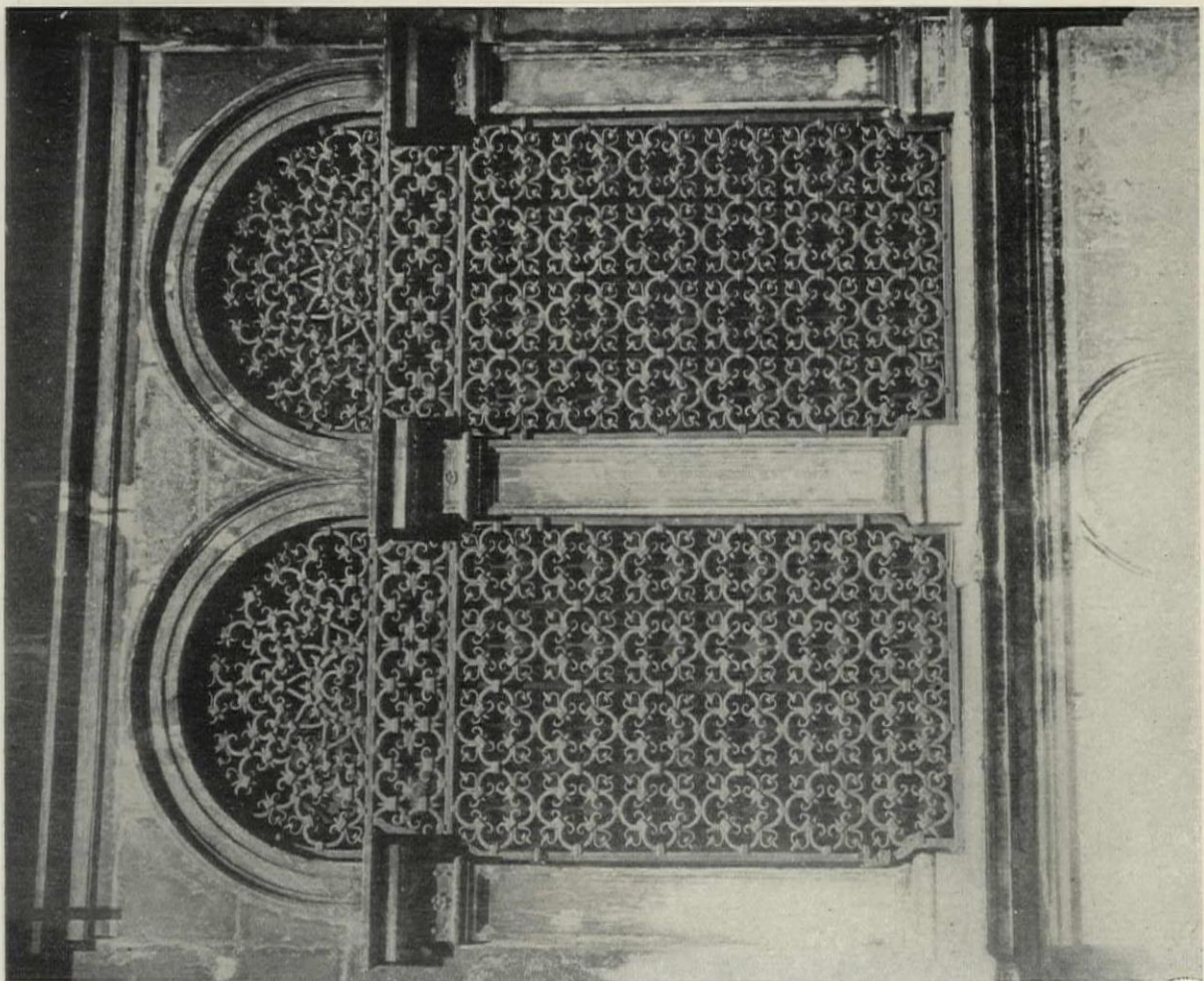
KNOCKER IN HAND WROUGHT BRONZE



DISTINCTIVE ANDALUSIAN HOUSE
RONDA, SPAIN



OPPOSITE ENTRANCE TO PATIO IN CASA DEL CONDE DE TOLEDO
TOLEDO, SPAIN



WINDOW GRILLE IN SCUOLA DI S. GIORGIO, VENICE, ITALY
 PHOTOGRAPH AND DRAWING BY GERALD K. GEERLINGS

blow of certain energy will make a bigger impression than that same force spent when the bar is cooler thirty seconds later. Splitting a bar for a portion of its length and fashioning from its several parts a flower, an animal's yapping head, and an ornate widget or so, in such a way that the working of one section shall not ruin another part which is still red-hot, takes an extraordinary lot of rapid thinking. Remember that while the hammer is exerting pressure on one side of the bar, the anvil is exerting an equal and opposite force on the other, so that if, for example, one face was intended to be flat and the other side rounded or ornamented, damage would result unless the smith took into account both of the compressing elements.

The means by which various effects can be gained in wrought iron will be taken up in detail when considering the characteristics of the material. For the moment it is sufficient to remember that wrought iron is most genuinely itself when produced by working hot under the hammer, although a certain small amount of "carving" may be done on the cold metal. With that in mind it is easy to understand that though an egg-and-dart ornament is readily cast in iron or bronze, it would be a tedious and thankless task to induce eggs and darts to be chiseled into a red hot bar.

Until recently, wrought iron was mentioned only in a footnote in the social register of building materials. In the best circles it was regarded as existing but not really counting. Its European ancestry was acknowledged as being duly ancient, but perhaps was thought to be of unfashionable origin. Only in the last decade has it been permitted to timidly present itself now and again in halls of state, in counting rooms and salons. Bronze was the fashion of the day when there was money to spend. When there wasn't, cast iron was the apologetic substitute. But wrought iron, no!

The general public was scarcely aware of wrought iron until photographs of imaginative Californian and Floridian architecture became widely published. Shops specializing in wrought iron knick-knacks, hardware, and lighting fixtures also helped in press-agenting its virtues.

At the present writing even the majority of architects are suspicious, wary, or doubtful about wrought iron, and have been little interested in considering its historic accomplishments or investigating its modern possibilities. But now Mr. and Mrs. Public have begun to ask for wrought iron.

Wrought iron is coming into its own. It has become a matter of habit on Tudor doors. The old "H" and "L" hinges of Colonial ancestry are being taken for granted. The country's leading architects in domestic work have attained effects with wrought iron which no other material could have made possible. In the realm of large national buildings it has scored an outstanding success in the majestic Federal Reserve Bank of New York City. York and Sawyer employed it there instead of bronze because of its greater harmony with the early Florentine type of architecture. It was used exclusively in this instance for all exterior doors and grilles, as well as all interior grilles, heating and

ventilating registers, bank counter screens, and lighting fixtures. Other leading architects have also found that this material of the craftsman can contribute the maximum amount of humanness to the appearance of a building, be it a residence, church, office building, bank, or what not. And quite naturally—for what other of our modern building materials is hand wrought?

The human element in the fashioning of wrought iron is at once an advantage and a disadvantage. It may bring about either a thing of beauty or a desecration. Wrought iron can be made to so beautify a wall that an ugly radiator recess may become an artistic asset, but a poor craftsman can so maltreat the iron and abuse his opportunity that even a door handle may lower the morale of an entrance. In short, there is no half way point in the quality of execution. Either wrought iron should be done by a first-class craftsman or not attempted at all.

Of the illustrations accompanying this article, the close-up details on page 357 show very clearly the difference between bronze and wrought iron. Each example was patently designed by a man who knew his material, hence it is almost as difficult to imagine the design for the knocker executed in wrought iron or the flag-pole holder done in bronze, as it would be to actually so carry them out. On pages 354 and 355 are two excellent examples of wrought iron grilles, both from Florence. The one from Santa Maria Novella is of an unusual type, depending largely for its effect on the varied texture of the verticals. Three bands of flat ornament, at top, middle, and center, relieve the severity of the design. The detail drawing reproduced exactly to scale shows the simplicity of its construction. The other grille, from Santa Trinita, embodies some of the favorite motifs of Florentine iron work: the stiles and rails with the dentils, the repeating quatrefoil, and the panels of "retroussée" work at the top. The size of the quatrefoil unit is about 7" in height; its parts are here welded, although customarily banded together instead.

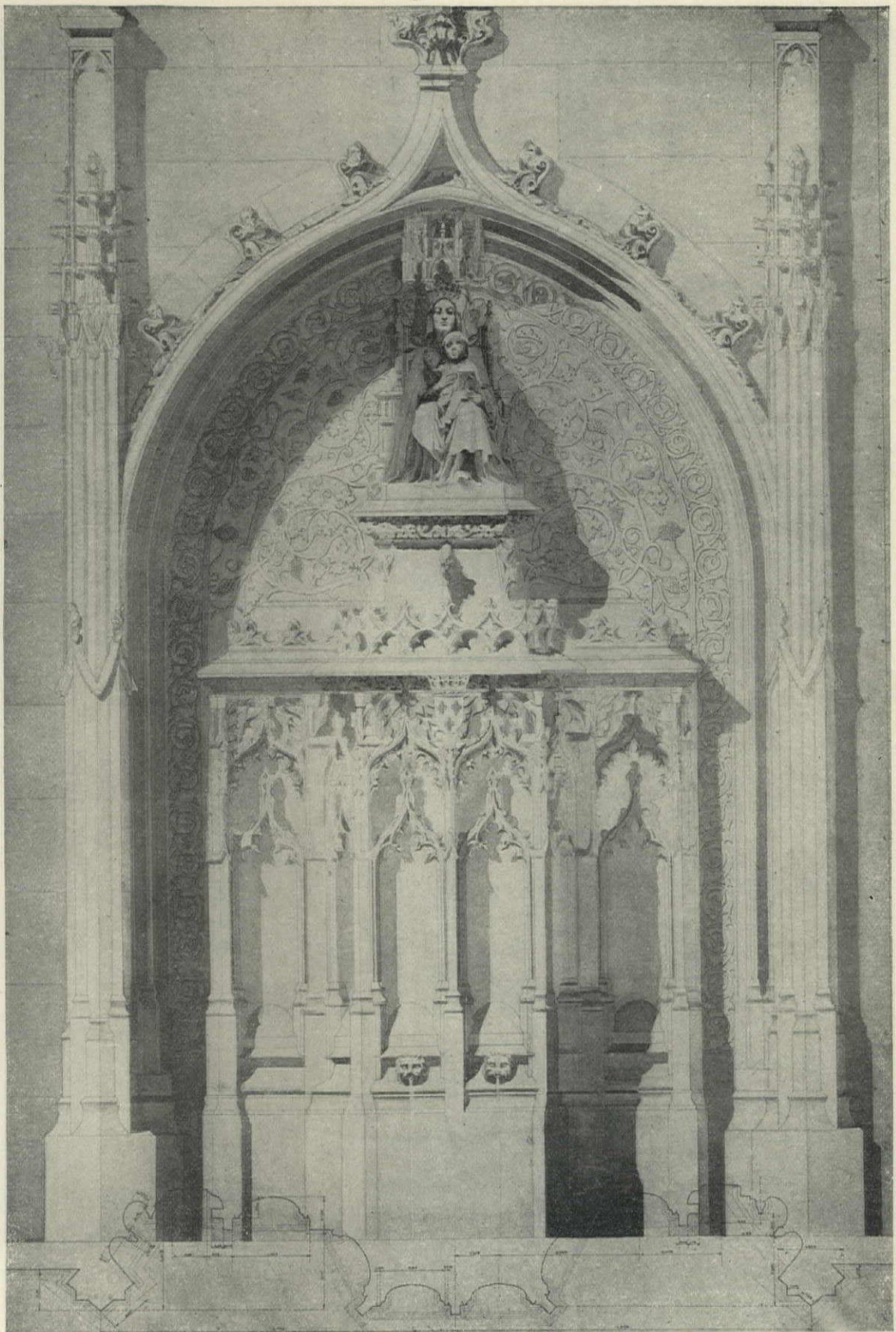
The views on page 358 include one at Ronda, Spain,—showing the typical Andalusian house with its wrought iron grilles, balconies, and clothes-line,—and one opposite the entrance to the patio in the Casa del Conde de Toledo, in Toledo. It is noteworthy in the latter that although every feature of the patio is most charming, the center of interest has been focussed on the window grille. Inside the 9" wood-carved jamb, the *reja* is 3'8½" wide by 5'6¼" high. All vertical bars are ½" square, twisted, while horizontal members are 1⅛" x ⅛". Top and bottom bars are 1⅜" x ⅝".

Another grille is shown on page 359, that from a window in the Scuola di San Giorgio, Venice. It is a particularly typical example of wrought iron expression, as shown by the detail drawing. The parts are held together by bands, not riveted as in cast iron. The frieze between the capitals offers a pleasant variation from the lower portion, while the lunette is an achievement all by itself.

Editors' note: The next installment will treat of the characteristics of wrought iron in the forms best suited to it.



Arcus Marci Aurelij Imp. ex ejus archetypis, efformatis antequam destrueretur ob ampliandum hippodromum. A, B Anaglyphi qui asservantur in aedibus Capitolinis. C C lumna Cochliodes ejusdem Marci
Vide indicem ruinar. num. 29.



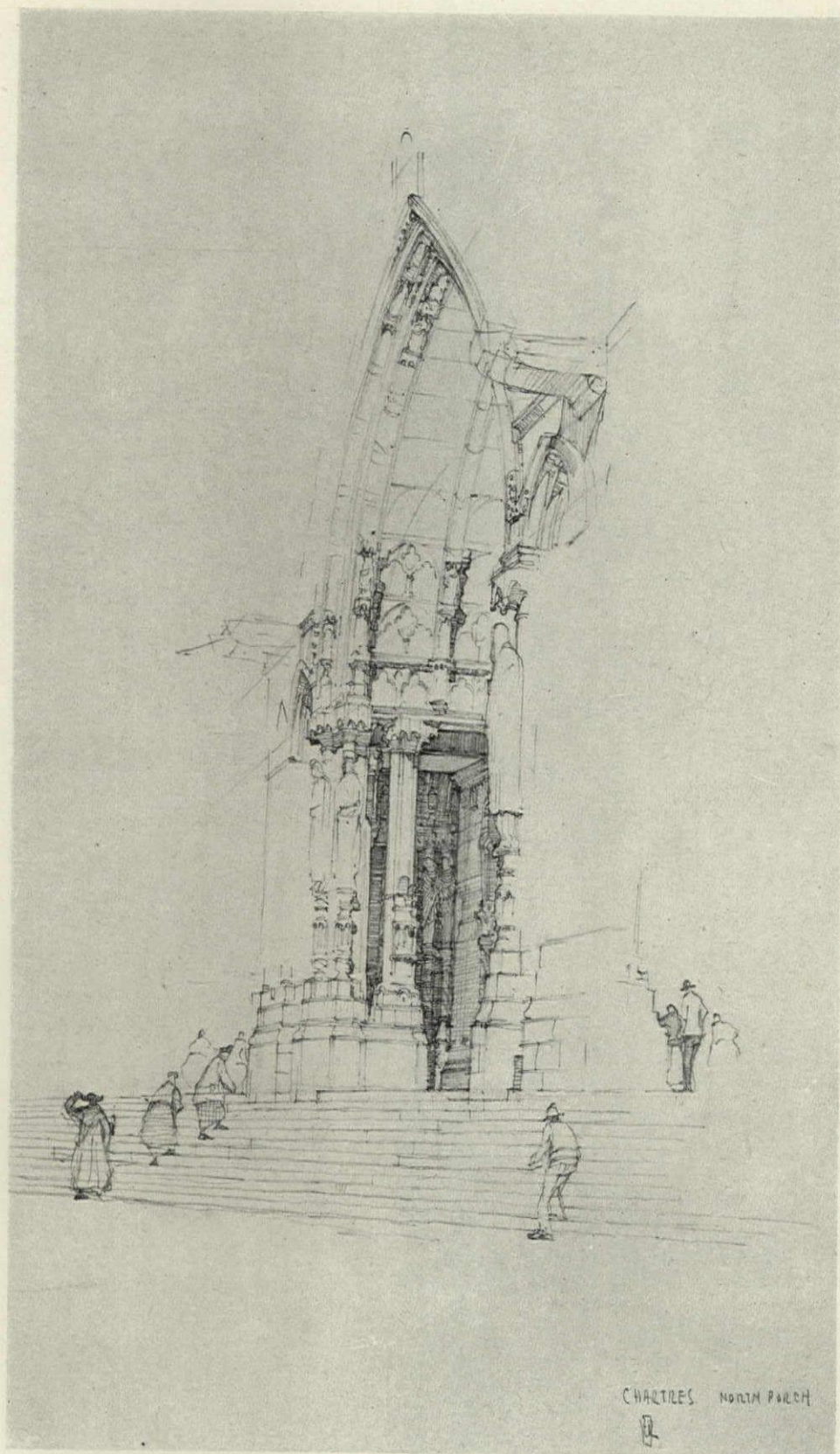
MEASURED DRAWING BY MAURICE GAUTHIER
FONTAINE DE LA CROSSE AT ROUEN

PLATE XVIII

VOLUME VII

NUMBER 6

*The measured drawing shown in this plate was
made by Gauthier as a student in the atelier
Rédon of the Ecole des Beaux Arts.*



DRAWING BY LOUIS C. ROSENBERG
NORTH PORCH, CHARTRES.

PLATE XIX

VOLUME VII

NUMBER 6

Louis Rosenberg's work is well known to the readers of Pencil Points and needs no comment. The sketch shown in this plate was done in 1924 on his last sketching trip abroad.



BAS-RELIEF BY EDMOND R. AMATEIS
MADONNA OF THE JEWEL

PLATE XX

VOLUME VII

NUMBER 6

This piece of relief sculpture, the work of Edmond R. Amateis, was executed when he was in Rome as a Fellow of the American Academy. The panel is carved in white Serravezza marble and the beautifully designed frame, also the work of the sculptor, is in gilded and polychromed wood. The size of the panel is 21" x 29".



CHARCOAL DRAWING BY F. HOPKINSON SMITH
ST. ETIENNE DU MONT, PARIS

PLATE XXI

VOLUME VII

NUMBER 6

F. Hopkinson Smith, whose versatility enabled him to achieve fame both as a writer and as a painter, worked in many mediums. This plate shows one of his charcoal sketches done on gray paper with a few touches of gouache for highlights. The drawing is reproduced through the courtesy of Stanley A. Sweet.



RENDERING IN OPAQUE WATER COLOR BY HOWARD GREENLEY

Size of Original 11 $\frac{3}{4}$ " x 16 $\frac{1}{4}$ "

Show Room for Colgate & Co., New York

Howard Greenley, Architect

PENCIL POINTS
SERIES
of
RENDERINGS
IN
COLOR

HOWARD VAN DOREN SHAW

MAY 7, 1869—MAY 7, 1926.

HOWARD VAN DOREN SHAW was born in Chicago, Ill., May 7, 1869, the son of Theodore A. Shaw and Sarah (Van Doren) Shaw. He received his B. A. degree from Yale University in 1890 and from the Massachusetts Institute of Technology in 1893. He married Frances Wells of Chicago in 1893, and started to practice his profession in Chicago in the same year. He was a Fellow of The American Institute of Architects, a member of the executive committee of the Art Institute of Chicago, chairman of the Illinois State Art Commission.

Upon the fifty-seventh anniversary of his natal day, Howard Shaw started on his long journey into the Beyond. He was still young—young in years and in heart; but years and heart were ripe in experience and achievement. He was in his prime, and his joy in life and his enthusiasm had not paled. Why should they pale in one who was gifted as was he, and to whom the door of opportunity was ever opening. Such opportunities as came to him, however, do not come to one who has not met halfway those which preceded; and Howard Shaw met more than halfway the duties, responsibilities, and the opportunities which came to him.

Howard Shaw was born with a sense of values and of the fitness of things which seldom lapsed and which grew in fullness with the years. He had a strong sense of his obligation to society, and he realized that from him to whom much has been given, much will be expected. Much was given to Shaw not only of the material but of the spiritual, and in both fields he gave freely to his less fully endowed fellows. He looked for good and beauty in lives as in objects; and he found beauty in life, in nature, and in the works of man. He was blessed with a fine sense of humor which helped him over many a difficult pass. For one born to, and educated in, the conventions he possessed and exercised a highly individualistic

mind and mode of expression, and his work was highly characteristic. Even in his more important work he manifested his playful spirit, and in this work the evidences of his fine humor are not wanting.

Howard Shaw created many beautiful home surroundings; and his residences and gardens proclaim his joy in life, and in art as it touched the beauty of

life. He had a lovely home, both in its spiritual and material aspects; a talented wife with whom he enjoyed a rare companionship, and three lovely daughters to whom he was intensely devoted. These intimate facts of his life must be noted, for they colored his work, and other and outside lives were the better conditioned because of his own happiness. He was generous in nature and deed, and friendship irradiated from his personality. One cannot speak of Howard Shaw's works without speaking of the man; and one cannot speak of the man without considering his works, for the man is in and of them.

That vortex of human energy known as Howard Shaw has been dissipated; but the impulse throbs in ever-widening circles.

Those who have felt the thrill of the throb will not forget but must, perforce, relay the message into other lives. The work still stands radiating the spirit of the man. They are happy who felt the emanation from the person and still can feel it in the work.

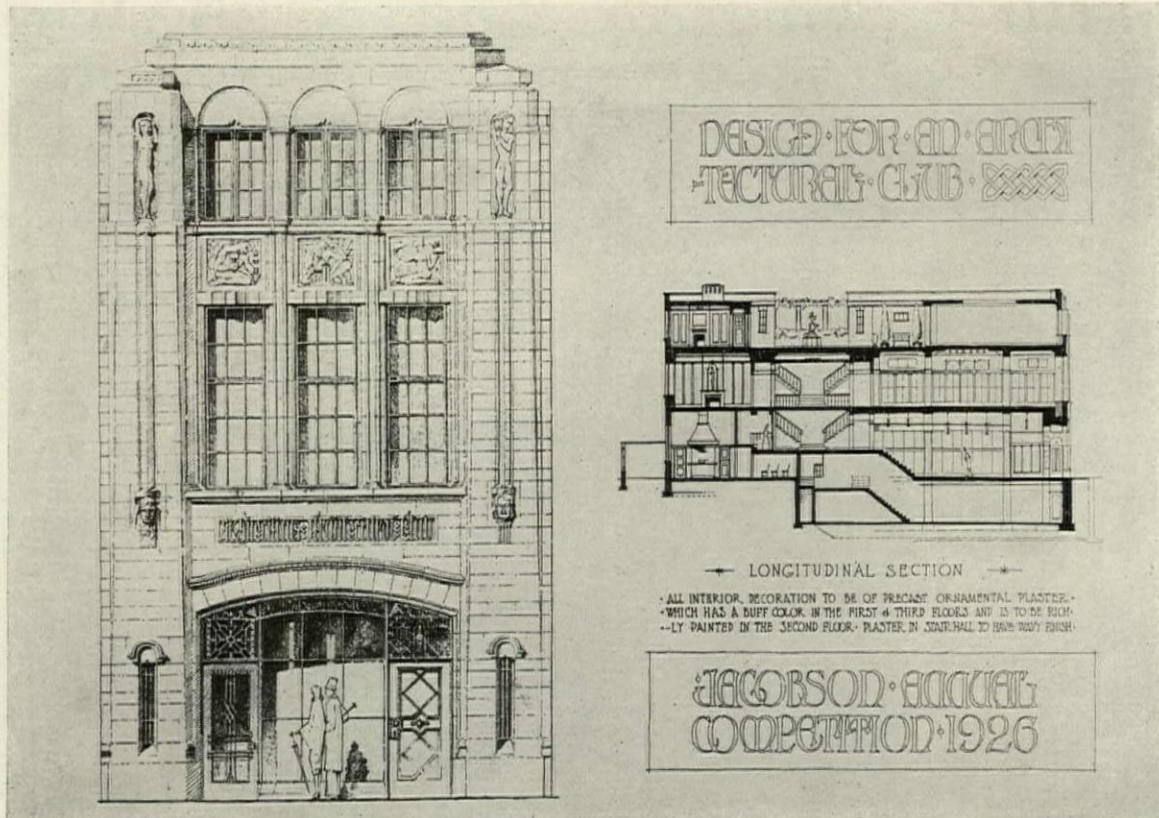
It was fitting that The American Institute of Architects, whose highest standards he upheld so persistently and manfully, should recognize Howard Shaw's merits and should have conferred upon him, as it did at the convention which was just about to close its sessions at the time of his death, the gold medal of the Institute, the highest award in its power to bestow.

