

# PENCIL POINTS

A JOURNAL FOR THE DRAFTING ROOM

SEPTEMBER 1927

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# Want Samples? Just look about you

By A. E. DICKINSON

President

Indiana Limestone Company

23

(Indiana Limestone Company is a consolidation of 24 of the oldest and largest companies in the Indiana Limestone district. With assets at over \$46,000,000, this company has facilities for handling any number of large contract operations)

WE call your attention to the danger of basing contracts for Indiana Limestone upon samples. Many an architect has been led into taking chances with an unreliable firm through a goodlooking sample.

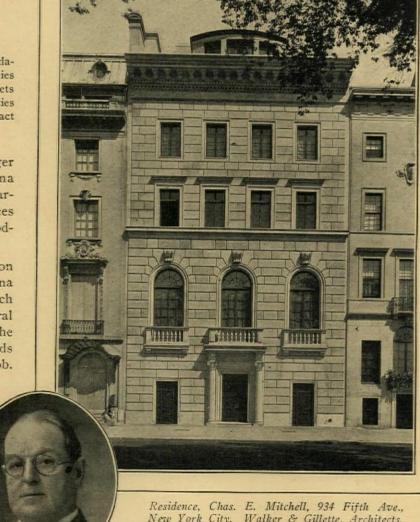
We state without fear of contradiction that the soliciting of orders for Indiana Limestone on the basis of a four-inch piece of stone is a farce. When several firms are competing with samples, the one submitting an honest sample stands no chance whatever of landing the job.

For the honest and reliable firm, as a matter of precaution, submits samples representing an *average* of the grade specified by the architect.

It is Indiana Limestone Company's policy to discourage the awarding of contracts solely on the basis of samples. In taking this stand, we are acting for your best interests and for those of the stone industry.

The true samples of Indiana Limestone from this company's or any other company's quarries are the buildings constructed of stone from these quarries.

As matters stand now, almost every Indiana Limestone job in the United States worth pointing to has



Residence, Chas. E. Mitchell, 934 Fifth Ave., New York City. Walker & Gillette, Architects. Built of Indiana Limestone from the quarries of the Indiana Limestone Company.

come from the quarries now owned by Indiana Limestone Company.

So we say, tell us what building you admire. We can furnish stone to match. Thus you and your client will be sure of satisfaction.

Please write us when information on any question pertaining to the use of Indiana Limestone is desired. Address Box 784, Service Bureau, Indiana Limestone Company, Bedford, Indiana.



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By using Atlantic Terra Cotta for an entire facade the design can be worked up with originality of detail—in color, texture and modeling.

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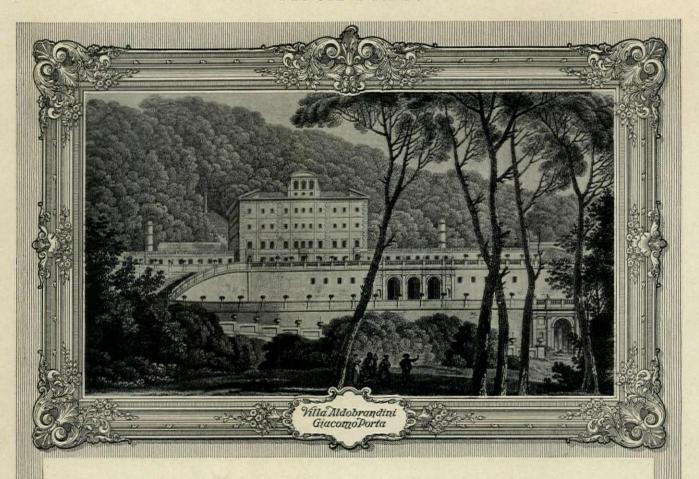


The cost of Atlantic Terra Cotta is moderate. May we estimate?

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Revised
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on
Request



The splendors of the Renaissance have been a challenge and an inspiration to the fire of genius for centuries.

## Northwestern Terra Cotta

affords expression for that excellence in color and in form so essential to American Architectural Masterpieces.

The Northwestern Terra Cotta Company
Chicago St. Louis



# Even the *Partitions* in this Home Are Lined with *Cork*

HERE is a home which the owner and his architects determined to make not only comfortable in summer's heat and winter's chill, but quiet and sound-proof as well. Armstrong's Corkboard was used on the exterior walls and second floor ceiling for insulation against outside temperatures, and on the partitions and first floor ceiling to deaden sound.

The efficiency of Armstrong's Corkboard as heat insulation—to keep the sun's heat out and furnace heat in—is well known and its use is rapidly becoming widespread in the better types of houses. The fact that it is also an excellent sound retardant is just another

argument in its favor. Used on exterior walls and roofs, it reduces the transmission through them of noises from the outside. On interior partitions and ceilings, it makes each room virtually sound-proof—a most desirable feature in hotels, apartments, and detached dwellings.

Special attention has been paid to the architect's requirements in preparing the book, "Armstrong's Corkboard Insulation for the Walls and Roofs of Buildings." It contains complete information in convenient filing form. If you do not have one

in your files, write for a copy. Armstrong Cork & Insulation Company, 201
Twenty-fourth Street, Pittsburgh, Pa.



# Armstrong's Corkboard Insulation

A Heatproof Lining for Walls and Roof



Hickox Building, 9th Street and Euclid Ave., Cleveland. The roof of Barrett Pitch and Felt, laid in 1888 by Hugh Huntington & Son, Cleveland, has not cost a cent for repairs in 39 years

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#### SINCE THE "ELEGANT 80's"- BUT NOT IN THE MATTER OF ROOFING

"\*\*\* When you look into the matter you find that roofs of coal-tar pitch and felt, with a wearing surface of slag or gravel, were considered sound building practice way back in the 80's.

Today you find these veterans on old office buildings, warehouses and factories all over the country—still staunch and weathertight after their 40 or more years of service. Moreover, in a majority of cases, you will find that they have cost little or nothing for repairs."

The superiority of pitch and felt built-up roofs has been established—proved by the years. Today for the majority of our finest modern structures architects specify The

Barrett Specification Roof—a pitch and felt roof which is accepted as the last word in permanent roof protection.

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Note: Volume 1 of our Architects' & Engineers' Built-Up Roofing Reference Series gives specifications for flat roof construction. If not already in your files, a brief note to our Built-Up Roof Department will bring you a free copy.

#### Keep the Door Closed

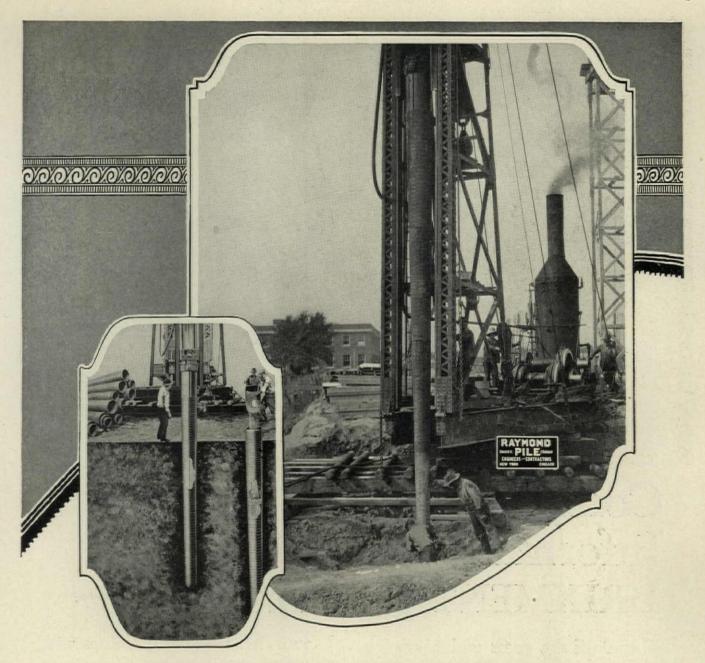
When you write "or equal" in your roofing specifications you open the door to mobecompetition, leaving the high-grade roofing contractor to fight it out with the fly-by-night roofer. Result? Price wins the job—and you lose prestige when the "or equal" roof goes wrong.

Write "Barrett Specification 20-year Bonded Roof" and stop there!

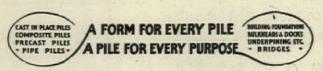
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The Barrett Company, Limited 5551 St. Hubert Street, Montreal, Quebec

Barrett SPECIFICATION ROOFS



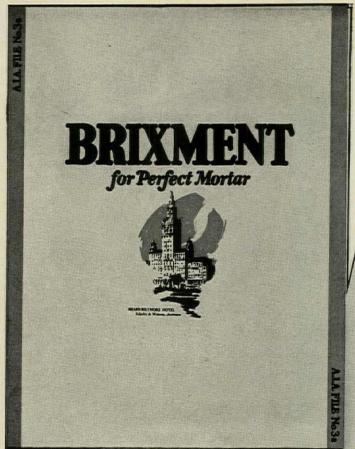
There is no form of concrete piles so widely used as Raymond Piles. There is no method just like the Raymond Method—every pile is poured into a tapering steel shell and every shell left in the ground.



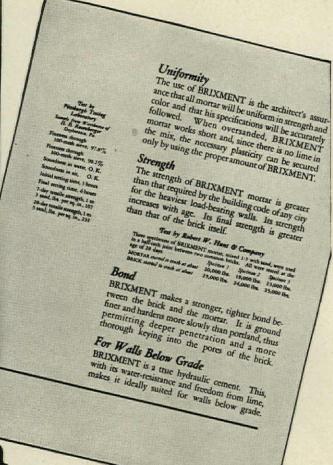
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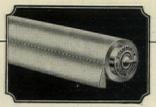
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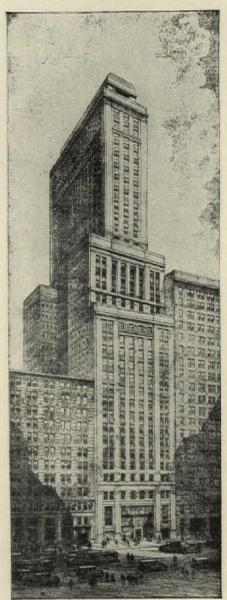
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The Fifty Broadway Building, New York City H. Craig Severance, Architect. Equipped with Columbia Window Shades and Rollers.

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But take a larger building-with whole batteries of windows, with thousands of square feet to be shaded.

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"But," you object, "isn't any window shade buying that I do, bound to be blindfold buying? I'm not an expert on window shades. And I can't spare the time to make myself an expert."

Then let us put you in possession of one fact that makes you ipso facto an expert on window shades:-

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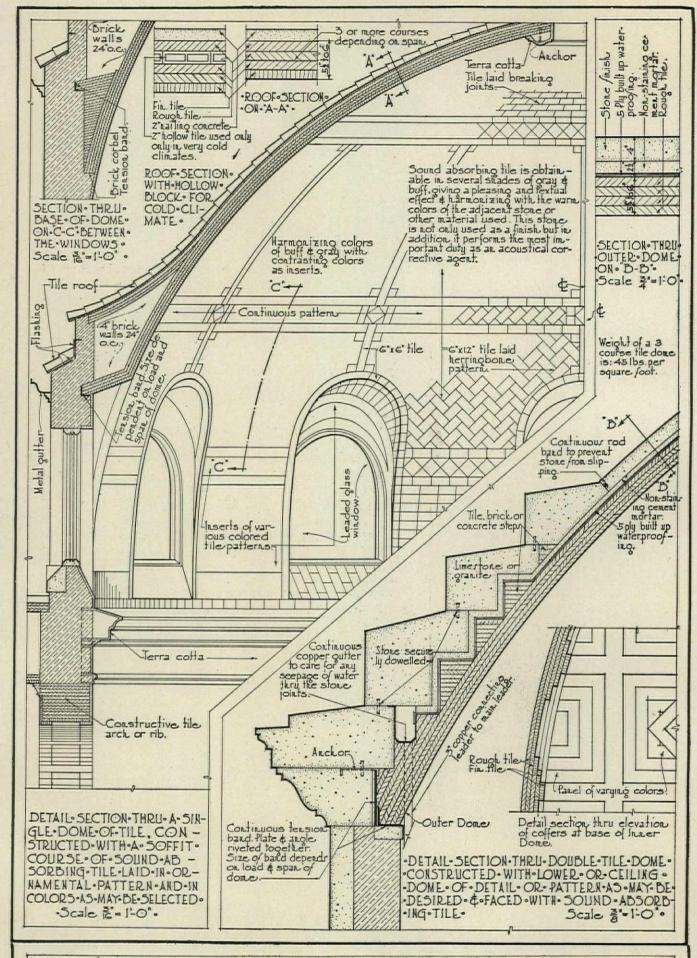
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# Plumbing Fixtures On the Job, "With their Sleeves Rolled Up"

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Clow plumbing is set up according to specifications, be-

fore shipment, and tested under conditions similar to those on the job. Batteries are fitted—surfaces are checked for im-

perfections—and all working parts are carefully tested under water pressure.

Fixtures so tested arrive on the job "with their sleeves rolled up." Their installation is speeded up —"re-

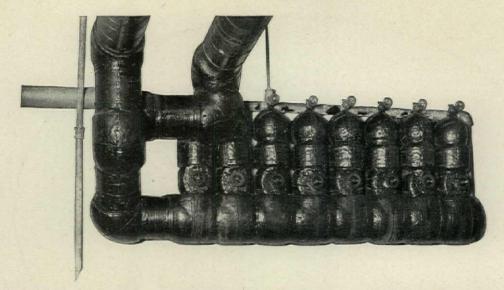
jects' are few and you have the assurance that the job will be a credit to you and a satisfaction to your customer.



Fitting a Battery

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RMSTRONG'S (Nonpareil) Cork Cover-A ing for drinking water, brine, ammonia and other cold lines has a definite, constant heat-insulating efficiency. The progressive deterioration and loss of insulating value

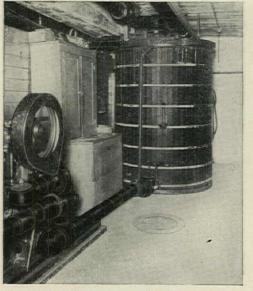
inevitable with moistureabsorbing coverings and always involving steadily increasing line losses, are not a factor when Armstrong's is used. No extra refrigerating capacity need be figured to allow for them.

Armstrong's Cork Covering is air-proof, moistureproof, frost-proof. When properly applied and given reasonable maintenance attention, it will insulate the lines as long as the lines themselves remain, unchanged in efficiency or structural properties by normal service conditions.

Refrigerated lines insulated with Armstrong's Cork Covering can be safely

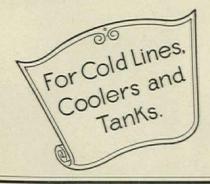
run in chases. There will be no sweating or frosting and no failure of the insulation after the lines have been sealed in. This assurance is of special importance in hotels, apartments, and similar buildings, since it

eliminates all danger of discoloration and damage to walls and ceilings due to condensation on the cold lines.



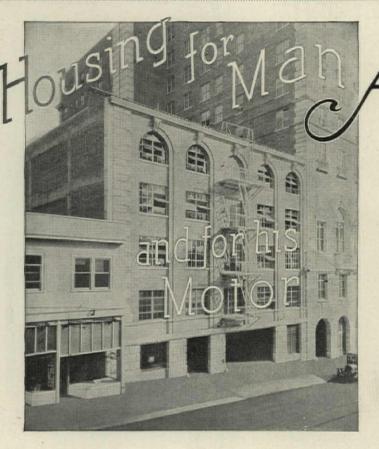
Armstrong's Cork Covering, Fitting Covers and Lag-ging on brine header connections, drinking water lines and cooling tank in the Kansas City Athletic Club, Kansas City, Mo. Architect Hoit, Price & Barnes, Kansas City, Mo.

Literature containing much helpful information on the subject will be sent free on request. Write for the books, "Refrigerated Drinking Water" and "Nonpareil Cork Covering." If desired, Armstrong engineers are prepared to give valuable assistance to architects in the design and insulation of refrigerated drinking water systems, and other cold lines. Armstrong Cork & Insulation Company, 201 Twenty-fourth Street, Pittsburgh, Pa.



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is like an Apartment House in needing a Garage

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"HOUSING for man and his motor car"—the two are inevitably linked together in thought of modern America, and must be linked together in architectural planning.

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> America needs more garages—more than any one type of building. Have you a "Ramp" file of garage information? Write us.



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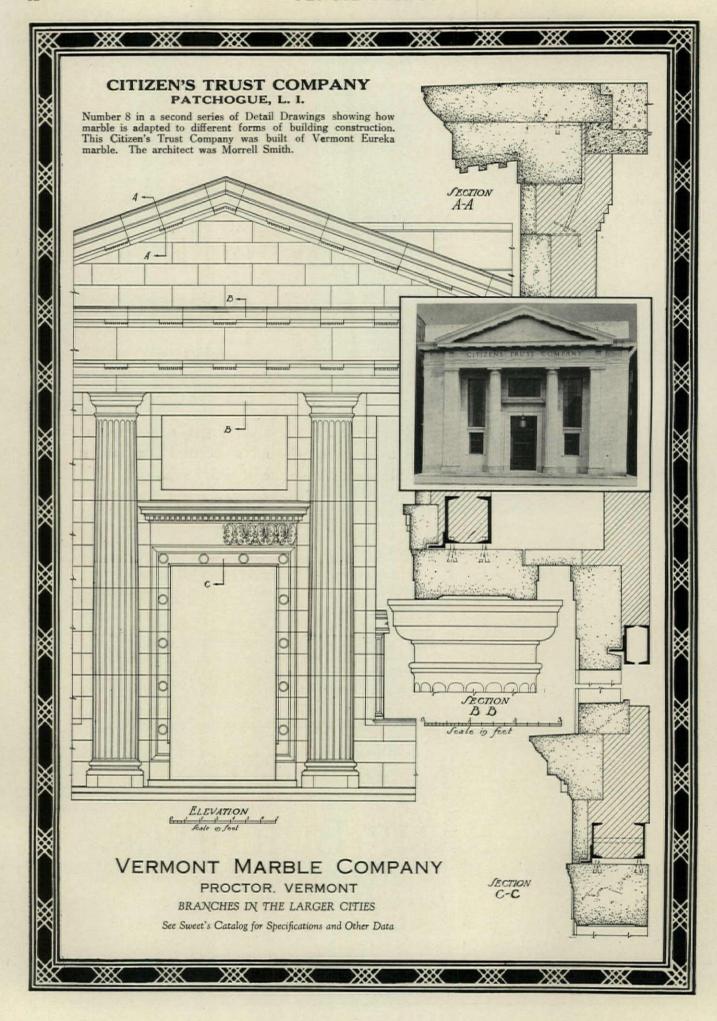
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GARAGE ENGINEERS

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The New "Thermal-Insulating" material that has structural strength

MAFTEX ends the doubts of the architect who would like to specify "Thermal-Insulation" combined with structural dependability. MAFTEX gives you both qualities, in the one material—insulation that's an effectual barrier to the passage of thermal units; strength and structural adaptability that make it thoroughly dependable for use in place of wood sheathing.

# MAFTEX is made from the Roots of Licorice

MAFTEX is composed of millions of soil-toughened, interlacing, reinforcing, stiffening licorice fibers that not only form "dead air" cells through which thermal units cannot pass, but which also strengthen and stiffen each MAFTEX board to withstand the structural tests for which, perhaps, you've felt only wood sheathing could be depended upon with certainty.

The Structural Service Bureau, of Philadelphia, and D. Knickerbacker Boyd, F.A.I.A., technical consultants to leading building materials industries, have developed a series of Architectural Bulletins describing the various construction uses of MAFTEX. With these is a Manual of Practice which you will find a valuable adjunct to your specification equipment. Write for them; they will be gladly sent upon request.

MAFTEX may be specified with absolute assurance for application "direct" upon outside wall studding or upon roof rafters, in place of wood sheathing. With equal assurance, it may be used "direct" upon inside studding, in place of lath, as a perfect and enduring plaster base.

Inside or out, MAFTEX will not warp, crack, buckle, or disintegrate. MAFTEX is unaffected by atmospheric changes. MAFTEX is rat- and vermin-repellent.

In every climate, for every type of construction, the insulating and structural values of MAFTEX are as permanent as the building in which applied.

Write for full particulars
without delay

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## These Elevator Doors Are Completely Wagner Equipped



Wagner Hangers, Door Closers and Pneumatic Operators have been tested and approved by the Underwriters' Laboratories. Labeled units, manufactured in accordance with Underwriters' specifications, are furnished without extra cost, provided they are to be used in connection with approved Fireppoof Elevator Enclosures.

All elevators in the new Lowry Hotel, St. Paul, are equipped with Wagner Elevator Door Hangers, Door Closers, and Safety Interlocks and Elevator Signal System, thus providing the added safety, convenience and dependability of service which the use of Wagner Equipment always insures.

Wagner Elevator Door Equipment is produced to meet the demand for efficient service and dependability. A constantly and rapidly increasing number of the most modern structures in every part of the country are Wagner equipped. Whenever Wagner Equipment is used, there you will find elevator doors, which provide the utmost in safety, convenience and dependable service.

Is there complete information in your files on Wagner Hangers, Closers, Interlocks, Barlock Interlocks, Pneumatic Operators and Signals? If not, write us and we will gladly see to it that you are supplied.

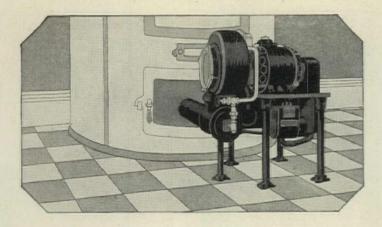
WAGNER MANUFACTURING COMPANY Cedar Falls, Iowa.

# ELEVATOR DOOR EQUIPMENT

Elevator Door Hangers, Door Closers, Electric Interlocks



Elevator Signal Systems, Pneumatic Operators



# When the home is built . . . the logical time to provide for heating comfort

OBVIOUSLY, a heating system can be most satisfactorily and economically installed when a home is built—when the excavation for it is first begun.

The advantages of oil heating—its efficiency, its complete dependability—are steadily becoming more evident to the architectural profession. And the oil burner that today is favored by architects throughout the country is the Quiet May. You can specify the Quiet May unhesitatingly for your clients' homes. With assurance that the Quiet May will meet completely and permanently every heating requirement of these homes. . . .

We have prepared a free descriptive booklet filled with authoritative, concrete information about oil heat. Let us send you a copy of this booklet. Let us give you full data concerning the Quiet May. For any further information you may desire, write to

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Factory and Executive Offices: Baltimore, Md. Branch Offices: 331 Madison Ave., New York; 35 East Wacker Drive, Chicago; Terminal Sales Bldg., Seattle.

Also makers of the May Commercial Oil Burner

These definitely superior features of the Quiet May will interest you

Quiet: The Quiet May admits a measured quantity of air through a large opening, at low speed—and as a result, its combustion is really noiseless. Because of this improved principle of operation, the Quiet May removes the greatest single objection to oil heat. With the Quiet May, no sound can intrude into the living quarters to disturb the occupants of a home.

Safety: Listed as standard by the National Board of Fire Underwriters, New York Board of Standards and Appeals, Commonwealth of Massachusetts Department of Public Safety. The Quiet May is equipped with both temperature and combustion controls of proved dependability. Every part is rigidly tested for accuracy and reliability.

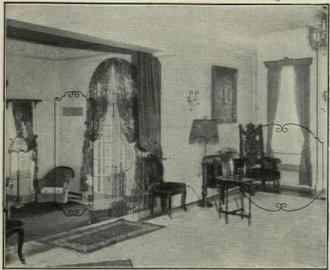
Adaptability: The Quiet May is approved to burn all grades of home-heating fuel oils from 25 degrees Baume upward. It is adaptable to large as well as small homes. It meets the requirements of every type of heating system, whether steam, vapor, hot air or hot water, through its flexibility and simplicity of adjustment to different furnace, flue and chimney conditions.

Simplicity: So simply designed is the Quiet May that it has only two moving parts. It is of the sturdiest possible construction. Every May burner must pass twenty-three exhaustive tests before it leaves the factory.

Integrity: A firm of unquestioned reputation, with immense resources, stands back of the Quiet May. Every claim made for the Quiet May can be relied on.

Cost and Terms: Depending on the locality, size of tank and soil conditions, the Quiet May costs a nominal sum when measured in family health, freedom from trouble and increase in property valuation. It is sold on convenient time payments, and is installed only by experienced and reliable dealers.

# QUIET MAY CAUTOMATIC OIL BURNER



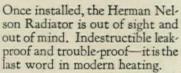
Living Room in the W. E. Hyde Residence, Memphis, Tennessee

# No space wasting radiators here ...

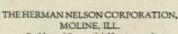
for in the modern home, exposed radiation is obsolete. Nothing must interfere with refinement of interior arrangement and decorations.

Built right into any standard 4" wall or partition—the . Herman Nelson Invisible Radiator occupies no floor or

wall space. It is not camouflaged —but concealed. Only the attractive outlet grille is visible.



Architect, heating engineer, contractor, and everyone interested in new home or modern building construction, should know the facts about the Herman Nelson Invisible Radiator.



Radiator (1) comes installed in a steel case (2) more substantial than the wall itself. The complete unit is ready to install in any 4" wall or partition.

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TYPE L-9-E (Exposed Piping)

No sudden shots of hot or cold water from a shower when a Leonard Valve is used: The action of the solid metal thermostat prevents it.

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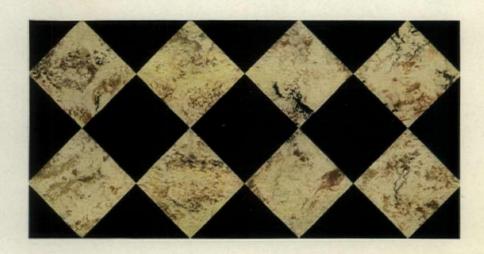
Incorporated 1913

Providence, Rhode Island

# Announcing

# KARNEAN MARBLED INLAID

True marble effects in GOLD SEAL LINOLEUM



3032—THE IMPERIAL PATTERN, with its bold contrast of black against rich-veined cream, combines dignity with lasting charm, beauty with comfort.

MELLOW richness of coloring . . . . unstudied grace of veining . . . subtle shadings of tone. All the luxurious appearance of marble has been completely attained in the new Karnean Marbled Inlaid patterns. Moreover—

These newest additions in Nairn GOLD SEAL INLAIDS introduce an entirely new feature in linoleum. The Congoleum-Nairn Super Finish! A newly-discovered process which increases the durability of the goods, and makes them soil-proof without sacrificing any of the inherent properties of high-grade linoleum.

Easier to clean and easier to polish—adding years of wear and beauty—the Congoleum-Nairn Super Finish is the

greatest single advance in linoleum manufacture yet introduced.

Another improvement is the strong joint between the tiles. A positive protection against open seams marring the beauty and causing deterioration. And the flexible, leathery feel of the goods further indicates their superior quality.

Offices, stores, banks, libraries, lodge-rooms, lobbies, theatres, fine residences—wherever impressive beauty plus long-time serviceability is called for, *Karnean Marbled Inlaid* answers all requirements with gratifying economies in cost.

Other richly decorated color combinations are shown on the other side of this page.



(See next page)

# GOLD SEAL INLAIDS

NAIRN

3033—A TOUCH OF THE SEA in this rich Neptune Pattern—the magical green of tropic waters curling into graceful white-caps.



# KARNEAN MARBLED INLAID

ERE you see the other striking designs now available in Karnean Marbled Inlaid—the group of rich marble effects newly added to Nairn GOLD SEAL INLAIDS.

Never before has linoleum possessed such resistance to wear and dirt as has been achieved in the smooth, fine-textured composition of these goods.

With the exclusive quality features described on the preceding page—and combining resilience and great pliability with extreme toughness and wear-resistance they offer the most remarkable value in de luxe flooring. All patterns are made in Heavy Weight, and the tiles in the diagonal design measure 61/2 inches square.

Karnean Marbled Inlaid is but one of several types of GOLD SEAL Linoleum which will serve architects in giving the individuality and decorative richness to all types of interiors. The various Belflor tile patterns in delicately-mottled colorings . . . the Newark and Universal patterns in smartly-contrasting solid colors . . . the soft-toned Hudson Moulded patterns . . . and the quietly decorative Jaspé effects.

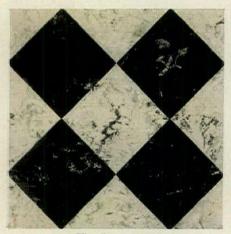
Samples and actual size color reproductions gladly sent on request. Have you a copy of the Linoleum Data Book on file?

CONGOLEUM-NAIRN INC., Philadelphia, New York, Chicago, Boston, Kansas City, Atlanta, Minneapolis, Cleveland, Dallas, Pittsburgh, San Francisco, New Orleans.

(Don't miss the important facts on the preceding page)



3034-The Autumn Pattern in Karnean Marbled Inlaid



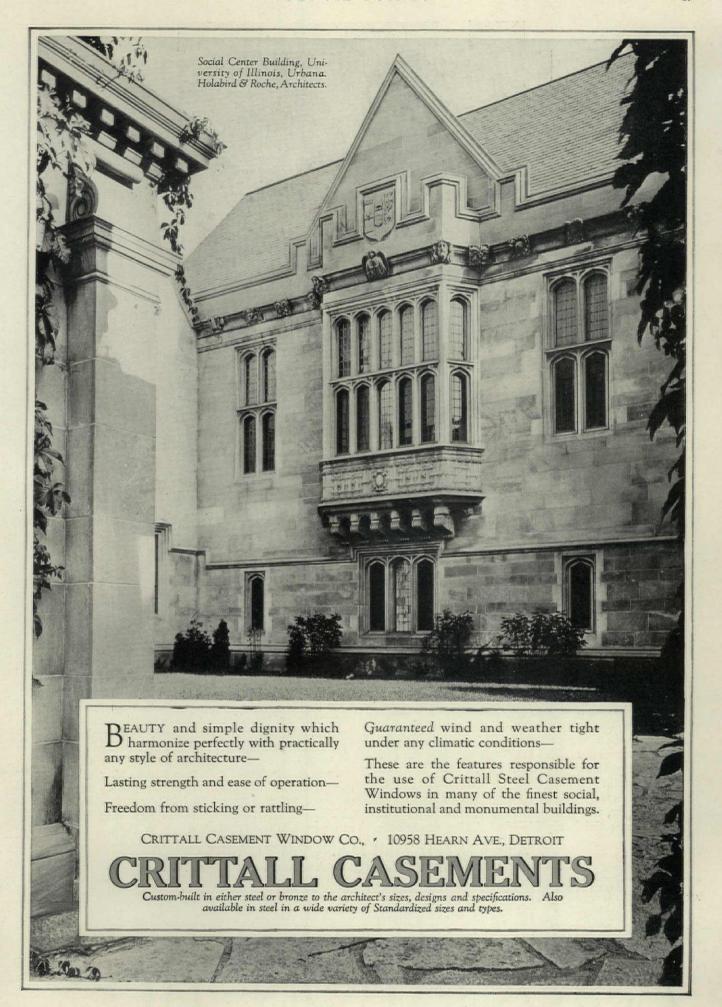
3031-The Granada Pattern in Karnean Marbled Inlaid

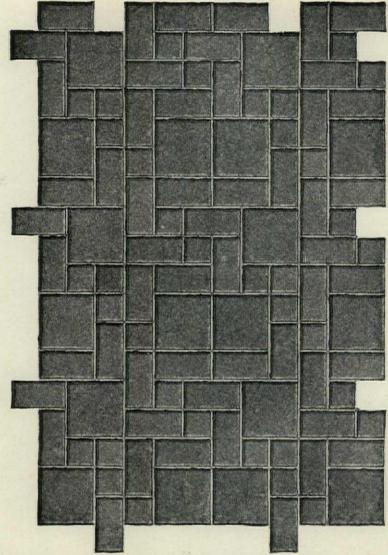


3035—The Greycloud Pattern in Karnean Marbled Inlaid

(See preceding page)

## NAIRN GOLD SEAL INLAIDS





THE EIGHTH OF A SERIES OF INFORMATIVE ADVERTISEMENTS ON PATTERN IN TILEWORK

#### CHARACTER IN FLOOR SURFACES-1.

IN addition to beauty of COLOR, interest of PATTERN and appropriateness of SCALE in a TILE floor, one of the most important considerations is the CHARACTER of the floor surface. Man has been for so many centuries accustomed to the resilient response of the earth's surface that often the mechanically "flat" man-made pavements become, if not distasteful, more or less unpleasant to the human foot. This criticism of certain types of modern floor coverings one often hears. In connection with TILE surfaces, however, this is never a consideration for, while this material is capable of producing the utmost

variety of COLOR, PATTERN and SIZE, the "feel" of the surface may also be absolutely and assuredly controlled by the careful consideration of the JOINTING that enters into every tile floor design. If for sanitary or other reasons a mechanically "flat" floor is required, that is possible. If, on the other hand, a charming accidentally undulating and responsive surface is desired, the width, the depth and the frequency of the JOINTS, which make, after all, the "life" of the floor, will accomplish the purpose. Here again COLORFUL CERAMIC TILES demonstrate their superiority over all other modern floor materials.

#### ASSOCIATED TILE MANUFACTURERS

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ALHAMBRA TILE CO., Newport, Ky.

AMERICAN ENCAUSTIC TILING CO., Ltd., Zanesville, Ohio
BEAVER FALLS ART TILE CO., Beaver Falls, Pa.
CAMBRIDGE TILE MFG.CO., Covington, Ky.
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Pyrobar Partition Tile are fireproof, plus every other attribute a good partition material ought to have!

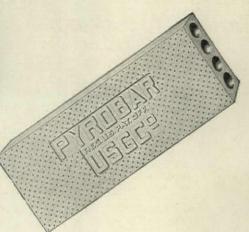
Plus a degree of sound insulation unobtainable in partitions of any other standard building material of equal thickness.

Plus speed of erection. Workmen like Pyrobar—they're light and smooth—less lifting and no injury to hands. That means swifter, smoother work.

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# In the Southwest, too, they're favorites!

THE popularity of Halsey Taylor Drinking Fountains is not confined to any one section. The factors of practical sanitation and drinking convenience and a freedom from servicing after installation; these make their choice nation-wide. As an example, in this beautiful structure in one of Texas' largest cities, so strikingly characterized by Gothic motifs, and conceived by Cameron, one of Texas' prominent architects... what fountains could be more fitting than Halsey Taylor?

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Largest Manufacturers of drinking fountains exclusively



Photograph and diagram of a Kawneer hollow metal sash. Age and rough usage will not affect its strength and beauty. The heavy copper mouldings from which Kawneer sash and bars are built require no wood reinforcement. We are in a position to fill your specifications whether for a front of the most simple or the most ornate design.

Wood strips covered with thin metal (to imitate Kawneer shapes) are perishable, thus endangering the safety of the glass. The thin, soft metal is easily dented and marred.



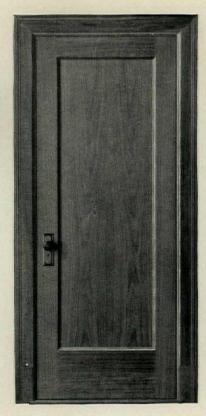
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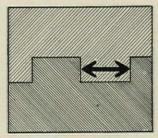
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Balanced Stresses in Compound Door Construction

If a Compound Door were made of one piece of wood it could not be more solid. Veneer and core are locked together by construction that makes the door, to all practical purposes, a unit.

Balanced stresses offset the tendency of the veneer to pull away. A slight swelling of the tongues, when in place, creates a dovetail that resists separation. Above all, a gluing surface double that of the ordinary flat joint, multiplies Compound's strength tremendously.

In buildings where doors are subjected to abnormal strain, in hotels, apartments, banks and public institutions, Compound Doors have made an enviable record for long life during a period of over thirty years of manufacture.

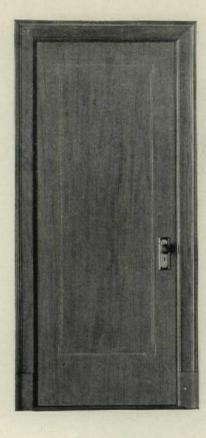


Cross-sectional sample of COM-POUND construction, showing 3/16inch sawn veneer tongue-and-grooved to core.

DOORS

THE COMPOUND &

ST. JOSEPH



# PYRONO

# -but Each Gives Special Protection

Pyrono is a fireproof door, but it possesses superlative beauty which the word "fireproof" might not suggest to the uninitiated.

That is because many architects have grown used to thinking of fireproofing as a necessary evil opposed to the demands of beauty. But in Pyrono, ingenious use has been made of asbestos, which is an unexcelled fire-arresting agent.

Asbestos sheathing, mechanically bonded between veneer and core, allows the use of the choicest wood veneers for Pyrono's surface. This has not only the effect of making Pyrono a fire barrier, but makes it easy to fit to the opening, and keeps it from changing shape under extreme temperatures, often when life itself is at stake.

Both Compound Doors & Pyrono Doors would probably fall considerably under your estimate of their cost. Let us give you the actual figures, with further data and references.

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PYRONO construction magnified—the asbestos sheathing indented into the core and the cross-banded surface veneers applied over it.

PYRONO DOOR CO.

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DOOR SPECIALISTS



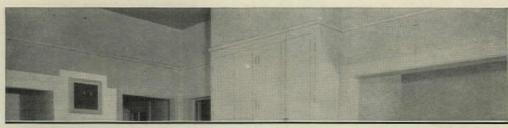
RESIDENCE OF SAMUEL B. SPENCER, GREAT NECK, L. I.

ARCHITECTS: F. ALBERT HUNT & EDWIN KLINE

It's not surprising that American architects have so quickly accepted Fenestra Casements. Few, if any, building materials have so fully met both the decorative and technical needs of the architect, or provided the home owner with so many genuine conveniences. \* \* \* And

not the least of Fenestra advantages is the low cost made possible by standardized production methods which offer no limitations in decorative results. Ordinarily these better, more convenient steel windows represent only about two per cent of the building cost.

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Lamson Floor Company made this installation of Goodyear Rubber Tiling in the kitchen, service dining room, butler's pantry and service hallways of the Studor Thompson residence, Cleveland, Ohio

The kitchen today is a rare combination of convenience, good looks, and *laboratory cleanliness*.

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This fine, rich, sanitary material is suitable for any room in the house.

It is equally desirable for club, church, hospital, office or store.

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Goodyear Means Good Wear-



RUBBER TILING





Dominating New York's Fashionable Park Avenue, MURPHY was specified for this graceful Ritz Tower

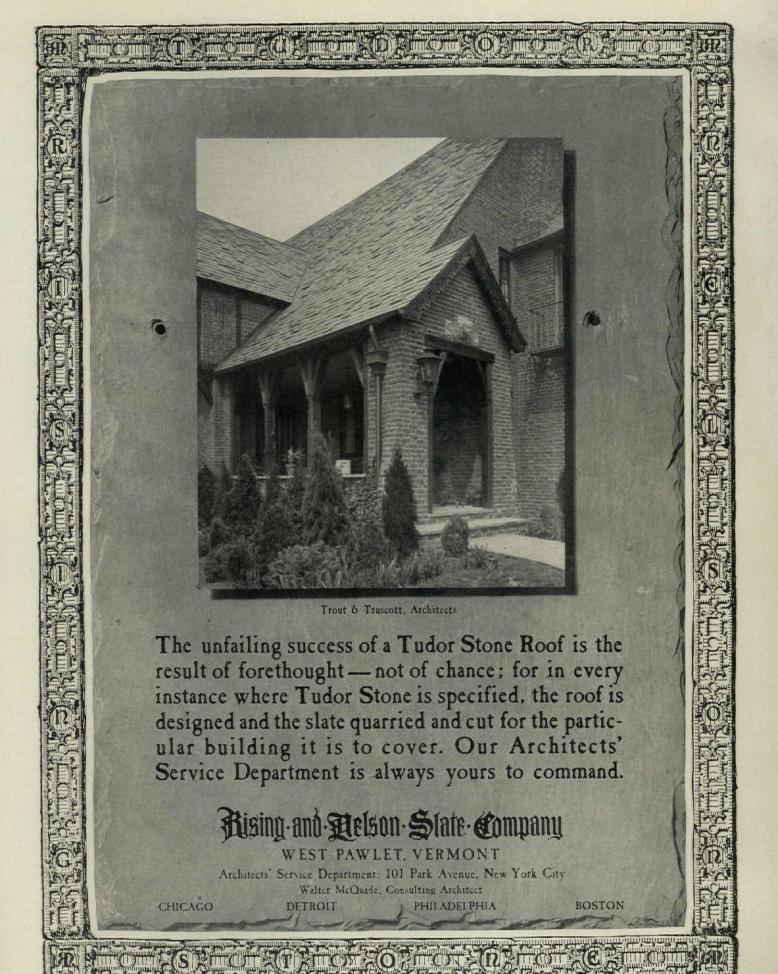
Time tests all things—reputation and varnish. Murphy Varnish Company has made varnish for sixty years. It has always made the best it knew how. It is doing that now. That determination to make good varnish has given the name Murphy whatever value it has. Those who have used its varnishes, some of them for many years, must have found them good. They have given it its reputation.

The Ritz Tower is one of the finest of the more recent skyscraperapartments which are rapidly altering New York's skyline. For interior finish Emory Roth, the architect, specified Murphy Muronic Enamel. L. S. Fischls Sons were the painting contractors.

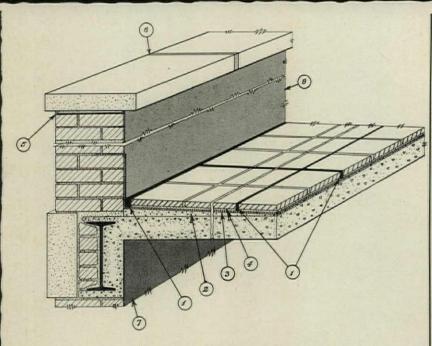
This is a typical Murphy contract. Leading architects, for over 60 years, have specified Murphy finishes on their most important jobs.

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# HORN-WATER-PROOFINGS



- (1) Expansion Joints placed as shown, not over 20 feet apart in either direction, and filled with Horn's Expansion Joint Cement.
- (2) Cinder Concrete Fill.
- (3) Roofing membrane.
- (4) Mortar bed of tile roof.
- (5) Waterproof cut off of Dehydratine No. 6 under coping.
- (6) Expansion Joint in Coping filled with Vulcatex.
- (7) Dampproofing, Dehydratine No. 10. (Inside surface of solid brick walls).
- (8) Rear of Parapet Wall waterproofed with Dehydratine No. 6.

#### PROBLEM VII

#### Expansion Joints in Roof Decks and Coping

When efficient waterproof expansion joints are not provided in tile (or concrete) roof decks, and in copings, the concrete or masonry is frequently disrupted as the result of thermal expansion and leakage results.

#### SOLUTION

The solution of this problem is adequately expressed in the following specifications which meet the requirements of modern building design and construction practice with respect to both methods and materials.

#### Specifications:

#### (a) Expansion Joints in Roof Deck:

An expansion joint, reaching the copper (or membrane) roofing, shall be provided between the tile (or concrete) deck and the parapet. This joint shall be one of a connecting system of similar joints which shall cover the entire roof area. These joints to be spaced at intervals not greater than 20 feet in either direction. The sides of these expansion joints shall be coated with Dehydratine No. 1, after which the joints shall be filled with Horn's Expansion Joint Cement.

#### (b) Expansion Joints in Coping:

Expansion Joints shall be provided in the coping at intervals not greater than 20 feet. No mortar shall be placed in these joints, the sides of which shall be coated with Dehydratine No. 2, transparent waterproofing, after which the joint shall be carefully filled with Vulcatex Elastic Cement of color to harmonize with the coping material.

#### Note:

#### Horn's Expansion Joint Cement:

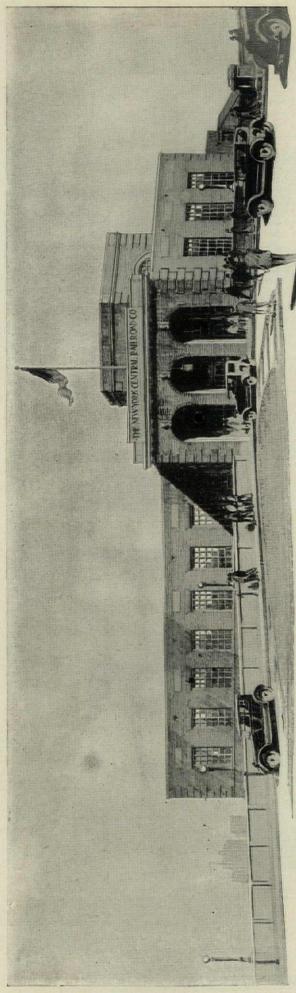
A solid asphalt, in conjunction with vulcanized oils that must be melted to be poured. Bonds perfectly and permanently to concrete or masonry. Remains plastic and elastic. Will not run in summer heat or smear under foot traffic across the joint. Maintains a waterproof expansion joint.

#### Vulcatex:

An elastic cement that is applied cold with a pointing trowel. Always remains plastic and elastic. Bonds permanently to the sides of the joint. Maintains a waterproof joint. Furnished in colors: Gray, Red or Brown.

Specifications covering any waterproofing problem sent on request.

A.C. Horn Company, Long Island City, N.Y.



ALFRED FELLHEIMER AND STEWART WAGNER, ARCHITECTS, NEW YORK CITY

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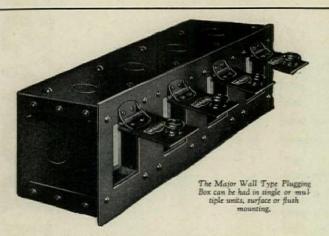
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# TRUSCON STEEL WINDOWS



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You know, those of you who have designed theatres, the specialized knowledge it requires both on the part of the architect and on the part of the manufacturer who supplies the products (particularly the lighting equipment) to build a successful theatre.

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There is a very complete line in



#### Theatre Lighting Equipment

from which the most complicated needs can be effectively supplied

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# The World's Largest Hotel Chose this Wood for Sash

ARCHITECTS and builders of the world's largest hotel, the new Hotel Stevens in Chicago, made studied choice of materials for its construction. And Durable Dougles Fig.

Douglas Fir was selected for its frames and sash.

For its sash they chose Long-Bell durable Douglas Fir... and to them went two car loads, 60,000 board feet cut to length, to make the sash for this famous hostelry.

Douglas Fir has proved its

satisfaction for sash and frames...and Long-Bell Douglas Fir has proved its excellence of manufacture and seasoning to many a buyer.

In new buildings and in the remodeling of old buildings, Long-Bell Douglas Fir is being used extensively for making sash and frames . . . and, too, Long-Bell Douglas Fir window and door frames have found increasing country-wide acceptance.

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# Architectural Design and Plans Imbued with Real Feeling and Beauty

The original inspiration and carefully worked out design and plans of Architect and Artist demand a kindred feeling for beauty in the mind and hand of the producing craftsmen.

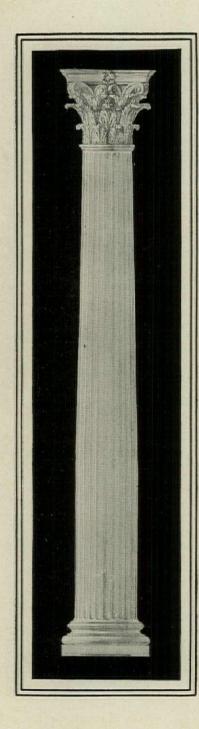


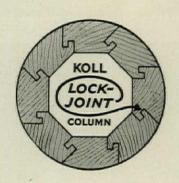
Itis this in-born, in-trained feeling for beauty and design of our craftsmen that assures architects and artists the faithful interpretation of their ideas and plans.



The illustrations are of the interior of the Emmanuel Episcopal Church of La Grange, Illinois, designed by Marshall & Fox, architects of Chicago, interpreted and executed complete in our Wood Carving Division.

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MANY homes and other buildings, doomed to be plain and common-place, are given a touch of classic elegance—a note of beauty and charm—by the happy use of a few stately columns.

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The genius of the master craftsmen, who painstakingly fashion these finer columns, is also available to architects and builders in the creating of artistic entrances and other features.

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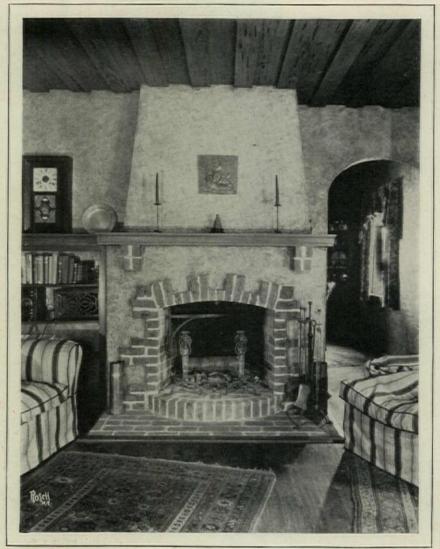
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S. TILDEN NORTON, Architect

# To All Beamed Ceilings

#### California Redwood is peculiarly adapted

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And for this purpose no wood can serve more effectively. For Redwood is a soft lightwood of great strength, easily decorated and easily stained or tinted.

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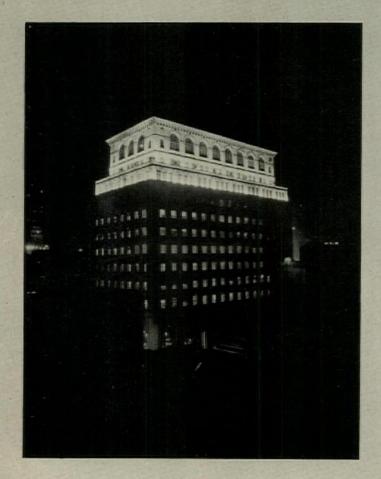
Association

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California Redwood

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# In the Character of the Italian



#### Typical of floors now available in modern Armstrong's Linoleum

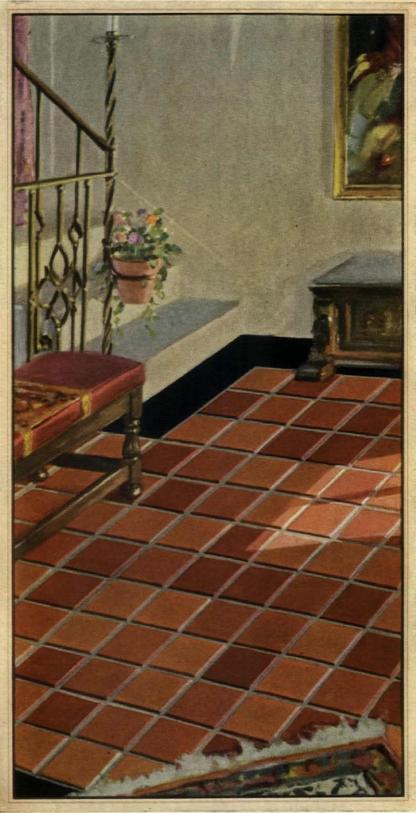
In THIS Armstrong Floor of Latin influence, each tile is framed by a mortar line actually pressed below the surface of the linoleum. Hence the name, Embossed Handcraft Tile Inlaid Linoleum. In coloring, in design this floor reflects the beauty of old world handicraft.

Like all Armstrong Floors it is quiet, springy to walk on, easily cleaned, permanent. With proper waxing and polishing it acquires a rich mellow sheen. Cemented over builders' deadening felt, it lasts a generation.

\* This page is No. 1 of a series on Modern Floors. If you would like reprints of the entire series, or the assistance of our Bureau of Interior Decoration, address Armstrong Cork Company, 701 Virginia Avenue, Lancaster, Pennsylvania.





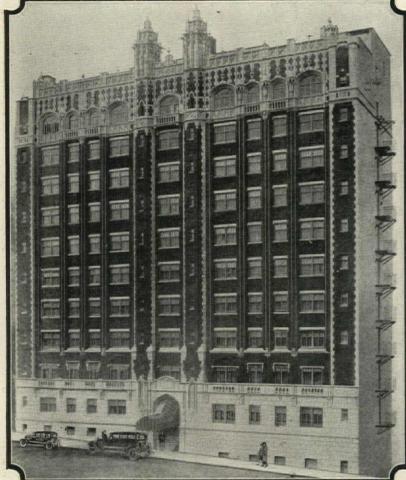


Embossed Inlaid Linoleum is obtainable only in Armstrong's. Above is pattern No. 6018

Armstrong's Linoleum for Every Floor in the House

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Exactly the same thing will happen with any oil plastic calking compound. A thin layer of it will oxidize clean through—and become utterly useless as an expansion filler in any joint.

# Pecora Calking Compound

is a heavy, thick, viscous mass, made only in one quality or grade. When forced deep into a well cleaned joint it will remain soft and pliable underneath the tough skin which forms on its exposed surface.

Pecora Calking Compound cannot be "sucked" into nor "squirted" out of spring or ratchet operated calking guns. Any oil plastic thin enough to be so "sucked" or "squirted" is neither suitable nor efficient for heavy duty service; and calking—the kind that makes of every joint a permanent, waterproof expansion joint—is a heavy duty service.

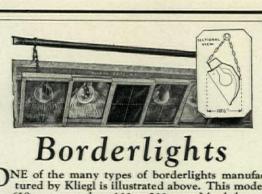
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Mortar Stains Enamels Established 1892 by Smith Bowen



Plastics Varnishes Incorporated 1911



ONE of the many types of borderlights manufactured by Kliegl is illustrated above. This model, No. 618, accommodates 100- to 200- watt Mazda lamps. A larger size is made for 300- to 500- watt lamps. Fitted with all-metal silvered reflectors—it is furnished completely wired for independent control of white, red, and blue lights—with a splice-box for making feeder connections. Pipe batten with chains for hanging, and metal frames for gelatine color mediums are also furnished. A new model in borderlights has just been completed, with aluminum reflectors and colored glass roundels, which permits the use of other color mediums as well. Write for descriptive literature.