Irving K. Pond

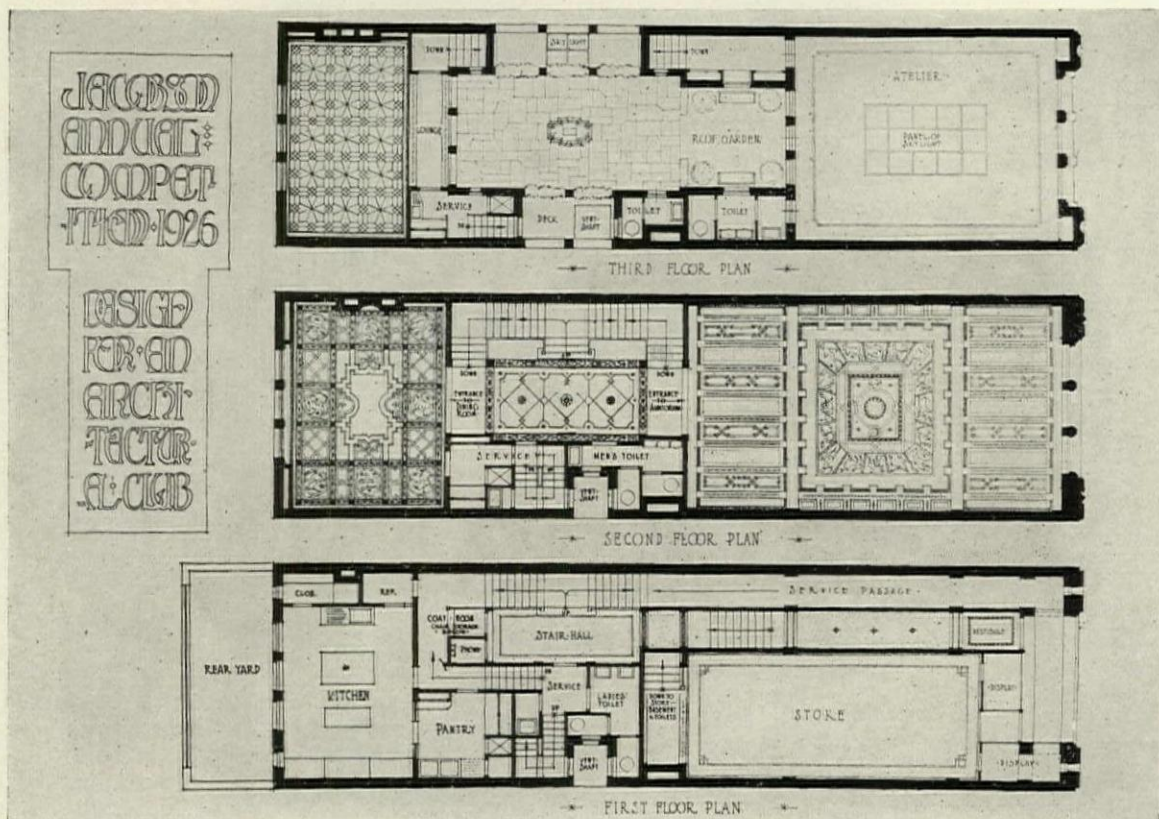


HOWARD VAN DOREN SHAW
Sylvia Shaw Judson, Sculptor

PENCIL POINTS



JACOBSON ANNUAL COMPETITION FOR 1926



PRIZE WINNING DESIGN, BY ALFRED KASTNER, NEW YORK CITY

REPORT OF THE JURY ON THE JACOBSON ANNUAL COMPETITION FOR 1926

THE JURY FELT THAT requirements of the program made the problem one of the most difficult to solve correctly that has been presented in any competition of this character in recent years, but as the problems involved were exactly those which are presented to the practicing architect by his clients, they felt that the competition was therefore exceedingly interesting and the number of excellent solutions presented, surprising.

It is probable that no solution can fully meet all the requirements in an entirely satisfactory manner; the necessity of two entrances to the Architectural Club as well as one to the shop and a large show window would, if carried to a logical conclusion, result in an entire first story of glass and doors, a thing which is particularly undesirable as the first story of a club of dignified character. Some compromise between the necessity of properly expressing the main purpose of the building as an Architectural Club, and the necessity of providing a shop which would be reasonably attractive to a shop keeper was therefore inevitable, and in making the awards the success of the compromise was to a certain extent the determining factor, since there were a number of plans for the Architectural Club proper which would have resulted in an exceedingly attractive and perfectly practical building.

The Jurors were surprised to find such a high average of thoroughly workmanlike solutions of the problem among the drawings submitted, and while it is not unusual to find in this type of competition many schemes of considerable merit as regards exterior, it is not usual to find such intelligent thought devoted to the purely practical side of the question. There were at least nine sets of drawings which were very seriously considered for the awards and it was only by very careful balancing of the several features of façade, design of the Architectural Club, and treatment of the shop and entrances that it was finally determined to award the first prize to Mr. Alfred Kastner of New York City.

The elevation of this scheme was highly original and exceedingly interesting and, though treated with much freedom, was still of a type which the Jury felt would build in a satisfactory manner. The plan offered a complete solution to the problem, although perhaps not in the simplest manner, and the disposition of the various rooms in the Architectural Club made for convenience and pleasant occupancy of the building. The service arrangement both as to entrances and to service within the building, a very important factor, neglected in some of the plans, was in this thoroughly practical.

The second prize was awarded to Mr. James Edward Agengroad of Philadelphia, whose elevation was of good character and well composed even if somewhat too archaeological. The plan was simple and direct; the treatment of the shop was

adequate although the service entrance was not considered entirely satisfactory.

The third prize was won by Mr. Alfred Thompson Granger of St. Petersburg, Florida. The design of the exterior of this building was perhaps the most interesting of all those submitted, but in spite of the Jury's admiration for the façade it was not possible to award this contestant a higher place because of certain faults in the plan and a specialized solution of the service entrance. While the program did not specifically state that no alley way could be considered, several contestants assumed an alley way for service entrance, and while it may be thought by the contestants that the Jury lays too much stress upon a comparatively minor point, it must not be forgotten that the correct solution of this minor point involved very great difficulties as to the major points, and the contestant who did not adequately provide for service was at a very great advantage over those contestants who interpreted the program in its true sense, as a building on an inside lot. Mr. Granger's treatment of the shop front was interesting but one to which all merchants would object, and for these reasons the third place was the highest that the Jury felt could be given even to so interesting a conception.

Although the program did not call for the award of mentions, there were three sets of drawings which were of such great merit that the Jury felt especial attention should be called to them and for that reason have mentioned: First, Mr. S. M. Kurtz of New York City, who had a plan of usual excellence with very interesting interiors, but whose elevation did not fully express the character and quality of the building.

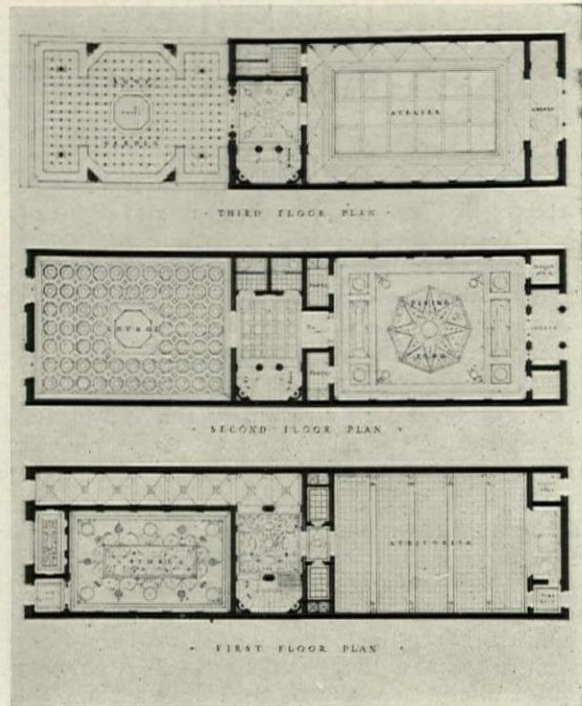
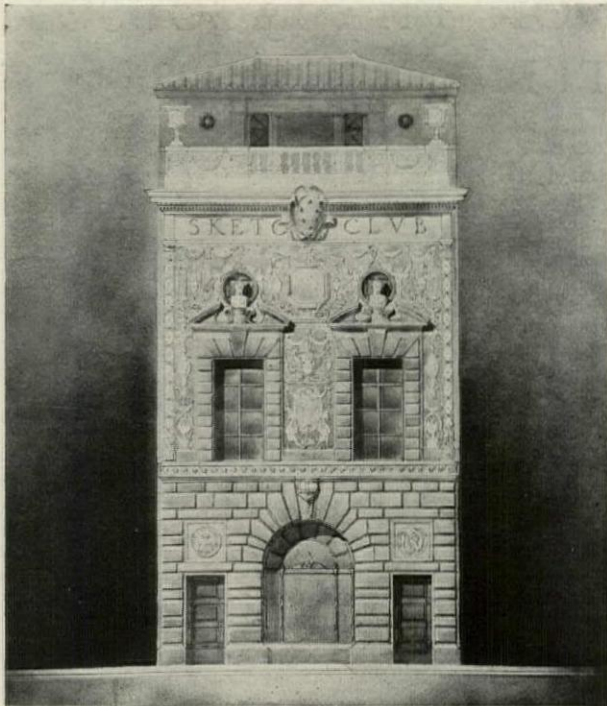
Second mention was awarded to Mr. Albert Sturr of New York City, whose general scheme was exceedingly good both as to plan and elevation, although the treatment of the shop front left much to be desired, and the stairway was distinctly forced. The Jury presumed that Mr. Sturr desired to make the interior a sort of museum of Architectural styles, but felt that a club house should be of a much more harmonious character than would result from such a confusion of schemes.

Third mention was awarded to Mr. F. J. Lippell of Buffalo, who presented perhaps the best treatment of the store front, and the difficult problem of service and club entrances, but the Jury believed that the plan of the building beyond the entrance was far too complicated especially in the arrangement of the stairway.

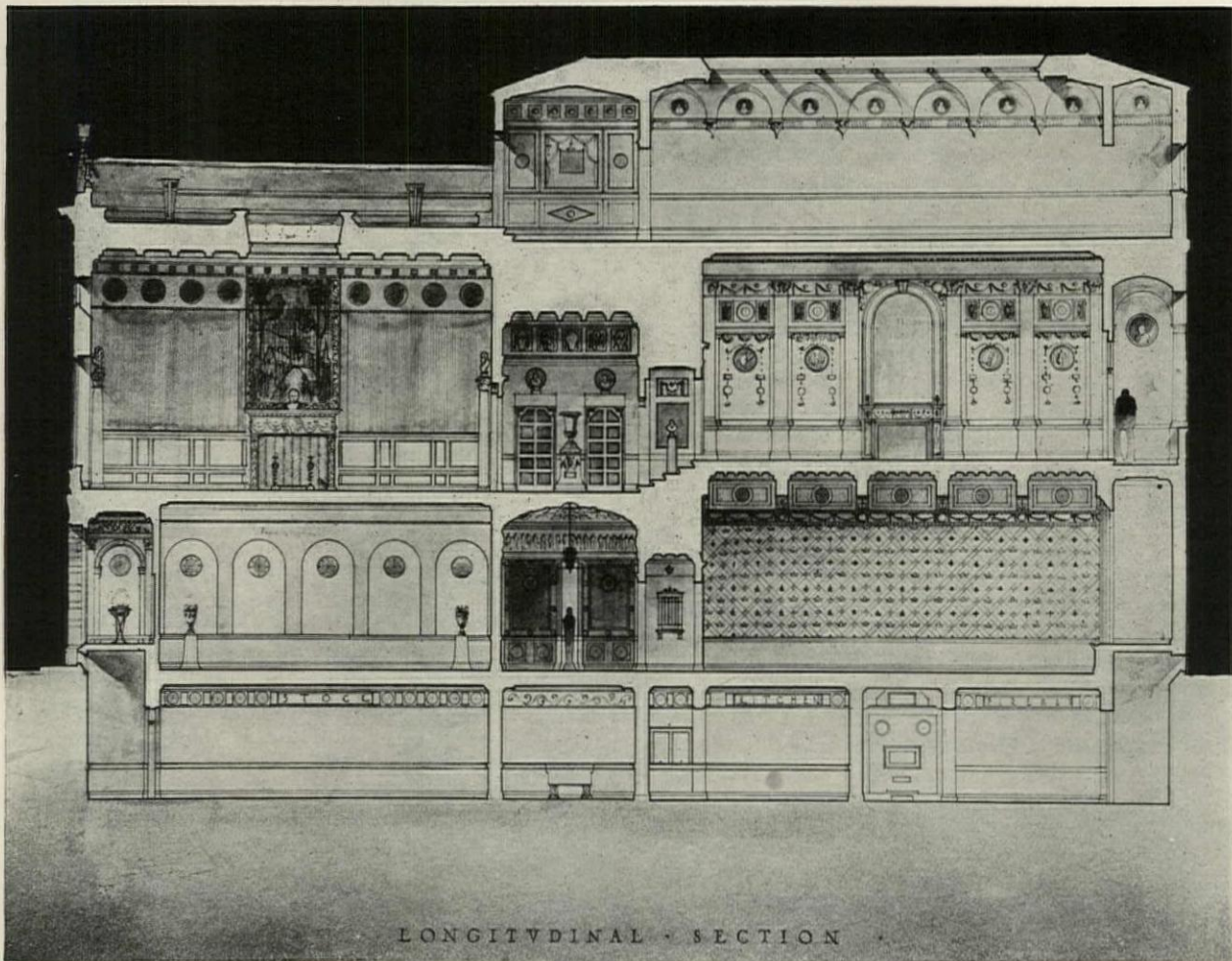
There were many other schemes submitted about which the Jury would have liked to speak, but since space does not permit, they desire only to express to the contestants as a body, their appreciation of their intelligence and ability.

Jury of Award { AYMAR EMBURY II
HOWARD GREENLEY
RALPH REINHOLD

PENCIL POINTS

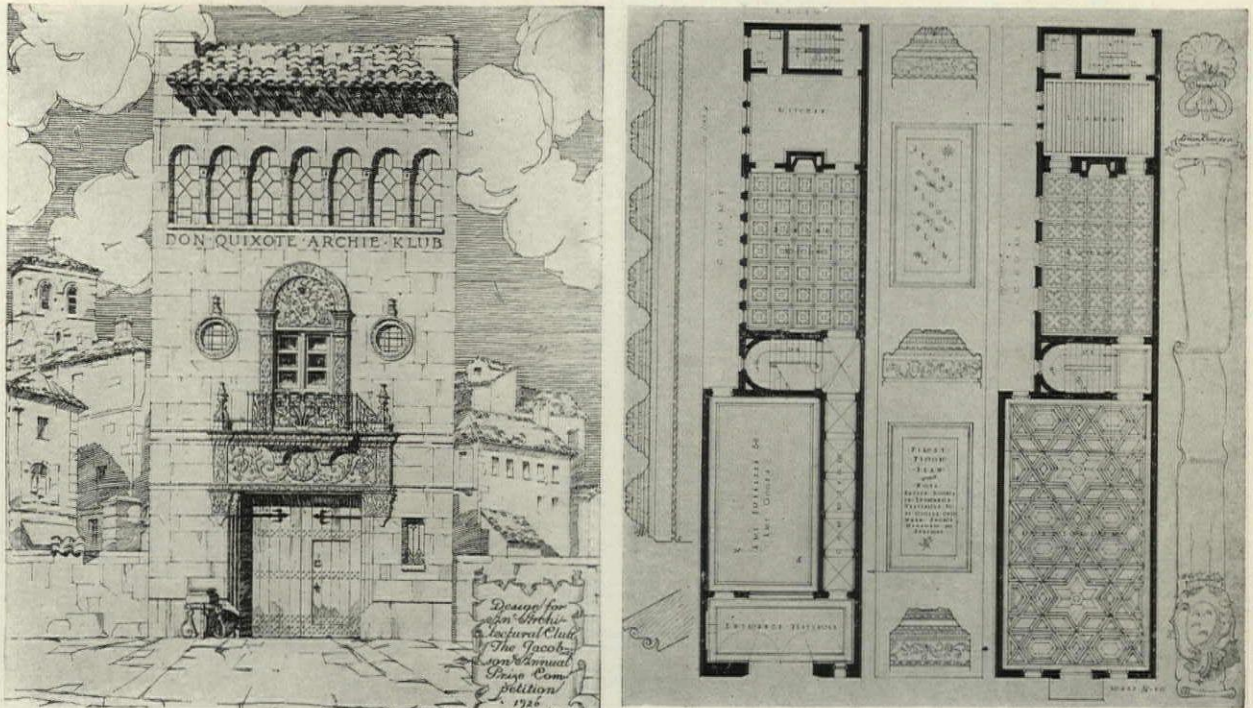


JACOBSON ANNUAL COMPETITION FOR 1926

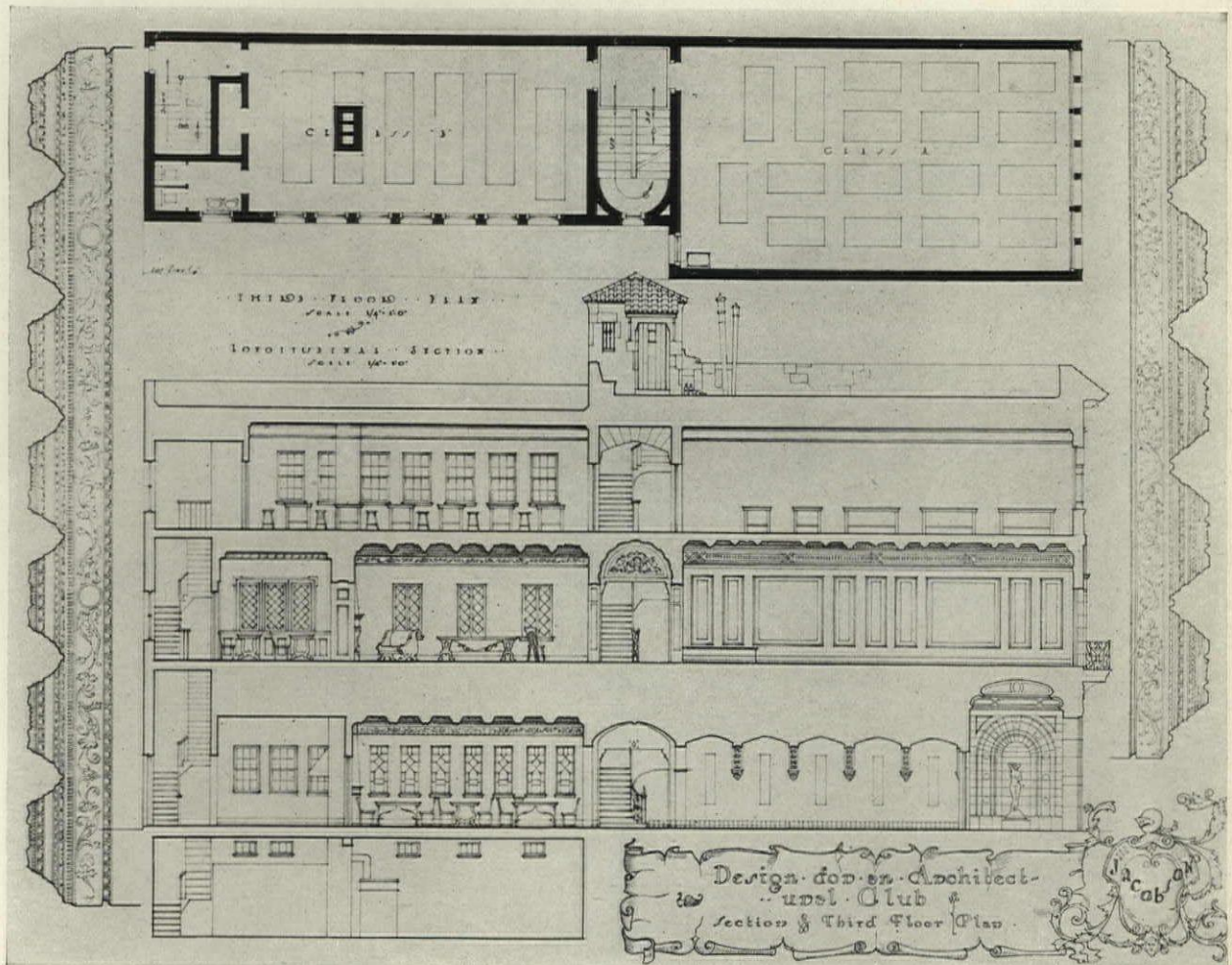


SECOND PRIZE DESIGN, BY JAMES EDWARD AGENGROAD, PHILADELPHIA, PA.

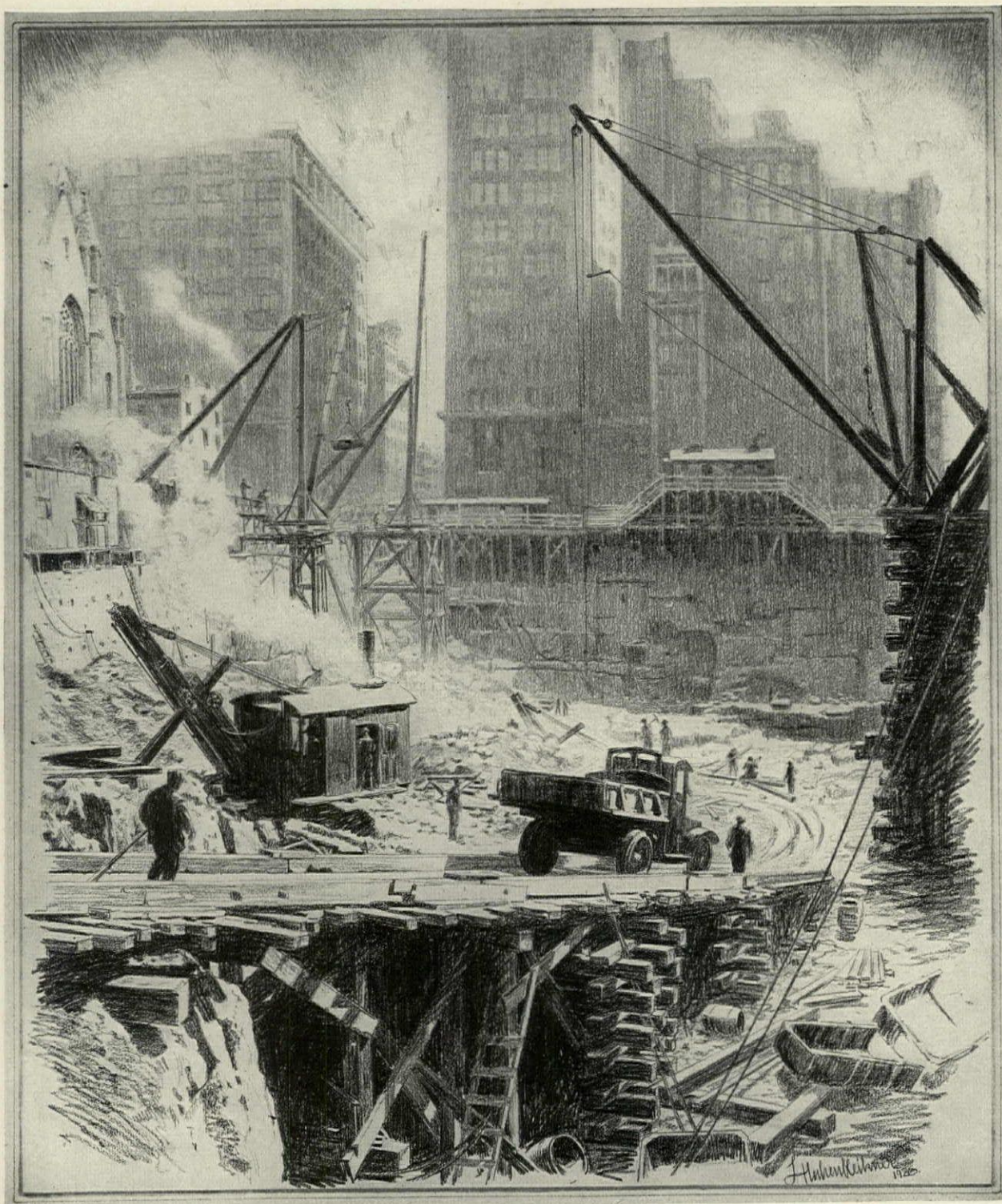
REPORT OF THE JURY



JACOBSON ANNUAL COMPETITION FOR 1926



THIRD PRIZE DESIGN, BY ALFRED THOMPSON GRANGER, ST. PETERSBURG, FLA.



PENCIL DRAWING BY LOUIS HECHENBLEIKNER
SITE OF MADISON SQUARE GARDEN AS IT APPEARS TODAY



WHITT LINGS

THE NEW YORK ARCHITECTURAL CLUB, INC.

SOME VERY IMPORTANT DECISIONS were made at a recent meeting of the Board of Directors, among which, one in particular, should be of interest to all members, and especially to prospective members.

The Board, after considerable deliberation, has fixed an initiation fee of \$5.00 for all new members making application for membership in the club on and after July 1st, 1926.

There seems to have been some misunderstanding among the club members as to when their dues went into effect and for what period of time they applied. In order to clear up this point, the Board has gone on record with the following decision, and we hereby notify all our members to please note same, and be governed accordingly:

The fiscal year of the club is from July 1st to June 30th of the following year. The membership dues are \$10.00 per year, payable in advance either quarterly, semi-annually or annually. A quarter year will be the minimum time period in calculating dues. All members will pay dues starting with the quarter in which their membership application is dated, and will run from then on continuously on the yearly basis, regardless of when the fiscal year begins and ends. Any of the present applicants who shall not have paid in at least a part of their dues by July 1st, 1926, after having been notified to do so, *will be considered as new members* after July 1st, 1926, in which case they will have to pay the \$5.00 initiation fee.

The club rooms are fast nearing completion. At the present writing, the lounge room and entrance foyer wall treatment is finished, and the result is surprising, to say the least. The walls are done in "Craftex," finished with a very effective Spanish plaster texture. A coat of very light yellow paint was applied over this as a primer, after which the glaze was applied, starting at the base of the wall with a warm reddish-brown, fairly dark, and grading lighter in tone toward the ceiling, where it finishes in a very light yellow-pink at the cornice, giving the room a very cozy and warm feeling. In the very near future everything should be finished, when we look forward to some sort of a house warming party, and some very enjoyable times thereafter.

The Atelier part of the club is coming along in good shape, about everything that may be required having been contracted for and being delivered right along, so that by the time this number of the magazine is issued, we expect the Atelier to be complete in every detail, making it the best equipped Atelier in New York, where it will be a decided pleasure for our boys to work, nothing having been spared, and practically everything in it brand new. In previous numbers we have given quite complete accounts regarding the management of the Atelier, the Patrons, the ideals and aims.

BOWLING LEAGUE DIVISION

The Architectural Bowling League of New York finished the tournament schedule for 1925-26, on Thursday, April 29, ending with the 3-man team tournament.

This tournament ended in tie for first place between the offices of Donn Barber and William H. Gompert, each team having won 16 out of the 19 games scheduled. To decide the championship in this class, it was decided to have these two teams bowl 3 games, the total pinfall to decide the winners. The deciding games were rolled on Monday evening, May 10th, on Thums Alleys, in which the Donn Barber team brought in a decisive victory.

Team high score was rolled by the office of McKenzie, Voorhees & Gmelin, who scored 601.

The individual high score medal goes to Chas. Ackerman,

of the McKenzie, Voorhees & Gmelin team, for a score of 253.

The individual average medal for this tournament was won by M. R. Johnke of the Donn Barber team, who averaged 187 in 19 games.