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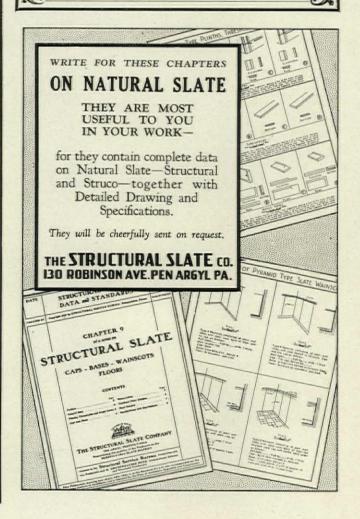
#### kliegl bros

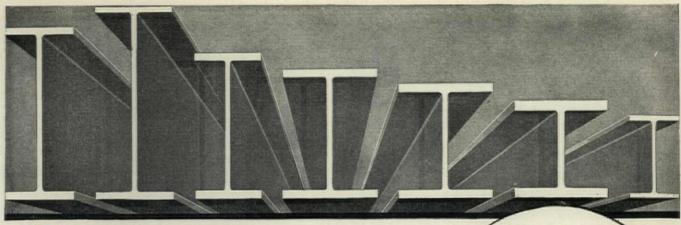
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#### 41 Sections Ready!

The 41 sections comprising the new Carnegie Beam Sections have all been successfully rolled and are now in actual production. A large stock of these sections is now carried at our Homestead Plant.



This book contains profiles and properties of the new sections and safe load tables. The series is further explained in detail as to

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PROGRESSIVE BEAM DESIGN

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PITTSBURGH



PENNSYLVANIA

# THATCHER ROUND BOILER



# Add Comfort to the Homes you design

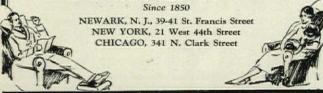
No matter how attractive the house or how convenient its arrangement, reputation and good will suffer if the heating equipment is inadequate.

You are not only safe, but you will gain the lasting gratitude of your client by specifying the Thatcher Round Boiler.

So designed and constructed is the Thatcher that time and labor in caring for the fire are at a minimum, because of the less frequent firing periods, due to the size and depth of the fire-pot, and the sensitive and automatic checks, drafts, and dampers. High heating efficiency with low fuel cost is made possible by the "Staggered" fire travel feature, which utilizes all the hot gases and smoke before entering the flue. These are but a few of the many advantages of the Thatcher Round Boiler.

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#### THE THATCHER COMPANY



# THATCHER BOILERS-FURNACES-RANGES

# Your Copy of our NEW

Metal Covered Door Catalog is Now Ready!



The LEEDOR—the new idea in metal covered doors is thoroughly described in this new catalog.

You'll want a copy of this new catalog for the information it contains. And you'll find many helpful suggestions in the illustrations of modern metal covered doors.

The advanced methods of manufacturing A. M. P. Doors are interestingly illustrated and described.

Your copy is waiting to be addressed. Write for it today.

ARCHITECTURAL METAL PRODUCTS, INC. Covington, Ky.

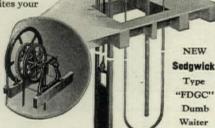


Sedgwick Hand Power Outfits have exclusive improvements which insure greater durability and ease of operation.

A special Dumb Waiter Bulletin prepared for the convenience of architects will gladly be sent on request.

The Sedgwick Architects' Service Department invites your inquiries.

Sedgwick Outfits Include: Dumb Waiters Freight Elevators Fuel Lifts Trunk Lifts Gravity Drops Ash Hoists, etc.



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#### Double Guarded Against Flame!

In restaurants, hotels, garages, wherever the danger of severe fire exposure compels two fire doors, nothing assures greater protection than Cornell Steel Rolling Fire Doors. They close automatically at a temperature of 150 degrees Fahrenheit, making an impassable barrier, against flame and heat.

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Write for Catalog No. 25, Cornell Iron Works, Long Island City, New York City.

Established 1846.

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#### Sheet Metal Work that Resists Rust!

The destructive enemy of sheet metal is rust. It is successfully combated by the use of protective coatings, or by scientific alloying to resist corrosion. Well made steel alloyed with Copper will last longest. Insist upon

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Rust-Resisting Copper Steel

# Sheets

AND ROOFING TIN PLATES



Add safety to satisfaction, with full protection from lightning, fire, and weather. Keystone Copper Steel gives superior service for roofing, siding, gutters, spouting, flashings, metal lath, tanks, and all uses to which sheet metal is adapted. Look for the Keystone included in brands. It means better sheet metal work. Send for our *Roofing Tin* booklet—valuable to architects and specification writers. We manufacture Black and Galvanized Steel Sheets and Roofing Tin Plates for every requirement in the building construction field.

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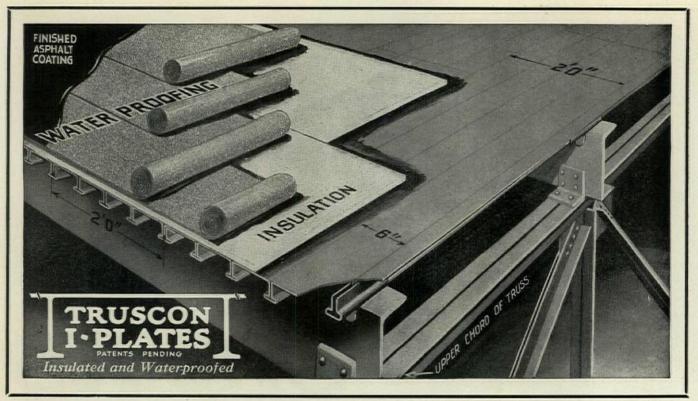
APOLLO-KEYSTONE Galvanized Sheets give increased service and added permanence to your building construction. These are unquestionably the highest quality sheets produced for galvanized sheet metal work.

KEYSTONE COPPER STEEL Roofing Tin Plates make clean, safe, attractive and satisfactory roofs. Supplied in grades up to 40 pounds coating, specially adapted to residences and public buildings. Added to enduring protection, metal roofs may be painted to harmonize with the color scheme of the building—an important feature which is often overlooked. Krystone quality products are sold by leading metal merchants, and are used by first-class roofers and sheet metal workers.

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No torn fibre or split grain here—but an edge as clean cut as though first lined with a knife. Such are the requirements for perfect joinery in cabinet work, interior finishing and trimming—such are the qualities provided by the remarkable close grain, soft texture and elastic fibre of Arkansas Soft Pine

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Finest
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Textured
Wood

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Satin-like Interior Trim

Is particularly suited as interior woodwork in residences, apartments, hotels, schools and churches. It takes stains and enamels without the hazard of raised grain or discoloration. In common grades light weight, freedom from rosin and non-splitting qualities render the wood highly satisfactory for framing.

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Handbook, grading rules, natural and finished samples and book of architectural competition house designs, free on request.

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YOUR MARK OF IDENTIFICATION FOR SUPREME SOFT TEXTURE

# Over 86 Years of Close Association With Architects

Over 86 Years of close association with architects and their plans has resulted in the keenest appreciation of their problems and how we can best serve them in our particular capacity.

In every instance where we have been called into the picture the architect's ideas on exterior lighting fixtures have been interpreted [and executed to his expressed satisfaction.

Can we help you on the next project where exterior lighting fixtures require careful attention?

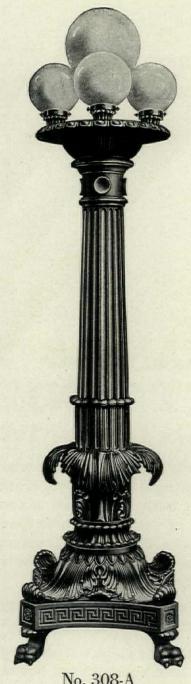


Catalog "J" is a complete treatise on exterior lighting fixtures. It illustrates over 300 designs. A request on your business letterhead will bring it to your files.

Lamp Posts :-: Lanterns
Brackets

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No. 308-A
Scale, 34"=1'0"
7'014" high to bottom of upper
globe
Base, 2'4" x 2'4"

# ASHABI

· SO THEY OUTLAST IN WEAR AND BEAUTY

Tontine reduces replacement costs to a minimum. Minerva Court Apartments Upper Darby, Pa.



"The washable, waterproof features of Tontine", write the owners, N. H. Scroggins & Sons, "and the fact that it is crack-proof reduce replacement costs to a minimum.

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Architects are specifying window shades of Tontine for hospitals, schools, business buildings, hotels and apartments, as well as for fine dwellings. They know from experience that it can be utterly relied on.

Tontine looks better and lasts longer for three important reasons:

It is PYROXYLIN IMPREGNATED. It contains no filler to fall out. It cannot crack or "pinhole".

It is WASHABLE. Soap, hot or cold water and a scrubbing brush remove at once all sign of soil and grimerenew its freshness season after season.

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Where long life and service count, Tontine gives the utmost shade economy. You can recommend its use with perfect confidence.

Send for samples to test yourself.

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WINDOW SHADE







Women Especially Appreciate the Beauty of

#### **SPEAKMAN** CHROMIUM PLATE

-also the fact that it Will Never Tarnish

SPEAKMAN Chromium Plate is a beautiful, mirror-like silver-platinum finish. It will never tarnish and requires absolutely no polishing even years after it has been installed. This new plate is not affected by acids (except muriatic). It is proof against corrosion, steam and cooking fumes and has ten times greater resistance to salt air and salt water than the finest nickel plate.

All brass fixtures in the bathroom—shower, bath and lavatory, and in the kitchen, the sink fixture, can now be had furnished in Speakman Chromium Plate - the lifetime finish.

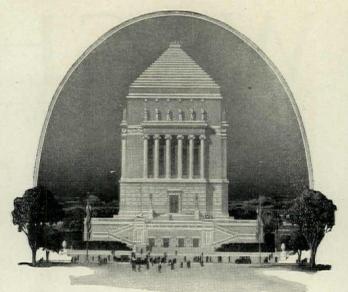
We have a folder going into greater detail of Speakman Chromium Plate; also a pocket-piece finished in this remarkable plate. We shall be glad to send both.

SPEAKMAN COMPANY

WILMINGTON DELAWARE

### SPEAKMAN SHOWERS and FIXTURES

"Safe to build in the wall"



Indiana World War Memorial Building, Indianapolis, Indiana Architects, Walker & Weeks, Cleveland, Ohio

#### Down Through The Years

Down through the years the simple beauty of this imposing structure will stand as a concrete expression of Indiana's tribute to her soldier dead. Those who conceived and built it wrought for utmost permanence in every detail. Like many other fine public buildings, it is completely equipped with Evernu Seats.

The enduring beauty of these hard rubber seats makes them particularly desirable for installations in public buildings; in schools, clubs, hotels, hospitals and office buildings, as well as in fine homes everywhere.

Evernu Seats are patented—no other can be quite like them. Special hard rubber, jet black or mahogany, is

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#### NEVER SPLIT SEAT COMPANY Founded 1905

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The Largest Manufacturers of Toilet Seats in the World



PERMA-WHITE and COLORO-Sheet Covered Seats

Extra-heavy sheet pyralin reinforced at points of wear. Perma-White in glistening pure white—Coloro in pastel blues, greens, yellows and other shades to match any color scheme. Can't chip, warp, peel, stain or fade

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"Perma-White" Sheet Pyralin White "Duco" Sprayed Pyralin

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Patented Construction

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OUR Bronzalun Anti-Slip Treads are designed especially to be installed in fine buildings where all hardware must be the best; both from the utility and appearance angles. These treads are made up in a variety of standard door saddles, elevator thresholds and stair treads.

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METALS COMPANY
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Photo by Fairchild Aerial Surveys, Inc.



The Windows in the new buildings of the Harvard Graduate School of Business Administration are hungwith dependable

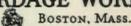
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"There IS a Difference in Sash Cord"

SAMSON CORDAGE WORKS

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Entirely of Mt. Airy Granite.

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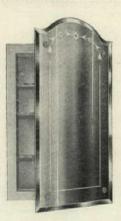
#### MOUNT AIRY GRANITE

TODAY hundreds of architects, seeing the wisdom of that decision, are doing likewise. Why not inbestigate through

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VENETIAN STYLE

A De Luxe Cabinet, entirely concealed by the beautiful etched mirror. The last word in bathroom furnishing. Made in three sizes.

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HESS WARMING & VENTILATING CO.

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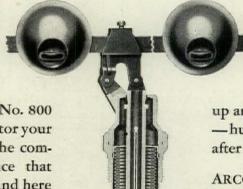
1223 S. Western Avenue, Chicago



Comfort and convenience for your clients

# ARCO

### WATER REGULATOR



ARCO Water Regulator No. 800

When you specify a No. 800 ARCO Water Regulator your client is getting all the comfort and convenience that goes with it—free! And here is the reason—because the ARCO Water Regulator pays for itself—again and again—in fuel saving alone.

Architects, ever thoughtful of the utmost comfort and satisfaction for their clients, will insist on this Automatic Damper Control for every hot water job, and save owners the unnecessary trouble and inconvenience of running

up and down basement stairs
—hundreds of times—year
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ARCO Water Regulator regulates drafts automatically; saves fuel; prevents overheating; and insures steady, even, healthful warmth.

Architects can no better serve their clients than by protecting them against discomfort and inconvenience by modernizing their installations with good heating accessories such as the No. 800 ARCO Water Regulator.

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ACCESSORIES DIVISION 816-820 South Michigan Avenue

Chicago, Illinois

Makers of:--



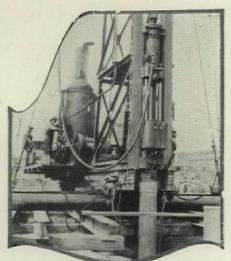












# speed

### It is essential that the foundation be finished on time

Unexpected ground conditions never slow up a MacArthur schedule.

If the contract calls for piles to carry 30 tons, 30" on centers, to be completed on a certain date, you can be sure they will carry that load, even if they need be 100' long, and the job will be finished on time.

A special pile for every condition -not one pile for all conditions.

While others are dallying around sending for special equipment and special materials, the MacArthur Method is driving piles with equipment designed to drive Standard Pedestal and Composite Piles at will.

Then because the dry mixed (just sufficient water to bond) concrete is compressed by 7 tons pressure into the ground itself, the enormous skin friction developed gives the required bearing and the certainty of a permanently safe foundation.

An organization built up over sixteen years of successful operation stands back of every contract to finish the job in the specified time.

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Union Trust Bldg. Pittsburg, Pa.

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102 Massachusetts Ave. 22 Battery St. Boston, Mass. San Francisco, Cal.

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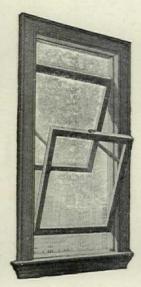
325 North Cortez St. New Orleans, La.

Canadian MacArthur Concrete Pile Co. 10 Cathcart St., Montreal, P. Q.

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Northport Union School, Northport, L. I.



Claymont School, Claymont, Del.



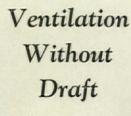
Oregon District School, Mattituck, L. I.



North Miamus School, Greenwich, Conn.



Locust Valley School, Locust Valley, L. I.





Byram School, Greenwich, Conn



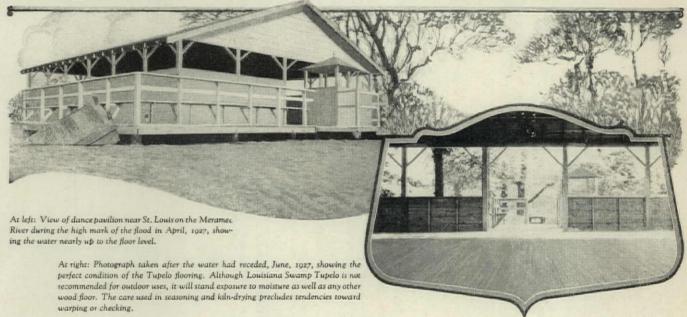
Hicksville High School, Hicksville, L. I.

Coffin and Coffin, who have used Austral Windows over a long period of time, recommend them whole-heartedly as being entirely satisfactory, efficient, and economical. The endorsement of these eminent architects is one of many on the Austral roster.

SEND FOR THE AUSTRAL BOOK ON SCHOOL VENTILATION

PARKAVE AUSTRALWINDOW @. NEW YORK

### Super Service from Tupelo Floors



## Louisiana Swamp Tupelo

is as unique as its name, and as perfectly adapted for flooring as fine manufacturing methods can make it.

Where wear is hardest, Tupelo is surest to demonstrate its economy and longevity of service.

Industrial floors of Louisiana Swamp Tupelo, subjected to the trucking and moving of merchandise, have given as many as twenty years of continual use, with virtually no repairs.

For gymnasiums, dance pavilions, roller skating rinks, assembly halls, locker rooms, club houses, and similar buildings, as well as residences, apartments and other public buildings, Louisiana Swamp Tupelo outwears ordi-

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As a trimwood for fine interiors, Louisiana Swamp Tupelo rivals more expensive woods in decorative value and finishing quality. It can be stained effectively and it provides an ideal base for enamel work.

Louisiana Swamp Tupelo is produced by the Mills that manufacture

### Louisiana Red Cypress "The Wood Eternal"

and can be relied upon to give complete satisfaction for its recommended uses.



We shall be glad to supply Architects and Builders with specific information on the uses, grades and advantages of these superior products.

Write for a copy of Specification Data on the Structural Uses of Tidewater Red Cypress (Coast type) A. I. A. File 19.

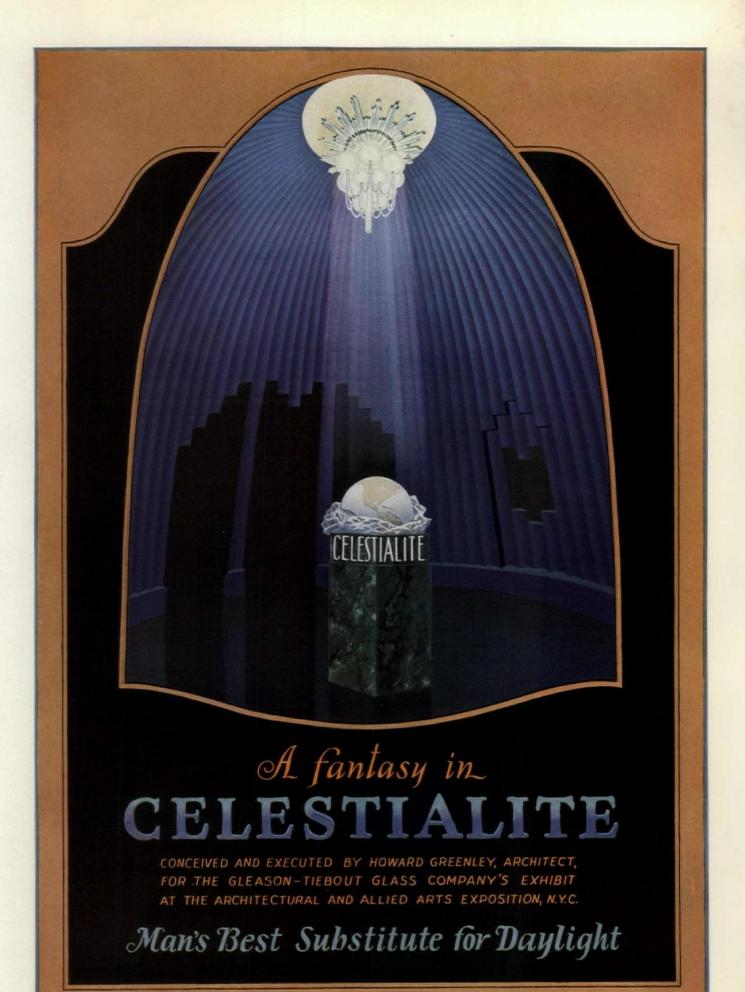
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50 U. S. Branch Offices . . . Darling Brothers, Ltd., Montreal, Canada.
More than 41,000 Webster Systems have been installed in America's finer buildings.



## FROM THE EARLIEST AGES

MAN HAS REALIZED THAT THE SUN WAS THE SOURCE OF LIGHT AND THAT UPON ITS RADIANCE HE DEPENDED FOR HIS HEALTH, HIS HAPPINESS, AND FOR HIS VERY EXISTENCE. TODAY SCIENCE TELLS US HOW AND WHY THIS IS TRUE...THE BEAUTY AND THE TRUTHS WHICH ARE INHERENT IN THIS CONCEPTION HAVE BEEN SYMBOLIZED BY HOWARD GREENLEY. ONE OF AMERICA'S GREAT ARCHITECTS. IN THE BEAUTIFUL FANTASY IN CELESTIALITE HERE REPRODUCED ... MEDITATE UPON THE TRUTHS IT PRESENTS TO YOU...THE BOOTH ITSELF. IN SOFT TONES OF BLUE, IS THE BLUE DOME OF HEAVEN. THE FANTASTIC CELESTIALITE LIGHTING UNIT AT THE ZENITH IS THE SUN ITSELF FLOODING WITH PURE WHITE LIGHT THE EARTH ON WHICH WE LIVE. THE IET BLACK FLOOR SUGGESTS THE HORRORS OF DARKNESS CONTRASTED WITH THE GLORY OF A CELESTIAL DAY ... UNDER THE INFLUENCE OF THIS HEAVENLY ILLUMINATION THE EARTH IS REPRESENTED AS GRADUALLY EMERGING FROM CHAOS TOWARDS PERFECTION. THERE IS THE THOUGHT OF GREAT FORCES. POWERFUL BEYOND MAN'S COMPREHENSION, TENDING TO DRAW THE WORLD TOWARD BETTER THINGS...IS IT NOT FITTING THAT MAN'S BEST ARTI-FICIAL SUBSTITUTE FOR THIS CELESTIAL RADIANCE BE CALLED

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A new kind of lighting glassware made of three layers. An inner layer of blue imitating the color of the blue sky whitens and perfects the light. The middle layer of white glass duplicates the action of the clouds, softening and diffusing the light. The outer layer is of crystal glass, clear as the air, to provide body and strength. The Mazda lamp enclosed in such a piece of glass serves as a miniature Sun illuminating with Celestialite a miniature earth beneath.

A FRAGMENT OF GLASS SHOWING THE UNIQUE CONSTRUCTION WILL BE GLADLY SENT UPON REQUEST GLEASON TIEBOUT GLASS COMPANY, CELESTIALITE DIVISION, 200 FIFTH AVENUE, NEW YORK, N. Y.

# AMBASTONE

HOW pleasant it is to note the increasing tendency on the part of architects and home-builders to get away from the stiff, unrelenting formality of concrete for walks, terraces, steps, etc., and turn to the permanent beauty of AMBASTONE for all such purposes.

AMBASTONE is quarried in rich, soft, pastel colors, including varying shades of Blues, Grays, Buffs, Rusts and Purples and its natural-cleft surface has just enough texture to be highly attractive.

AMBASTONE is very reasonable in cost.

AMBASTONE

The Friendly
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MINNEAPOLIS MUNICIPAL AUDITORIUM Minneapolis, Minnesota



Architects and Engineers—Cropt & Boerner,
Minneapolis, Minn.
Gen. Contractors—National Contracting Co.,
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REPRODUCED FROM THE ORIGINAL RENDERING



IF you know Minnesota winters, you will have an idea of what Carney Cement accomplished in laying up the brick and tile for the Minneapolis Auditorium. The only time masonry halted was when the temperature was so low that the men couldn't handle the trowels.

Finer looking walls or a better bond could not be secured in any season.

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Specifications: 1 part Carney Cement to 3 or 4 parts sand depending upon quality of sand.

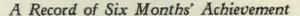
CARNEY CEMENT

for Brick and Tile Mortar

# The DUNHAM DIFFERENTIAL VACUUM HEATING SYSTEM

N January 14th of the present year, the Dunham Differential System of Vacuum Steam Heating was released to the company's selling organization within the United States, Canada, and in the United Kingdom. This was the culmination of many years' invention, research and of tests made

from actual commercial installations under varying conditions. It represents the most notable advancement in the art of heating buildings, since the advent of our fluid thermostatic radiator trap twenty-four years ago.



Less than six months have elapsed since our announcement, and the cumulative results have been highly gratifying. Already there are thirty or more prominent buildings in and about Chicago destined to be heated by the sub-atmospheric system this winter. Chicago's lead is being followed by New York, Detroit, Rochester, Los Angeles, Kansas City, Denver, St. Louis, San Francisco, Portland, Birmingham, Louisville, Seattle, Cincinnati, New Orleans, Grand Rapids, Trenton, White Plains, Buffalo, Battle Creek, Spokane, Newark, and many other cities in the United States, and points in Canada, including Toronto, Montreal, Winnipeg and Quebec. These installations are pyramiding in each locality as the year advances and discriminating architects and engineers gain in an understanding of the merits of this new system.

The very fact that the heat from burning 75 tons of coal results in heating comfort for the same space as required 100 tons or more under the old method, puts before the world a simple solution of the much discussed question of fuel conservation, and simultaneously corrects a condition affecting the health and well being of the occupants of the space heated.

#### Prevents Overheating and Excessive Window Ventilation

Heretofore, steam has been supplied to large buildings and homes at approximately the same temperature, viz.:212 degrees, under all weather conditions; the size of the radiators designed for the lowest degree of cold was obviously too large during ninety-five per cent of the heating season, when the heating media remained at the same temperature. Overheating and excessive window ventilation resulted, air became dry and hot and the contemplated comforting agent of heat became a source of discomfort.

With the new system, no change is made in the radiation; we simply alter the heating value of the steam,



introducing it into the radiators by making it do our bidding at variable temperatures, flowing as low as 133 degrees for mild weather and increasing in temperature to correspond to the heat lost from the building in extreme weather.

It is natural for the question to arise as to why this system has not come into use before. The Patent Office discloses many attempts to accomplish better results. Differential devices, orifice plates (and we have used these for years), with an occasional reference to handling steam under rarified conditions, evidence a recognition of the weakness in current heating practice.

#### Automatic Control at Return End of Radiator an Essential

A Differential System operating with steam pressure above atmosphere has no value except to insure circulation; orifice plate values are limited to a closer distribution of steam through better control of friction, confining it to one point instead of through the supply piping. A sub-atmospheric differential system with orifice plates can not be successfully maintained without automatic control at the return end of the radiator, for two reasons—first, because it is impossible to govern evenly each radiator supply under the different condensing conditions of steam, and, second, such a differential in pressure exists at the wrong place; namely, between the steam supply to the radiator, and the steam in the radiator.

The Dunham Differential Vacuum Steam Heating System operates on sub-atmospheric steam; it includes the regulating or orifice plate for consistent sub-atmospheric steam distribution only. The differential in pressure exists between the steam in the radiator and the non-condensable gases in the return pipe, thus insuring a perfectly drained radiator at all times and free from non-condensable gases.

#### Two Outstanding Reasons for this System of Heating

There are two outstanding reasons why this improved system is now available to the public—first, through our radiator trap development, which under high vacuum will pass water and air, and retain steam under varying degrees of temperature, and second, because our vacuum creating apparatus will produce a vacuum of 26 inches of mercury, into which water and cool gases will flow from the radiator as a result of the automatically controlled difference in pressure between the radiator and the return piping.

Look for the Name
DUNHAM
This nameplate identifies a
genuine DUNHAM
Radiator Trap



The Dunham Differential Vacuum Heating System is fully covered by patents and pending applications for patents in the United States and Canada and Foreign Countries. Any infringemets will be vigorously prosecuted.

#### C. A. DUNHAM CO.

DUNHAM BUILDING
450 East Ohio Street, Chicago

Over seventy branch and local sales offices in the United States, Canada and the United Kingdom, bring Dunham Heating Service as close to you as your telephone.

ham Heating Service as close to you as your telephone. Consult your telephone directory for the address of our office in your city. An engineer will counsel with you on any project.



"Like two big White

China Bowls"

base.

cloth.

## Your Files

¶ It's the "What and How Book" of laundry installations.

¶ You'll need it. The Porceliron Laundry Tray is a double compartment, snow-white, sanitary and-note this, please—durable porcelain enamel laundry tray unit that is within financial reach of every builder.

The booklet gives you all important details and includes in addition a sample of the material.

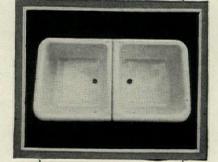
Write for it—and put it where you can reach it quickly. It's a complete, technical story that means satisfaction to your clients and prestige to you.

INGRAM-RICHARDSON MANUFACTURING CO. 400 Thirty-second Street, Beaver Falls, Pa.

Porceliron Factories at:

Beaver Falls, Pa. Frankfort, Ind.

Bayonne, N. J.



Each compartment is deep drawn in one piece of heavy gauge enameling iron. There are no seams, cracks or joints inside the tub. All surfaces-inside and out, even under the rolled rim-are glistening snow-white Porceliron, the "perfect porcelain enamel.'

### GEORGIA MARBLE



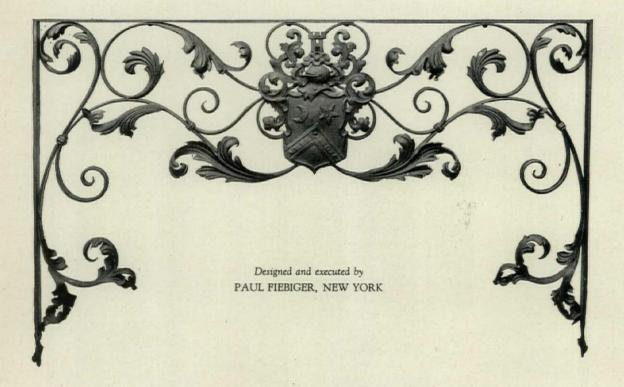
ENTRANCE, SENIOR HIGH AND JUNIOR COLLEGE, MUSKEGON, MICH.
H. H. TURNER, V. E. THEBAUD, ARCHS., GRAND RAPIDS, MICH.
W. B. ITTNER, CONSULTING ARCHITECT

#### USED AS TRIM

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Georgia Marble is ideal for trim because it is crystalline and retains its life and sparkle. White Georgia Marble is being used extensively for trim on Colonial type buildings with entire satisfaction to architects and owners.

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Dodge Electric Co., Tulsa, Okla., Elect'l Contractors.

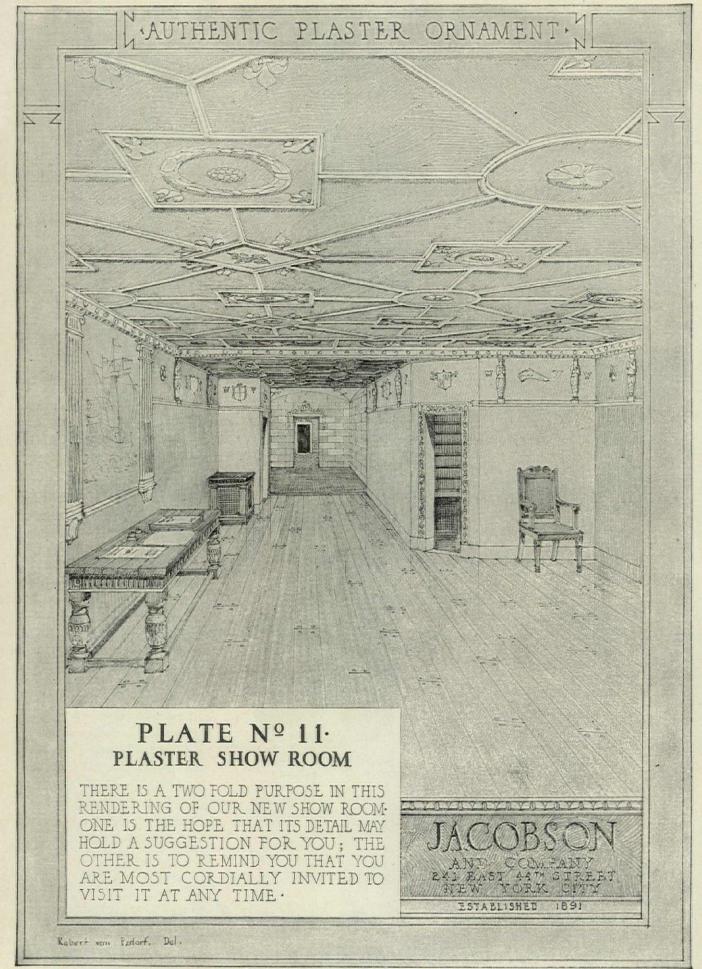
Lane and Tweed, Kansas City, Mo., who equipped the Building.

To safeguard the interests of their client for efficient lighting equipment, that would harmonize with the design and purpose of the building, Guth-Lites were installed in the offices and Guth fixtures of special design in the banking room. . . The surprising number of letters which have called our attention to the error gratifyingly indicate the general interest in modern methods of illumination, and the particular interest which attends GuthLite installations.

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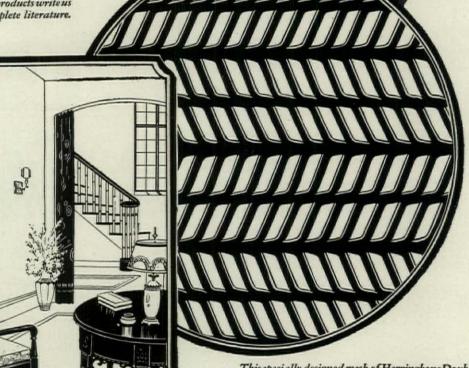
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3

4

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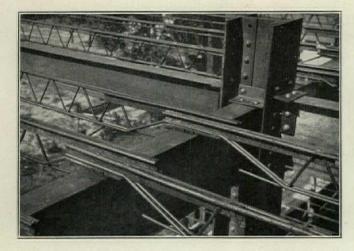
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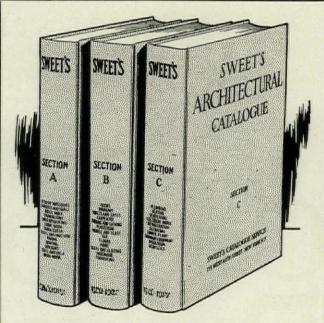
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EVERY TIME you spend a few extra minutes turning over the pages of SWEET'S you are likely to find something you have not noticed there before.

SWEET'S ARCHITECTURAL CATALOGUE is a publication of the F. W. Dodge Corporation



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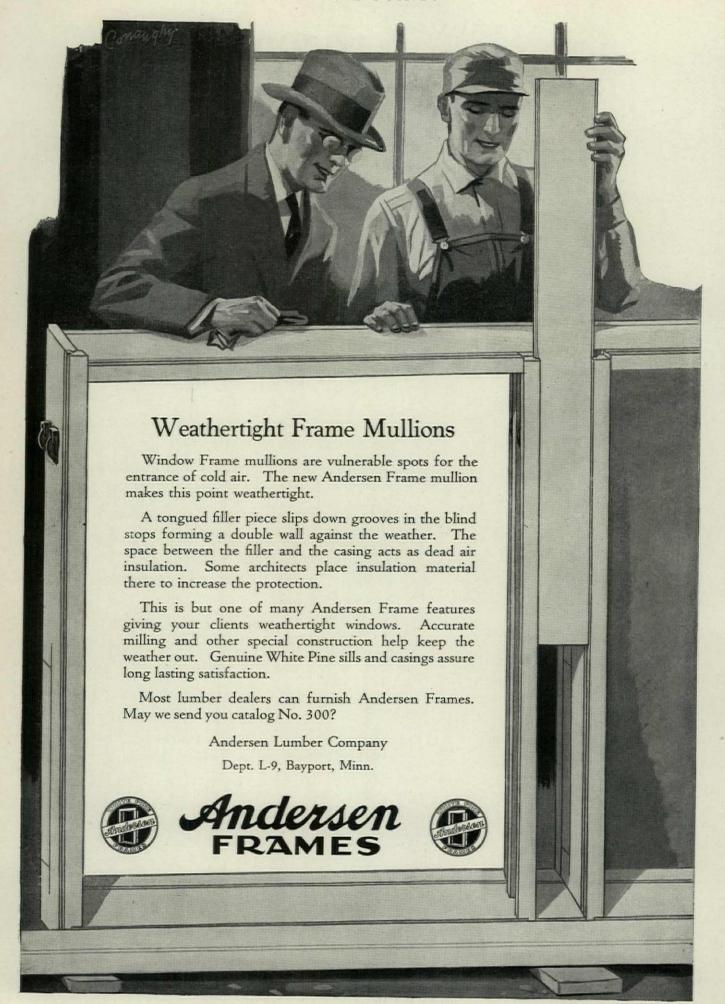
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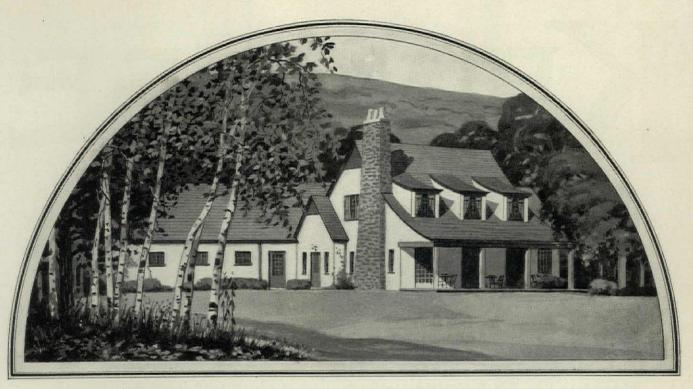
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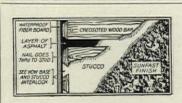
YOUR effort in conceiving beau-tiful homes of colored stucco surely deserves a color finish that will make that beauty permanent.

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THIS IS THE UNIT-WALL
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Send for our interesting booklet, "The Renaissance of Colored Stucco" - mailed without charge to architects. It contains much that is new and valuable on the subject of colored stucco. Illustrated with full color plates. Please use the coupon below.

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## **BISHOPRIC**

THE UNIT-WALL CONSTRUCTION

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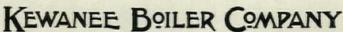
The upkeep-cost of a boiler extends over the whole period of its life. That means that in the first twenty-five years the fuel cost alone will have totaled an amount equal to from six to fifteen times the original cost of the boiler.

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#### An Illustrated Monthly JOURNAL for the DRAFTING ROOM Edited by RUSSELL F. WHITEHEAD

KENNETH REID & E. L. CLEAVER Published by THE PENCIL POINTS PRESS, INC. Ralph Reinhold, President, Edward G. Nellis, Vice-President, W. V. Montgomery, Secretary



#### ARCHITECTURE IS ALSO A BUSINESS

I HE growth of Architecture in importance among the arts has been marked by an equal and no less important growth of Architecture as a Business. After buildings are designed they have to be built, a process which is practical in the extreme in this modern day and which involves the wise expenditure of many millions of dollars a year-all under the direction of this man, the Architect, who is so often looked upon by the layman as an impractical æsthete!

Now this is not news to the young architectural draftsman or student, but it is often overlooked by

him while he is in pursuit of his education, with the result that he finds himself confronted with all sorts of difficulties when he starts out on his own

The wise student and draftsman will not only strive to make himself a competent designer, fully equipped with knowledge of the theory of composition, historical precedent, design in color, good construction, the proper use of building materials, and so on, but he will at the same time learn all he can about the architect's business relations with his clients, with contractors, with dealers in materials and equipment, with real estate men, with bankers, and with all the many representatives of the business world with whom the profession has dealings. He

will take every opportunity to find out about office systems and methods for promoting efficiency in keeping records. He will keep his eyes open to the legal entanglements which lay in wait for the unwary and will become thoroughly acquainted with the building laws of the community in which he intends to establish himself.

It is not hard to see that the foregoing constitutes a large order for the young man but it is one which he will have to carry out if he wishes to become an architect in the fullest sense.

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A most talented architect, one who can design and plan to the Queen's taste, may fail absolutely in his career through lack of training in the business and legal aspects of his profession. Just as a good design can be ruined if the building be not properly built, so also may an otherwise good architect come to grief if the business end of things is not properly looked after. Of course this does not mean that the successful architect must himself attend to all of the practical phases of his work. But at some time in his training he must have had experience with each and every branch of his profession, in order to intelligently direct the business of his organization and work out his own problems to the most successful completion.

EDITORIAL AND BUSINESS OFFICES, 419 FOURTH AVENUE, NEW YORK

EDITORIAL AND BUSINESS OFFICES, 410 FOURTH AVENUE, NEW YORK

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LITHOGRAPHIC PENCIL DRAWING BY BOB FINK SCENE NEAR CORAL GABLES, FLORIDA

Volume VIII

September, 1927

Number 9

#### THE DRAWINGS OF BOB FINK

By John L. Skinner

EDITOR'S NOTE:-The author of this article was for two years Head of the Department of Architecture at Georgia Institute of Technology and is now a practicing architect in Miami, Florida. He has just been chosen to head the new Department of Architecture at Miami University, beginning with this fall.

FOR THE PAST THREE years there has been to draw. It is related of him that his nurse used to appearing in the newspapers and periodicals of every section of the country, a series of remarkably able drawings illustrating the publicity matter and adver- ticular excursion, when he was just about old enough

Evidently the work of a facile draftsman, these drawings have attracted widespread attention and admiration. For the most part they were signed, "Bob Fink." A series of drawings such as this naturally could not fail to arouse, in those who are continually interested in outstanding draftsmanship, curiosity concerning the personality and history of their author. All of which justifies the present effort to tell his story to the great army of architectural draftsmen who are the readers of PENCIL

Robert Kendall Fink, commonly known to his friends (as well as to strangers through his characteristic signature) as Bob Fink, was born in Brooklyn in 1905. His home during his boyhood was in New Jersey, and like thousands of other American boys, he went

to school in the vicinity of New York. As an infant, he distinguished himself from the great majority of children by making profoundly serious attempts to draw. A sketch of a fly, made when the artist was three years old, was perhaps one of his most serious efforts. This drawing is one of his mother's prized possessions today.

He cannot remember a time when he did not crave

take him on strolls through a park near his home, a form of outing which he dearly loved. On one partisements relating to the Coral Gables development. to romp around, he became suddenly inspired to make

a sketch. With a single minded purpose, he charged up to a couple of men who were leisurely smoking, and cried, "Pencil!" At the same time he made vigorous efforts to relieve them of their cigars. His taste for big black pencils was thus early evident.

As he grew older, during his high school days he was a frequent contributor of illustra-tions for "Boy Life", the National Boy Scout magazine. He prepared for college, but thought better of it when he was about to enter, and decided to work for a year or two. About this time, he attended classes intermittently for two years at the Art Students' League, in New York.

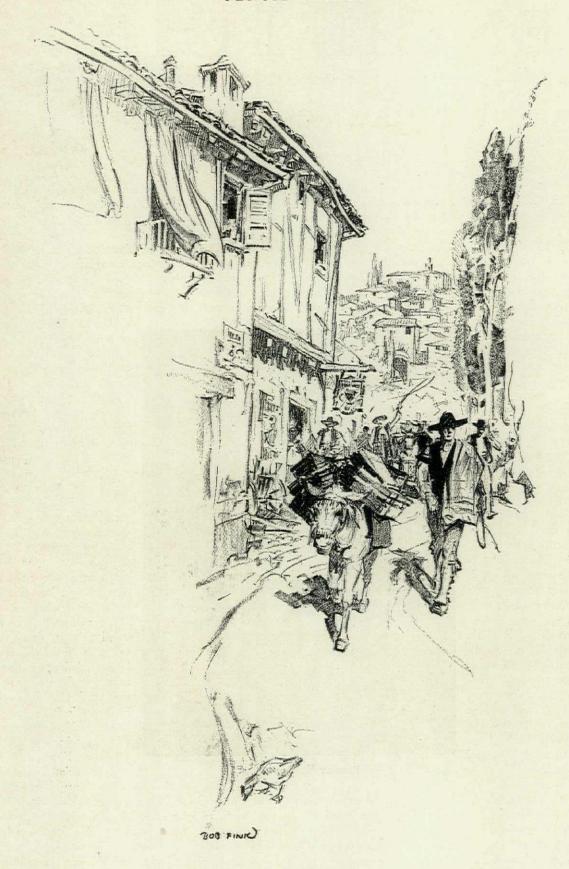
In 1924, he went to Florida with his father, Denman Fink, and became associated with the

Advertising Department of the Coral Gables Corporation. Since that time, he has produced practically all of the black and white drawings used by that company. This work has been mostly a matter of presenting sketches of existing subjects and of developing imaginative compositions.

Right here it might be well to state that Bob Fink has been unusually fortunate in the constant guidance and encouragement he has received from his father.

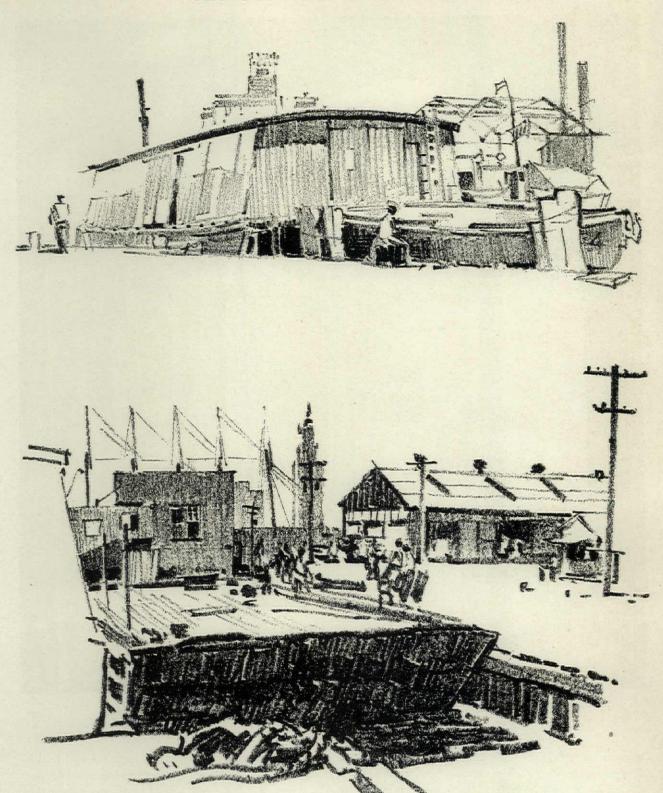


ROBERT KENDALL FINK



LITHOGRAPHIC PENCIL SKETCH BY ROBERT KENDALL FINK "IN A SPANISH TOWN"

#### THE DRAWINGS OF BOB FINK



LITHOGRAPHIC PENCIL SKETCHES BY ROBERT KENDALL FINK BARGES ON THE MIAMI WATERFRONT



BRUSH DRAWING BY ROBERT KENDALL FINK
PATIO AT MIAMI UNIVERSITY

In him, Bob has found a sound critic who has confind his influence to telling his son what to do rather than how to do it. Careful to guard originality in Bob's work, he has given him the opportunity to develop himself in his own way. As the work of father and son has been so closely allied, it may be of interest to readers of this article, to have a few paragraphs devoted to Denman Fink.

For many years, Mr. Fink was an illustrator and painter in New York, and built up for himself an

enviable reputation, particularly in the field of illustration. It so happens that he is the uncle of George E. Merrick, who, until a few years ago, owned and operated a fruit farm near Miami. On visits to the North, Mr. Merrick often talked with his uncle about the future of South Florida, and together they planned to build a city some day on the site of what is now Coral Gables. It was Mr. Merrick's idea to have Mr. Fink associated with him in control of the architectural and scenic development of his project.



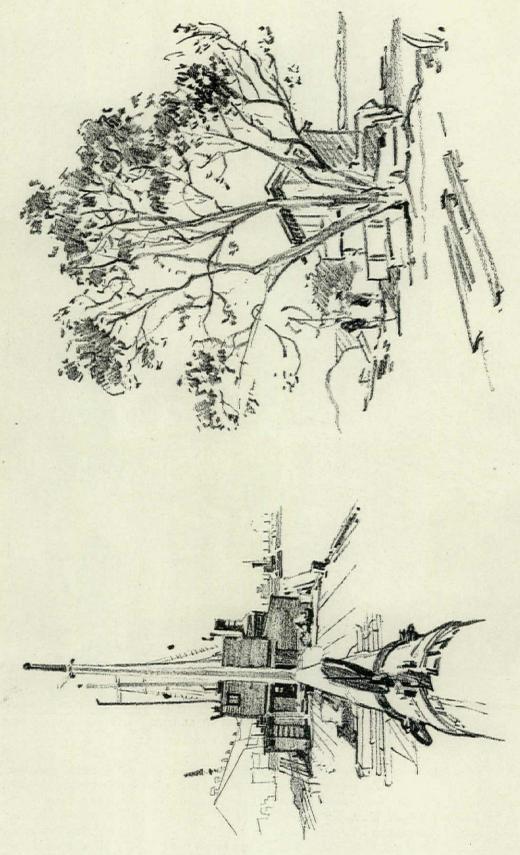
BRUSH DRAWING BY ROBERT KENDALL FINK
IMAGINATIVE COMPOSITION—THE CITY ON THE HILL

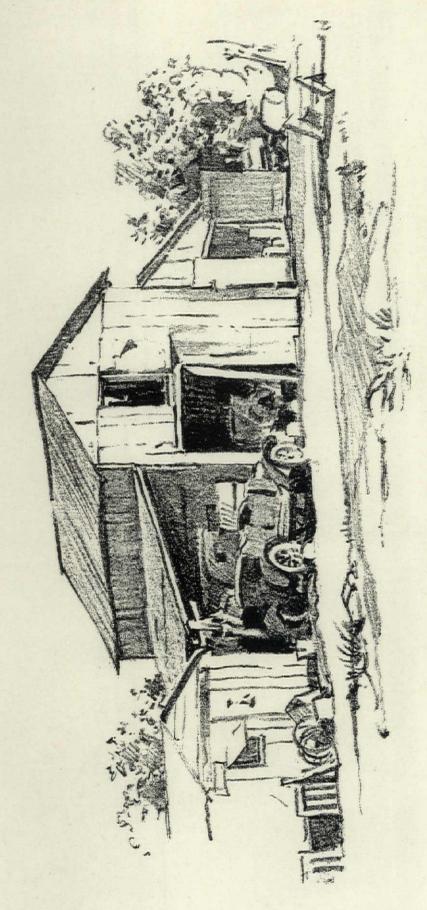
It all came about perhaps sooner and certainly on a much larger scale, than was originally contemplated. Mr. Fink made the original plot plan, and designed and directed the building of all plazas and focal points. Through him and his associate, Phineas Paist, the supervising architect of Coral Gables, building operations, both public and private, have received intelligent supervision and control. His position is a

difficult one involving innumerable problems, and he has had a constant struggle to insure the preservation of the beauty of the scheme as a whole.

Bob Fink's philosophy of work is interesting and alive. Briefly stated, it is that "everything which comes to his net is fish." He seizes with enthusiasm upon any chance to draw,—be it doing a job of lettering, knocking off for a day to go sketching along the

LITHOGRAPHIC PENCIL SKETCHES BY ROBERT KENDALL FINK—SCENES AT MIAMI

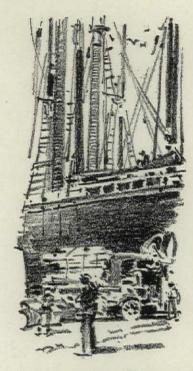




LITHOGRAPHIC PENCIL SKETCH BY ROBERT KENDALL FINK-SHANTY AT MIAMI

LITHOGRAPHIC PENCIL DRAWING BY ROBERT KENDALL FINK PERSPECTIVE OF COCOPLUM DEVELOPMENT

#### THE DRAWINGS OF BOB FINK



harbor, or making a picture of a Dobbs' Hat. He uses his head, eye, and hand with every opportunity, an attitude towards his work which will no doubt carry him far and make his progress on the road to achievement constant and sure. It is gratifying to find a young man of twenty-two, already arrived in one medium, and not too proud to tackle any kind of a job.

His lithographs, pen-and-ink sketches, and wash drawings have won him na-

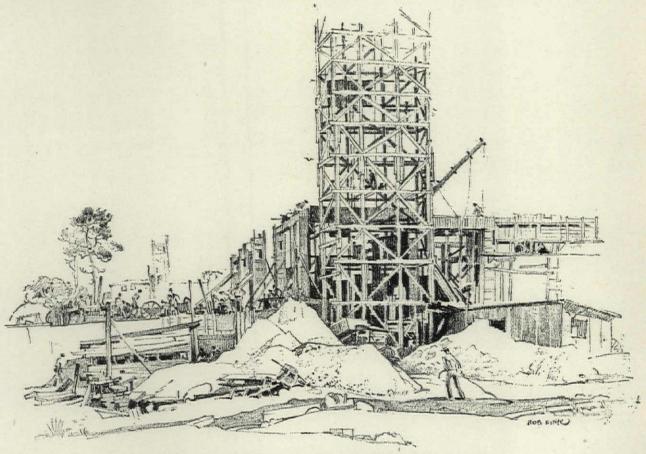
tional recognition. The examples shown here, though not primarily architectural in subject, exhibit a sense of composition, a feeling for the picturesque, and a

sureness of stroke which are the marks of a rare talent. Notice, in the lithographic pencil sketches, how each line was placed unhesitatingly and unerringly in its proper relation to the rest of the drawing. There was no opportunity for erasures; he was working in an indelible medium on the delicate surface of cameo paper which made it necessary to get it right the first time.