Rex D. Read, of the Cass Gilbert team, is the first winner of the beautiful new trophy presented by the Architects' Samples Corporation to the individual all-around champion of the League for the entire season. This is a very beautiful solid silver cup standing 22 inches high, and will become the permanent property of the one that wins it the third time, not necessarily consecutively. Rex's name will be engraved on this trophy, and as a memento, he will also receive a handsome silver platter, which is also presented by the Architects' Samples Corporation of this city.

HENRY SASCH, *Secretary*,

THE ARCHITECTURAL TENNIS TOURNAMENT OF NEW YORK

ARRANGEMENTS HAVE BEEN made to reserve courts for the first round matches, which will be played on the 19th of June.

The Championship Singles for the William Adams Delano Trophy is limited this year to sixty-four entries.

The draw in the Championship Singles will be seeded with Kayser, Kraus, Lawson, and McBurney, semi-finalists in the 1925 singles.

FEES—for the Singles are \$3.00 per entry.

Entries will close Monday, June 14th, at 5:00 P. M.

PRIZES—The winner will obtain possession of the Delano Trophy for one year and will receive a 14 kt. gold medal.

Gold filled medal to runner-up.

2 sterling silver medals to semi-finalists.

4 bronze medals to winners of qualifying round.

CONSOLATION SINGLES

All those losing their first round matches will be automatically entered in the Consolation Singles.

Sterling silver cup to winner.

Sterling silver medal to finalist.

2 bronze medals to semi-finalists.

Any players defaulting their first round matches in the Championship Singles, will not be eligible for the Consolation Tournament.

Additional entries in the Consolation Tournament will be \$2. per man.

These entries close Monday, June 21st, at 6:00 P. M.

DOUBLES

PRIZES—2 sterling silver cups to winning team.

2 sterling silver medals to finalists.

4 bronze medals to semi-finalists.

Teams to be composed, where possible, of two men from the same office. Where this is impossible, an individual entry may be made, and a partner assigned by draw from the other individual entries.

Entries for doubles close July 6th.

FEES—Entry fees—\$5.00 per team.

Individual entry—\$2.50.

The draw in the Doubles will be seeded with Kayser and Faulkner, and, McBurney and Terhune, finalists in the 1925 Doubles.

The cups and medals will be displayed in the lobby of the Architects' Building, 101 Park Avenue, through the courtesy of the Architects' Samples Corporation.

Address inquiries and checks to: A. F. Darrin, *Chairman Architectural Tennis Tournament of 1926*, Room 1406, 247 Park Avenue, New York City.



PENCIL RENDERING BY J. MACGILCHRIST

A Shooting Lodge for Dr. and Mrs. J. A. Victor, Hampton Bays, L. I. Chas. M. Hart, W. Lynn Patton, Arch'ts.

THE AMERICAN ACADEMY IN ROME

From a letter received by C. Grant La Farge from Gorham P. Stevens, Director, we quote the following:

"OUR LARGE CLASSICAL SCHOOL has shrunk to just one student in Rome; all the rest, professors included, are away traveling. Professor Van Buren and his party are now in Greece, and about half of the members of the School of Fine Arts are also traveling.

"The list of our visitors is, on the other hand, unusually large; for this is the height of the season for American travelers. Mrs. Prentice of Princeton, of the Garden Club of America, is here; she is the chairman of the committee which is trying to raise an endowment fund to maintain a second Fellow in landscape architecture at the Academy. A brother of Ex-President Taft has called, and so has Professor George H. Chase, of Harvard, and Mrs. Hawes who conducted important excavations in Crete some years ago. Then we may mention the visits of Mr. Abraham Flexner of the Rockefeller Fund, of the sculptress Mrs. Vonnoh, and of Mr. and Mrs. Herbert L. Satterlee.

"Mr. William R. Mead is in Northern Italy, on Lake Garda.

"Among the last lectures in the Classical School was one of especial interest by Miss Lawler, Fellow of the Academy. Her subject was the Greek dance; and a few days after the lecture she favored us with a physical demonstration at the Villa Aurelia. The dance, which she herself had reconstructed from a study of Greek sculpture, vases etc., was exceedingly interesting and graceful.

"The Academies in Rome affected by the proposed new taxes have made a combined protest. The American Ambassador sent an excellent *note verbale* to the Ministry of Foreign Affairs.

"Mrs. Stevens and I expect to leave for an archaeological congress in Syria on Friday next. We have received reassuring telegrams from both Jerusalem and Beirut. We expect to see everything on the program, with the exception of Damascus. Palmyra and Baalbek are the chief places of architectural interest to me."

A CORRECTION

The sketches published on pages 316 and 317 of the May issue were made by Mr. Chrystie Douglas of Montreal, Canada, and not by Mr. Ralph Warner Hammett to whom they are erroneously attributed.

THE T SQUARE CLUB OF PHILADELPHIA

THE ANNUAL MEETING of the T-Square Club was held at the club house Wednesday evening, May 5th, 1926. Before the meeting, dinner was served and as our guest we had present Mr. Howard Strong of the Regional Plan Federation who, after the business session, engaged in a most helpful talk on Regional Planning and its growth. After the talk a lively and helpful discussion ensued making the evening one of note for those present.

The following officers were elected:

President	Paul P. Cret
1st Vice-President	Roy F. Larson
2nd Vice-President	Louis F. McAllister
Treasurer	Roy Banwell
Secretary	Henry G. Rieber
Director	George Daub

The club is looking forward to an active year with increased activities in all fields. The Grub Club continues to serve excellent lunches daily which are well attended.

The ATELIER which is the most important field of club endeavor has, through the able leadership of Mr. Grant Simon, nearly completed a most successful year and we hope to find in its list of members for the coming season many interested young men ready to take up the work and carry on in the usual fashion.

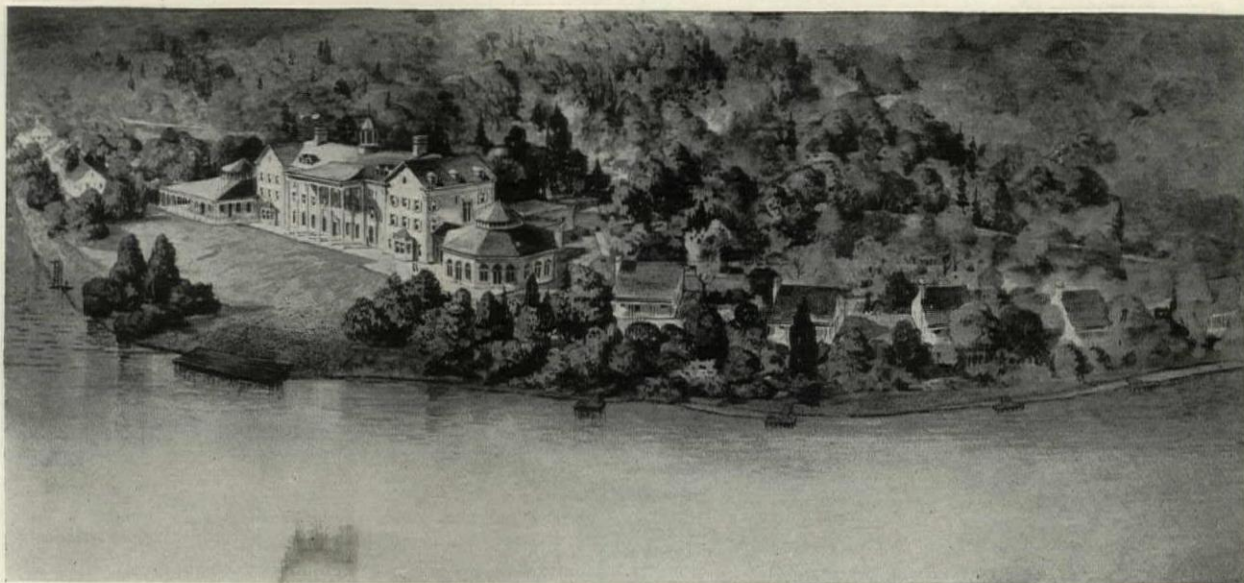
The present year showed an increase in membership greater than for many years past and the award of scholarships to four students of the University of Pennsylvania.

The Exhibition Committee, with Harold M. Saunders as chairman, showed the club what could be done in the way of many and varied exhibitions which decorated the club house walls throughout the entire season.

BOOKS WANTED

THE PUBLISHERS OF PENCIL POINTS would like to hear from those prepared to submit manuscript for books suitable for publication in the PENCIL POINTS' LIBRARY. It is not necessary that the author have an established reputation as a writer as we are quite as willing to consider copy from those who have never had their work published as from those who have.

What we especially desire are books which will primarily be helpful to the great body of architectural draftsmen of the country. So if you have a book entirely or partly completed, or even an idea and outline for a book not yet started, we shall be pleased to consult or correspond with you concerning its publication.



WATER COLOR RENDERING BY J. MACGILCHRIST

Hotel and Cottages on Lake Winnepesaukee at Wolfeboro, N. H. Chas. M. Hart, W. Lynn Patton, Arch'ts.

EXHIBITION OF THE ARCHITECTURAL CLUB OF NEW HAVEN

CURRENT CONNECTICUT ARCHITECTURE was representatively presented in the Seventh Annual Exhibition of The Architectural Club of New Haven, held in the Trowbridge Mansion, New Haven, for two weeks beginning April 17. Work lent by thirty of the leading architects of the state was on view. Despite the rather closely circumscribed area from which exhibits were available the show was amazing in its appeal to both the public and to members of the architectural profession.

Spacious, high studded rooms, and the wide halls of a fine old city residence provided a setting of unusual charm in which to hang the collection. The opportunity all this afforded was made much of in the arrangement of the exhibits, for they were so grouped as to sustain interest throughout.

While the annual shows of the New Haven Club are primarily designed to exhibit the work of Connecticut architects it should be made manifest even to the casual visitor, that in this one at least, some effort was expended toward achieving educational value. For example, in addition to the work of the Connecticut architects there was on view some typical designs and photographs of completed buildings by such well known architects as Delano & Aldrich, John Russell Pope, Thomas Hastings, and Taylor & Levi of New York, which offered a logical basis of perspective in viewing the other exhibits.

Of distinct educational value too, was the large and varied collection of decorative elements and material shown. This included stained glass windows, mosaics, hand forged iron, pottery, tapestries and other fine fabrics from the ateliers of such representative houses as: Willet's Studios, Philadelphia; Charles J. Connick, Boston; Tiffany Studios, New York; The George Hardy Payne Studios, Paterson; Ravenna Mosaics, Inc., New York; Fulper Potteries, Flemington, and Heinigke & Smith, New York.

Stressing the importance of architectural quality in designing small houses the Exhibition Committee again this year conducted a competition for small house plans in which prizes amounting to \$800. were distributed. It was provided that the designs entered be for houses of concrete wall construction, and the collection of plans obtained formed one of the interesting features of the exhibition.

For the second time since it was established by the Club, the Leoni W. Robinson Memorial Medal for excellence in architecture was awarded. This year the jury, headed by Prof. Sheppard Stevens, Department of Architecture, Yale University, was unanimously of the opinion that the medal be given Orr & del Grella, architects, of New Haven. The award of the jury has the general approval of both the public and of the local members of the architectural profession. The jury also unanimously recommended that Honorable Mention be given Theodate Pope, (Mrs. John

W. Riddle), Farmington, for her work as shown in this exhibition, Avon, Old Farms, and to Walter John Skinner, Stamford, for his Hinks Bros. Banking House, Bridgeport.

Among others of the architects whose work was on view were: Delbert K. Perry, New Britain; Charles S. Palmer, New Haven; W. F. Brooks, Hartford; Butler & Provost, Stamford; Alfred W. Boylen, New Haven; A. Raymond Ellis, Hartford; Brown & Von Beren, New Haven; Lorenzo Hamilton, Meriden; Joseph W. Northrop, Bridgeport; Joseph A. Jackson, New Haven; Sunderland & Watson, Danbury; Whiton & McMahon, Hartford; Norton & Townsend, New Haven; Charles Wellington Walker, Bridgeport; Theodore O. Appel, New Haven; Raymond Percival, Forestville; R. W. Foote, Jacob Weinstein, Walter R. Shiner, Harold H. Davis, New Haven.

The collection of designs by students of the Department of Architecture, Yale University, many of which had been awarded medals by the Beaux Arts Institute, contributed interest to the exhibition.

In the second competition for small house designs conducted by the Exhibition Committee, The Architectural Club of New Haven, as a feature of the Club's annual exhibition, distributed cash prizes amounting to \$800. The jury of award was made up of the following named architects: Horace B. Mann, New York, Theodate Pope, (Mrs. John W. Riddle) Farmington, Conn., and Charles E. Cutler, Westport, Conn.

Robert L. Walldorff, New Haven, was given first place, H. Story Granger, New Haven, second, and Elbert J. Richmond, third. The four remaining prizes were awarded without place.

Mr. Walldorff, whose design sent to the Club's competition of last year was given an Honorable Mention, is a native of Olean, N. Y. On completing his studies in the department of architecture at Syracuse, Mr. Walldorff entered the office of Dwight James Baum, New York, and continued there for two years.

On severing his connection with the office of Mr. Baum, Mr. Walldorff went to New Haven, Conn., where he is now associated with the office of Charles Scranton Palmer.

ROME PRIZE COMPETITION IN ARCHITECTURE
IN THE PRELIMINARY COMPETITION for the Fellowship in architecture the problem was the designing of buildings for a School of Fine Arts in a University. As a result of this competition the jury selected the following as final contestants: C. D. Badgeley (Columbia), D. V. Freret, (Cornell), H. F. Pfeiffer (Yale), P. F. Taylor (Princeton), V. Viscariello (Armour Inst.), J. W. Wood, Jr. (Harvard).

The final competition will close on May 15th.

Fellows appointed in other branches this year are the following: in classical studies, John Day, Frederick La Motte Santee and Lillian Starr; in musical composition, Robert L. Sanders; in painting, Deane Keller; in sculpture, Joseph Kiselewski.



THE ARCHITECTS' MAY PARTY

THE UNIVERSITY OF MICHIGAN

THE STUDENTS OF ARCHITECTURE at the University of Michigan gave their Annual May Party on Friday, May 7th, in the Barbour Gymnasium. William E. Preston's design—an under-sea dream world—won the competition for the decorative scheme for the party. The design was selected as the best from a score or more by the architectural faculty and the idea was carried out by the whole student body working under the direction of Ben Wyatt.

SAN FRANCISCO ARCHITECTURAL CLUB

A BANQUET FOR THE MEMBERS of the Club, as well as members of the profession not belonging to the Club, heralded the opening of the new quarters of the San Francisco Architectural Club at 523 Pine Street. A comparatively large attendance was enjoyed, and an evening was spent of which might be said, "a good time was had by all." This evening was the initial opening of the Grand Opening Week, the remainder of the week being spent in educational and social affairs, climaxed by a dance given for the members of the Club and their friends.

Now that we are established, and have an incentive for Club spirit, "Art" Janssen has instigated a Membership Campaign which we feel sure will prove well worth the time and effort of those members entering into the spirit of it. We are looking for big results!

The "Beaux Arts" activity is developing in our Atelier. The members are taking advantage of our new quarters, and will, no doubt, all be humming throughout the season. With the results of this season's work, we hope to have a greater number of "Class A" men in the beginning of the Fall Season.

The resignation of two of our active students was necessitated by their leaving San Francisco. Ed. K. McNinch, one of them, is now in Sacramento where he has joined Starks & Flanders, former members of our club, who are now the correspondents for the "Beaux Arts." Fritz Kruger, the other member, left to join Fred Kramer in New York, where he is developing skyscrapers for York & Sawyer.

News from two of our former students has been received lately. Jack Geering, who is employed by the Peruvian Government, developing Peruvian school buildings in that country, has reported that he is thoroughly enjoying his experience in South America. Word has been received from Orin Bullock, who is studying at Harvard, to the effect that his studies there are most advantageous and that he is getting the most out of them.

GEORGE G. BOOTH FELLOWSHIP AWARDED

THE GEORGE G. BOOTH TRAVELLING FELLOWSHIP in Architecture of the College of Architecture, University of Michigan, has this year been awarded to LeRoy E. Kiefer, '25A, William A. Turnbull, '25A, and Livingstone H. Elder, '26A, dividing the honors of second place. The income of the Fellowship is \$1200, the winner being given considerable latitude of choice as to itinerary and the use of his time.

PERSONALS

LEO STILLMAN, ARCHITECT, has removed his offices to 1993 Jerome Avenue, New York City.

WALTER EARLE BORT, ARCHITECT, has removed his offices to 201-203 Tucker Building, Clinton, Iowa.

CHARLES WELFORD LEAVITT & SON, CIVIL AND LANDSCAPE ENGINEERS, have removed their offices to 285 Madison Avenue, New York City.

STANLEY MOYER PETERSON, ARCHITECT, has removed his offices to 231 17th Street, Wilmette, Ill.

FRANK A. MOORE, ARCHITECT, has removed his office to 607 Fifth Avenue, New York City.

FRANK A. ROOKE, ARCHITECT, has removed his offices to 12 East 41st Street, New York City.

MAY & HILLARD, ARCHITECTS, have removed their office to 607 Fifth Avenue, New York City.

ROSARIO CANDELA, ARCHITECT, has removed his office to 578 Madison Avenue, New York City.

ISADORE E. ALEXANDER AND ROBERT L. BRANDT have opened an office for the practice of architecture under the firm name of Alexander and Brandt, 332 State-Lake Building, Chicago, Ill.

FRED FORNOFF has opened an office for the practice of architecture at 88 North Front Street, Columbus, Ohio.

LAWRENCE A. KOETH has removed his offices to the Bailey Building, Hendersonville, N. C.

FREDERICK WALLICK, ARCHITECT, has opened a new office at Haines City, Florida.

M. C. KLEUSER, ARCHITECT, has opened a new office at 509 Republic Bank Building, Dallas, Texas.

HARBIN F. HUNTER, ARCHITECT, has removed his offices to 1111 Paden Pelton Building, Los Angeles, Calif.

H. P. KOLLINER, ARCHITECT, has removed his offices to Miami, Florida.

SIDNEY H. KITZLER AND LEO M. ZAMORY have formed the firm of Kitzler & Zamory, Architects, 4046 Broadway, New York City.

RITCHIE & WAKELING, ARCHITECTS & ENGINEERS, have opened an office for the practice of Architecture in the Coachman Building, Clearwater, Florida.

PAUL GASSER has removed his office to 13 Real Estate Building, Miami, Florida.

PAUL J. DUNCAN has opened an office at 703 Pacific National Bank Building, Los Angeles, Cal.

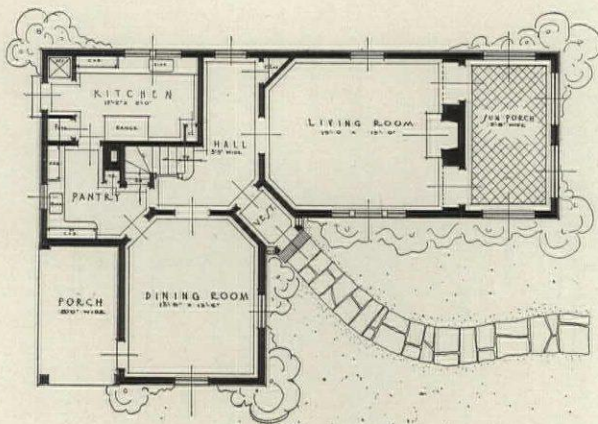


SKETCH BY P. R. WILSON, NEW YORK
Aqua Morta, Venice

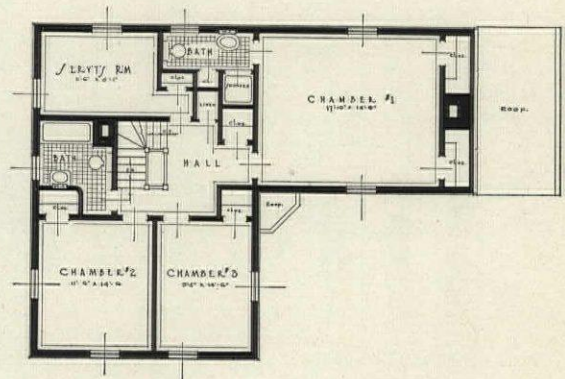
PENCIL POINTS



Perspective



~FIRST FLOOR PLAN~



~SECOND FLOOR PLAN~

HOUSE FOR CHARLES J. TULLY ESQ., NEW ROCHELLE, N. Y.
EDWARD F. FANNING, Architect

HERE AND THERE AND THIS AND THAT

CONDUCTED BY RWR

THINGS ARE PRETTY NICE around here this month. Just about the right proportion of good sketches, amusing cartoons, verse, etc., together with quite a flock of letters from subscribers all around the place telling us that they like PENCIL POINTS better than ever and bidding us, each in his own way, to keep up the good work.

All of which makes us feel very expansive and mellow. There are so many days in the publishing business when things get all mixed up, not to say up-side-down, that we sympathize with the fellow who said that an optimist is a poor fish who doesn't realize how rotten everything is." But we don't feel a bit like that today and we can just let our optimism bubble up and sprinkle around until something goes wrong which, experience teaches us, is likely to happen almost any moment. So we draw a line right here and now!

The prizes this month go as follows:

Class 1. M. H. Gambee

This little item appears where the name of the winner in Class 2 ought to be. Our hands are up and we are calling loudly for mercy. All of which means that Howard D. Plary, Chicago, Ill., was duly awarded the prize for verse this month, but the copy got lost somewhere between the office and the printshop and cannot be found. We hope to print the poem next month.

Class 3. Walter J. Campbell

Class 4. No award

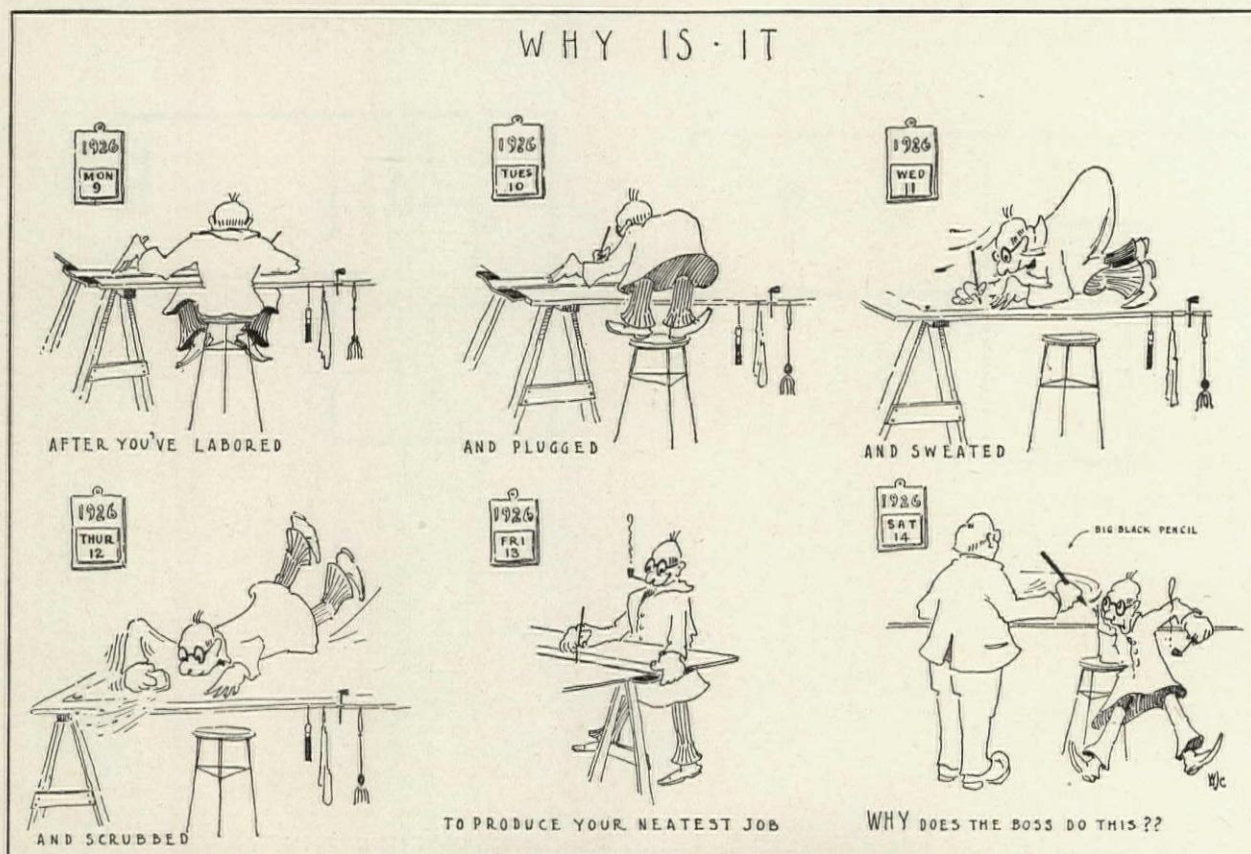
We have had several contributions come to us recently where the name of the competitor has appeared neither on the outside of the package nor upon the inside thereof. It is far safer to do both, for the cover is sometimes roughly handled in the mail and it is true that the envelope and contents are sometimes carelessly separated in this office. And then somebody feels that we have been discourteous or worse, which is not the way we want anybody to feel. So please mark everything plainly and we will do our best to keep things straight at this end.

ROGER B. DAVIS of West Durham, N. C., evidently has a flair for painstaking investigation for he sends us this:

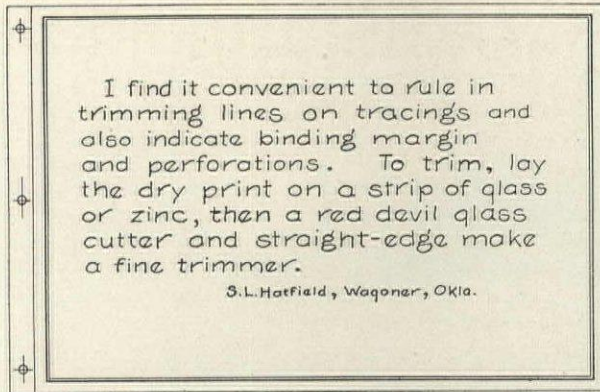
Even in the sixteenth century one had to be careful of bootleg stuff—if the terra cotta frieze of the Ospedale del Ceppo, representing the Seven Acts of Mercy, is to be relied upon.