Brush drawings, made with India ink on rough surfaced



illustrator's board, are also a moderately severe test of draftsmanship. Specimens are shown on pages 528 and 529 and in the bookplate on page 534. The



LITHOGRAPHIC PENCIL SKETCH BY ROBERT KENDALL FINK CONSTRUCTION OF MIAMI UNIVERSITY

originals of the first two of these were about half again as large as the reproductions and were drawn with the same freedom and sureness which characterize all of Bob Fink's work.

Of water colors he has made many and they are wonderful for their boldness and color. It is regretted that they could not be reproduced here. The same applies to his oil sketches, which are admirable. He has undoubtedly learned much from his father about the handling of color and is constantly showing improvement in his command of these two mediums. His sketches are always vigorous and direct, and free from tricky draftsmanship.

This young man has found satisfaction and pleasure in the publicity work for Coral Gables because he liked it and

"done on his own" for the sheer pleasure of creating. He goes about making a sketch with quiet conviction—does not shy in front of a drawing board nor yet

drawing, should insure for him a brilliant future.

mess around aimlessly on the paper, but takes his time for consideration of the subject, makes up his mind as to the composition he wants, and then goes right after it.

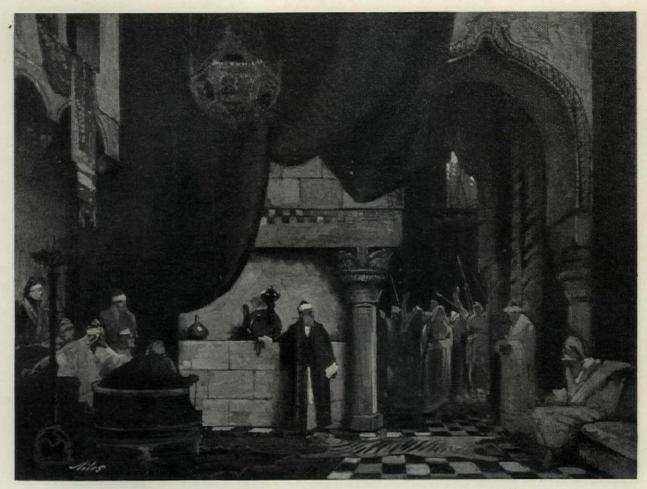
He expects to come to New York some time this fall, as he expresses it, "to work and get in the way and mill around with the boys" who have ambitions like his own. He hopes to find opportunities to do architectural renderings, among other types of work, and judging from his skill as shown in these sketches he should be able to make his mark in this special field. A fine and sensitive nature which neither praise nor criticism can spoil, coupled with the solid foundation he has acquired in the art of



BOOKPLATE BY ROBERT KENDALL FINK

because he has made it pay. His keenest enjoyment, however, is in indulging his fancy in original work,

PEN-AND-INK DRAWING BY ROBERT KENDALL FINK BIRD'S-EYE VIEW OF COCOPLUM DEVELOPMENT



DESIGN BY HAROLD MILES FOR C. B. DE MILLE'S "THE KING OF KINGS"
SET FOR INTERIOR OF THE HOUSE OF CAIAPHAS

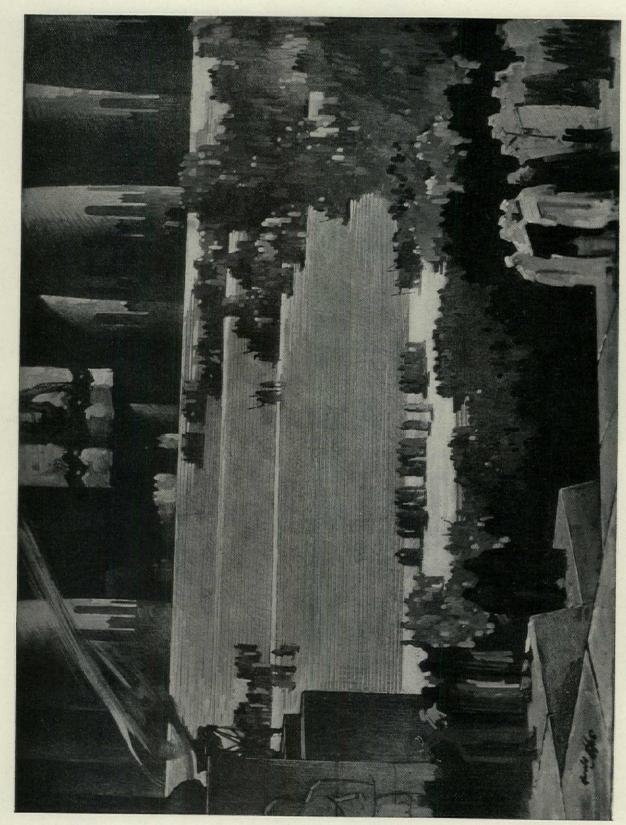
#### ARCHITECTURE IN MOTION PICTURES

By Harold Miles

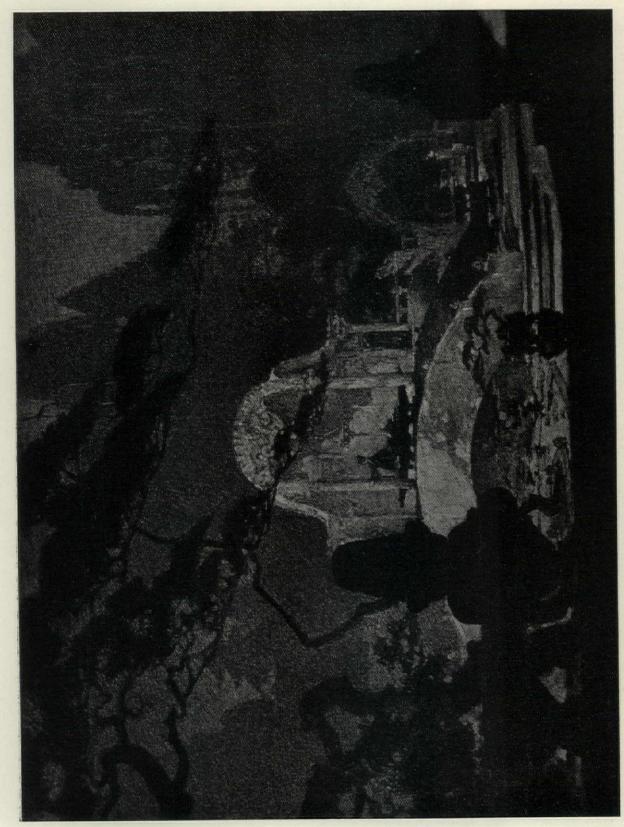
Editor's Note:—The author of this article is, as an architect, a director of the Hollywood League of Architects. He is at the same time one of the leading designers of sets for the "movies." His discussion of the use of architectural features in the design of backgrounds for dramatic action is therefore authoritative.

THE ASTOUNDING DEVELOPMENT of Motion Pictures during the years since this form of entertainment was put before the public has called for a great variety of skill and talent in many fields. Amongst other professions, trades, crafts and vocations that have been called into play, the one of architecture occupies a prominent place. The artist, the architect, the engineer, and the draftsman are today all more or less numerous in the motion picture studios. Each studio has its own drafting-room and corps of men whose business it is to design, draw, and supervise construction of the sets and properties used in the pictures produced there.

Although this article primarily concerns architecture and architectural sets it will be well to explain that motion picture sets not only include architectural material from all ages and countries, but cover also a much wider field which includes everything conceivable to human imagination. The designer for motion pictures has to deal with such a variety of subjects as marine architecture of all sorts, landscape effects of rocks, trees, waterfalls, mountains, deserts, swamps, hurricanes, earthquakes, volcanoes, floods, and "what have you." His versatility should permit him to design exquisite boudoirs for high-salaried feminine stars, massive castles for masculine heroes, palm houses, skyscrapers—in fact, anything. That is to say, he must present these things in a manner sufficiently true to be convincing on the screen—nor can he stop here; he must also design furniture,



DESIGN BY HAROLD MILES FOR C. B. DE MILLE'S "THE KING OF KINGS"—SET FOR THE TEMPLE



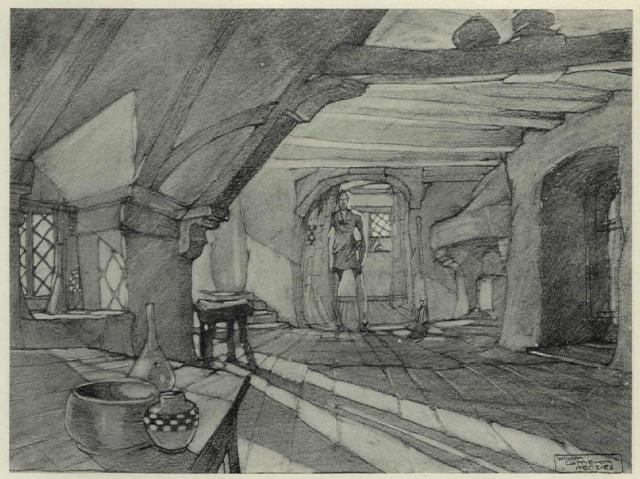
DESIGN BY ANTON GROT FOR JESSE L. LASKY'S "EAST OF SUEZ"-SET FOR JAPANESE GARDEN



SET FOR BURGUNDY'S CASTLE IN "THE BELOVED ROGUE"



SET FOR BRIDGE OF HOUSES ACROSS THE SEINE DESIGNS BY WILLIAM CAMERON MENZIES FOR JOHN BARRYMORE IN "THE BELOVED ROGUE"



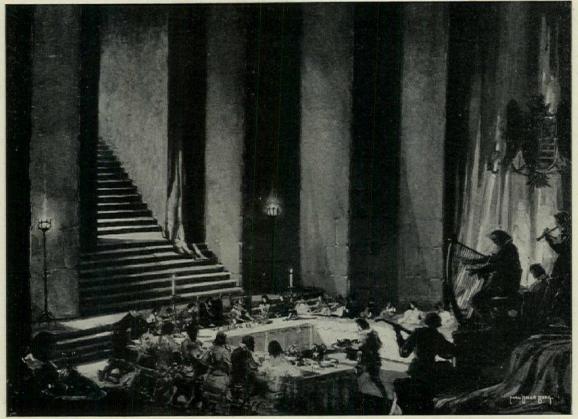
DESIGN BY WILLIAM CAMERON MENZIES FOR BARRYMORE IN "THE BELOVED ROGUE" SET FOR HOME OF VILLON'S MOTHER

draperies, property of all sorts, and must be fairly familiar with all of the crafts, trades, and arts associated with building. He must know something of tapestries, rugs, metal work, glass, plaster, paint, and anything else necessary to create successfully a convincing atmosphere. He usually has, to assist his faltering resources, a well-organized research department able to give him information on short notice of anything in the entire field of human knowledge.

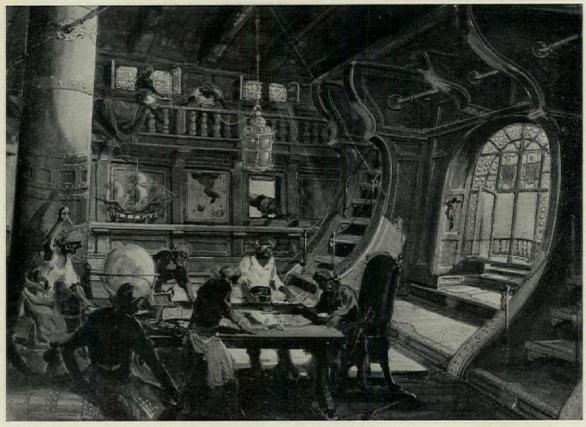
Although practical and durable construction is not usually necessary, the architect or artist must nevertheless tie his design to reasonable construction costs, for motion picture magnates have a weakness for making profits on their investments and look with a fishy eye upon too much extravagance. So with thought upon the cost the design must, nevertheless, be true to the style and period to be represented. As the game develops, doubtless, costs must be figured even more carefully than at present, for competition and the growing discrimination of the public will eventually put the producer of pictures on the same basis as all other business is; namely, that of making the maximum of profit with the least expenditure. In the great prosperity of this youthful business of "pictures" there has been, of course, enormous waste due to the lack of knowledge concerning what was really desirable and necessary. This is inevitable to the growth and evolution of any line of endeavor.

Relative to costs, every studio has, amongst other things, a trick department. It is the business of this department to produce various effects of natural and supernatural phenomena and the designer must cooperate with the department to produce the best results at the least expense. There is an elaborate technique for cutting down building construction which involves the designing and building of miniatures, painting on glass, double and multiple exposures and so on. The first of these, that of building miniatures, has a special department and corps of men in nearly every studio.

A miniature is a model in diminished scale, which is suspended in front of the camera at a distance of a few feet or yards, and which appears when seen on the screen as a part of the set. The designing, drawing, building, finishing, and placing of miniatures involves an amount of skill and experience entirely unappreciated by those unacquainted with motion picture productions. In designing a large architectural set, for instance, the action of which takes place on the floor level, it is possible to build the set to a



SET FOR BANQUET HALL IN SAM GOLDWYN'S "A NIGHT OF LOVE"



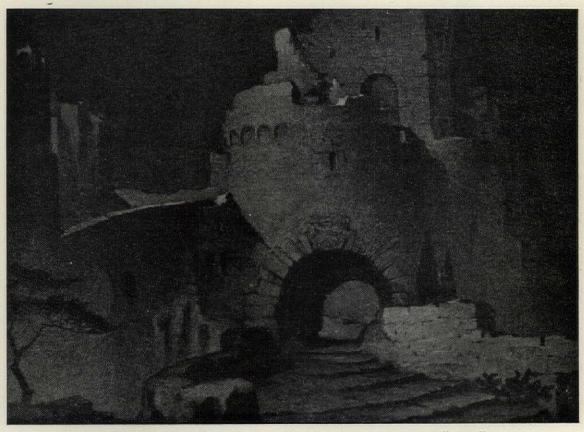
SET FOR MAIN CABIN OF GALLEON IN FAIRBANKS' "THE BLACK PIRATE"

DESIGNS BY CARL OSCAR BORG

#### ARCHITECTURE IN MOTION PICTURES

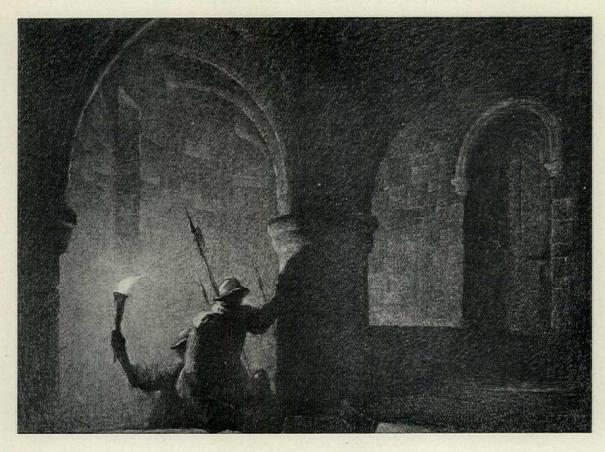


DESIGN BY JOHN HUGHES, C. B. DE MILLE'S "THE KING OF KINGS"



DESIGN BY ANTON GROT, RUINED CASTLE IN SPAIN FOR FAIRBANKS' "DON Q"
TWO ARCHITECTURAL SETS





INTERIOR SETS DESIGNED BY HAROLD MILES

#### ARCHITECTURE IN MOTION PICTURES



SET BY HAROLD MILES, CITY GATE, C. B. DE MILLE'S "THE KING OF KINGS"

height of ten or fifteen feet only, and continue the rest of it in miniature, thus often saving many thousands of dollars on construction cost. Another common way of doing this is to paint the part of the picture, not built, upon glass. Glass painting is done by men who make a special business of it and is a form of artistic and mechanical endeavor requiring years of experience in which to achieve success. Briefly, it consists of placing the glass between the camera and the set, the artist securing his structural points by having a helper looking through the lens and directing his hand to each point located.

All this elaborate technique, of course, gives the designer greater scope in some ways and limits him in others. For instance, on the side of limitation, those sets involving miniatures or glass painting can be shot from one angle only, as it will readily be seen that if the miniature or painting is out of alignment the results will be quite impossible. On the other hand the use of these means of assistance makes it possible to build sets to a scale much larger than would otherwise be financially possible.

The method of designing sets is somewhat different in the various studios. The larger institutions usually employ an art director whose business it is to supervise the physical makeup of the picture to be produced. This includes sets, properties, and costumes. As a usual thing this is the work of supervisor or critic rather than that of designer. Sometimes, however, the art director does his own designing, but when this is not the case he gives his ideas and requirements to his artists and costume designers whose work it is to present sketches for his approval. The artists employed for the work sometimes are and sometimes are not architects. Inasmuch as motion pictures call for many of the qualities used in illustration and painting, excellent results are gained by employing artists who naturally have the imagination which makes for pictorial and dramatic effect. Architectural effects designed in this way may have certain defects from the architectural point of view, but these are compensated for by the qualities of dramatic interest and design that go far toward making the right appeal.

Designing for the camera is, of course, a totally different thing from designing for permanent construction. For one thing the lenses in use in motion picture cameras are narrow angle lenses which have the effect of decreasing the apparent depth of perspective. This calls for heavier reveals and for greater thickness generally than is used in ordinary design. Most sets are now produced inside and are lighted

artificially, which enables the designer to control his shadows. Detail is therefore of less importance than mass and line.

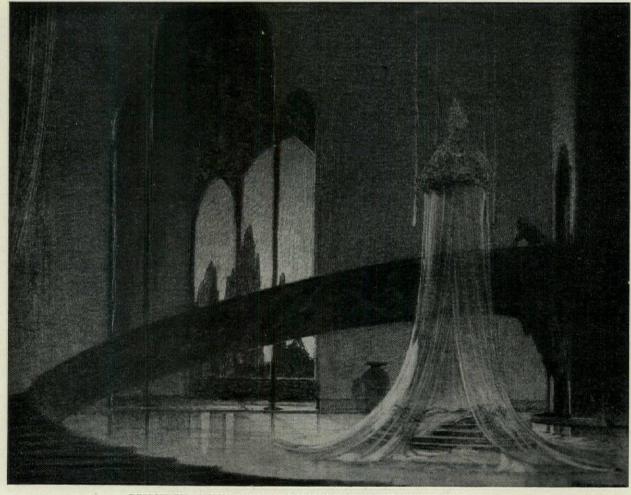
The fact that motion picture sets are of a very temporary nature and are used as backgrounds or adjuncts to the action permits possibly a certain license or freedom of design, and experiment is more possible than would be the case in permanent building. If the result is unsatisfactory it does not have to stand in the public view as a monument to the daring but unsuccessful designer. Because of this it may not be too much to expect motion pictures to be the advance guard of those who are trying to do new things, and because of the educational power of the industry a considerable influence may result in the architecture of the future.

After the sketches have been submitted and the most satisfactory one chosen, a model is sometimes built for further consideration. This is made to scale and the location of the camera indicated so as to give an idea of the various possibilities as seen from different viewpoints. The draftsman is then called in and from the sketch and the model makes his drawing which is given the final examination before being turned over to the construction department.

After the building is finished the painter steps in, to be followed by the set dresser, whose business it is to decorate the set with the properties, furniture, drapes, and other accessories suitable to the design, period, and business involved.

As the public taste develops, the standards of design must develop likewise, and it is safe to predict that motion pictures will be an influence for the good of public taste in many lines of effort and in standards of living generally.

Motion pictures are still in their "swaddling clothes" and it is likely that it will be some years yet before the technique of producing them will have reached the point of perfection that other and older arts enjoy. Through this evolutionary process motion pictures will eventually take their place as an independent art with a technique appropriate to their needs and possibilities. They will then rank even more than they do at present as one of the most powerful sources of moulding public opinion that civilization has devised. Architecture as well as the other graphic and plastic arts will naturally be affected and the reciprocal influence of the various arts and motion pictures should result in a stimulating influence everywhere.



DESIGN BY ANTON GROT FOR FAIRBANKS' "THE THIEF OF BAGDAD" SET FOR PRINCESS' BEDROOM

#### A BUILDING ON THE BOARD

### SHOWING SOME DRAWINGS FOR THE BANK AND OFFICE BUILDING FOR THE NATIONAL AMERICAN COMPANY AND ITS SUBSIDIARIES

Joseph H. Freedlander, Architect

THE BANK AND OFFICE building shown on the following pages was designed by Joseph H. Freedlander for the National American Company and its subsidiaries, the State Title and Mortgage Company, and The Realty Foundation, all of New York. It is a good example of a small city building, set on a narrow lot and used for business purposes—such a

problem as might be presented to any architect.

The feature of greatest interest is, perhaps, the facade, where the architect has adopted a rather unusual color treatment. The stonework is of variegated limestone of a predominantly warm tone. Set in the midst of this and embracing the windows of three stories are silvercolored Benedict nickel window frames and spandrels. This metal work serves as a setting for a large urn of jade green marble which is placed over the entrance doorway. Five small rectangular windows serve to light the uppermost story while the whole façade is capped with two limestone urns set at the extremities of the parapet wall. The three early studies for this facade (page 547) show that in the design as worked out there was little deviation from the original thought. The original

sketch by Mr. Freedlander is in the center of this group of studies. The two small windows added later on either side of the entrance are intended as show windows in which notices and publicity matter can be displayed.

On the interior we find the street floor devoted to the public banking room from which lead the stairs to the Safe Deposit department in the basement and to the mortgage offices on the second floor. The banking room has been treated interestingly with a

Belgian black and Alabama cream marble floor, real travertine walls, and a decorated wood ceiling composed of old worm-eaten chestnut beams imported from Italy. These beams are to be painted with colored designs based on those used in the palaces of the Italian Renaissance.

The travertine stairs leading to the second floor

are to have a decorative railing of Benedict nickel and bronze designed in the Renaissance spirit. All other interior metal work throughout is to be of Benedict nickel.

The open space on the second floor affords room for desks where the mortgage business of the company will be transacted with the customers. On the third floor are two private offices for officers of the company and also room for some of the clerical force. The fourth floor is given over to general office purposes.

The directors' room, adjacent to the president's office on the fifth floor, has been treated in a novel way with walls of natural finish white pine in the early American manner. It is designed to be in the spirit of a club lounging room, with easy chairs but without the conventional directors' table.

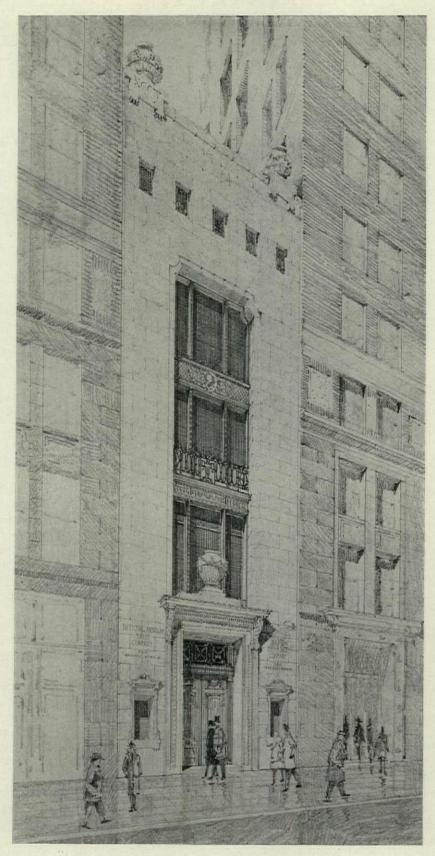
The entire building will

house an organization of approximately seventy-five people and will provide comfortable working space for this number.

All the drawings here shown, aside from the studies and the perspective rendering, were made at the scale of one-quarter inch equals one foot. The perspective itself, as well as the study designated above, was made by Mr. Freedlander, and our reproductions were photo-engraved from his original drawings.

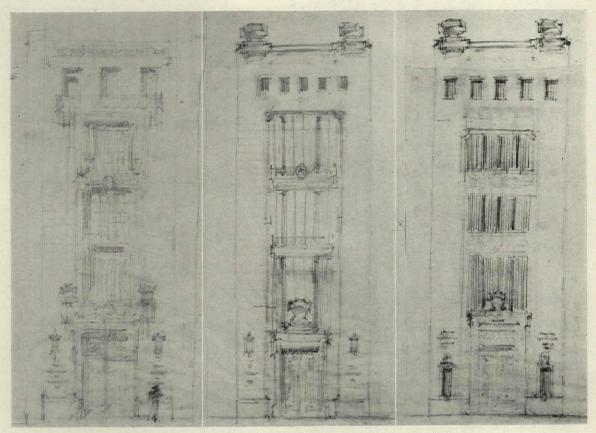


SKETCH STUDY OF ENTRANCE DETAIL

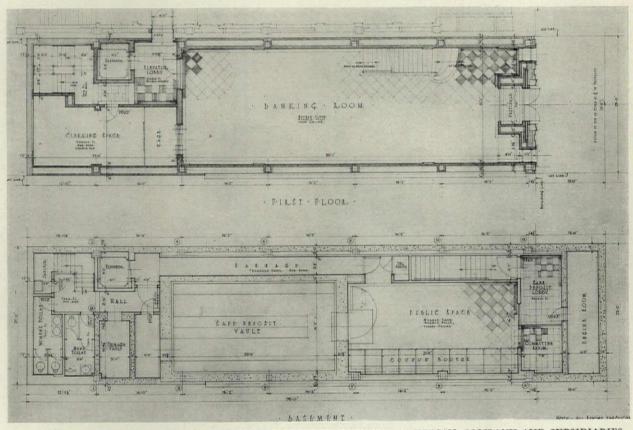


PERSPECTIVE OF BANK AND OFFICE BUILDING
FOR THE NATIONAL AMERICAN COMPANY AND SUBSIDIARIES
JOSEPH H. FREEDLANDER, ARCHITECT

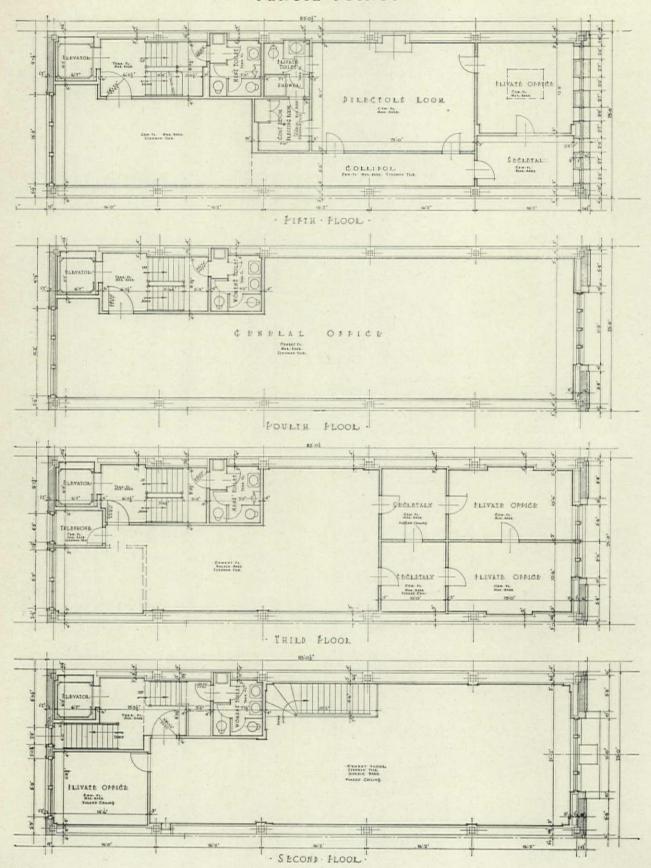
#### A BUILDING ON THE BOARD



PRELIMINARY SKETCH STUDIES FOR DESIGN OF FAÇADE

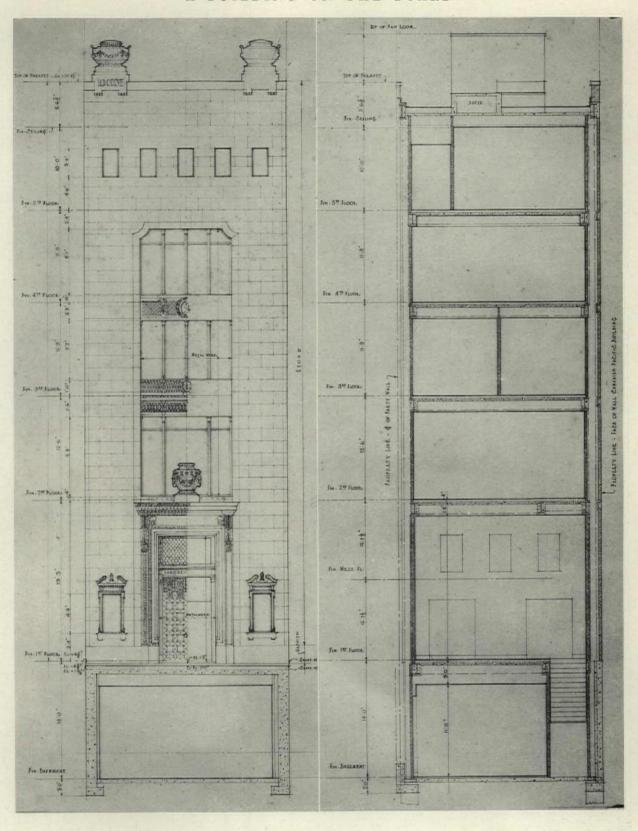


BASEMENT AND FIRST FLOOR PLANS, BUILDING FOR THE NATIONAL AMERICAN COMPANY AND SUBSIDIARIES JOSEPH H. FREEDLANDER, ARCHITECT



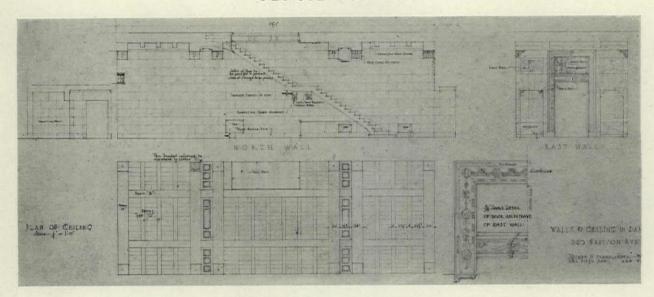
UPPER FLOOR PLANS, BUILDING FOR THE NATIONAL AMERICAN COMPANY AND SUBSIDIARIES JOSEPH H. FREEDLANDER, ARCHITECT

#### A BUILDING ON THE BOARD

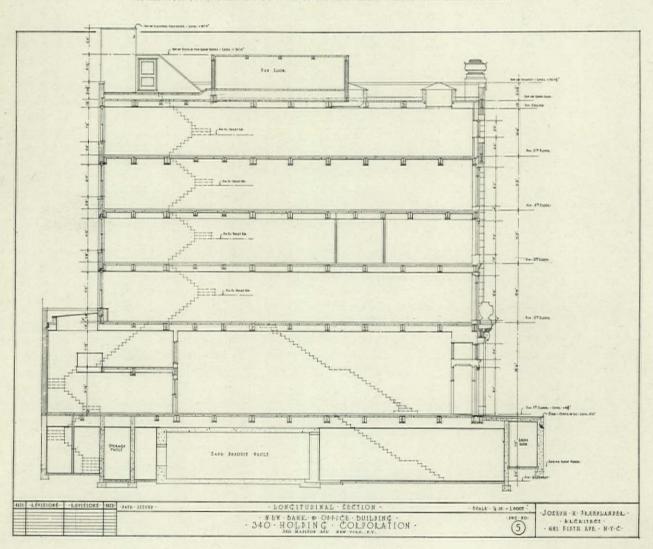


ELEVATION AND SECTION, BUILDING FOR THE NATIONAL AMERICAN COMPANY AND SUBSIDIARIES

JOSEPH H. FREEDLANDER, ARCHITECT



INTERIOR OF BANKING ROOM-NORTH AND EAST WALLS AND CEILING PLAN



LONGITUDINAL SECTION

BUILDING FOR THE NATIONAL AMERICAN COMPANY AND ITS SUBSIDIARIES

Joseph H. Freedlander, Architect

#### THE DIMINISHING GLASS, VI

Circumcidite igitur praeputium cordis vestri, et cervicem vestram ne induretis amplius:

Liber Deuteronomii.

#### By Hubert G. Ripley

ONE OF THE EARLIEST figures to emerge from the dim shades of the hoary past, a past so ancient that the human mind can hardly conceive its true significance in its relation to art and culture, is Zoser, the first King of the third dynasty in Egypt. The period of 80 years from Zoser to Snefrue, was most important to the history of architecture, for our earliest stone buildings date from that time (2980-

2900 B. C.) These monarchs of the old kingdom were progressive and enlightened men who discovered and developed the resources of their country in a manner hitherto undreamed of. Zoser was fortunate in securing the services of a rising young artist named Imhotep. The two men were educated together, became fast friends, and in their early youth hunted the gazelle, whipped the same trout streams during the spring freshets around Hieraconpolis, frequented the same night clubs in Memphis, and went on occasional wild parties to Nekhen, the Palm Beach of the nobles of the old kingdom. It was but natural, when destiny called Zoser to the highest office in the gift of his countrymen, that he should take Imhotep with him as his chief assistant or architect.

Then, as now, the Nile valley, from the Delta to the First Cataract, was a country of unparalleled fertility. Swept by the dry winds of the desert,—even in the great heat of summer the atmosphere was not oppressive, while the nights were cool and invigorating, often exceedingly chilly just before dawn. The city of Memphis was only about four hundred years old, just in the first flush of its lusty youth, as one might say, and the calendar, a comparatively recent invention, had only been in use for about 1250 years. People had hardly become accustomed to it, still dating events from some notable happening, such as the 499th year after the "first smiting of the Troglodytes". Time, like everything else in ancient Egypt, was cast in an heroic mould.

Imhotep thus becomes the first architect of whom as yet, anything definite is known. He was a splendid

figure, versed in many branches of science, medicine, and the arts of industry and government. His organization was even larger and more impressive than that of Cross and Cross, or Smith, Hinchman, and Grylls, as scenes in the old kingdom as portrayed by Lepsius would seem to indicate. The education of a youth (who must perforce be of noble family) desirous of becoming an architect was in those days rigid in the

extreme. His first task was to gather papyrus and beat and roll it into sheets. This was so skillfully done that specimens exist today, over five thousand years old, on which the hieratic writing is as clear and legible as the day it was traced. It is doubtful if even the 180-pound hand-made Whatman's will last that long. The next step was the preparation and grinding of colors, black, red, yellow, obsidian, and white. Then the apprenticeship in the stone quarries, and finally the actual modeling and painting on the walls. With this training was interspersed periods of office practice, the casting of accounts, and the stalling off of clients of lesser

The Memphite wall paintings, combined as they are with flat modeling in low relief, are some of the most heavtiful examples

of the most beautiful examples that have come down to us, hardly excelled by the delicate and refined work produced during the reign of Ikhnaton. The sure and confident draftsmanship of the familiar geese panel of Medum, illustrates the high degree of skill that painting had attained at that early period. What seems to us an archaism, but which in reality tells the story in a more decorative and detached manner, is the custom followed by these early masters of combining two points of view in the same picture. That is, the eye and trunk may be in front view, while the legs and face are in profile. Different periods of time were also combined in the same scene. This convention, as must be evident to every draftsman, was developed in the architect's office, where on the same drawing, a building would be shown in different stages of construction, or a plan, section, and elevation often superimposed on one



From a low relief in the Fullerton Collection found at Nekhen.

another. Imhotep's office was noted for the skill with which a complete set of working drawings could be presented on comparatively few sheets. The office, due to the tireless energy of its master, developed a complete library of plans, comprising sets of drawings for buildings and monuments of varying types, from the simple pyramid form to the exquisitely planned temples which have since served as models for so

many buildings. These plans were for thousands of years jealously guarded by the high priests and viziers who used them in building after building, much as we now use D'Espouy, Buhlman, Letarouilly, and the White Pine series of Architectural Monographs.

The Egyptian word for architect is "chief of all the works of the King." Kegemne and Ptah-hotep, architects of the 3rd dynasty, and Thretiy, Nehsi, and



BUILDING THE GREAT PYRAMID OF KHUFU

As chronology is of no import in Egyptian Ideographs, we have taken the liberty of introducing the pyramids of Chefren and Mycerinos in the background, although they were, as every schoolboy knows, built at a later date than that of Cheops. In the construction of this massive monument, over 2,300,000 blocks of stone, weighing on an average  $2\frac{1}{2}$  tons each, were used. It is 481 feet high and 756 feet square at the base. It was covered with a casing of huge limestone blocks laid without mortar, with joints of extreme fineness, one tenthousandth of an inch thick.

Professor Breasted, to whose researches we owe practically all, although he pays a handsome tribute to Herodotus (to whom we owe the rest), is authority for this statement, incredible as it would seem. The architect in charge of the erection of the most massive monument the world has ever seen, a master whose name is as yet unknown, generously gives the credit for its conception to Imhotep. Hence the pyramids.

Hapuseneb of the 18th, as likewise the distinguished Peumre, who designed the thirtieth anniversary obelisk\* of Thutmose III, all owe their inspiration to their patron spirit, Imhotep, whom the Greeks called Imouthes, and who is further recognized as their god Asklepios.

While our authoritative records of Imhotep are conclusive in a degree, it must not be thought that he was the first architect. Many other able men preceded him, men skilled in the design, superintendence, and erection of vast masonry structures, docks, ship-yards, temples, pyramids, and the planning and sanitation of great cities. We are unable as yet to identify these earlier masters, but we know that their activities were broad and extensive in their scope.

Stone had been used for pavements, dykes, ramps, and steps, and for sculptural treatment, but it was to Imhotep that the idea first came to use stone as a building material for important structures. Like all of his guild, he had served his apprenticeship in the stone quarries of Sinai and Assouan, had seen the great blocks of stone hewn with unerring skill from the cliff side; he was familiar with the problems and difficulties that beset his confrères who found the brick unit unsuitable for ceilings and lintels; he was versed in the cultural traditions of the age.

On his return from the quarries, during a visit of inspection to the vast audience hall of the new palace that Zoser's predecessor had begun, he watched the workmen placing the great beams of hewn cedar for the roof. Other beams or posts of cedar were placed for supports, and the thought suddenly flashed to his mind, "Why not try something of this sort in stone?" Shutting himself up in his cabinet with rolls of papyrus, tablets, steles of highly tempered bronze, saucers of ground pigments, and all the tools of his craft, he denied himself to even his favorite concubine, subsisting for weeks on a simple diet of rice, wine and pine nuts. Here, with intensive application, he made study after study on papyrus, stretched tightly over the smooth surface of the polished syenite drafting table.

The master was not content with merely supporting a rectangular lintel on a square or round column, he had to work out a complete system for an order, or rather a series of orders, with skillfully modulated parts, moldings, decorative features, capitals, bases, and all the elements that announce the birth of a style. Now and then sounds of merry jesting in the outer office, a fragment of a song, or, "and there stood General Snefru in full uniform and epaulettes!" would be wafted over the stylobate that separated his cabinet from the public space. Imhotep would pause smilingly for a moment as he recognized the old wheezes that, coming down from the time of Menes, recalled his student days. "Still dusting off the old

ones," he mused, "That must be that Lybian limestone salesman from the Sinai Quarries, Inc., trying to make himself solid with Miss Ty." Then with renewed energy he set himself again at his gigantic task. Even when King Zoser and his favorite Ufratete called to see how the drawings for their new hunting lodge between the first and second cataracts was progressing, Miss Ty firmly but reverently barred the way to the master's cabinet.

"He's in conference," she said, "but our Mr. El Beled will talk with you," and she ushered them into the library where Beled, commonly called the sheik on account of his curly hair, shortly appeared. He wore a freshly laundered linen smock, embroidered in gold thread with a pattern of palmettes and wild fowl, the pleated folds of the garment revealing rather than hiding the rippling muscles of his erect figure. He carried a roll of papyrus sketches under one arm, and at his appearance Ufratete fluttered prettily, for El Beled was one of her favorites. The two bent absorbedly over the plans while Zoser paced restlessly to and fro, his brow clouded in thought, cogitating on some knotty problem. Absent-mindedly he would answer his favorite's delighted exclamations with a perfunctory, "Yes, my love," "Certainly, dearest," "Naturally, darling."

Suddenly the door to the master's cabinet burst open and Imhotep appeared in their midst waving a large sheet of double elephant papyrus in one hand and a mass of data sheets in the other. He was as a man in a trance; his features, pale and drawn, showed the signs of long hours of unceasing study and travail; his eyes gleamed with a strange light of exultation, while his impassive face seemed almost lifted beyond the veil which separates the natural from the sur-natural.

"My dear friend, companion of my youth, brother in arms, speak! what is it?" said Zoser, as pausing in his walk, he stepped quickly forward and placed a sheltering arm about Imhotep's massive shoulders, now somewhat bent with the fatigue of his long vigil.

"I have evolved a new theory of Art," replied the master simply, and spreading out the larger roll he pointed to a series of drawings, depicting buildings in stone designed on a wholly new theory. Here was no long and gradual development by experimentation, such as at later periods the art of building underwent. Everything had sprung forth from the massive brow of the master,-full-fledged, complete, satisfying, perfect, and in addition, one hundred percent Egyptian. From the simplest pylon and obelisk form to the most elaborate temple details, with their exquisitely modeled lotus-bud caps, great coves and ceiling beams chiselled in low relief, the germ had been conceived in the fertile brain of Imhotep, and the group gathered in the library of his office, representing varying walks in life from little Miss Ty to the great Pharoah himself, were sponsors at the accouchement.

<sup>\*</sup>Now in Central Park, New York.

Outside, a sudden hush had fallen over the great drafting room. It was as if Smith, Hinchman, and Grylls or Cross and Cross had returned unexpectedly after announcing an afternoon of golf with Henry Ford or John D. Rockefeller. Glancing up from a study of the papyrus rolls, Ufratete saw the doorway and balcony overlooking the vast hall filled with the curious awed faces of the draftsmen, each eager for a peep at the new style, the rumor somehow having spread like wildfire that the long travail of their master had ended.

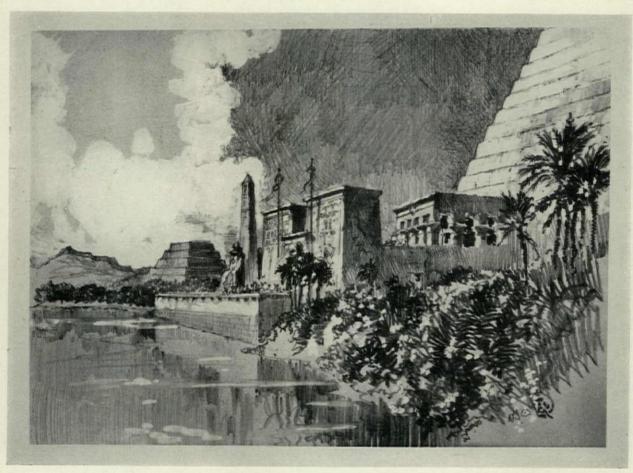
"Let the sacred trumpets of Khnum and Horus be sounded," shouted the King.

"Give every man in the office time and a half over-time, with no work for seven days, and put it on my bill.

"We want to start this new style right. From now on Imhotep shall be my chief vizier, Keeper of the Seals, Attorney-General, and Supervisor of the Royal Treasures in special charge of all building enforcement.

"Come on, Ufratete, your mother must be tired waiting for us in the car."

Thus speaking, the royal pair hopped into their high powered chariot and whirled off to Nekhen in a cloud of dust.

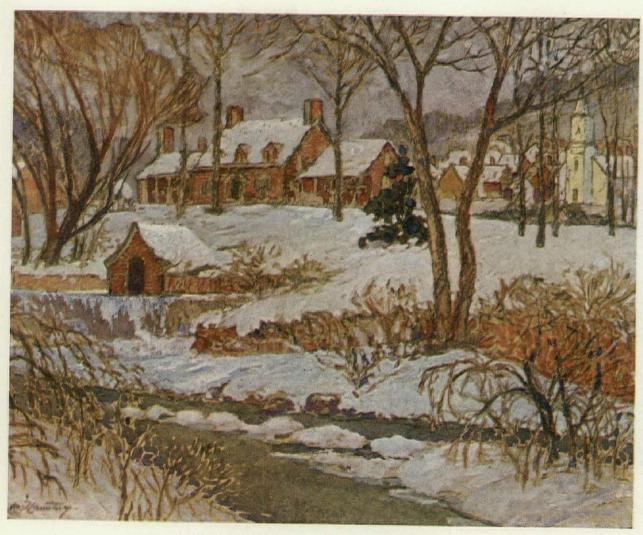


APPROACH TO THE GREAT PYRAMID

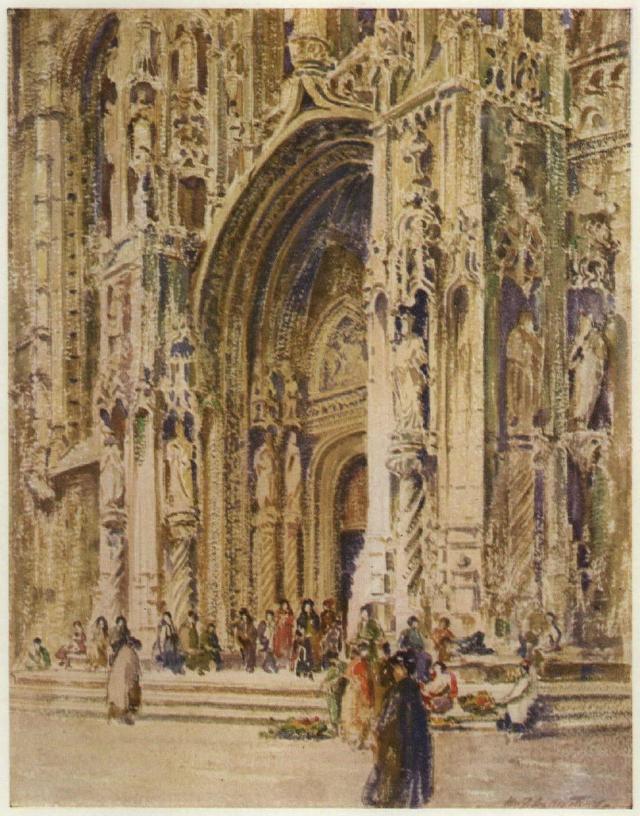
Herodotus, who visited Egypt about the 80th Olympiad, where he was graciously received by everyone and hospitably entertained by the priests of Vulcan, says that the causeway from the river was scarcely less marvelous than the pyramid itself. It was 5 furlongs long, 10 fathoms wide, 8 fathoms high, and occupied the labor of 100,000 men for ten years. He says, "An inscription on the Pyramid records the quantity of radishes, onions, and garlic consumed by the laborers who constructed it; and I perfectly well remember that the interpreter who read the writing to me said that the money expended in this way was 1600 talents in silver." A strong diet for strong men, who had to lift great stones thirty feet long; five hundred feet into the air. The manner of doing this was as follows: a machine, evidently similar to our modern gin pole with winches, properly guyed, was set up on the lower step, the stones being raised a step at a time, the machines keeping always one course above them until the top was reached. The casing stones were placed after the pyramid as we now see it was erected, beginning at the top course and working down, so that when the job was finished, all machines, staging, etc., were on the ground again.

# PENCIL POINTS SERIES of COLOR PLATES

The subject of this water color painting, a winter landscape at Nutley, N. J., is of particular interest in that it includes the house formerly dwelt in by Bob Fitzsimmons, the famous prize fighter. The painting was made on brown English water color paper, size  $20\frac{1}{2}$ " x  $16\frac{1}{2}$ " and both transparent and opaque water color were employed. While it is not an architectural rendering it may furnish valuable hints as to color scheme, arrangement, and so on for renderers.



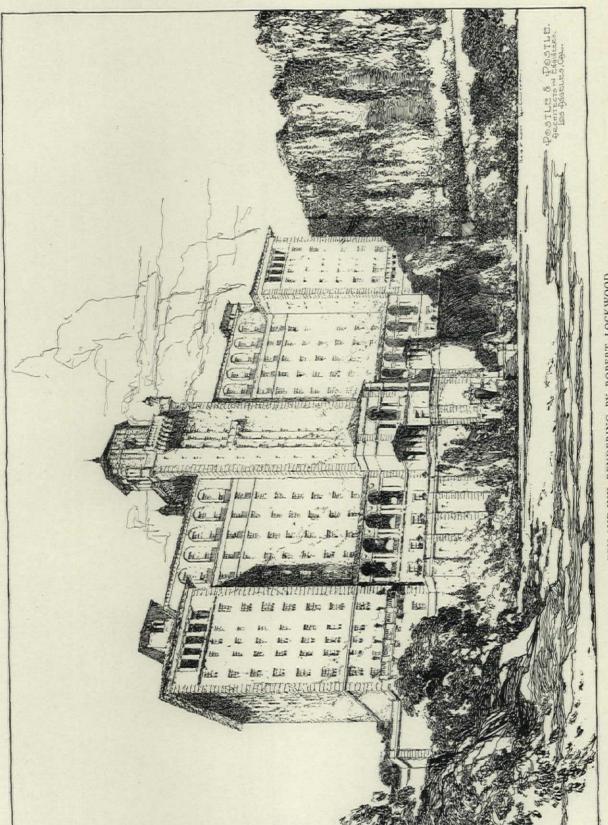
WINTER LANDSCAPE AT NUTLEY, NEW JERSEY
WATER COLOR PAINTING BY WILLIAM T. ARMSTRONG



"THE DOOR OF PARDON"
WATER COLOR DRAWING BY WILLIAM T. ARMSTRONG

# PENCIL POINTS SERIES of COLOR PLATES

This water color by William T. Armstrong was made on Whatman's cold pressed water color paper with clear color and furnishes a good example of the artist's command over this medium. He used a palette composed of aureolin yellow, rose madder, French blue, cerulean blue, cobalt and emerald green. The size of the original was 16" x 20". Mr. Armstrong is a New York architect and a member of the firm of Armstrong and De Gelleke. He paints in various mediums as a hobby and with very satisfying results, as may be judged from the two specimens of his art shown in this issue.



PEN-AND-INK RENDERING BY ROBERT LOCKWOOD PROPOSED HOTEL IN SAN DIEGO, POSTLE AND POSTLE, ARCHITECTS

#### PLATE XXXII

VOLUME VIII

NUMBER 9

The original of this rendering by Robert Lockwood was drawn on buff colored illustrator's board and measured 32" x 25". The beautiful dynamic freedom of the pen technique has produced a feeling of spaciousness and atmosphere in the picture which is lacking in many renderings in this medium.



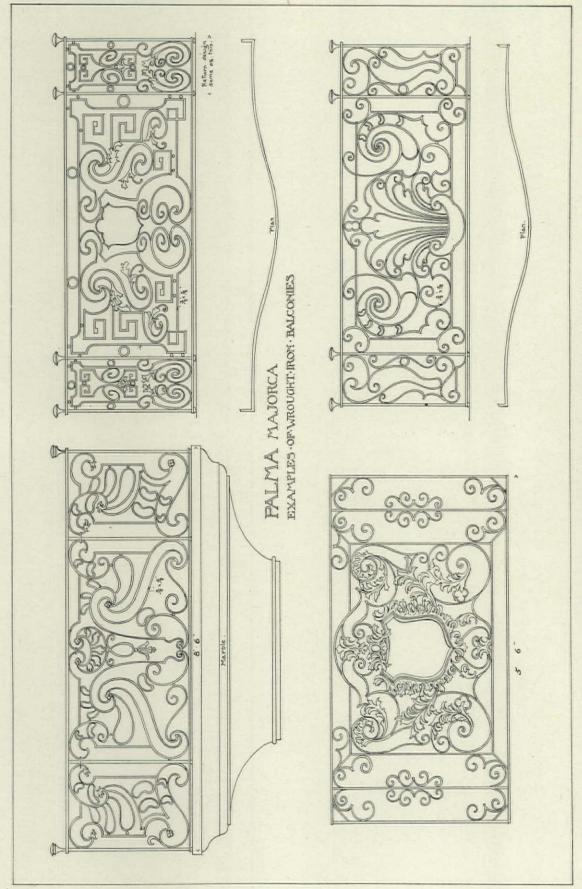
FROM THE ORIGINAL WOODCUT BY J. J. LANKES
PLACE HENRI QUATRE, ROUEN

#### PLATE XXXIII

VOLUME VIII

NUMBER 9

We have here reproduced a woodcut by J. J. Lankes, who is one of the acknowledged leaders in this form of artistic expression at the present day in America. This example of his work, which is shown at the exact size of the original print, is architectural in subject and decorative in its black-and-white pattern.



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

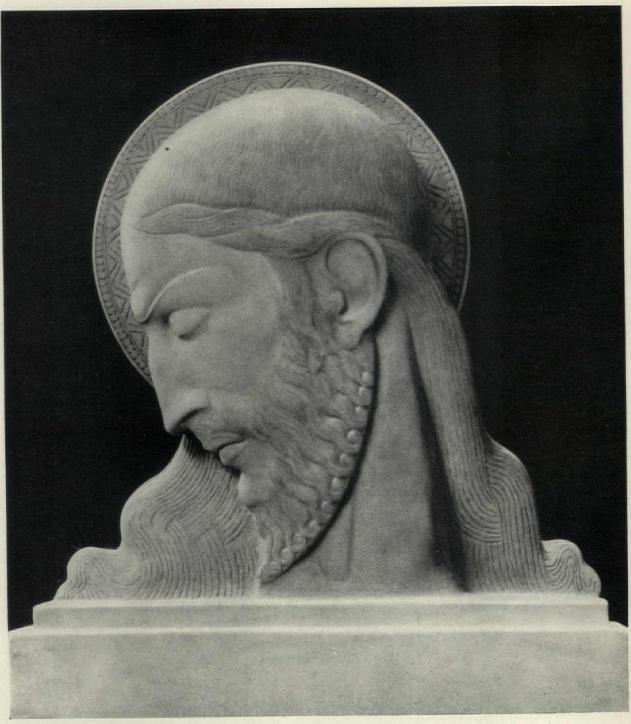
#### PLATE XXXIV

VOLUME VIII

NUMBER 9

"Curious wrought iron balconies form one of the principal charms to the streets of Palma, and are to be observed at every turning. Four typical examples are here given; the lower design to the right being from the Casa Morell."