The sixth panel is entitled, "Thirsty and Ye Gave Me Drink," and the seventh, "Burying the Dead".

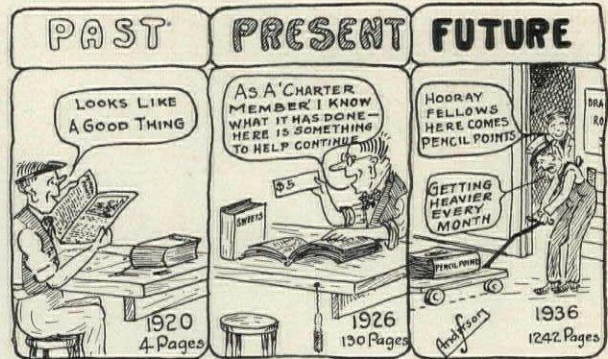
The drawing shown on Plate XXI, page 367, of this issue came to us entitled "The Glory of Chartres." It is, we think, really a sketch of a door of the church of St. Etienne du Mont in Paris. Can any of our travelled readers corroborate or confute our theory?



THIS CARTOON BY WALTER J. CAMPBELL, DANBURY, CONN., WINS THIS MONTH IN CLASS THREE



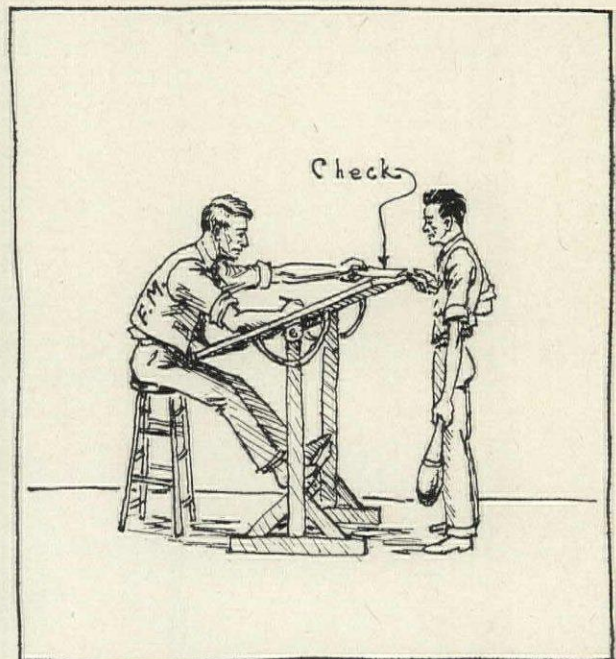
PETER S. L. HATFIELD of Wagoner, Okla., does his bit this-wise. Little useful suggestions like this may be valuable to many a draftsman so if you have discovered a better way of doing some little thing just make a note of it or a drawing, or write some kind of a piece about it and send it along to us.



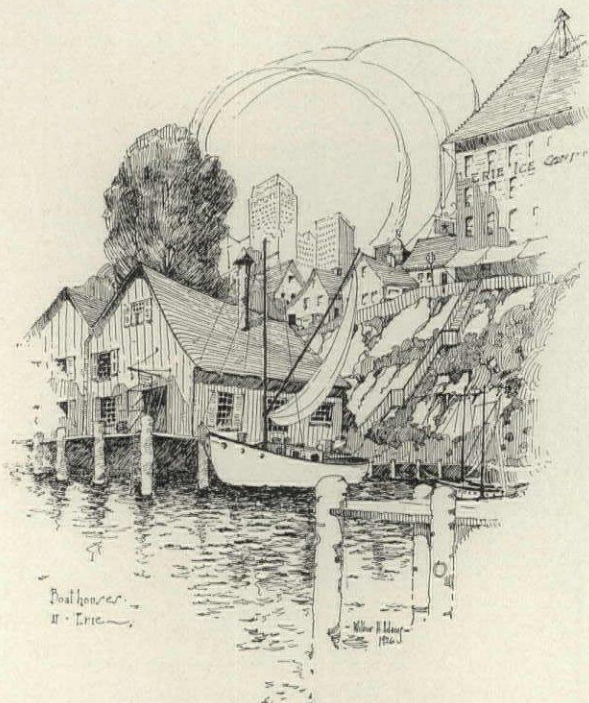
Charter subscriber STEN ANDERSON, Lincoln, Nebraska, in renewing his subscription for three years expresses his feelings in the manner shown above. Thanks for the ad, Brother, but we hope PENCIL POINTS will never compete in size with Sweet's.



We have all heard about architects doing work at home. Here is a picture by our staff artist, Don Goss, revealing the true situation.



Snapshot of PENCIL POINTER R. AU WERTER, Detroit, Mich., caught in the act of securing PENCIL POINTS subscription from F. Miller. Congratulations, say we.



PEN AND INK SKETCH BY WILBUR H. ADAMS

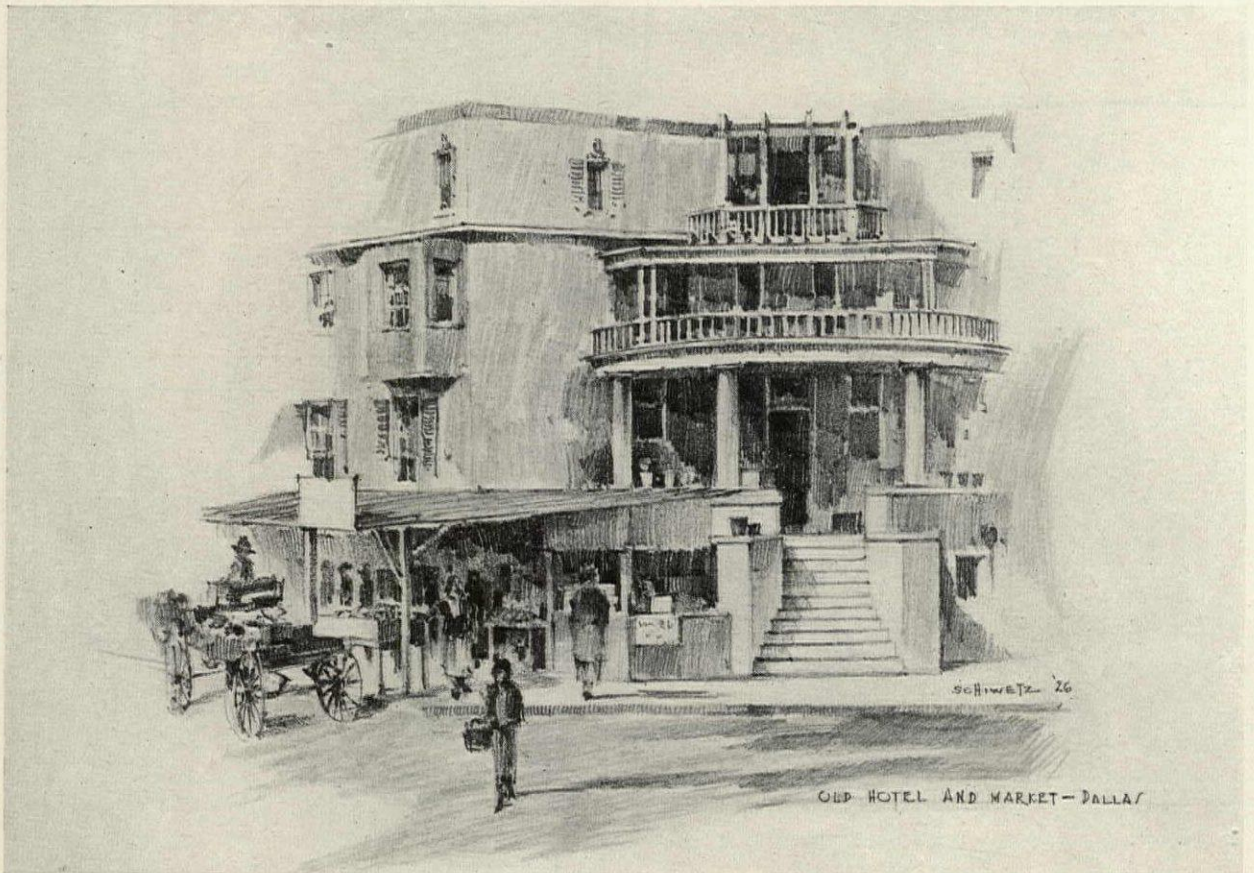


PEN AND INK SKETCH BY W. HONACK

PENCIL POINTS

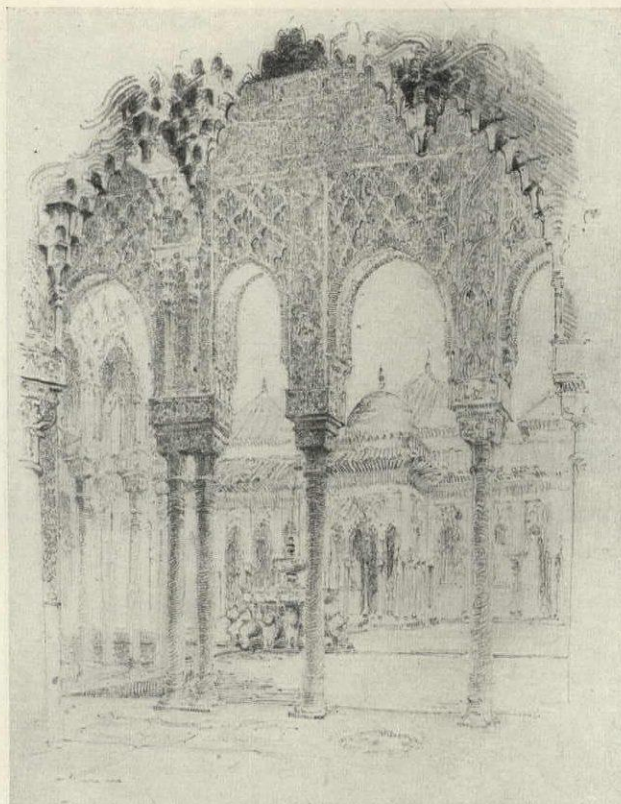


"MONTEREY, MASS."—SKETCH BY M. H. GAMBEE
(PRIZE—Class One, May Competition)



"OLD HOTEL AND MARKET, DALLAS"—SKETCH BY E. M. SCHIWETZ

HERE AND THERE AND THIS AND THAT



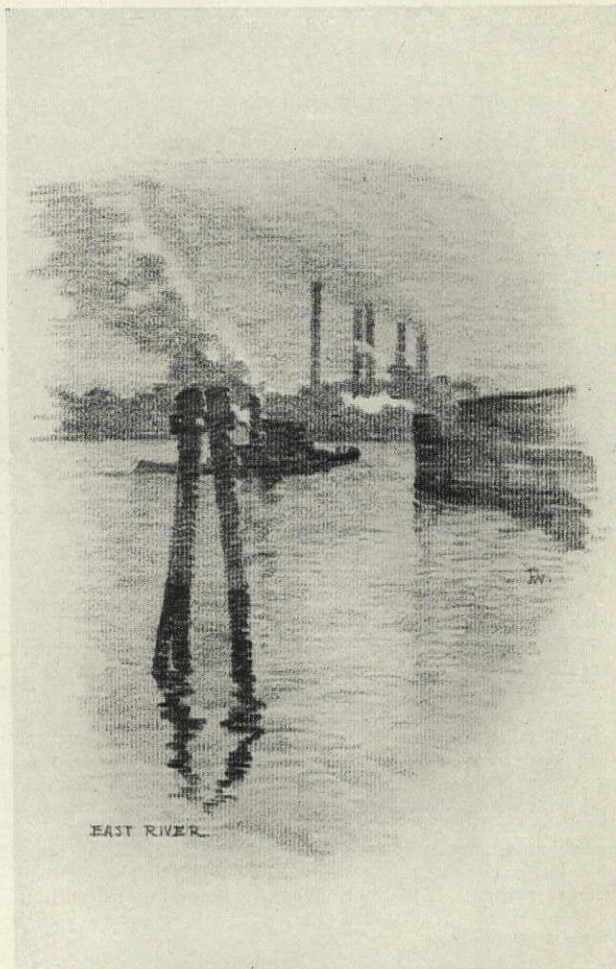
SKETCH BY RALPH WARNER HAMMETT



SKETCH BY M. H. GAMBEE



SKETCH BY ARNOLD R. SOUTHWELL
(Actual size of original—One of a collection for an historical record.)



SKETCH BY ROBERT MOSLEY WILLIAMS
East River



NEW JERSEY TERRA COTTA COMPANY ENTERTAINS DRAFTSMEN FROM NEW YORK CITY OFFICES

WE THINK IT IS A VERY GOOD THING for the producers of the various materials required in building construction to establish and maintain cordial relations with the men in the architects' offices whose daily task it is to decide what materials shall be used and how they shall be employed in order that the best results in the finished building may be secured. The New Jersey Terra Cotta Co. evidently feels the same way about this for they recently invited a number of men from the New York offices to visit their plant. Here is a little story of what happened, together with a group picture of the crowd. We are sure that a good time was had by all and only regret that it was impossible for us to be among those present.

On Saturday afternoon, April 10th, approximately forty draftsmen representing various offices in New York City gathered at the offices of The New Jersey Terra Cotta Company where a buffet lunch was served; after which, they left New York in a sight-seeing automobile to visit the plant. During the inspection trip much interest was manifested by all in the manufacture of the material. After the inspection, the visitors together with the heads of the various departments reported at the Raritan Yacht Club, at which place a banquet had been prepared. A number of speeches were made by the visitors in which they expressed themselves as having had a wonderful afternoon of instruction and pleasure. William Tennant acted as toastmaster.

SECOND ARCHITECTURAL EXPOSITION

The officers of the Architectural League of New York have announced that the annual League Exhibition next year, to be known as the Second Architectural and Allied Arts Exposition, will be held in the Grand Central Palace from February 21st to March 5th 1927. The exposition will be held in the interest of architecture and the allied arts and trades and will be confined to highly selected exhibits.

THE NEW YORK PUBLIC LIBRARY, 476 Fifth Avenue, E. H. Anderson, Director, needs, to complete its files, all the copies of PENCIL POINTS, Volume 3 (1922). Anyone having these copies available is invited to communicate with Mr. Anderson. Here is Mr. Anderson's letter:

We are in receipt of your letter of April 29th stating that it is impossible for you to send us any issue of the "PENCIL POINTS" earlier than that of the present month. As we feel, however, it is most important that we should have a complete file of your publication on our shelves, we are venturing to write again.

We do not wish to annoy you, but as it is our intention to preserve the file permanently, we feel that no effort should be spared to complete it. Do you think that an appeal through the columns of the "PENCIL POINTS" to your readers might be successful in bringing us these numbers? Many people who subscribe for magazines and papers save their copies until for lack of space or for other reasons, they are glad to dispose of them, particularly if they can find a depository where they will be useful and appreciated. As a result of this habit of saving publications, many old files come to the Library as gifts, both solicited and unsolicited, and it is seldom that publishers make an appeal for us to their readers without satisfactory results. Anything further you may do towards supplying us with the missing issues of "PENCIL POINTS", will, I assure you, be highly appreciated.

Very truly yours,
(Signed) E. H. Anderson,
Director

COPIES OF PENCIL POINTS

WANTED AND FOR SALE

Henry A. Martin, 466 Garson Avenue, Rochester, N. Y., wants January, August, November 1924; January 1925.

Oscar A. Bayne, 84 Tooronga Road, Hawthorn, Victoria, Australia, wants a copy of April 1925.

Mr. O. A. Yuncken, c/o A. & K. Henderson, 352 Collins St., Melbourne, Australia, wants a copy of November 1925.

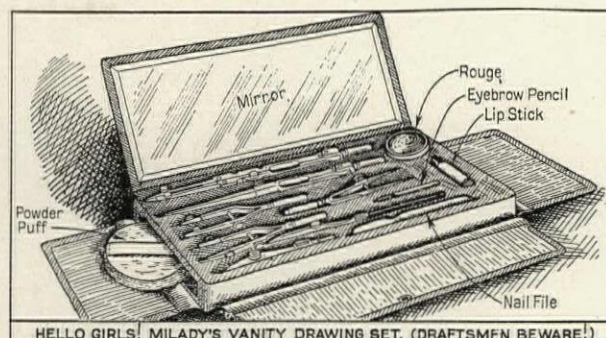
Arthur P. Moody, 4046 Charlotte St., Kansas City, Mo., wants a copy of January 1926.

J. Sandberg, Drottninggatan 32, Linköping, Sweden, wants a copy of January 1926.

L. H. Levander, 14138 Young Avenue, Detroit, wants a copy of March 1926.

Mr. Lee Fuller, 1877 West 38th Street, Los Angeles, Cal., wants a copy of March 1926.

The University of Cincinnati, School of Applied Arts, Cincinnati, Ohio, is anxious to secure whole or partial volumes of PENCIL POINTS, bound or unbound, from the beginning to the present year. Address to the attention of Miss E. Abbott, Librarian.



THE SPECIFICATION DESK

A Department for the Specification Writer

SPECIFICATION WRITERS—PLEASE LET US HEAR FROM YOU ABOUT THIS PLAN

EVER SINCE PENCIL POINTS WAS started we have had a constant stream of requests from our readers to "do something" about specifications. Most of those who have so communicated with us have wanted a book on specification writing or some other reliable guide which would assist them in the preparation and checking of this most necessary document.

We have, from time to time, considered publishing a comprehensive and exhaustive work dealing with the whole specification problem, but frankly, when subjected to analysis, this has proved to be such a gigantic and complicated task that we have never been able to make arrangements to compile or secure the material for a satisfactory book. There are so many different ways of writing specifications, so many different types of buildings and materials and conditions to be considered that a work on this subject, which could be depended upon to cover any considerable percentage of the information which might be required at any time in any office, would have to be so very extensive and require so much time in the making that we have never gotten anywhere. Recently another plan of dealing with this matter has engaged our attention. The plan is to publish in book form, thoroughly annotated with comprehensive footnotes, the actual specifications which have been used recently in the offices of representative and capable architects.

The following types of buildings have been considered for a place in this series: a bank, a hospital, a church, a school, a large commercial building, a small commercial building, a theatre, a hotel, a large residence, a medium size residence, a small house, a large apartment, and a smaller one. Later on in the series, should there be a demand for them, specifications for other types of buildings such as country clubs, large public buildings, prisons, railroad stations and others will be added.

What we are especially anxious to know at this time is what the specification writers of the country think of this plan. In preparing and checking your own specifications would it be valuable to you to have on your shelves the actual specification documents which prominent architects are using in their work today? All of the architects with whom we have consulted, and of whom we have requested specifications for publication in this series have (with one exception) offered us the use of their specification documents, at the same time realizing that they are by no means perfect and that in permitting their publication their work would be open to the criticism of their brothers in the profession. Nevertheless they are so much interested in seeing present day specification standards improved that they are willing to place themselves in this position for the good of the cause.

It would be our plan to publish these specifications in book form with large and clear type and at a moderate price. Before publishing the first book, say a hospital or a bank specification, we would like to get a general idea how this plan is regarded by those of you who read this department so that we may make some estimate as to the size of the edition required, which of course would also have an important bearing on the publication price of the book.

Our theory of the whole matter is something like this. Today the specification work in very few offices is regarded as satisfactory. The drawings, sketches and photographs of buildings produced in good offices are liberally published for the benefit of all. The specification documents used in connection with these same buildings have heretofore never been available for those who care to study them. But an office possessing a file of these proposed specifications would have an opportunity to compare what others

are doing with their own practice, thereby improving this department of their work as time goes on. It is also probable that the architects who permit us to publish their specifications will profit from the broad minded view they are taking of the matter. It is quite to be expected that suggestions will be made to them for the improvement of various clauses, which will in turn lead to a higher standard than they have been able so far to attain.

So please sit down and tell us frankly what you think of this idea. How else is improvement in specifications to be brought about? How else may an architect or a specification writer who wants reliable information secure it on short notice? Almost everyone agrees today, so far as our experience goes, that taken all in all the specification is the least satisfactory and most troublesome part of a building operation, considered from the standpoint of the architect's office. Much of the trouble arising on jobs comes from a poor, incomplete, vague, or carelessly prepared specification. It would seem to us that a careful study and comparison of the specifications tentatively listed above would be useful in many offices and would tend in the long run to bring about greater satisfaction and greater economies in connection with most jobs.

We are just as anxious to hear from those who see no value in this plan as from those who think well of it. You cannot hurt our feelings by criticising what we propose to do. If this series of specification documents is not required by our field we certainly have no desire to go forward with the work, but if on the other hand it is felt that the step we propose would be in the nature of a valuable service we are right here to go ahead with it.

SPECIFICATIONS

By W. W. BEACH

PLUMBING AND DRAINAGE, PART XX.

PENCIL POINTS FOR MAY CARRIED the specifications for steam heating for our imaginary "consolidated district school" building. Next in natural order is the division of Plumbing and Drainage.

Approaching this subject, we find no single feature of building construction more circumscribed by local ordinances and State laws and none more intimately concerned with trade union regulations. To each of these must the designer and specification writer on a particular job pay the most meticulous attention in order that they may avoid subsequent discomfiture. Nor is it sufficient to declare that the work shall be done in accordance with best standard practice and in strict compliance with local ordinances and State laws, although this is obviously necessary. But one can easily delineate a construction or stipulate a condition *not* in such accord, thus creating a discrepancy potential with all sorts of trouble.

Again, is "a little knowledge a dangerous thing."

True, one can nearly always get out of a difficulty, either by "trading" or by use of "the big stick". But, however honest such procedure may be, both in intent and practice, however prevalent they may be alleged to be in ethical offices, nevertheless they are dangerous business, especially if noted by a too suspicious owner.

Many architects do not appear to realize how sensitive a thing is reputation, both as it attaches to the individual and to the profession at large. One cannot be too careful—and the time to begin is when the drawings and specifications are in preparation.

If one is rewriting a school specification from a previous issue, which, we will say, for example, was governed by conditions in a village in which plumbing installation was unregulated and where, for economy's sake, standard soil pipe was used throughout the building; and one therefore neglects to comply with that item of the plumbing ordinance in this new location which stipulates that all soil pipe under the basement floor must be "extra-heavy"; it goes without saying that "trouble lurks in the offing".

But, having made the mistake, how is one to proceed? Is the architect really entitled, (if the contractor tries to take advantage) to seek refuge either in the specification clause which states that discrepancies must be referred to the architect for decision, or the one which insists that the contractor shall comply with the local code in every particular? Supposing the contractor, not having previously done work in that bailiwick, actually failed to discover the error (assuming that the architect knew his business) or that, being aware of it, took it for granted that the school district could "get by" with a deliberate evasion of the code? Assuming any one of several reasons why the contractor might have originally based his bid on the cheaper material (whether he did or not), to what extent should he be made to suffer for a palpable oversight on the part of one who should be infallible? It's a mooted question.

The most uncomfortable phase of it is that, propounded to anyone outside of the profession, the answer will almost invariably be "No one but the architect should be assumed to pay for mistakes emanating from his own office." In the abstract, this is harsh, but true. Then where shall one draw the line in this "give and take" policy?

To this, there is but one answer (from the outsider): "So prepare one's contract documents that there will be absolutely no need for giving or taking." "Impossible?" Perhaps, but one can at least make it a policy to take sufficient time in the checking of both drawings and specifications, and the one against the other, to approximate perfection. This should be done to such a degree that construction superintendents can be positively forbidden to do any trading with the contractors or their subs, insistence being made that the architect alone will take care of all doubtful points.

Prevention in this fashion of even the slightest inclination on the part of a superintendent to "let down the bars" will greatly increase his efficiency, as well as add materially to his respect for his employer and the product of the office. Discussion of this subject with the average experienced hired superintendent would probably disclose a surprising unanimity of opinion to the effect that no job can be supervised to a conclusion without a certain amount of give and take. This is neither true nor complimentary to the sincerest of our endeavors.

It is true, doubtless, of almost any rush job, in which, as in all others, the owner should be taken into the architect's confidence and have it made clear that the practice of architecture is so involved as to render it peculiarly susceptible to mistakes, serious as well as inconsequential. If the work must be turned out with improperly completed drawings or specifications, it should be definitely understood who is to stand responsible for their defects. Beyond question, the architect ought to take time enough to do his work right and should thereafter stand or fall on the result. He has no right, legal or moral, to try to force the contractor to suffer for his (the architect's) shortcomings or those of his instruments of service, nor to permit the contractor to recoup, at the expense of the owner, on some other feature of the work, except with that owner's consent.

And, certainly, he has no right, moral, ethical or otherwise, to give such contractor to understand, either by inference or by direct statement, that his continuance in the good graces of that office is dependent upon "swallowing his medicine", i. e.; making good the architect's mistakes—and seeking his recompense on the next job. We are using rather plain language, but it is a matter of observation that some architects have permitted their contract documents to become slipshod because of an acquired habit of limiting their bidders to tried men who can be depended upon to do as directed, rather than as was evidently implied by the contract. Not only are such architects compelling their clients to pay unduly for their construction, but they are digging for themselves a most embarrassing pitfall, if ever one such client should drag his case into court and employ

an experienced lawyer to show how his architect had betrayed the confidence placed in him.

We have digressed outrageously and can only plead that the subject is, to a considerable degree, germane—certainly worthy serious thought by those whose heart is in the good of the profession and the service it renders. What has been said applies, of course, to every branch of the work as much as it does to plumbing and drainage. An architect should carefully avoid the possibility of being placed in position where the contractor can carry a grievance to an owner and plead that the architect let him do thus and so (to the owner's surprise), so why should the same architect object to his doing this and that also?

To return to our mutton; another more or less embarrassing feature of specifying the plumbing, is the need (in almost any but large or standard work) of mentioning catalog items by name. Exception is made where the fixtures required are sufficiently repeated to warrant manufacturers making them specially to specifications other than their own. In preparing such a description, however, one must take care that he introduces no single feature or attribute that is peculiarly the prerogative of any one maker. For this reason, it is important that the architect or engineer writing the specification gleams at first hand the information upon which it is based and does not merely autograph descriptions which a representative of some manufacturer has prepared, with positive assurance that they can be considered common to all producers. On small work, for individual clients who take direct interest, one is accustomed to give the owner opportunity to assist in the selection, or to receive specific instructions that the architect is to use his best judgment.