A. N. PRENTICE



Courtesy of Dorr Service

HEAD OF CHRIST, CARVED IN WHITE CARRARA MARBLE
BY ORONZIO MALDARELLI

#### PLATE XXXV

VOLUME VIII

NUMBER 9

This very architectural head of Christ by a young New York sculptor, was carved at life size from a piece of white Carrara marble to which was given an ivory tinted patina. The piece is the property of the Saint Louis Art Museum which purchased it some time ago.

### ARCHITECTURE—THE SICK PROFESSION

By Charles Kyson

THE WARM, FRIENDLY, brown walls of the old Café "Au Point du Crayon" echoed to the song and laughter of the gay banqueting "Blades of Razz." Through a blue haze of tobacco smoke, Tom Kenyon regarded the smiling expectant faces of the younger architectural crowd, composing a portion of that knighthood of advanced thinkers of the profession of architecture.

"As you fellows know," he announced, "this is a free-for-all, an open forum. This is no private fight—you can all get in on it and I'll act as referee, so if any of you fellows are all steamed up with some secret sorrow about the dear old profession, here's your chance to tell the world. Remember, 'with razz to all and malice to none,' so let's go."

One of the diners rose to his feet, squaring his shoulders pompously. "It is my understanding this organization is advocating advertising the profession of architecture, both individually as architects, and collectively by a system of mass advertising as an association, and I would like to present my views in the matter." He paused impressively and surveyed the diners. "I think it a serious mistake,—it simply introduces another serious competitive element. In order for architects to secure business, they will have to compete with each other in advertising appropriations and already the profession is suffering too heavily from highly competitive methods."

"You gentlemen are complaining about the narrow margin of profit in the profession of architecture and yet you come forward with a program which will put on the architects an additional financial burden which they do not have to bear at the present time. I, for one, am against it. This is the first time I have attended one of your meetings. I have heard a great deal about them and I understand you invite different points of view from every one."

Tom Kenyon smilingly acknowledged the remarks of Mr. K. Mannington Browne. "Thank you, Mr. Browne, you are quite right; any one can present his view. Frankly, yours is one of the best arguments against advertising by architects that I have heard. While I do not personally agree with you, we have to get the various points of view."

A fiery advocate of advertising rose to his feet. "With all due respect to the former speaker, I call that 'shaking the venerable chestnut tree'. Those are the age-old bromidic arguments always used against advertising anything and if the industrial and merchandising business of America had followed that line of argument, many things in common use today which we consider necessities would never have been thought of, much less used. When you think of chewing gum, what is your mental reaction? Wrigley's? When you think of ready-made clothes,

why do you think of Hart, Schaffner & Marx? It's because your sub-conscious mind has been continually influenced by advertising. When you want any standard commodity, an advertised brand pops into your mind and you ask for it. But when 93 out of 100 people decide to build, what do they do? What do they say? 'I must get a builder,'-'I must go to a finance company,'-'I'd better go and talk to the Free Plan Construction Company.' Do they think of getting an architect? They do not! Why? Their sub-conscious mind does not come to their rescue and suggest the word ARCHITECT. The word has never been impressed upon that sub-conscious mind by advertising or publicity. The architects have never indulged in systematic methods to get their message into the publications read by the general public; consequently, the public hardly knows that the architect exists. They don't know what he does but they all have a settled conviction in their minds he is a luxury and when it is a question of saving money, his services can be the most easily dispensed with. That's why architecture is the 'Alley Cat' of the profession," he continued heatedly.

"Oh, ouch! But that's a hot one," grinned a listener. A ripple of laughter ran through the crowd.

"Oh, I say now, that's a bit thick, referring to the profession in that manner, you know," Mr. Browne protested indignantly.

"Not elegant but, unfortunately, sadly true," grimly commented the advocate of advertising, "and that's what we're all here for—to get the cat out of the alley, assist him to grow a bushy tail, and install him on the boulevard with the doctors, lawyers, and other progressive and forward-thinking professional men. It's some job, I'll say, but it's worth the effort."

"Oh Boy! There's no static on that lad's radio! Tommy, me boy," sang out another of the Blades, "how about that report you were going to give regarding that publicity campaign thing, and how we were to work it?"

Tom Kenyon rapped on the table for order. "I'm glad you brought up that subject, George. Chet Heatherstone is all primed. I appointed him chairman of a committee to make that report and he tells me he has the information all ready, so if you genial parrots will pipe down a moment, I'll call on him. Chet, will you kindly get up and sing the 'Song of Progress', to these birds so full of pie?"

J. Chesterman Heatherstone rose to his feet with a genial smile. "Fellows, I used to rather agree with friend Browne; I thought this publicity idea was one of those wild emanations of Hokum from Hollywood, but the more I go into it, the more I come to the conclusion it is the most vital thing the Architec-

tural profession has to face and solve. So, briefly, the following is a digest of the report of your Committee:

"We have interviewed a publicity agency and they have agreed to put on a four months' publicity campaign at \$100.00 per week. For this they will guarantee the following:

- (1) The publication of two newspaper stories per week in each of the daily newspapers of the city. Copies of these manuscripts will be sent to all of the newspapers in the County for re-publication but each large daily paper will have to be given a different story.
- (2) The agency agrees to help us write a mass advertisement in the name of our Association, telling the public of the benefits of employing an architect. This is to be placed in those newspapers where it is necessary to run advertising in order to get news space.
- (3) The Agency agrees to help us organize a speaker's bureau and arrange speaking dates for us to appear before the various service clubs, women's clubs, real estate sales meetings, and like organizations of people who would be interested in the story of how the community would be benefited by good architecture and how they can obtain it by employing trained architects.

"On our side of the agreement, we are to organize a publicity and editorial committee which will appoint certain members of our organization to write articles on architectural and building subjects which will be of interest to the public. These articles are then to be turned over to the agency, which agrees to put a re-write man on these articles and whip them into shape, giving to them the necessary human interest touch so they will have a news value.

"We are to furnish the publicity agency renderings of the buildings which we design, together with a suitable description, so they can be placed for publication. Also, we individually are to furnish any interesting things we do that we think have news value. In brief, that's that,—now, are there any questions you want to ask?"

One man spoke up. "I don't see where the publicity agency is doing anything we can't do ourselves."

Chet Heatherstone smiled. "At first thought, one might think that, but did you ever write a newspaper article which had news value and do you know how to do it? Or, do you know how to get such an article published? Do you realize it takes a personal interview and very frequently a personal friendship with some editor to get that particular news article into print? In other words, you have really got to go to the editor and sell him the idea that it is news and worth while being published in his paper. This takes an enormous amount of time and effort, which few of us can afford to devote to such activity. I know I could not possibly do it and carry on my business. It is the work of a specialist; consequently it is neces-

sary to employ a publicity agent who knows how to do it."

"Do we have to carry advertising in the papers in order to get things published?" inquired another. "The things we do, the buildings we design ought to be news to the public. I don't see why we have to advertise in order to get those facts into print."

Chet Heatherstone glanced amusedly at the speaker. "Now, you have struck at the root of the matter. We architects are great egotists; we think our activities are tremendously important and they are. However, there have come into being certain rules or relations between advertising and publicity. Without the one you do not get the other. The reason why we architects do not get publicity is that we are not advertisers. The news and editorial policy of many of the large dailies are not supposed to be influenced by the advertisers. The significant fact remains, however, that the people who advertise are people who get the notices in the news columns of the papers. It is particularly true with the newspaper having a small circulation. In these the advertiser has more influence on the editorial and news policy of the paper. The paid and street circulation of these publications hardly pays for the cost of the paper used; in other words, the advertising makes the publication of a paper possible as well as profitable. Therefore, architects, who are not advertisers, naturally get little or no recognition in the news columns of the papers."

"You know, fellows," Chesterman Heatherstone continued earnestly, "I know one or two editors and I have had a frank talk with them. I told them that we architects would never be big advertisers because we were professional people. However, the cause of good architecture was something which every daily newspaper, having the welfare of the community at

heart, should support."

"I explained to them we architects are the only ones who, by training and experience, possess the ability to create well constructed, well planned and beautiful buildings and, in helping to present our story to the public, the newspapers would be forwarding a great and worth-while service to the community. These editors are broad-minded fellows and they will be glad to help us but they said they thought it only fair that we should carry some mass advertising to help them pay the expenses of such a campaign. I think their point is well taken and we should play the game with them by carrying some mass advertising.

"It's a mortal cinch, fellows, that without the advertising, we won't get the publicity. It is vitally necessary to our very existence that we build up in the minds of the public the necessity of employing an architect and thus divert to ourselves some of the 93% of the business which now goes to builders and construction companies. Until we start to systematically sell architecture and architects to the public, we will continue to lose ground. It is well to remember we are competing with shrewd businessmen, who

realize the value of advertising and publicity. They are aggressive advertisers and are continually engaged in selling the public the idea of undivided responsibility and the elimination of the architect. We can close our eyes to facts if we want, but truth is a stubborn thing to get around, and facts are facts. There is no question that our profession is twenty years behind the times in this important regard and it's time we woke up if we are to survive. If we don't, we can decorate ourselves with calla lilies and do the 'Mausoleum March'."

"Chet, what do you mean by the expression 'news story'?"

"I'll answer that in this way," Chet turned to the speaker. "In writing our stuff, we architects are frequently too technical. We do not get the human interest angle into it. If, for instance, some of you golf sharks ever get to be so good as to win a cup, our publicity agency can turn in a story that Mr. Browne, the rising young architect, won a cup at the Meadowbrook Golf Club. Now, that is news and it goes in the sport section, where ordinarily the word architect never appears. If, for example, your wife gives a bridge party, the agency sends in a story that Mrs. Hanson, the wife of the architect of the new City Hall, has given a bridge luncheon at the Clover Leaf Country Club. Thus, you see, the word architect appears in the society column, and so it goes. The word architect becomes identified with the life and prominent activities of the community. The constant repetition of the word architect in the sub-conscious mind of the public arouses its curiosity and interest in the architect. When people get ready to build, the word architect occurs to them and they proceed to hunt us up. As a body, we should interest ourselves in the activities of the community, such as Tree Planting, Public Parks, advocating Recreation Centers, Playgrounds, constructive political activity, and so on. These are all good for news stories in which the word architect would figure prominently. And the word architect would become linked with service and then, when we rang in the word architect, we could play that soothing soul-inspiring cantata entitled 'Adequate Compensation'. And oh, the glory of it!!!" The crowd interrupted with a laugh that had a touch of anticipation.

"Now, that is a form of mass salesmanship which we badly need," Heatherstone continued. "We could tell the story of how beauty in architecture adds to realty values, increases rents, protects the owner from poorly planned and constructed buildings, and all that sort of thing. Thus we would rapidly build up prestige for ourselves. Soon the public would come to realize we architects are a very important factor in the development and life of the community."

"How can we start a publicity campaign of this sort?" inquired an attentive listener.

Tom Kenyon spoke up. "Gentlemen, we are all ready to go. I have here a subscription list and I have mighty good news for you. A member of this organization, who is financially able, has donated a thousand dollars. According to the terms of this subscription list, you agree to make monthly payments of whatever sum you can afford to invest in this campaign, which will last for the next four months, or as long as our funds last. Now, I want you to realize this:--you are not donating to a cause--you are investing money, which will be returned to you in increased business and profits. I am investing twentyfive dollars a month in the fund and am turning over a check for three months' payment in advance."

The paper was passed down the table amidst great applause. Man after man wrote his name with an amount after it. When this paper was returned to Tom Kenyon, a smile of gratification appeared on his face. "Hurrah, fellows, we have put it over! There is enough here to take care of the publicity agency and advertising for four months. At the end of that time you will see a greatly increased interest in the subject of architecture in this community and you will find it much easier to get an adequate fee for your work. Your publicity committee will continue to make frequent reports and keep you conversant with the number of column inches per month of news publicity you are getting."

"Mr. Chairman! What is the Public Relations Committee of the Chapter doing about getting publicity?"

Tom Kenyon grinned. "I fear that archaic body is ponderously pondering. Sometimes they think but mostly they just 'set on their mouldy china eggs of tradition' and dream on in a state of self-satisfied complacency. It is the younger and progressive members of that organization that will be the salvation of it and they'll have to start salvationing mighty soon or we'll all be working for building companies."

"What's the matter with us architects, anyhow? Why don't we wake up?"

Tom Kenyon smiled sadly. "I wish I knew. I confess I cannot understand the architectural complex; most architects are tremendously interesting men, exceedingly intelligent, well educated, well informed, and generally very able, charming fellows but they lack the ambition or ability to put themselves forward. They have never developed selling ability. They consider it unprofessional. On this subject, their minds seem to be frozen or atrophied. Their lack of progressiveness in this respect in so alert, fiercely progressive an age is a mental phenomenon which I cannot pretend to explain."

"Isn't the American Institute of Architects advo-

cating a campaign of publicity?", inquired a Blade. "Yes, I believe they are," Tom Kenyon replied thoughtfully. "I am not familiar with the details of it. I wish I knew so that we could co-operate with them and help in the good work. The trouble with us is we're an active bunch of frogs but we're operating in a small puddle. What we need is room," he grinned. "If the Institute would do a little less advocating and concentrate their energies in getting action, it would be a little more to the point."

The fiery speaker with such positive ideas on advertising again rose to his feet. "Well, it's time these worthy and archaic institutions woke up. I'll say there's a bunch of red-blooded guys among the old profesh' who are getting mighty well fed up on this old stuff. It's all right for them to amuse themselves by shooting off their antique cannons of ethics 'n' everything, but we'd like to see them start in to put the architect on the map by commencing to sell him to the public so that all of us can make a decent living out of our work."

"Hurrah, sic 'em, Jimmy,—you tell 'em," laughingly jeered the Blades.

"Action! kid, action!—So say we all of us, every darned one of us, so say we all!" chanted an enthusiastic Blade.

Tom Kenyon rapped on the table for order. "Well, boys," he smiled on them tolerantly, "let's not get violent. Our puddle is getting larger all the time and there are more 'frogs' hopping in every day and they're commencing to croak pretty loud but, after all, we don't want to start a fight. We want the various architectural organizations of every character throughout the country to feel we're for them 100%. We're trying to get them better fees for their work; we're trying to help them to help themselves, and, consequently, we should expect the backing of every architectural organization and every man-jack in the business who has the genuine welfare of the profession of architecture at heart. The American Institute of Architects is a mighty fine and earnest body

of men and it is the largest and best organized architectural group in America. Its members are the logical ones to 'put this thing over'. Let's sell them the idea of doing it in a systematic and effective manner and let them know that if they will write us their ideas and tell us about them, we'll boost their game for all we're worth! Now, let's give the old boys a good husky cheer,—What's the matter with the A.I.A.?" sang forth the enthusiastic Tom.

"They're all right!" bellowed the Blades.
"Let's give them a 'Tiger' and a kitty for good measure."

"TIGER!" howled the crowd. "Meow, meow," came from one Blade in a squeaky tenor. The Blades pounded the table and cheered, and a gale of laughter swept over the assembly.

"That ought to pep the old boys up, yelled someone,—we're for 'em 125%, but we want action!"

"Well, boys, I see the dear old proprietor of our "Au Point du Crayon" is regarding the gas meter suggestively. That boy packs a mean stop watch so we'll have to continue the row later. Let's bid ourselves 'Cafe Noir' until the next issue when the gong rings for a new round and, believe me fellows, if you could see the stack of mail we're getting, you'd think we were a gang of movie stars."

The walls of the venerable Café shook with a thunderous cheer.

Tom Kenyon held up his hands for silence. "Now, don't forget, fellows, to tell the crowd of lads and lassies out in Architectural Radio Land to write in and tell how rotten or how good they think we are. (We sure want to get talked about!)

"So long! See you next month!"



PEN-AND-INK DRAWING BY KJELL JACOBSEN

# WHITTLINGS

EDITOR,

Of The New York Times catches up a brand new suggestion which advocates of the skyscraper had overlooked:

"Skyscrapers have been called economical. They have been called beautiful. They have been called a characteristic expression of the American spirit. But it has been left to L. O. Honig, Chairman of the Height Limitation Committee of the National Association of Building Owners, to praise their health-giving qualities. 'It should be realized that the average length of life has increased more than ten years since the coming of the skyscraper,' he says. This is a comforting reflection. Few denizens of the tall buildings have given a thought to the longevity unconsciously acquired by living in them. Now if only some way could be devised to make them twice as high, man, the city-dweller, might be able to add another ten years to his span."

#### ALFRED C. BOSSOM,

Distinguished architect, decries the destruction of old landmarks to make way for new, as reported in the Providence Journal:

"When we see such famous landmarks as the Vanderbilt house in New York being smashed down with sledge hammers to make way for commercial structures, it seems like sacrilege. A house that was designed with such loving care and represented the finest America could produce, a house that marked a period in architectural progress in the 20th century, goes down under the remorseless energy of a sledge hammer. I mention this as but one example of what is taking place in the hundreds of fine old buildings throughout the United States. Their destruction also kills any possibility of developing a respect and tradition of what has gone before."

#### RAYMOND M. HOOD,

Architect, of New York, in a recent newspaper statement given to Phillip Hampson, discusses the colored skyscraper:

"Several three or four foot colored stripes running the length of a building will not suffice to color a skyscraper. The entire building will eventually have a distinct color. To color only the architectural embellishments and a few outstanding cornices and façades will appear like the rose decorations on a woman's white dress, hardly noticeable.

"New York of the future, I believe, will consist mostly of gaily colored buildings. Instead of walking down a drab stone lined street, one will be enlivened by drastic change of color schemes. No matter what the colors be, just so long as they vary, the harmony on such a scale will be a revelation. The tendency for most colors to neutralize themselves will soften most of the abruptness."

#### PERCY HARTLEY,

Landscape Architect, of New York, voices his reaction to the stimulating atmosphere of Denver:

"To anyone who has been away from Denver for the last four years as I have, the progress made here is amazing. Taste in the construction of smaller buildings has improved immensely. I doubt if there are many better planned and maintained cities anywhere than Denver."

W. BURKE HARMON,

Of the Harmon National Real Estate Corporation, makes a plea for a board of architectural control over new buildings:

"Such architectural horrors as New York's old postoffice building, the late Senator Clark's residence, the monotonous rows of drab frame dwellings all through Queens and the outskirts of Brooklyn, would automatically have been prevented by proper supervision of plans by a civic board of architectural control.

"New York's greatest need at the present time is a board composed of the leading architects of the city—men who would be willing to devote a part of their time, either in return for the honor involved or on some remunerative basis, to censoring building plans. The final decision in regard to every building would rest with them."

#### EDWARD P. SIMON,

Architect, of Philadelphia, just returned from a tour of France and Italy, brings tidings of the changes taking place in those countries:

"The building projects throughout France and Italy are tremendous. In Rome, Mussolini has opened up a new suburban development, similar to many of those surrounding Philadelphia, which covers nine square miles.

"Beautiful boulevards are being built almost overnight, and hundreds of new streets have already been established. One of the most amazing changes I noted was the large number of apartment houses, many of them ten stories high. They are constructed in a most modern fashion, fireproofed and contain hundreds of baths. In a majority I found the same push-button type of elevator service that we have in our apartment buildings here.

"In Paris, the work of leveling the fortifications which surrounded the city for centuries is nearing completion and on the sites of these famous structures are being built new boulevards and row upon row of apartments and homes."

#### OLIVE ROBERTS BARTON,

Special newspaper writer, calls public attention to a social injustice whose victim is the ever-modest architect:

"But to go back to the architect, the maker of beautiful buildings—why shouldn't he have a signature? His work is tangible and lasting. We cannot sign a sentiment but we can sign a fact. A building is a fact and should be signed.

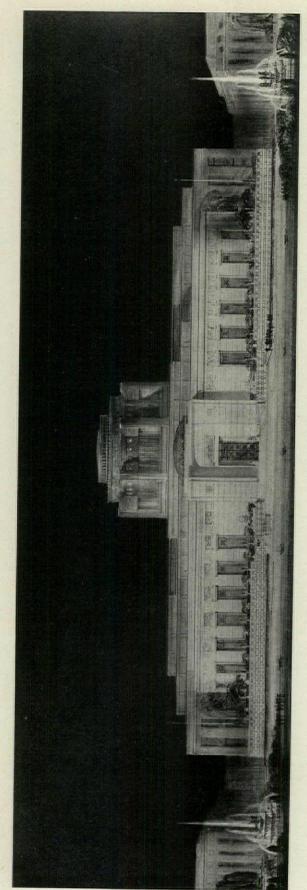
"One sees big buildings rising to heavenly modesty hidden behind fifty foot placards giving the names of the contractors, the plumbers, the landscape gardeners, et al. And the master mind stands back and says nothing, his work never to be publicly recognized!"

#### PERRY F. HOISINGTON,

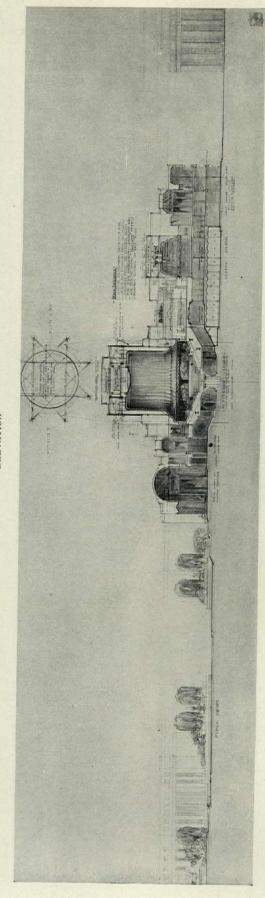
Executive Secretary of the Cincinnati Chapter of the A.I.A., writing in The Enquirer of that city, draws an analogy:

"A good house, like a story, is written with words. The architect is the author, the house is the plot and the structural forms are the words.

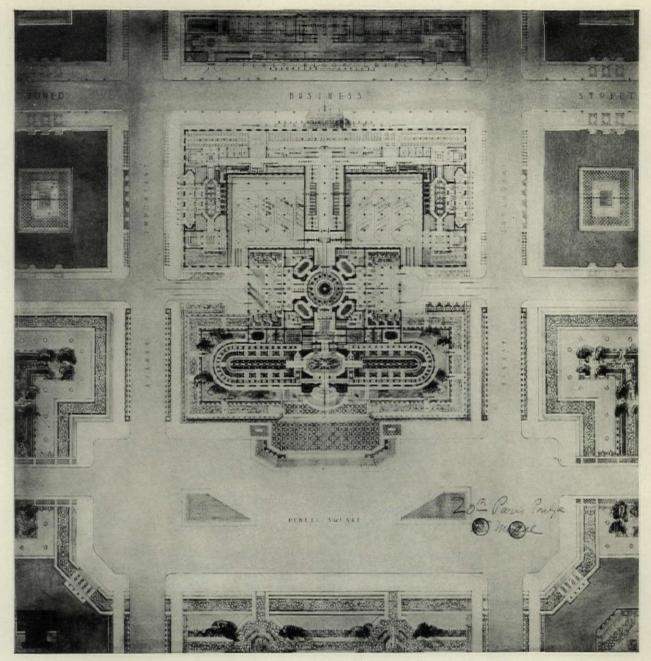
"Like an exciting story, a beautiful house stirs up our emotions. It gives us a feeling of smugness, quiet rest and protection—it is a 'homey' place."



ELEVATION



WINNING DESIGN FOR A RADIO BROADCASTING STATION, BY DONALD S. NELSON—COMPETITION FOR THE TWENTIETH PARIS PRIZE



GROUND FLOOR PLAN, WINNING DESIGN FOR A RADIO BROADCASTING STATION BY DONALD S. NELSON COMPETITION FOR TWENTIETH PARIS PRIZE

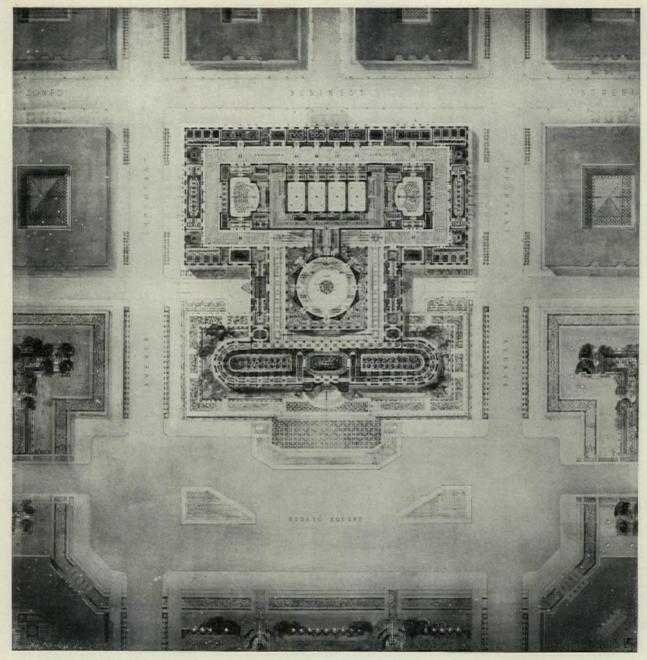
#### COMPETITION FOR THE 20TH PARIS PRIZE OF THE SOCIETY OF BEAUX-ARTS ARCHITECTS

THE PROGRAM of the Competition for the Twentieth Paris Prize of the Society of Beaux-Arts Architects called for the design of a Radio Broadcasting Station. Great organizations, comparable to the newspaper, telephone and telegraph companies of today, will undoubtedly be developed to handle and control the ever increasing importance of broadcasting. In this problem it was supposed that a corporation exists which has its central broadcasting station in the heart of Washington, for reasons of business convenience and facilities of getting together performers and programs. According to the program the main studio, or auditorium, was to be of especial size and arrangement, due to the importance of the performances that frequently take place in the station, such as the broad-

casting of political speeches by the President of the United States, and the gala performances. On such occasions it would be necessary to accommodate the press, the Diplomatic Corps, and other invited guests.

Four distinct elements were to be considered in the planning of the building: first, the technical equipment and the broadcasting studios proper; second, the reception of the radio performers; third, the business and executive offices; and fourth, the reception of the general public. This particular company is to operate on two wave lengths, which means that two performances are going out over the air continuously and at the same time.

For the building—the subject of the program—a level piece of ground 400 feet square inside of sidewalks, has



STUDIO FLOOR PLAN, WINNING DESIGN FOR A RADIO BROADCASTING STATION, BY DONALD S. NELSON COMPETITION FOR THE TWENTIETH PARIS PRIZE

been acquired. One side faces a public square, the two adjoining sides face important streets opening into the square, and the fourth side faces a street of minor importance.