But, on the ordinary run of work, where economy is an important factor, the simplest method, least expensive for both architect and client, is to specify catalog numbers and give the contractor permission to submit equivalents. Nothing can be gained by incorporating in the specifications a verbatim copy of a manufacturer's specification in lieu of the shorter numerical designation. That merely needlessly increases the bulk of a specification—and boots nothing, unless it be to save the sending of catalogs to superintendents. But the latter is less troublesome—and simpler for the man on the job.

Naturally, this opens up again the whole subject of the propriety of using "or equal" privileges in one's specifications, as what has been said applies as well to other factory products, such as hardware, steel furniture, lighting fixtures etc. And, in the last analysis, it must be up to the individual architect to decide whether or not he wishes to entertain the substitution of "equals" or to positively taboo them.

If his work is exceptionally high class and his client is depending upon him to get the best regardless of price, has implicit confidence in him to do so, then certainly the architect is justified in making up his mind that certain goods and none others will quite fill the bill. Even so, he should be just as sure that his exclusive requisition of the article desired does not affect its price to the contractor. Building materials are especially subject to competition and it is dangerous to eliminate it entirely.

It is equally true that many things appearing to be equal, and emphatically alleged to be so, may not be, may not even have the same market price. Again, it seems necessary for the poor architect to be almost omniscient. If he doesn't know, he must find out. Perhaps he can make money for the owner by permitting the substitution of something as good for the purpose as what is specified. Should he?

Our work is evolutionary. Why should not an improvement take place in a job under way instead of waiting to better the next one?

Supposing one had specified a large quantity of a certain bronze-body door-check for a building and a dealer wished to fill the order with another make which catalogued nothing better than a cast iron body, though the service and last quality of the check were demonstrably equal to the one specified. Further, that the architect discovers that the building will look as well with painted check-bodies as with those of tarnished bronze. Would it not be the proper procedure for the architect to ascertain how much he could benefit the owner by use of the cheaper material? In "cost-plus" building this is frequently done. Perhaps it could be done as often on definite-price contracts.

Let us then proceed with these plumbing specifications, assuming that the building is in a town of sufficient size to have a plumbing code, also water supply and sewers, both sanitary and storm-water, adjacent to the site. We will omit catalog numbers and makers' names, for obvious reasons.

DIVISION P. PLUMBING AND DRAINAGE

Note. The Contract and General Conditions of these specifications, including the Supplementary General Conditions, govern all parts of the Work and are parts of an apply in full force to these specifications for Plumbing and Drainage. The Contractor shall refer thereto as forming integral parts of his Contract.

ARTICLE 1. *Scope of work.*

(A) THE ITEMS under this Division include:

- (1) ALL PLUMBING, SEWERAGE AND WATER SUPPLY, hot and cold.
- (2) ALL DRAINAGE.
- (3) ALL EXCAVATING AND BACK-FILL in connection with plumbing and drainage.
- (4) ALL GAS-PIPING within the building.
- (5) STAND-PIPE AND FIRE-HOSE as stipulated.
- (6) SUCH OTHER WORK as is herein set forth.

(B) OMISSIONS.

- (1) FARM-DRAIN-TILE SYSTEM for the purpose of carrying surface water away from footings and foundation walls is not included in this Division.
- (2) TEMPORARY TOILET FACILITIES for the use of Workmen on the job are provided for in the General Contract and not in this Plumbing Division.

ARTICLE 2. *General Description.*

Note. Under the headings of this Article, there is given for convenience of Contractors a brief mention, not necessarily complete, of the work included in this Division, full description of which will be found in the following Specifications beginning with Article 3.

(A) ALL PLUMBING shall be in accordance with best standard practice and in strict compliance with the provisions of the local plumbing ordinances and State laws governing same. The drawings, diagrams and specifications, insofar as they apply to plumbing and sewerage are intended to comply in like manner and the Contractor shall carefully check same, one with the other and call the attention of the Architect to any apparent discrepancies and secure interpretation and decision on same before proceeding with work affected thereby.

(B) SEWERAGE shall consist of a complete system of gravity drainage connecting all plumbing fixtures and floor drains throughout the building with City sewer. All soil, waste and drain pipe and fittings for same in and under the building shall be extra-heavy cast iron. That outside shall be hub-and-spigot, vitrified tile.

(C) ROOF DRAINAGE shall consist of a complete system of gravity drainage connecting all roof outlets to City storm-water sewer, with piping as for sanitary sewer specified in preceding paragraph.

(D) TWO MANHOLES shall be provided, one in sanitary sewer line and one in storm-water drain line; each located as shown on plot plan.

(E) WATER SUPPLY shall consist of complete systems of hot and cold water supplying all plumbing fixtures as required, including heater, tank and recirculating piping for hot water system.

(F) FIRE-PROTECTION shall consist of a complete system of stand-pipes and hose reels, hose and fire-extinguishers, located as directed.

(G) COMPLETE PLUMBING FIXTURES shall be provided and installed as shown and described.

(H) NECESSARY CONNECTIONS shall be provided for kitchen and laundry equipment, boilers and hose-bibs.

(I) GAS-PIPING shall consist of a complete system, extending from gas company's meter to each emergency bracket-light and to gas-stove supplies.

(J) TESTS. All piping shall be tested before being covered from view and shall remain uncovered until approved under test. All cast iron pipe and fittings shall be tested by this Contractor under the supervision of the City Inspector and job Superintendent and as the former may direct, subject to his approval and certificate of acceptance, to be deposited with the Architect. All water pipe and connections, including valves and faucets, shall be tested under City water pressure and corrections made as required. All gas-piping

shall be tested as directed by the local gas company, from which a certificate of acceptance shall be obtained and delivered to the Architect.

(K) SHOP DRAWINGS AND SCHEDULES covering every feature of the work included in this contract shall be submitted for approval as specified under General Conditions. Pipe plans shall show runs of all pipe, with special indications of all which vary from locations shown on Architect's drawings. With schedules of fixtures, there shall also be submitted Maker's illustrations and descriptions of all items differing from those specified. No fixtures or other items will be accepted at building unless in exact accordance with specifications and approved schedule.

(L) PLUMBING PERMIT shall be secured from the proper City Official by this Contractor and the cost of same included as part of his contract price. The Architect will provide the necessary diagrams and make required corrections in same, but the Contractor shall attend to the filing and all subsequent dealings with the City Department, including all notifications to Inspectors incidental to the work.

MATERIALS

ARTICLE 4. *Purchase and Delivery.*

(A) ALL MATERIALS shall be of quality and make hereinafter specified, or equal materials approved by the Architect. Unless the Contractor makes written claim as to the unsuitability of any materials, it is understood that he agrees to produce first-class work with what is specified and will have same delivered at the building in ample time and in sufficient quantities so that neither this or other work will be delayed thereby.

(B) ALL DELIVERIES will be made in such manner as to properly maintain protection of all materials until installation. All items shall be properly labeled or marked for identification, which indentifications shall remain until ordered removed by the Superintendent. Proper storage space shall be provided for material ready to be installed, but it is not intended that more than half the total requirement shall be stored on premises at one time. Fixtures and finished equipment shall not be delivered until building is ready to receive same.

ARTICLE 5. *Materials for Manholes and Outside Sewers.*

(A) COMMON BRICK shall be whole, sound, hard, well-burned, of even quality and free from lime, checks and culls. They shall ring clear when struck together. A dry brick, soaked in water 4 hours, shall not show increase in weight of over 15 per cent.

(B) ALL CEMENT shall be fresh Portland, of approved brand, and capable of meeting test requirements of the American Society for Testing Materials. It shall be delivered in original cloth bags, bearing name and brand of Maker, and shall be properly stored in water- and weather-proof shed, with floor 12" above ground. Cement in damp, damaged or caked bags will be rejected.

(C) SAND shall be medium coarse, composed of clean, hard, durable, uncoated grains and shall be free from injurious amounts of dust, lumps, soft or flaky particles, shale, alkali, organic matter, loam or other deleterious substances.

(D) RINGS AND COVERS for manholes shall be of best quality gray cast iron, free from defects, and of weight and design stipulated for the purpose by the City Sewer Department. Ladders in manholes shall be steel as specified.

(E) OUTSIDE SEWER PIPE shall be vitrified, salt-glazed, hub-and-spigot tile, well-shaped, hard-burned and free from chips, cracks, checks or other defects. Necessary fittings and proper bends shall be supplied for all locations, and no cutting will be allowed, except by permission of the Superintendent.

(To be continued in the July Issue.)

PRODUCERS RESEARCH COUNCIL

THE PRODUCERS' RESEARCH COUNCIL held a meeting in Washington D. C., on Tuesday, May 4th, the day before the opening of the Convention of the American Institute of Architects. The opening address was given by D. Everett Waid, President of the A.I.A. Mr. Waid stressed the desirability of close cooperation between the Council and the Institute. The Council was also addressed by several architects including Emery Stanford Hall of Chicago, representing Illinois Society of Architects; N. Max Dunning of Chicago; Sullivan W. Jones, New York State Architect; D. Knickerbacker Boyd of Philadelphia, and Mr. H. B. Wheelock, President of the Chicago Chapter.

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 using them. When writing for these items please mention PENCIL POINTS.

Steel Moulding.—New Catalog No. 25, A.I.A. File No. 15. This Catalog has been compiled so as to be of the greatest use to those designing ornamental iron work. 11 pages of illustrated ornamental iron detail are included. 72 pp. 8½ x 11. J. G. Braun, 609 South Paulina St., Chicago, Ill.

Metal Work in Color.—Handsome brochure with three color plates showing ornamental metal work as produced for the Griswold National Bank of Detroit, Messrs. Smith, Hinchman & Grylls, architects. Standard filing size. The Flour City Ornamental Iron Co., Minneapolis, Minn.

Eye Comfort.—Monthly publication issued in the interests of good lighting Vol 12 No. 1 includes many illustrations and much information on the lighting of banks and hotels. Curtis Lighting Inc., 1119 W. Jackson Blvd., Chicago, Ill.

Oil Heating, What It Means to the Architect.—Descriptive and specification portfolio covering the question of heating with fuel oil primarily from the standpoint of those who design our buildings. A very useful document to all interested in this subject. Standard filing size 8½ x 11. Williams Oil-O-Matic Heating Corp., Bloomington, Ill. A. I. A. File No. 30-G-1.

Blasteel Building Specialties.—Data Sheet, A. I. A. File No. 27-C-4, illustrating and describing NoPole top sash operators, Spearpoint floor clips, Blasteel hanger inserts, Blasteel Bull Nose floor joiner and Flat Top floor joiner. Blasteel Mfg. Co., Kansas City, Mo.

Show Window Lighting.—A. I. A. File No. 31F4. Handsome catalog in color covering this most important subject from both technical and non-technical standpoints. Pen and ink sketches of many interesting buildings, pertinent lighting data, detail drawings, etc. 30 pp. 8½ x 11. Pittsburgh Reflector Co., Bowman Bldg., Pittsburgh, Pa.

Rolling Wood Doors.—Data sheet showing equipment suitable for driveways and openings in garages, warehouses, factories, etc. where fireproof construction is not required. Standard filing size. J. G. Wilson Corp., 11 East 38th Street, New York City.

Bulletin No. 81 and Data Sheet No. 42 with greasing rack details, etc. Standard filing size. Ramp Buildings Corp., 21 E. 40th Street, N. Y. C.

Herman Nelson Invisible Radiator.—Handsome booklet with six full page color plates showing treatment of different rooms where the radiators are actually installed. Complete detail drawings, tables, construction details and data for specifications. 8½ x 11. The Herman Nelson Corp., Moline, Ill.

Smokeless City.—Folder in color illustrating and describing the Kewanee Down-Draft Boiler. Size when folded, 8½ x 11. The Kewanee Boiler Co., Kewanee, Ill.

Contractors Atlas.—Periodical issued in the interests of architects and builders. The April issue contains an interesting article on The Ever Popular Bungalow for Town or Country with floor plan, sections and rear elevation. Also an article on New Method of Precasting Pier Shells. 8½ x 11. 11 pp. Atlas Luminite Cement Co., 25 Broadway, New York.

Kreolite News.—Monthly publication on the subject of wood blocks for floors for industrial plants, bridges, and other floors built to withstand heavy duty. 8½ x 11. 12 pp. The Jennison-Wright Co., Toledo, Ohio.

Some Examples of Revolutionary Time Saving in General Building.—Folder explaining what Luminite Cement is and its time saving qualities. Report of Tests. A. I. A. File No. 3a-1. 8½ x 11. The Atlas Luminite Cement Co., 25 Broadway, New York.

Triangle News.—The April issue (Sales Convention Issue) contains much interesting news on the activities of R. & B. and recent installations completed. 9 x 11½. 24 pp. Richardson & Boynton, 260 Fifth Ave., New York.

Parr-Quality White Sanitary Steel Bathroom Cabinets.—Catalog 6 illustrates and describes this accessory, also linen cabinets, kitchen cabinets and radiator enclosure cabinets. Typical bathroom installations. 4 x 9½. 18 pp. Parr Metal Products Corp., 3519 41st Street, Long Island City.

Lockwood Doors.—Folder illustrating in color various types of Lockwood Doors. Tables of sizes, specifications. Morgan Millwork Co., 113 W. North Ave., Baltimore, Md.

Boca Top and Bottom Sliding Ventilator Windows with Bronze Guides.—Catalog G-26, just off the press describes in detail the architectural and industrial types of projected windows and illustrates in color the exclusive Boca Bronze Guide feature. Contains specifications, standard installation details and tables. A. I. A. File No. 16. 15 pp. 8 x 11. The Bogert & Carlough Co., Paterson, N. J.

Sun Parlors and Sleeping Porches.—Plan No. 50 and large detail data sheet showing treatment of these features, both in elevation and with respect to construction. Southern Cypress Mfrs. Assn., New Orleans, La.

Architectural Interior and Exterior Woodwork.—Standardized. Illustrated. This is an Architects' Edition of the complete catalog of Curtis Woodwork as designed by Trowbridge and Ackerman. Contains many color plates. Curtis Companies Service Bureau, Clinton, Iowa.

Published by the same firm, Better Built Homes, booklet, 9 x 12, 40 pp. Also Curtis Details, booklet, 20 pp. 7½ x 10½.

Pease Junior Blue Printing Machine and Pease Junior Sheet Washer.—Booklet describing type of equipment especially designed for the moderate user of blue prints. Quick and satisfactory results at a low cost. C. F. Pease Co., 803 No. Franklin Street, Chicago, Ill.

Roddiss Doorman.—Illustrated booklet describing the use of Roddiss Doors for residences, clubs, hotels, etc. 12 pp. 7½ x 10½. Roddiss Lumber & Veneer Co., Marshfield, Wis.

Cotswold Casements.—Brochure showing casements and leaded lights in standard sizes and designs. Exterior views of noted English and American houses, hardware details and 12 plates of details useful in the drafting-room. 8½ x 11. International Casement Co., Jamestown, N. Y.

Gulf Stream Water Heater.—Leaflet showing design and construction of this most important item of equipment. Marion Machine, Foundry & Supply Co., Marion, Indiana.

Crescent Elastic Tile Floors.—Booklet describing this flooring with color plates, color chart and views showing different uses and installations. 8½ x 11. United Cork Companies, Lyndhurst, N. J.

Zeolite Water Softener.—Bulletin 509 describes the Graver type of equipment for softening and filtering water, together with useful notes on the various problems involved. Useful to every specification writer. Standard filing size. 8½ x 11. Graver Corporation, East Chicago, Indiana.

Holmes Concealed Beds.—Booklet describing this space saving equipment with necessary instructions for providing for it in the drawings and much other useful information. 40 pp. Concealed Bed Corp., 58 E. Washington St., Chicago, Ill.

Gorton Heating Equipment.—Catalog No. 92, just off the press and descriptive of the Gorton line of specialties which will be found useful on practically every heating job. Much useful data for the draftsman and engineer. 84 pp. Convenient pocket size. Gorton & Lidgerwood, 96 Liberty St., New York.

Research Bulletins.—These documents published by the Producers Research Council, affiliated with the A. I. A. are available to all who may care to apply for them. They cover research on concrete, architectural terra cotta, metal casements, and many other items of building equipment, as well as basic materials of construction. Standard filing size 8½ x 11. Scientific Research Dept. of the A. I. A., 19 West 44th St., New York City.

The Dunham Hand Book No. 314.—A very useful book for all architects, draftsmen and specification writers. Convenient pocket size, completely indexed, 190 pp. All on the subject of heating. Dunham Co., Dunham Bldg., 450 E. Ohio St., Chicago, Ill.

Atlantic Terra Cotta.—Monthly magazine for architects and draftsmen. Vol. 8 No. 7 shows details of interesting buildings designed by Mr. George B. Post. Atlantic Terra Cotta Co., 19 West 44th Street, New York City.

Grading Rules for Maple, Beech and Birch Flooring.—Booklet containing this useful information, Maple Flooring Mfrs. Assn., Stock Exchange Bldg., Chicago, Ill.

The Insulation of Roofs to Prevent Condensation.—Technical treatise on this most important subject which will be found interesting to all those interested in industrial buildings and in many other types of buildings as well. Detail drawings, charts and much other useful information. 36 pp. 7½ x 10½. Armstrong Cork & Insulation Co., Pittsburgh, Pa.

Doorways.—The May issue shows attractive picture of Moorish architecture and contains much practical information as well. Richards-Wilcox Mfg. Co., Aurora, Ill.

Color Chart of Decorated Vitrolite.—Four pages in full colors showing thirty different ornamental motives together with blue prints. A. I. A. File No. 22-F. Vitrolite Co., 133 W. Washington St., Chicago, Ill.

Planning the Small Bathroom.—Booklet on facts about plumbing for the home owner. Many interesting plans, useful in solving many difficult problems. Crane Co., Chicago, Ill.

Silentvane Fans.—Catalog No. 208. Comprehensive illustrated treatise on the subject of ventilation. Dimension sheets, tables and other extremely important data for the specification writer. Really constitutes a handbook on the subject. 90 pp. 8½ x 11. B. F. Sturtevant Co., Hyde Park, Boston, Mass.

Pond Continuous Sash.—A. I. A. File No. 16-E-1, Catalog 12 covers subject of sash and sash operation for all types of industrial buildings. Also covers question of roof design. Many pages of carefully drawn details of value to the engineer as well as the architect and draftsman. Complete specifications. A valuable hand book. 44 pp. 8½ x 11. David Lupton's Sons Co., Philadelphia, Pa.

Surfacing Concrete with Contex.—Illustrated brochure on the subject showing the application of this material to many different types of work and for many purposes. Specifications. 30 pp. 8½ x 11. Concrete Surface Corp., 342 Madison Ave., New York City.

The ELDORADO PAGE



Theatre of
MARCELLUS
ROME

Ernest W. Watson



Sketching with "The Master Drawing Pencil"

THE artist rarely finds his composition "ready-made" for him. It is seldom that he can copy the tones of the subject as the camera does. The dark and light masses must be placed according to his sense of design. Dark areas of the subject frequently are made light in the sketch for the sake of pattern interest. The device employed in this study, called "path of interest," is often useful. (See Eldorado Page No. 9 of this series.) Notice how drawing is vignettted at the right.

© Joseph Dixon Crucible Co.

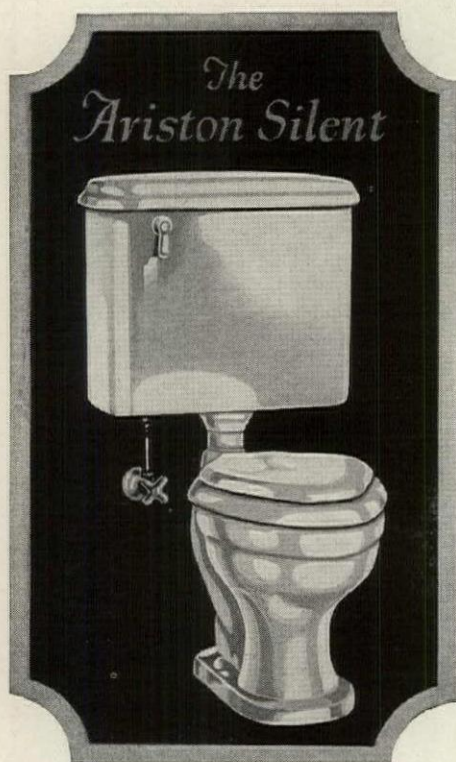
This is one of a series of Pencil Lessons prepared by Ernest W. Watson. Write on your letterhead for samples of Dixon's "Eldorado," The Master Drawing Pencil. Joseph Dixon Crucible Co., Pencil Dept. 167-J, Jersey City, N. J.

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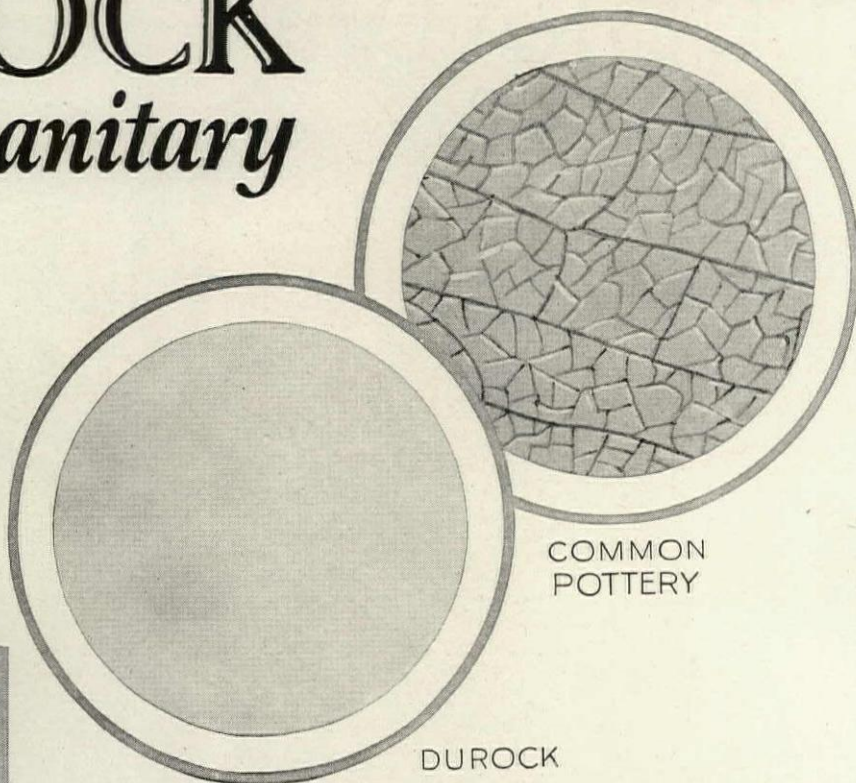
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YOU have noticed so-called porcelain ware in which the surface had become criss-crossed with fine web-like cracks, such as are shown in the illustration above. This is called "crazing," and results from the use of a glaze that does not expand and contract equally with the underbody.

Under the microscope, each of these hairline markings is seen to be a crevice quite deep and wide enough to harbor a myriad of germs. Therefore, a "crazed" washbowl or toilet cannot be truly sanitary.

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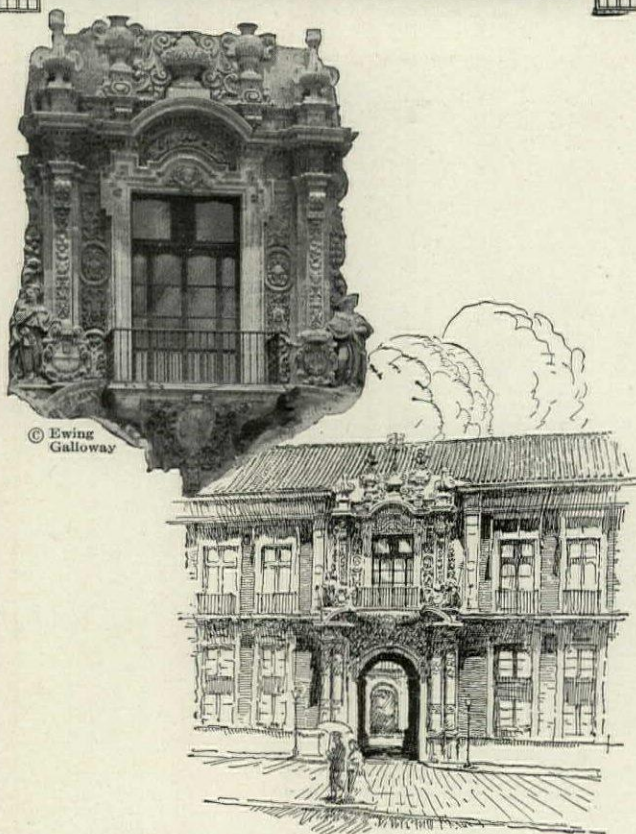
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Typical of the artistic effects possible with GOLD SEAL INLAIDS is this dining room in the remodeled house of Mr. John M. Hatton, Architect, Scotch Plains, New Jersey. Belflor Pattern No. 2047/8



Beauty and economy in remodeling



As in the dining room, the introduction of this formal patterned floor into a richly colored scheme of decoration gives unusual distinction to the entrance hall of Mr. Hatton's remodeled home.

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So a *Belflor* pattern of GOLD SEAL INLAIDS was selected, with the decidedly pleasing result shown above. Note with what

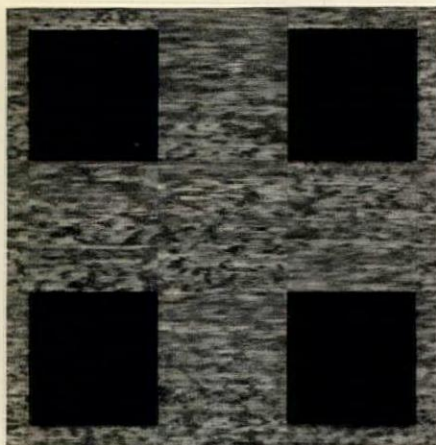
an air of distinction the patterned floor unifies the colorful Old World furnishings—as an ordinary floor never could.

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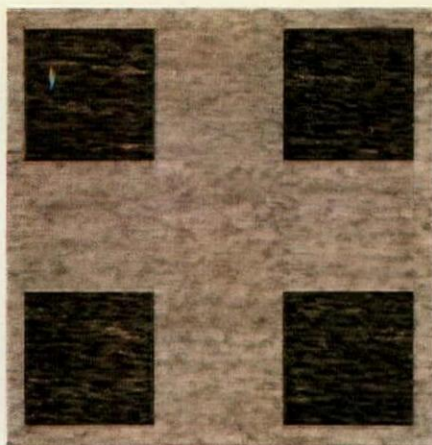
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(See next page)

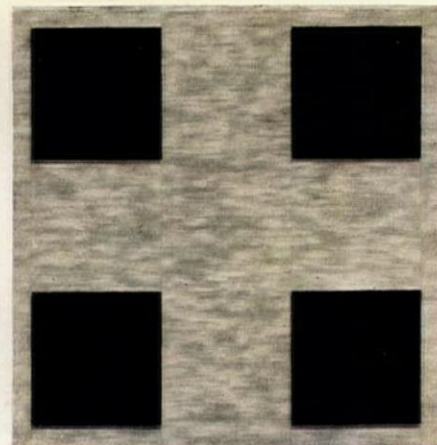
NAIRN GOLD SEAL INLAIDS



GOLD SEAL INLAID
Belflor 6" Inset Tile Pattern No. 2155/2



GOLD SEAL INLAID
Belflor 6" Inset Tile Pattern No. 2155/3



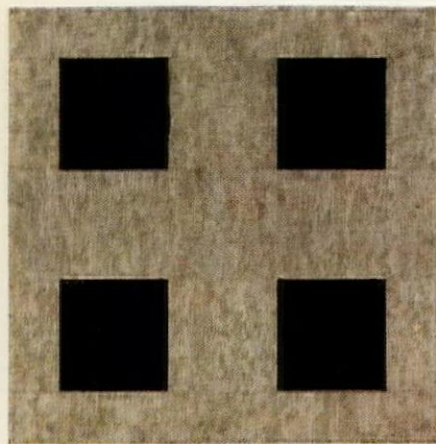
GOLD SEAL INLAID
Belflor 6" Inset Tile Pattern No. 2155/4



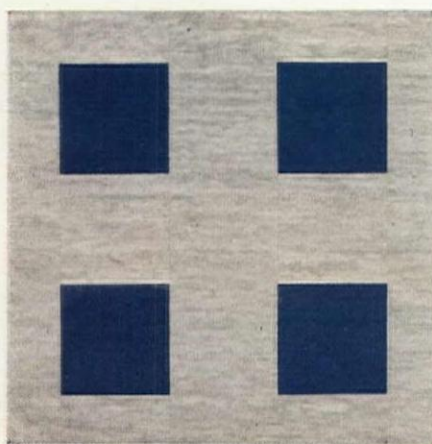
GOLD SEAL INLAID
Belflor Pattern No. 2154/4



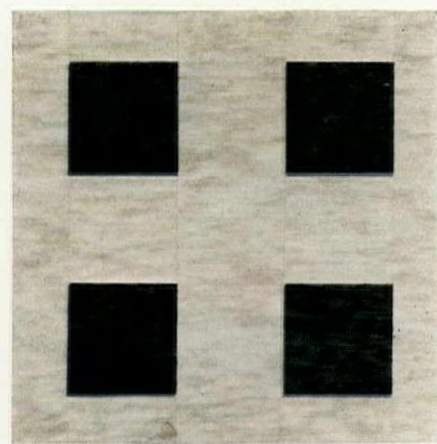
GOLD SEAL INLAID
Belflor Pattern No. 2154/3



GOLD SEAL INLAID
Belflor 4 1/2" Inset Tile Pattern No. 2152/4



GOLD SEAL INLAID
Belflor 4 1/2" Inset Tile Pattern No. 2152/2



GOLD SEAL INLAID
Belflor 4 1/2" Inset Tile Pattern No. 2152/3

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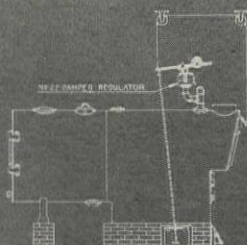
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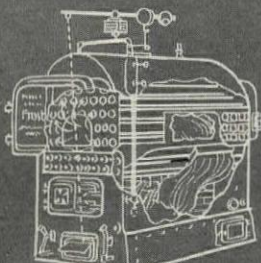
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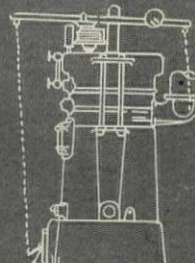
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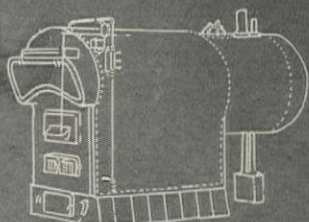
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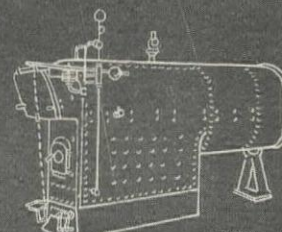


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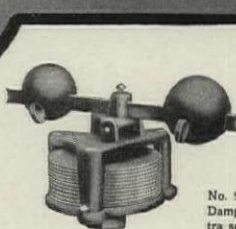
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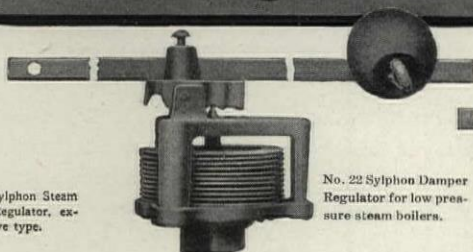


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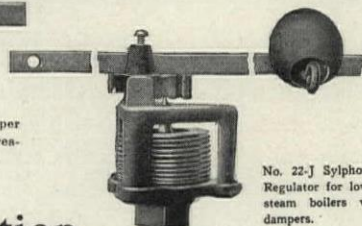
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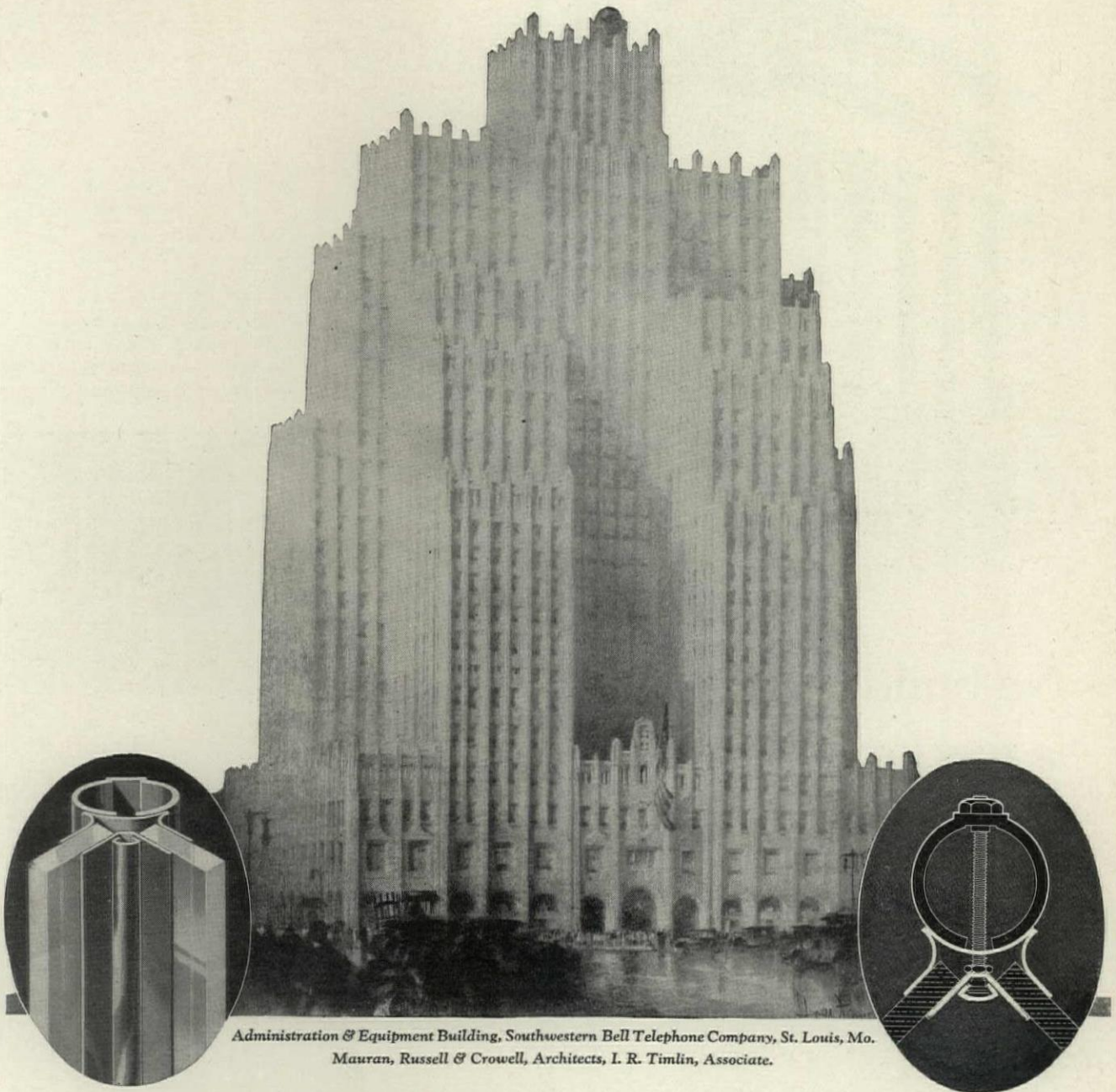
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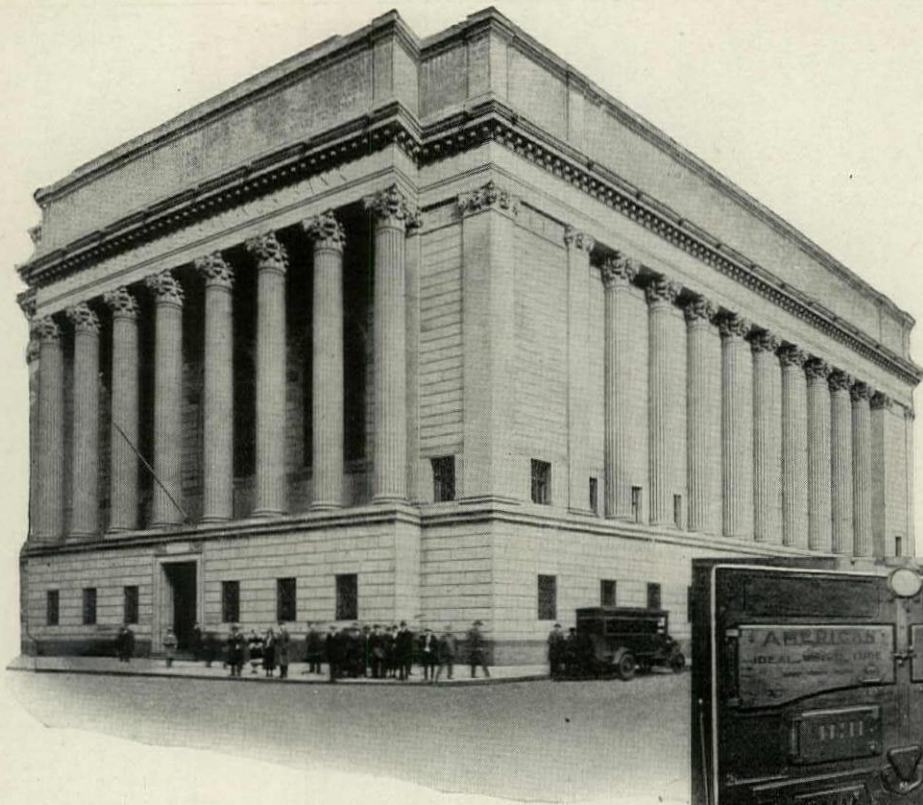
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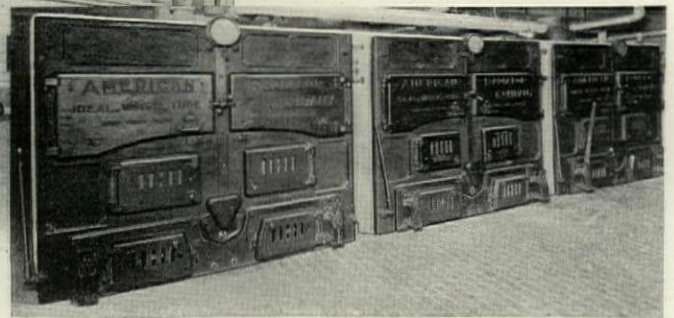
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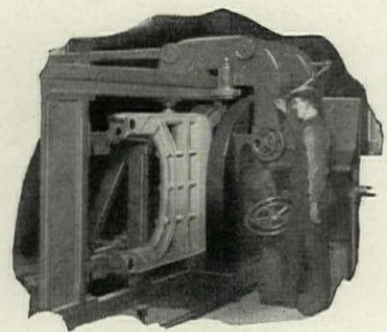


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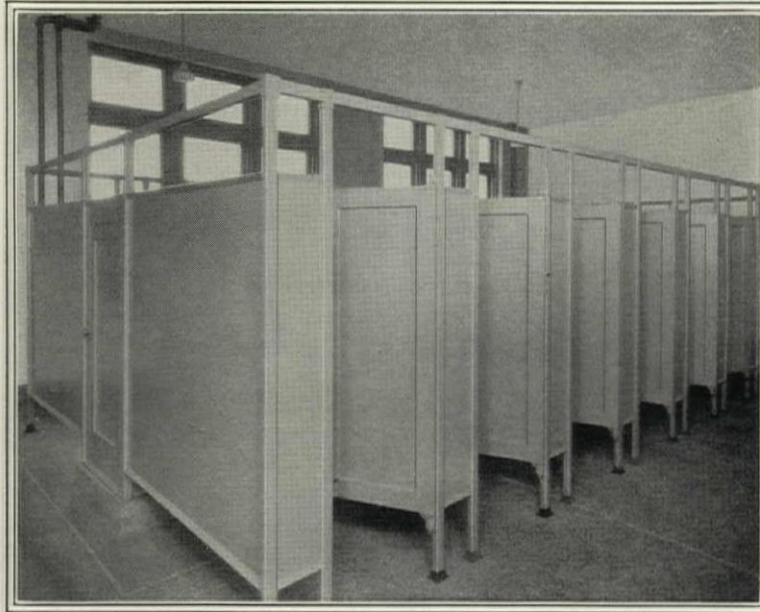
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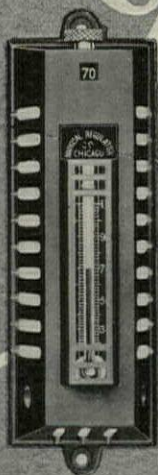
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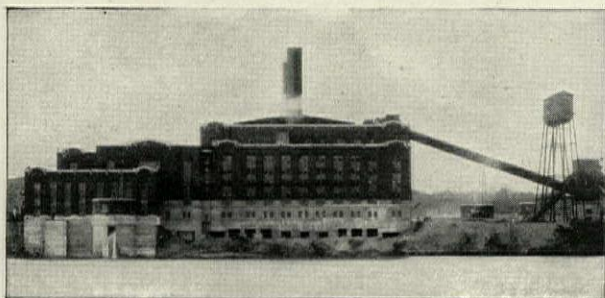
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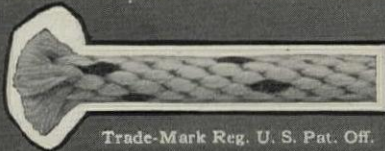
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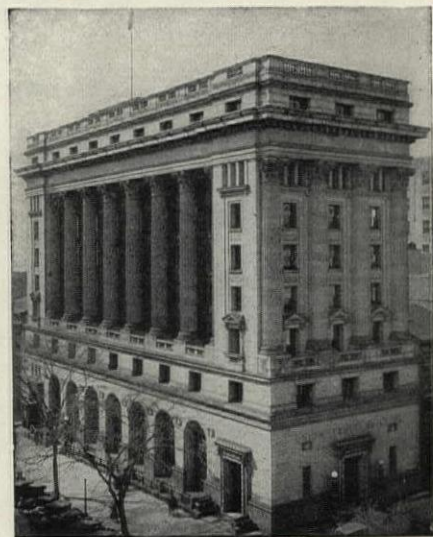


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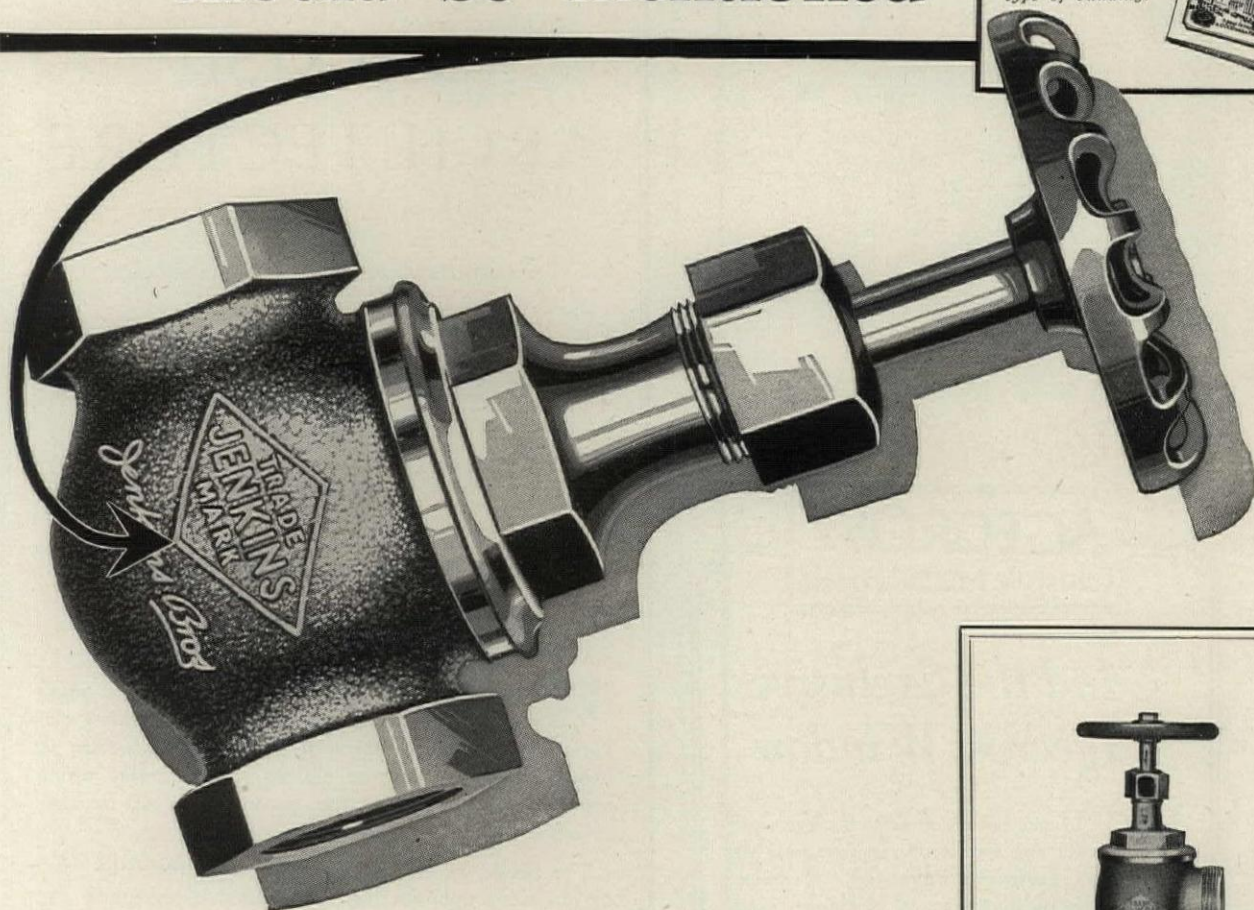
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Fig. 715
Jenkins Bronze Fire Line
Angle Valve



Fig. 352
Screwed Jenkins Stand-
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Valve

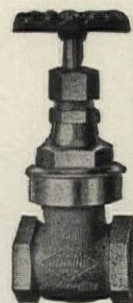
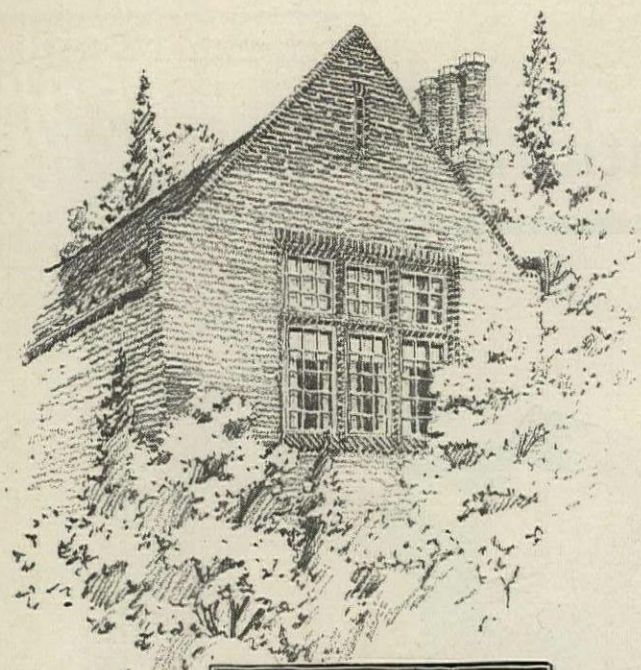


Fig. 370
Screwed Standard Bronze
Gate Valve



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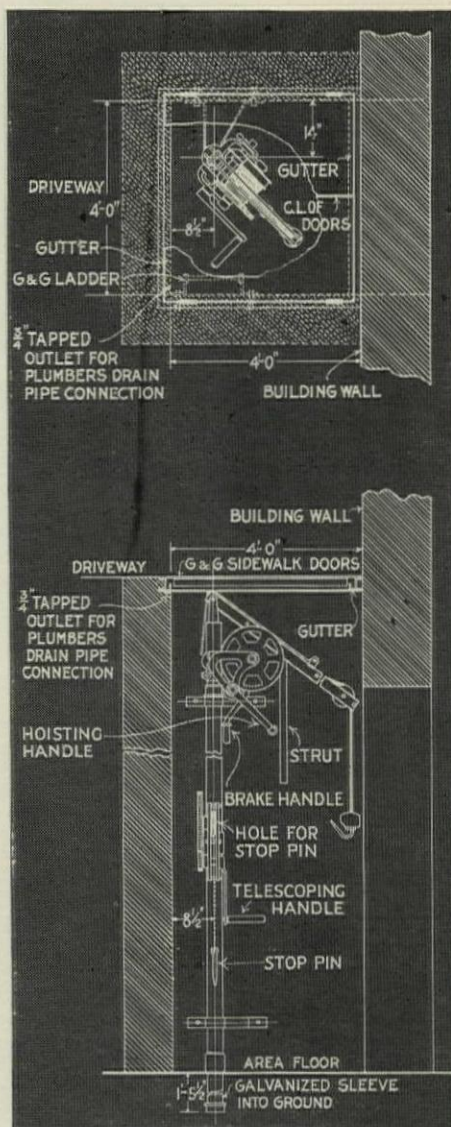
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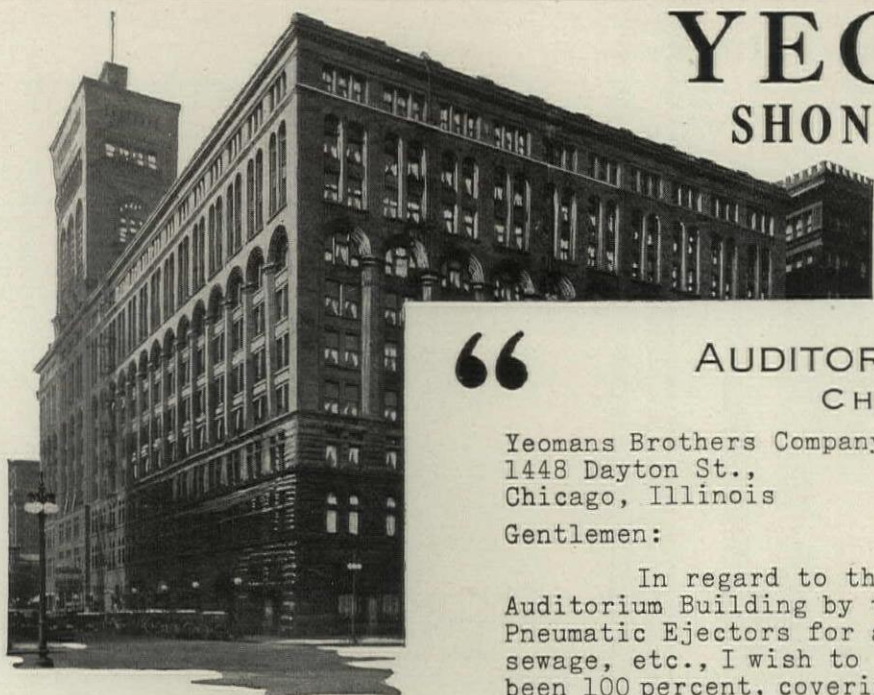
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Other items on Page 80



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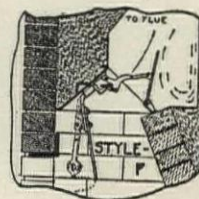
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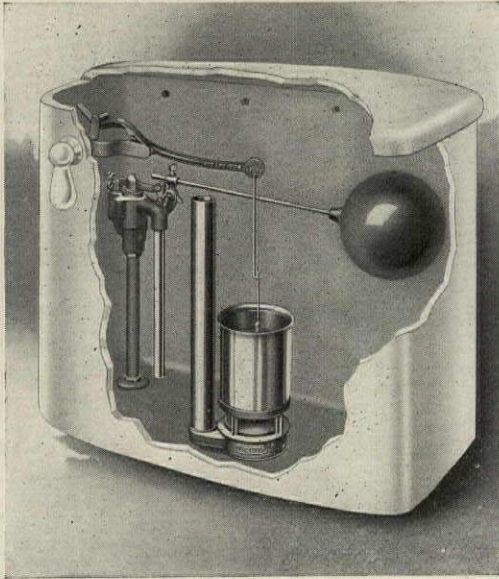


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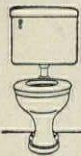
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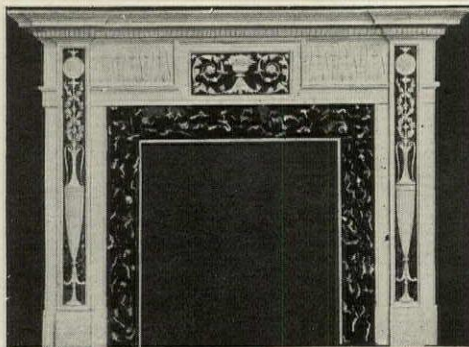
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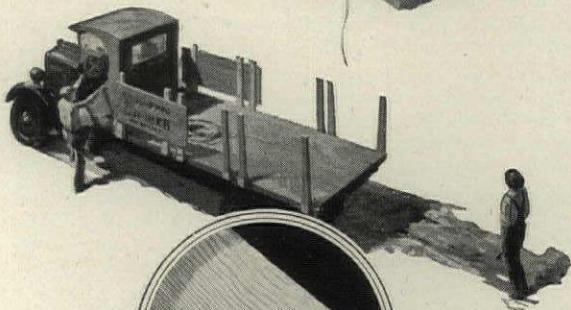
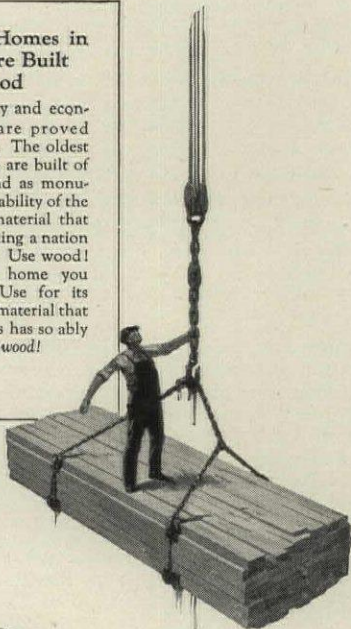
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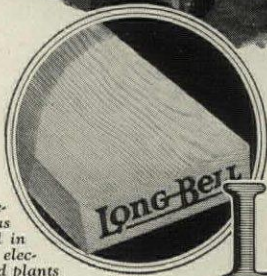
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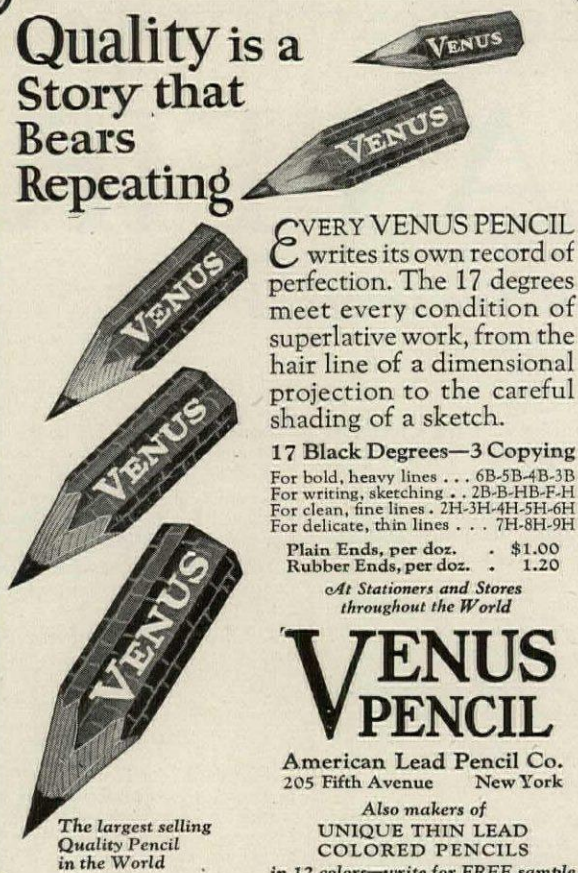
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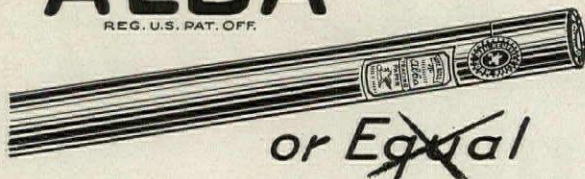
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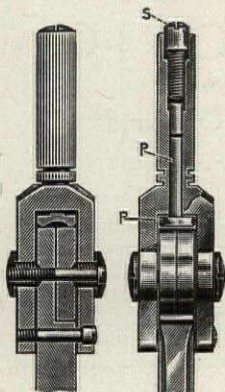
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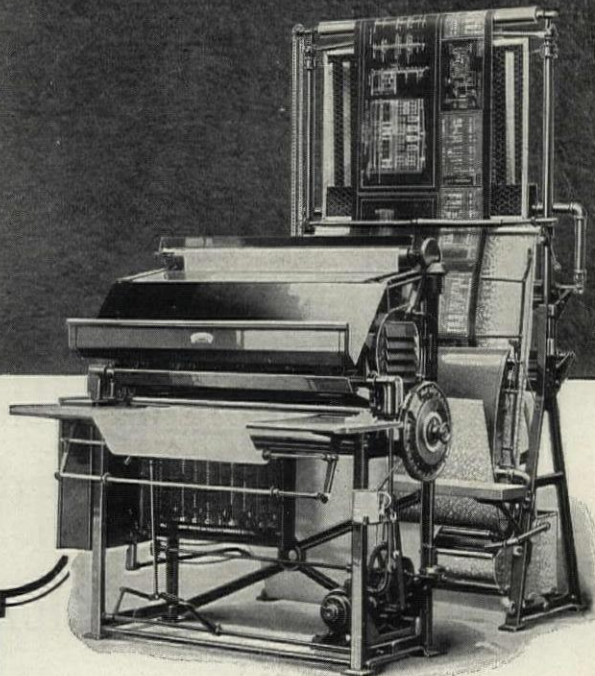
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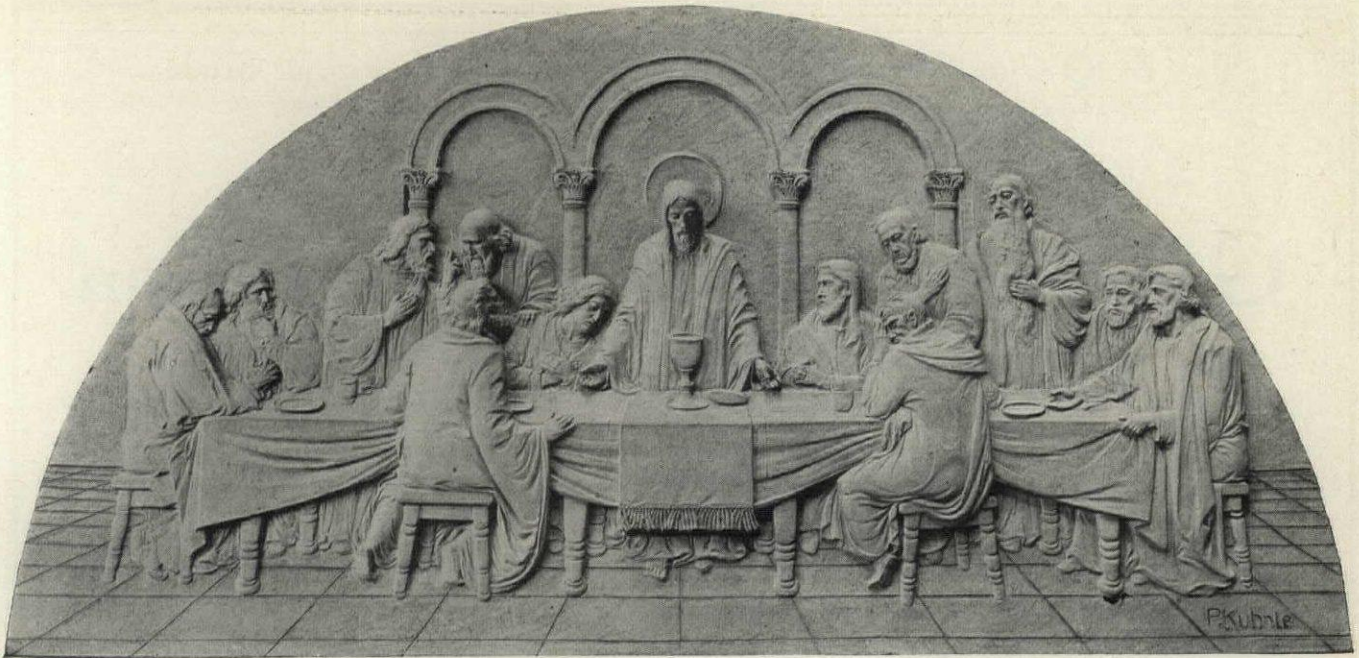
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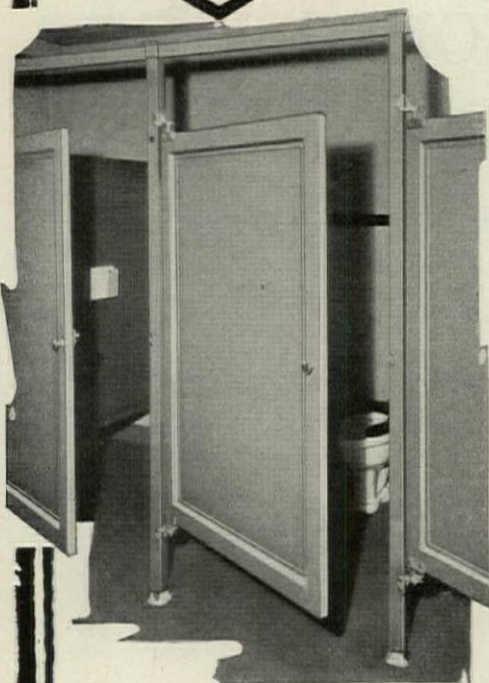
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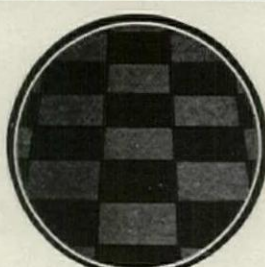
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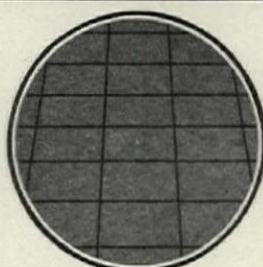
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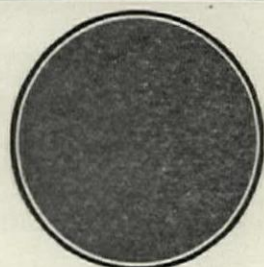
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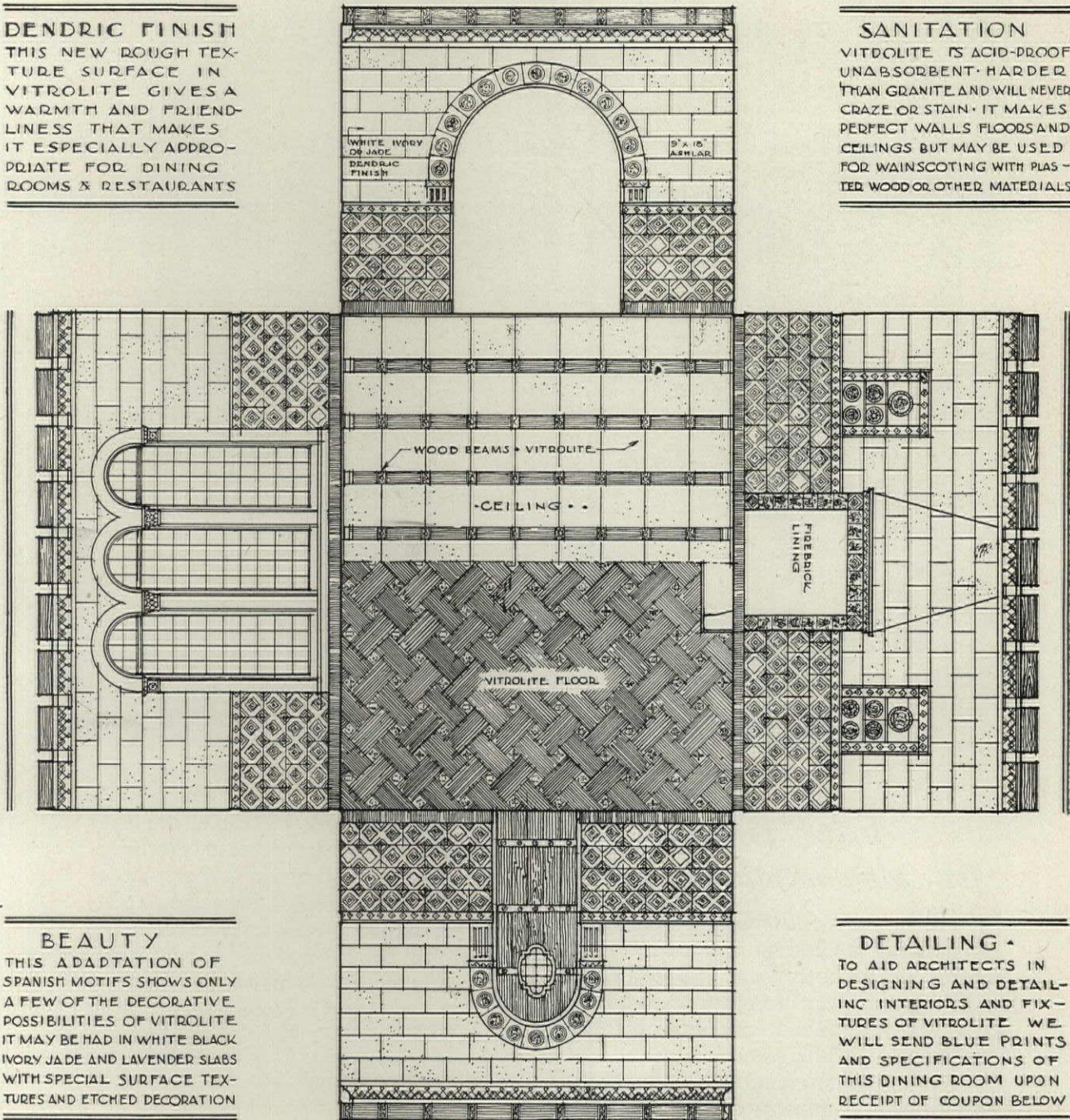
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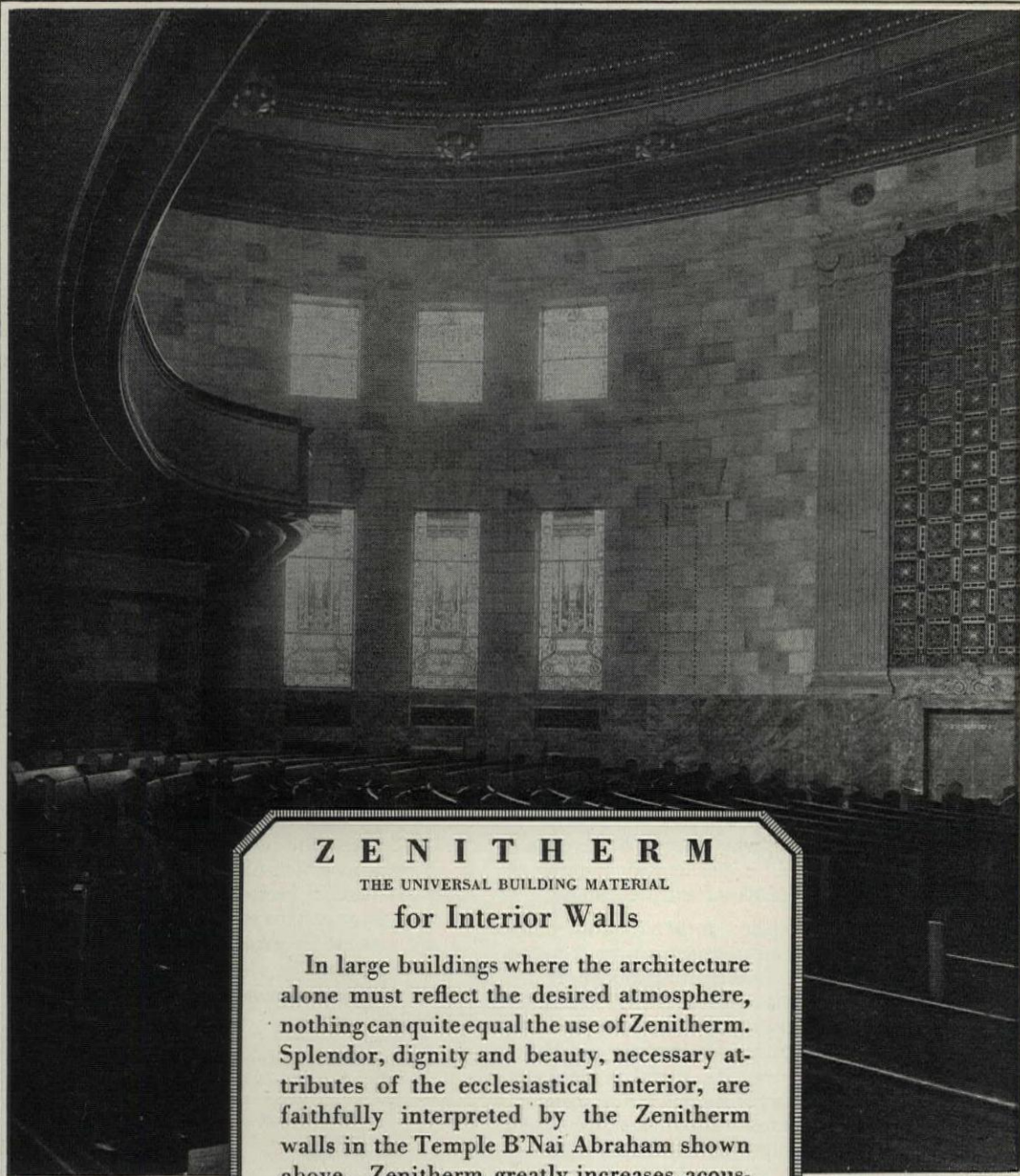
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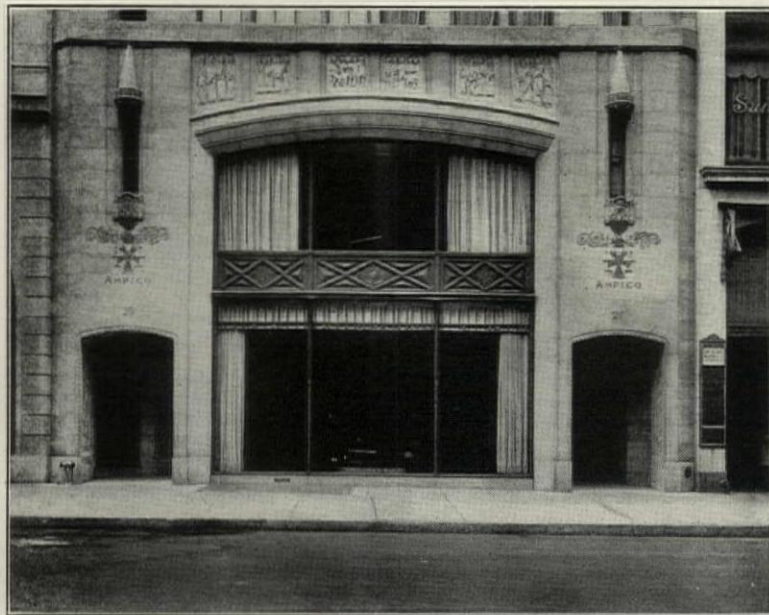
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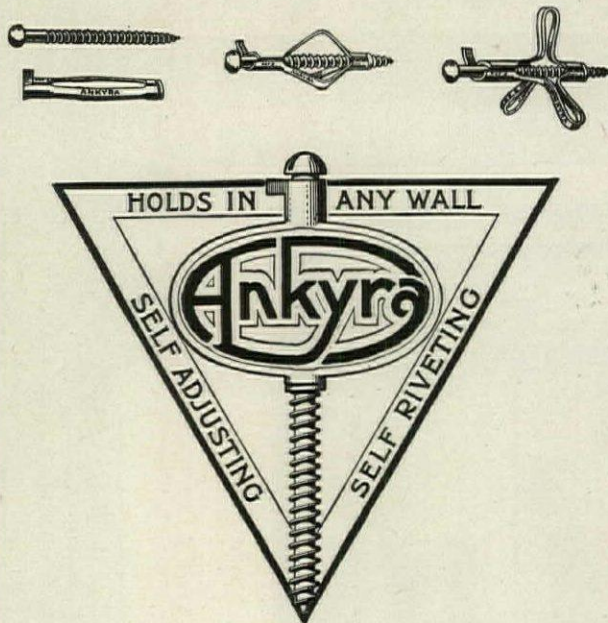
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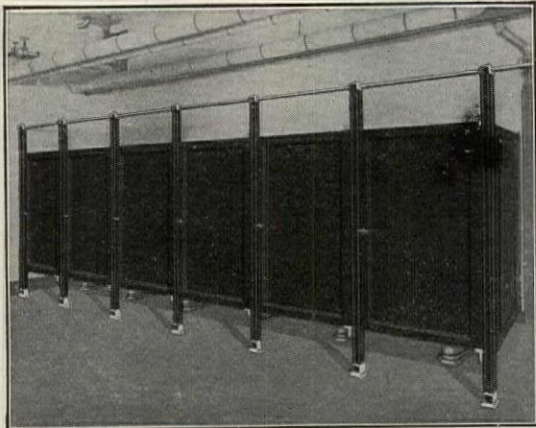
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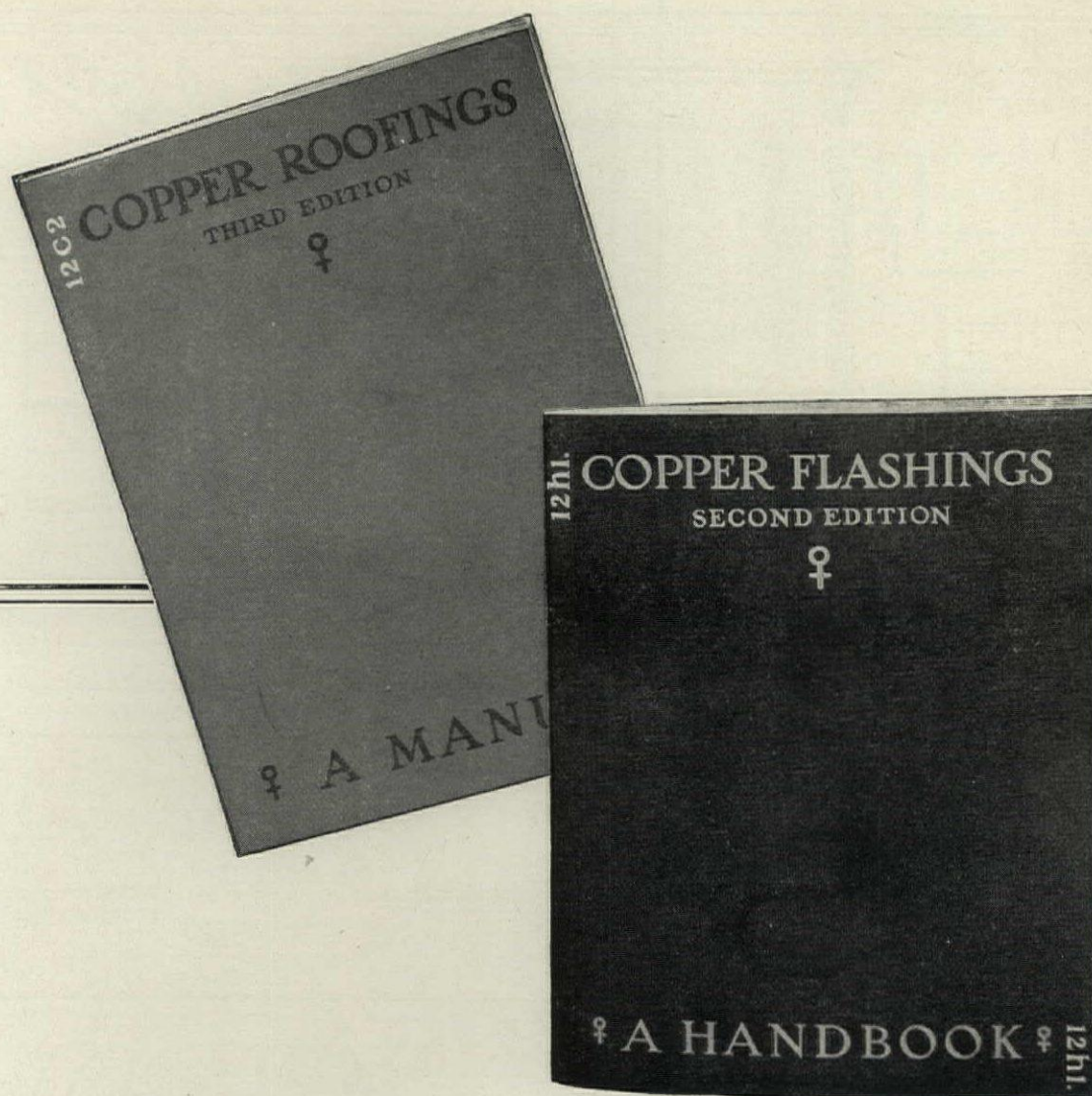
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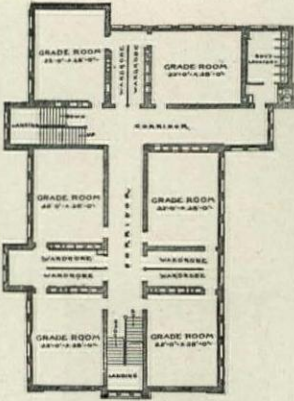
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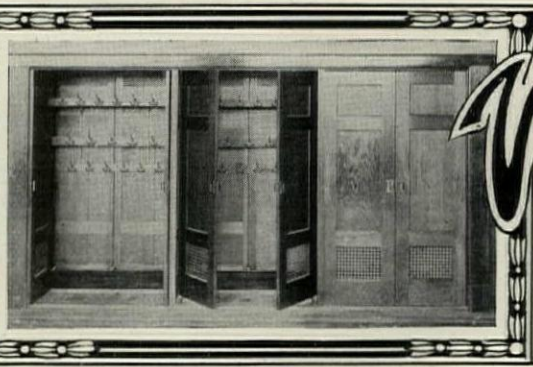
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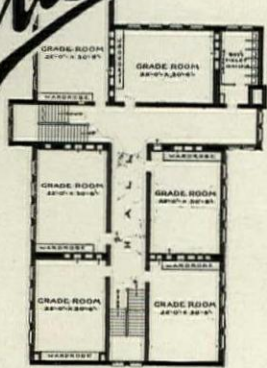
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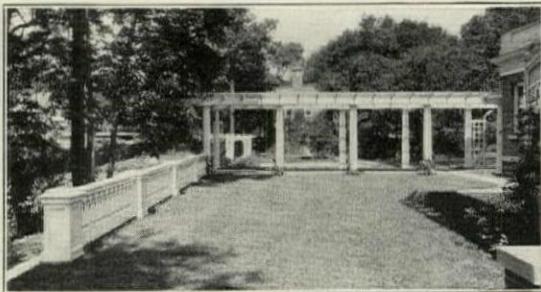
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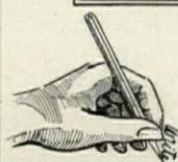
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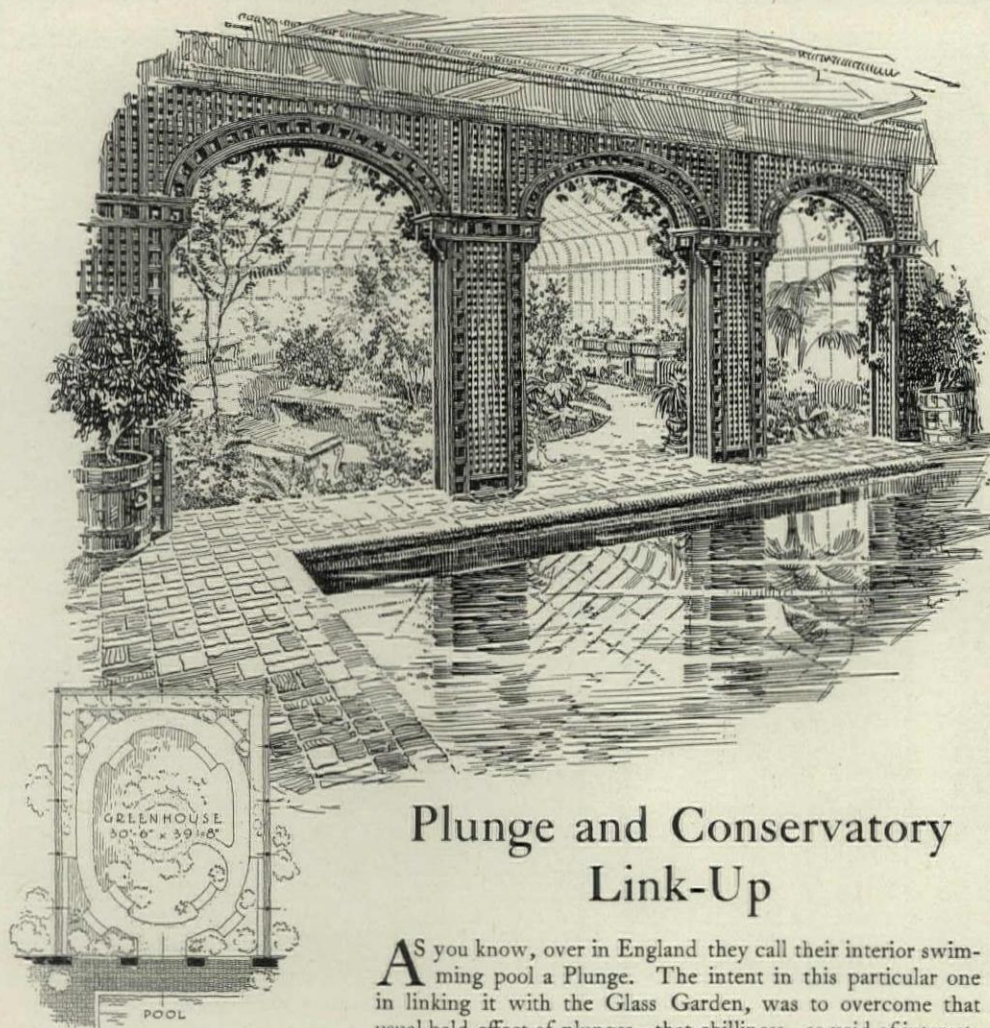
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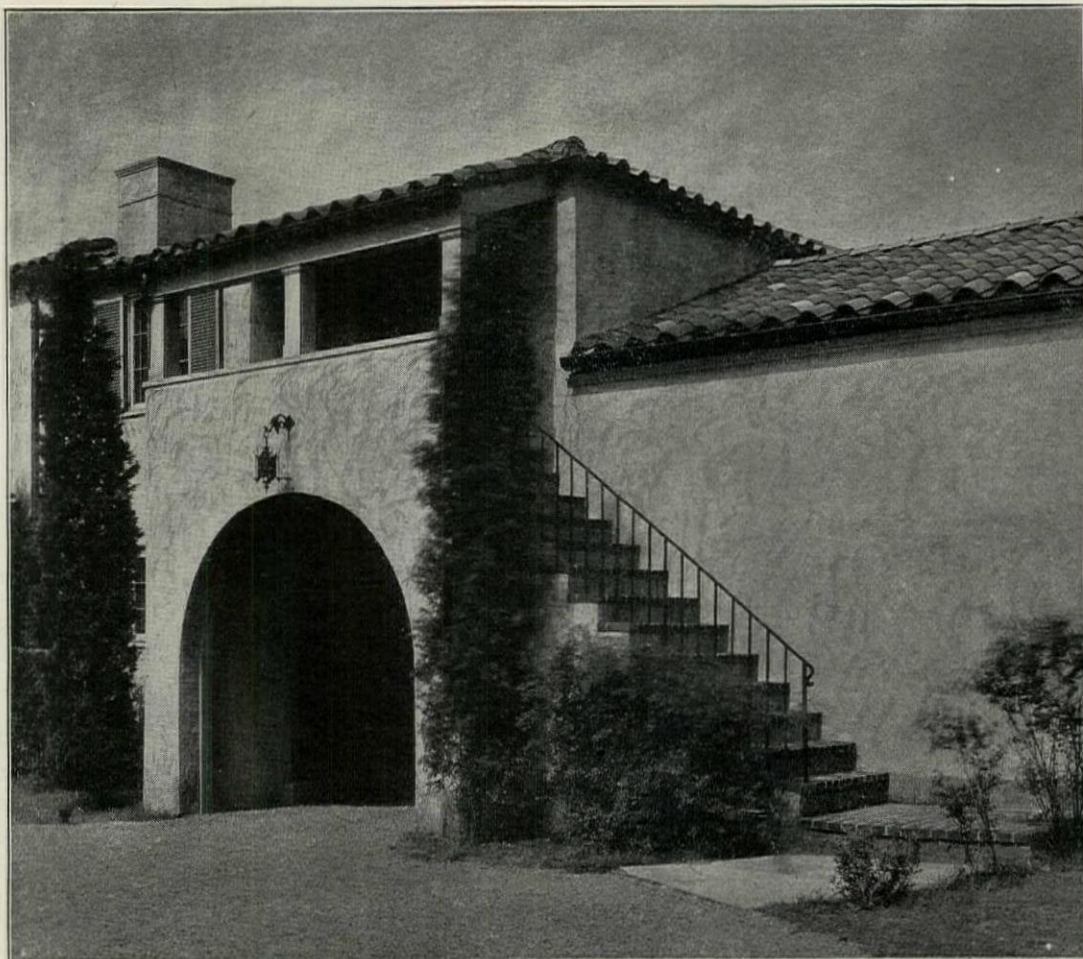
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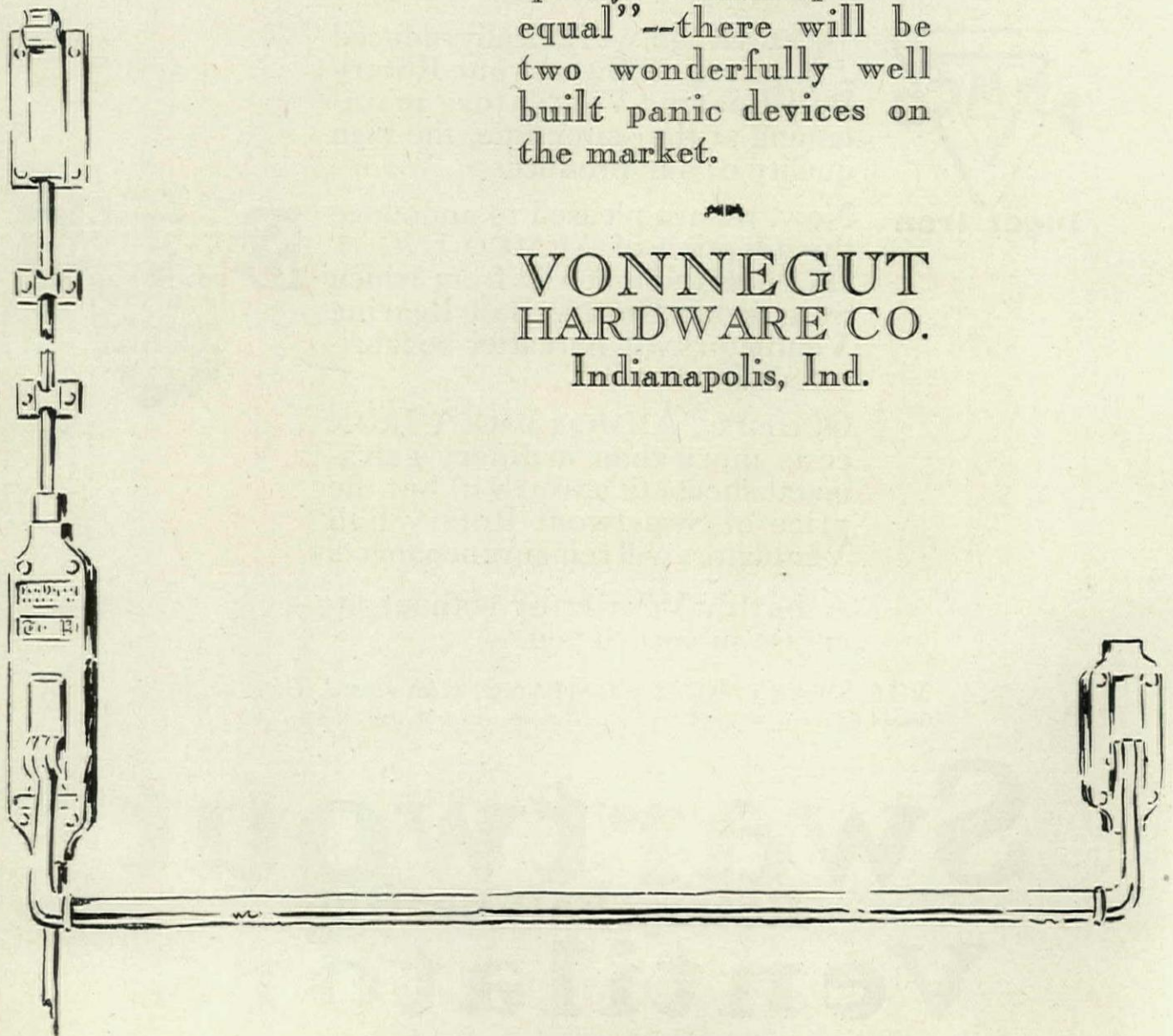
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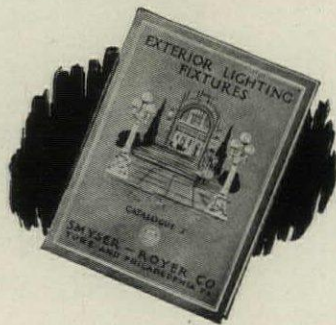
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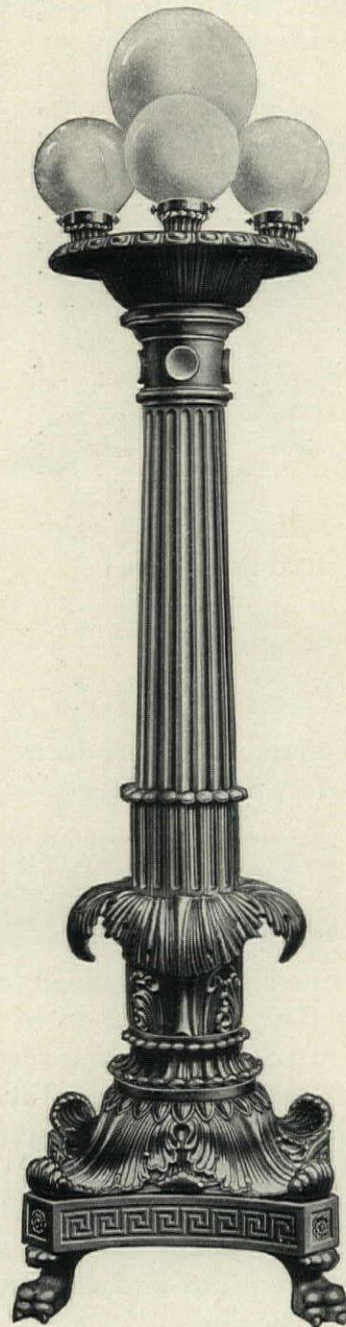


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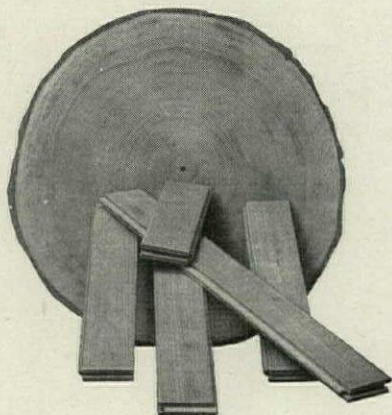
Scale, $\frac{3}{4}$ " = 1'0"

7'0 $\frac{1}{4}$ " high to bottom of upper
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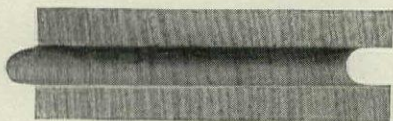
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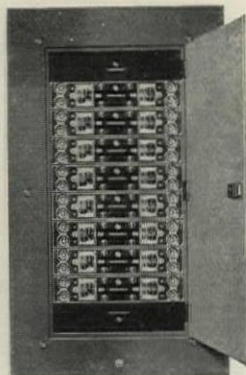
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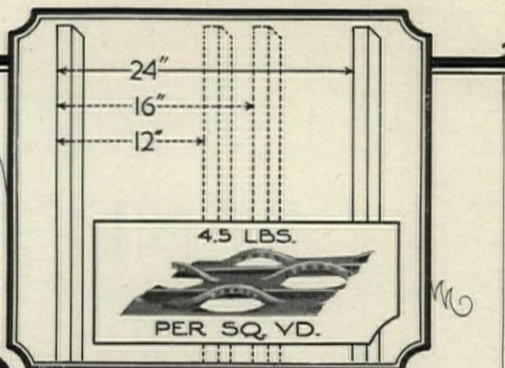
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By ARTHUR L. GUPTILL

With a Preface by

HOWARD GREENLEY, A. I. A.

Past President of the Architectural League of New York

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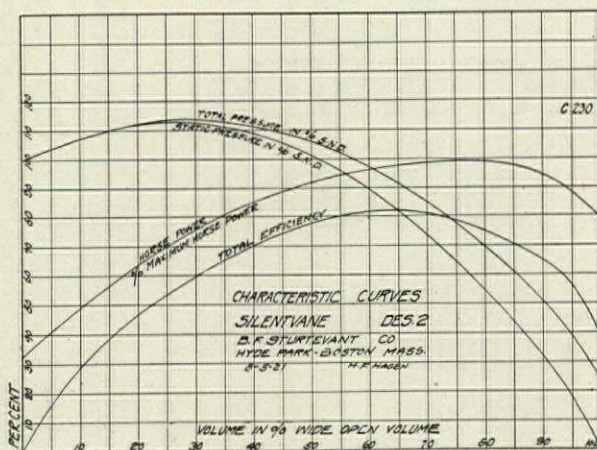
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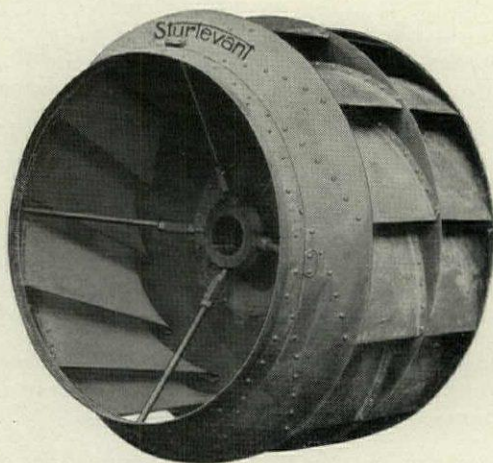
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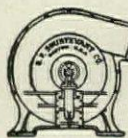
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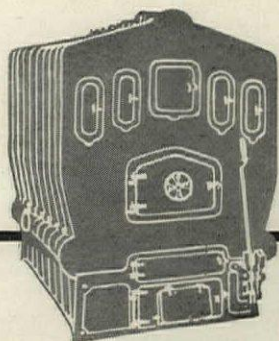
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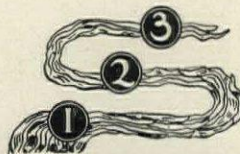
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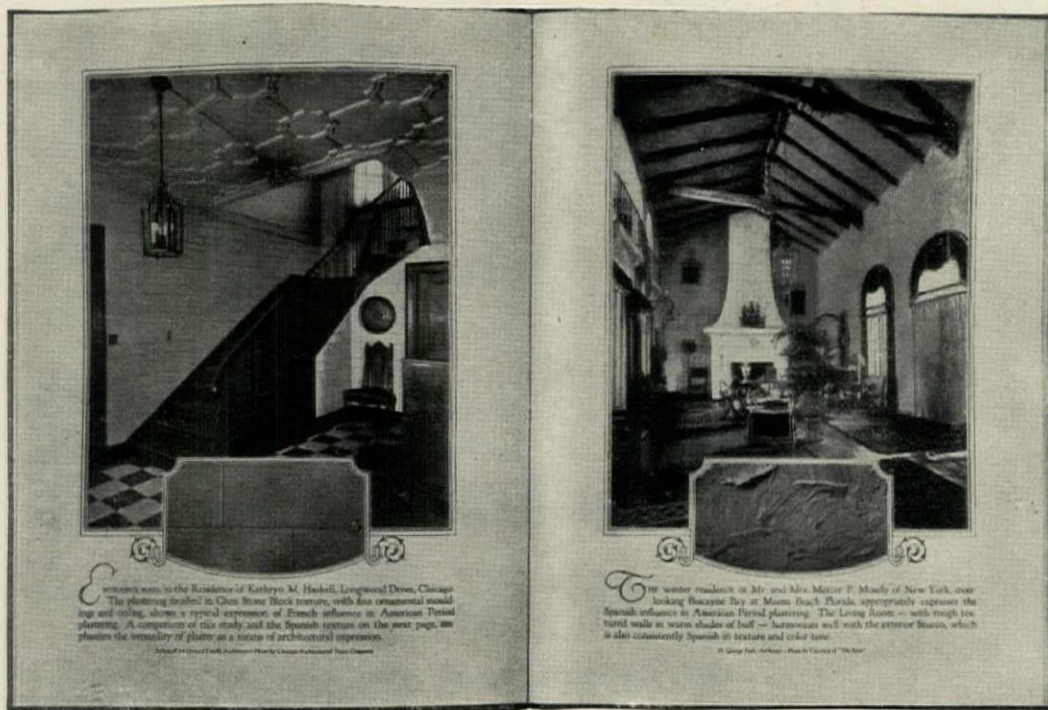
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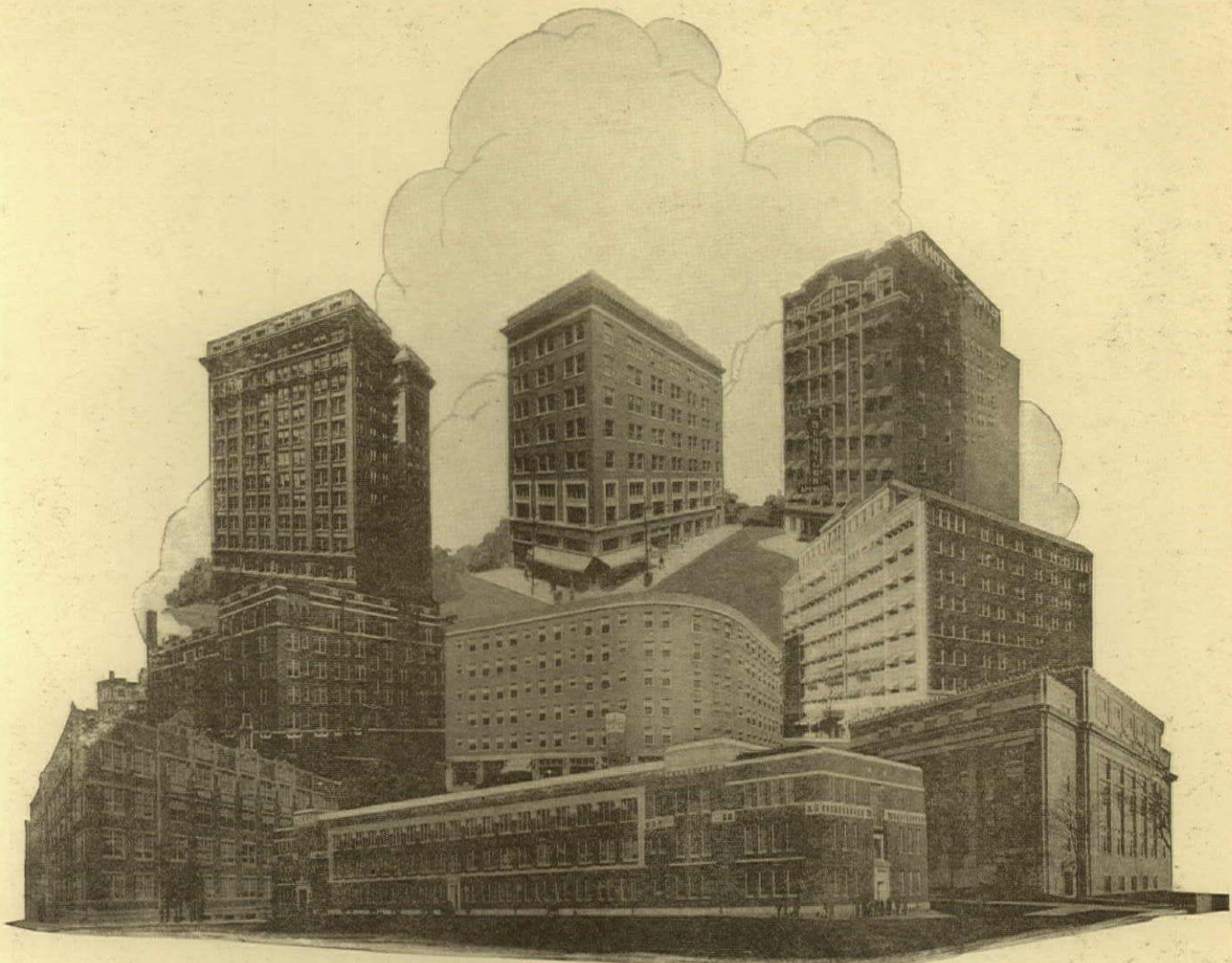


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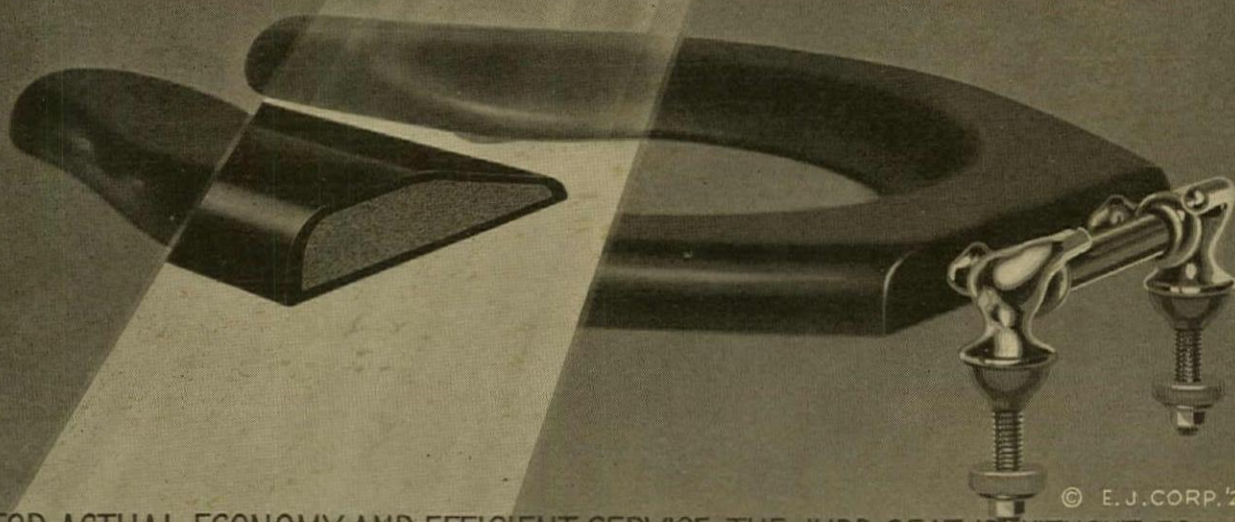
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