The winning design and those placed second and third, respecitively, are reproduced on pages 568 through 572.

The winner of the Paris Prize will receive a payment of \$3,000.00 distributed over two and one-half years, and is authorized by decree of the French Minister of Public Instruction and Fine Arts to follow the Lectures and take part in the Competitions of the First Class in the section of Architecture at the Ecole Nationale et Speciale des Beaux-Arts, subject to the approval of the Faculty of the Ecole.

#### BROOKLYN DRAFTSMEN TO FORM ATELIER

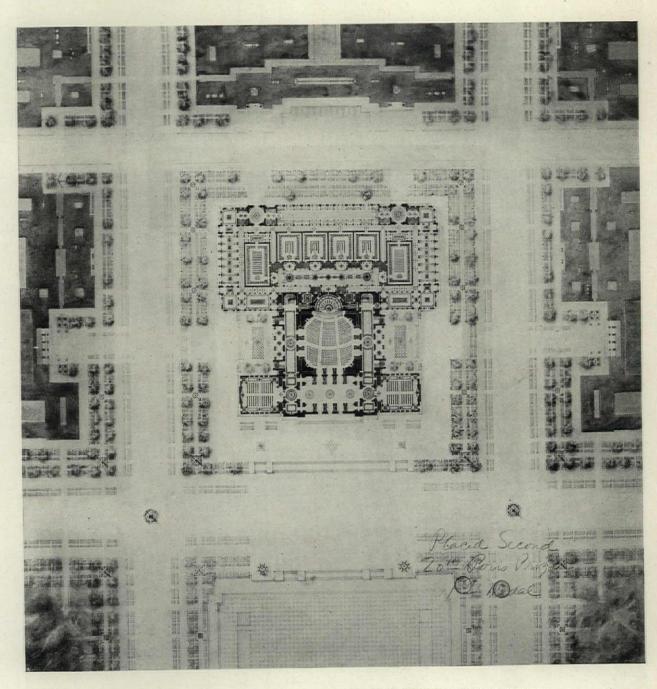
An ATELIER is in the progress of formation in Brooklyn. Architectural draftsmen are invited to become members. For full particulars write; J. Bertram Jongberg, 352 East 52nd St., Brooklyn, N. Y.

THE ARCHITECTS' LEAGUE OF HOLLYWOOD has published a booklet entitled Your Profit, Friend Architect—How About It?, which contains much information of practical value to Architects, both those who are established and those who are commencing practice. It may be obtained by sending fifty cents to The Architects' League of Hollywood, 6040 Hollywood Boulevard, Hollywood, Cal.

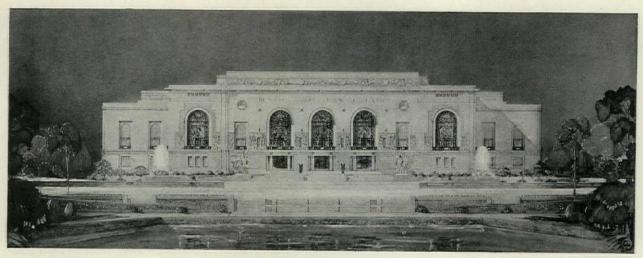
#### PENCIL POINTS



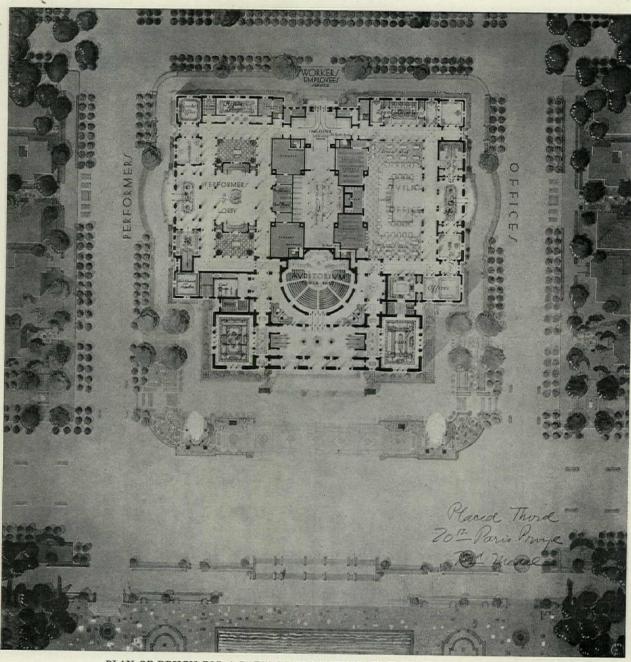
ELEVATION



PLAN OF DESIGN FOR A RADIO BROADCASTING STATION, BY A. J. KELSEY PLACED SECOND, COMPETITION FOR THE TWENTIETH PARIS PRIZE



ELEVATION



PLAN OF DESIGN FOR A RADIO BROADCASTING STATION, BY G. E. BRENNAN PLACED THIRD, COMPETITION FOR THE TWENTIETH PARIS PRIZE

#### A LETTER FROM CLARENCE D. BADGELEY

Editor's Note: Mr. Badgeley is a Fellow in Architecture, American Academy in Rome.

The following comprise a few notes on a subject that has recently come under my observation.

While travelling in Greece a short time ago, I took particular notice of restorations now in progress on the Parthenon. Whether you have received any other communications I know not, but I think the present work demands immediate attention. Upon examination, and to my astonishment, I found the workmen using concrete as a filler and as external surface of the columns being erected. An apparent attempt was being made to match the color of the beautiful Pentelican marble but it was as much a failure as the match in the materials themselves. Long has the world seen the Parthenon as the highest expression of refinement in the art of proportion and execution, but if the present methods are allowed to continue, future generations and ages will look upon an unsightly ruin.

Professor Dinsmoor of Columbia University, who has made a very careful study and restoration of the Acropolis buildings sent a report to the proper authorities in New York concerning the restorations now in progress on the Parthenon. I have seen no publication of the report, but I am convinced the architectural world is interested enough in the Parthenon to support a movement against the present method of restoration which is under Greek supervision. American money is paying for an inferior piece of work, so, in years to come, the world will look upon the result of the poor judgment of the Americans.

The restoration of the missing fragments should be made in the same kind of material as the original structure from the large supply of Mt. Pentelicus. Time must be a minor consideration. As the restoration of the stained glass windows of Rheims Cathedral is being done in a most careful method, matching exactly the old glass in color and cutting, so should the Parthenon be treated in matching and cutting and setting of marble. Thus it should rise again as a great monument to Faith, Architecture and Art. Although not the same, it will retain much of the original spirit and stand as an inspiration to future generations.

Hoping you may give this consideration in an early issue of PENCIL POINTS I am,

Very truly yours,

C. D. BADGELEY.

#### HOUSE BEAUTIFUL COVER COMPETITION

THE SIXTH ANNUAL COMPETITION for a cover design has been ansounced by *The House Beautiful* magazine. Among the awards will be: First Prize of \$500; Special Prize of \$500; Second Prize of \$250; Student Prize and several Honorable Mentions. A copy of the conditions may be obtained from the *Competition Committee*, *The House Beautiful*, 8 Arlington Street, Boston Mass.

#### THE NEW YORK ARCHITECTURAL CLUB, INC.

THE NEW YORK ARCHITECTURAL CLUB will hold a Surprise Dance at the club rooms, 118 East 42nd St., New York, on Saturday, September 10th. Tickets may be obtained at the club.



JOHN L. SKINNER

John Llewellyn Skinner, architect of Miami, Florida, and former head of the department of architecture at the Georgia School of Technology, will be in charge of a similar department at the University of Miami, starting with the fall term. Mr. Skinner was awarded a B.A.S. degree by the University of Toronto; his master of architecture degree at Harvard, where he was awarded the Nelson Robinson traveling fellowship with two years of travel in Europe. He has had five years' experience as a practicing architect.

Phileas E. Paist, Coral Gables supervising architect, and Denman Fink, art director, will assist Mr. Skinner. The new department will cover four years of work and will lead to the degree of bachelor of science and architecture.

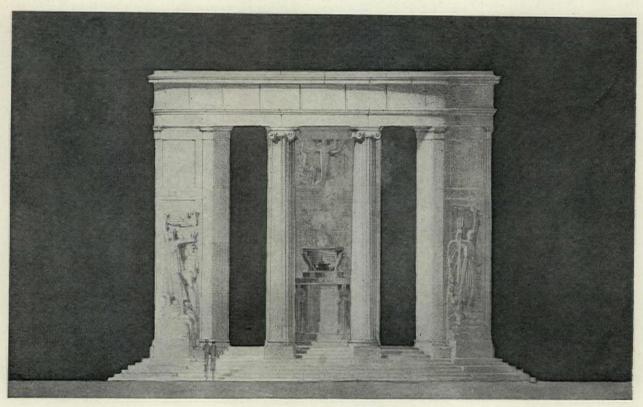
#### POSTER COMPETITION

THE NATIONAL SOCIETY OF THE COLONIAL DAMES OF America is cooperating with the Bureau of Education, Department of the Interior, in its endeavor to promote literacy in the United States. To this end, the Colonial Dames are conducting a competition to secure a poster that will instantly arrest the eye and convey to illiterate as well as literate citizens the advantage and desirability of being able to read, write and speak the English language.

The competition is open from October 1, 1927 to January 15, 1928. Announcement of the winners and distribution of prizes will be made February 1, 1928. Prizes will be awarded as follows: 1st Prize \$300; 2nd Prize \$150; 3rd Prize \$50, and Five Honorable Mentions. Copies of the requirements may be had upon application to Poster Secretary, 120 Bellevue Place, Chicago, Illinois.



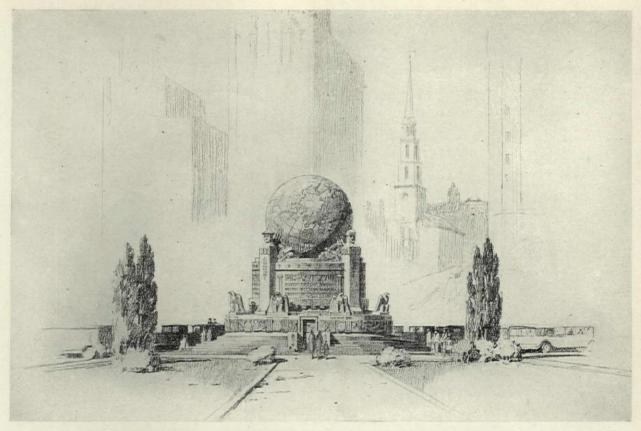
BY W. T. L. ARMSTRONG, NEW YORK



BY J. E. R. CARPENTER, NEW YORK

DESIGNS SUBMITTED IN PRELIMINARY COMPETITION FOR THE PROVIDENCE WAR MEMORIAL

These Designs and that on the opposite page were awarded cash prizes and placed after the three Competitors invited to compete in the final stage of the Competition. The final Designs submitted by these invited Competitors were reproduced in the August issue of Pencil Points.



DESIGN SUBMITTED IN PRELIMINARY COMPETITION FOR PROVIDENCE WAR MEMORIAL BY ALFRED FELLHEIMER AND STEWART WAGNER, NEW YORK

#### LETTERS OF AN ARCHITECT TO HIS NEPHEW

With this issue, begins a series of letters by William Rice Pearsall of New York, addressed to young draftsmen and students about to take up the study of architecture. Mr. Pearsall, who is an architect of long experience, aims in these letters to answer questions which he has found likely to occur to these younger men who are thinking about their future in the profession. In his practice, like other architects, he has been asked upon many occasions to give helpful advice to young men in his employ. The gratitude of these fellows for the counsel of an older man led him to believe that there might be a number of readers of Pencil Points who would welcome the suggestions which have helped others.

Mr. Pearsall, who may be addressed at 527 Fifth Avenue, New York, has expressed his willingness to answer any questions which may be addressed to him by our readers. His replies will be made either by mail or through these columns, according as circumstances dictate. The first letter follows:

August 27th, 1927.

Dear George:

Well, my boy, you are beginning, in a week or so from now, your senior year in High School. You intimate in your last letter that you are wondering just what education really means and where it leads to, for you. I am glad you are beginning to think about this most important subject, for each one must determine for himself his own future.

Your studies have so far been more or less general, perhaps, I might say, like the foundation of a building many feet below the grade,—stone, steel, and cement, so intermingled as to make a foundation that is solid for the superstructure.

Will it help you any, my boy, if I put the question a little differently from the way you have asked it? You said, "What do I get from education"-let me ask it, "What do we get from education?" I have emphasized we because education is cooperative. We get in education, as in everything else in life, just what we put into it. If the Professor and Instructor do not put themselves into their work they do not present the subject understandingly. If we (meaning each one) do not put ourselves into our study-which in school is our work-we do not get what we expect to get from the study. The mind, soul, and body must be clean and clear to do the best work. A filter is made to clean water of impurities; one I know of was installed to filter the water of a pool, but the pipe previously installed was not clean. The result was a cloud of dirty water in the center of the pool. Cleaning the pipe made the filter a success, so that it worked as intended.

No matter what business or profession you enter, you need the foundation you are now getting; but how strong that foundation is will depend on what you put into it. Just now you will make the best use of this next year by studying in and around each subject with the idea of finding out what there is to it all, beyond that which appears on the surface. Clear the vision and thought channels—like the pipe before the water would run clear. For investigation, study, and research from all points of view will clear the thought as the various ingredients in the filter clear the water.

Sincerely,

YOUR UNCLE.



DETAILS OF CONSTRUCTION—SGRAFFITO PANELS OVER WINDOWS VILLA FOR MRS. JOHN R. RINGLING, SARASOTA, FLA., DWIGHT JAMES BAUM, ARCHITECT

第五條 修改	第四條 職員	第三條 會員	第二條 宗旨	第一條 定名	總綱	海中華建築
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PAGE FROM CONSTITUTION, CHINESE ARCHITECTS' SOCIETY

#### SOCIETY OF CHINESE ARCHITECTS FORMED

WE HAVE RECENTLY received a copy of the Constitution and By-Laws of the newly formed Society of Chinese Architects of Shanghai, China, which is the first organization of this kind in China. Its objects as stated in the constitution are: "To organize and unite in fellowship and co-operation the Chinese Architects, to uphold the dignity and standing of their profession, to increase the efficiency and usefulness of their service to community, and to render support to the public authorities in their civic developments and improvements." The officers elected for the first year are: President, T. Chuang (U. of Ill.); Vice-President, Robert L. Fann (U. of Pa.); Secretary; K. C. Chang (Columbia U.); Treasurer, S. W. Wong (London U.). The members, in addition to those already named are; Y. C. Lu (Cornell), S. Chao (U. of Pa.), Charles Moo (Columbia), F. T. Lao (U. of Oregon), Francis Lui (U. of Pa.), Poy G. Lee (Pratt Institute).

# DETROIT ARCHITECTURAL BOWLING LEAGUE ANOTHER MONTH and we will be back on the job! On September 16th we start what now looks to be another

September 16th we start what now looks to be another very successful season. The interest of the League has been kept more or less alive this summer by our monthly *Scraps*, so we may expect a much more beneficial season than ever before.

We have been corresponding with the Architectural Bowling League of New York for another match early in the season and are also desirous of hearing from leagues in other cities as well. We have had several very pleasant meetings with the New York boys by telegraph and find them to be a very congenial and sportsmanlike bunch of fellows.— Lester S. Manning.

# CHICAGO ARCHITECTS ATHLETIC ASSOCIATION

Representatives of eight leading architectural firms of Chicago recently convened and established a Chicago Architects Athletic Association, thereby ending Chicago's dilatory action in following the lead of eastern cities where architectural offices have been engaged in inter-office athletic competitions for some time. It is their hope, however, that they have now established an organization that eclipses the activities of any architectural athletic organization of any other city and will be a model for other cities to follow.

The purpose of the Architects Athletic Association is to bring the architectural firms into a closer and more intimate contact with each other; it is to furnish outside recreation and amusement for the draftsmen and by so doing it increases the morale and cooperation of the men in the drafting room which is so necessary for the success of any architectural office.

The activities of the association will be extended to many sports. An indoor baseball schedule is now being played and will close September 20th, after which the winning team will be banqueted and trophies presented to the members of the first and second place teams. Preparations are being made for tennis and golfing matches and a bowling league in the winter.

The charter firms and the ones responsible for this organization are: Granger & Bollenbacher; J. W. McCarthy; Rapp & Rapp; Childs & Smith; Schmidt, Garden & Erikson; Graham, Anderson, Probst & White; H. V. Von Holst, and Holabird & Roche.

All architectural firms of Chicago who are interested in joining this association are extended a cordial welcome. Information may be procured from any of the above mentioned offices.



1ST MENTION BYZANTINE DESIGN BY J. LAIKAUF, JR.

Class in Modeling Architectural Ornament,

Beaux-Arts Institute of Design



THE WINNERS in the little monthly competitions, which closed August 15th, are as follows: Class 1—G. C. Sponsler, Jr.; Class 2—R. G. Hall; Class 3—Arthur Slade; Class 4—J. H. Hoffman.

#### SILHOUETTE

(Prize—Class Two—August Competition)
Hung low, a wan moon gleams
And soft clouds billow, while
Wrapped in mist the city seems
A vague and lonely pile.
Dull grey a spire takes on
A mantle faint yet warm,
While hazy shapes now don
A nebulous uniform.
The hills on high are cold
In dim relief, and yet
Their splendour they unfold
In misty silhouette.

Deep bells enchantment lend In muffled harmony, While lesser sounds do blend In mystic symphony.

R. G. Hall.

The prize of \$10 for the most interesting letter about the advertising published in the August issue, goes to Henry A. Billsten of Chicago. Here is Mr. Billsten's letter:

Pencil Points, Gentlemen: 2737 Carmen Ave. Chicago, Ill.

To pick out the best advertisement from your pages is a comparatively simple job.

There is but one advertisement that stands out above all the rest and that is the "Eldorado Page", judging from the interesting as well as valuable standpoint.

I have always admired Mr. Watson's pencil sketches and



SUBMITTED BY ARTHUR SLADE, THORNTON HEATH, SURREY, ENGLAND (PRIZE—Class Three—August Competition)

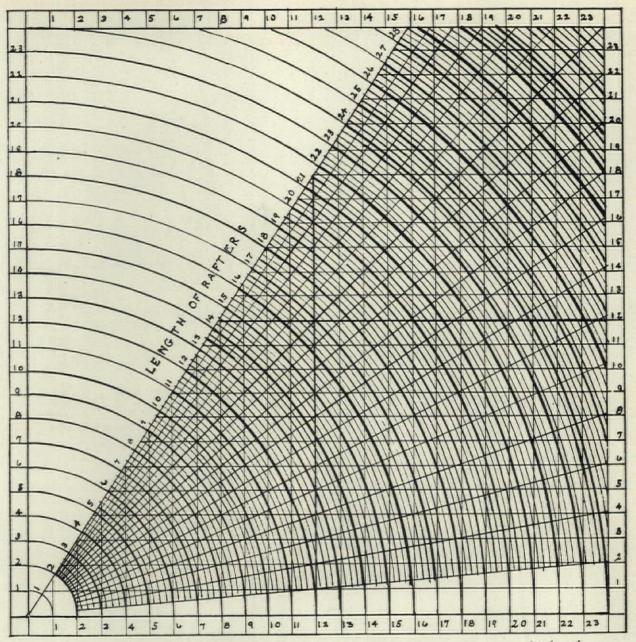


TABLE OF RAFTER LENGTHS, BY J. H. HOFFMAN, BARNESVILLE, OHIO (PRIZE—Class Four—August Competition)

By using this chart the length of rafter required for any given pitch can be readily determined. For example: If the horizontal component is 16 ft. and the rise 9 ft., the rafter length will be 18 ft. 5 in.

for the past few years I have enjoyed his monthly "Eldorado Page". His subjects are simple but always interesting and are rendered in his own distinctive style.

Any young draftsman or in fact anyone interested in this method of rendering would do well by clipping each monthly page and binding them in notebook form. They offer a complete course in pencil sketching and for that reason they are valuable.

Very truly yours,

HENRY A. BILLSTEN.

An artichoke by the name of McQuidd Started in business, he did When he met the old Dragon, He fell off the wagon. And now he's a lot wiser kid.



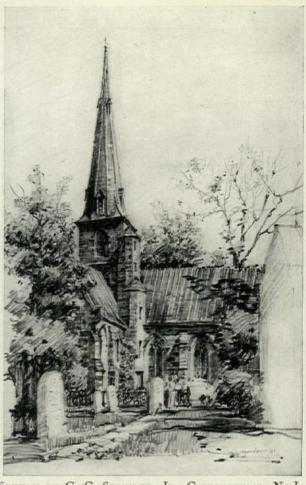
LIMERICK AND CARTOON OF "OLD DRAGON OVERHEAD" BY CHARLES H. KYSON, LOS ANGELES, CAL.

#### PENCIL POINTS



Sketch by R. Harmer Smith, Jersey City The Jumel Mansion





Sketch by G. C. Sponsler, Jr., Collingswood, N. J. (Prize—Class One—August Competition)



Water Color Sketch by R. C. Kelley, Los Angeles Water Color Sketch by Earl Purdy, New York

The Chimes of San Gabriel Mission Hotel El Vernona, Sarasota, Florida



# THE SPECIFICATION DESK

## A Department for the Specification Writer

#### ARCHITECTURAL SPECIFICATIONS

By Edward M. Bridge

THE APPROACH HERE to the subject of specification writing is not that of the specification writer who is a specialist in that department of the office, and who spends most of his time in that work alone, but, rather, the approach of one who has slowly but consistently moved up through all departments of office practice, from gen-

eral drafting, detailing, designing, drafting-room management, specification writing, superintending, general office management, associate partnership, and into independent practice. And fortunate it was that the greater part of this experience came on high grade work of varied character and in an organization where great freedom and scope were permitted, but where the requirements were exacting, the standards high and direct and efficient methods only were in favor.

The importance of specification writing in the architect's office, and the vital part played by the specifications in that complex process of reducing the vague idea of a building from the clouds of fancy to existence in steel and masonry, street and number, ready to collect its share of smoke and patina, is being more clearly recognized, but not yet enough.

The time is past when the specification for any building of consequence, which is to be built under contract, can be treated

lightly or dashed off gallantly at the last heated windup of a set of working drawings. It might once have been true that no one read them but the stenographer. It has been my experience that the job foreman often knew the specifications better than the job captain. Instead of gathering dust at the bottom of the proverbial nail-keg, they now have the place of stress, if not of honor, at the right hand of the field-office desk—usually very close to the telephone.

Who has not stepped into the shanty to find the general foreman and a gathering of his lesser foremen in hot debate as to the precise meaning of a phrase on the bottom of page thirty-seven. Then, when your presence is noted with, "Oh, here he is now", from the chorus, you are brought face to face with the offending phrase; you

have realized that you were up against it to give satisfaction to these hardheaded and big-fisted fellows because the phrase had been dashed off with a careless though perhaps graceful touch, and had no very exact meaning—and further realized, in the hushed and expectant silence, that the standing of the architect and the intelligence of the whole white-collared force were on trial.

To see the estimator and his assistants in the office of the general contractor racing against the time limit that you have so easily established -sweating and sometimes swearing over the task of putting a very exact price upon each item of material and labor which the architect's plans and specifications require of them-brings home another lesson in the importance of care and skill and patience and time in preparing specifications.

It is the seriousness with which others view his documents—those to whom the turn of a phrase or the placing of a comma means money in or out of their

Edward M. Bridge, Architect, of Boston

Mr. Bridge graduated from Massachusetts Institute of Technology in 1913 and since that time has practiced architecture. For many years he was with Coolidge & Carlson, Architects, of Boston, and was associated on the Dartmouth College work. He has just opened his own offices in Boston.

pockets, and who impress that seriousness upon the architect by means of costly extras, equally costly credits, and appeals to arbitrators and courts—that is forcing recognition of the importance of the specifications and of the writer of specifications.

Considering the different phases of the office work, the preparation of the specifications is not the most alluring. Yet to anyone who is so fortunate as to possess that full range of interests and abilities which we associate with the successful architect, there is a tonic in the precise visualization and the clear thinking that is experienced, and is forced in the writing of a specification. There is a pleasure in the sense of a real job well done, even though it is of a different quality from the joy in designing and clearly indicating a pilaster overlaid with Renaissance ornament; and again different from the warm satisfaction that comes, with the smiles of approval, after giving a talk before a building committee.

Modern building is simple only to those who know nothing about it. To those engaged in the building industry, if they are in a position to see all its phases, or a large part of them, as is the architect and general contractor, it is a terrifically complex business. Also it is well for the architect to realize that the general contractor has a whole maze of complexity which seldom comes to the architect's attention, much less annoy him. Appreciation of this fact will aid in mutual tolerance and cooperation.

To see into this business deeply enough to realize its intricacy and still be able to keep the detail in its place and hold the large view and full sweep of the operation in the center of the canvas, is the most difficult and important part of it all. The specification's function is to put order into this chaos. Analysis and organization are the simplifiers. First, we must analyze the function of the specification and then so organize its provisions and their sequence that it will be as simple and as logical a guide as is possible.

The documents prepared by the architect to control and guide a building operation are: the contract, or contracts; the drawings—architectural, structural, mechanical and detailed; the specifications and schedules.

It is the function of the specifications to make clear all necessary matters that cannot be made clear or cannot, so well, be made clear in the other contract documents. In them must be told:

- 1. The conditions under which the operation is to be performed.
- 2. The extent of responsibility and relegation of duties to the various persons who are involved in the operation.
- 3. The naming and description of the materials which are to be installed in the operation.
- 4. The methods by which those materials are to be installed and a description of the results which shall be obtained.
- 5. The location in the building of those materials and results.

In other words:

- 1. Under what conditions?
- 2. Who does it and when?
- 3. What materials?
- 4. How installed?
- 5. Where installed?

Now, how shall we best organize our specification to accomplish this? The breaking up of the specification into divisions, more or less compact and sufficient in themselves, following closely the natural relegation of the work to the different trades, seems to be a rather generally accepted practice and a logical and natural one. The number of divisions will vary with each project, but it is better to have enough than too few. No harm or confusion occurs if one trade takes on the work of two or more divisions, but it sometimes complicates matters if the work of a division is split up among several contractors. For the reason that sometimes more than twenty-six divisions are desirable, it is better to number them than to use the alphabet.

The first division would state the conditions under which the project is to be carried through, and general usage as well as excellence would make it best to use the standard General Conditions of the American Institute of Architects, with any special conditions applying to the particular project in hand cared for in supplementary general conditions which follow directly after the Standard ones.

Next come the other divisions which make up the specification, arranged in the order that the building operation will naturally take. Each division should start on a new page and should have first a reference to the general conditions, placing the responsibility for knowing their provisions upon the contractor who does the work of the division. Next would follow a reference to the drawings and schedules wherein would be found the location and extent of the work of the division. This, followed by a statement defining the scope of the work of the division. Next in order would come any special provisions or instructions which applied to the particular work of the division. After that, the items indicating what materials were to be used, the type of surfaces or conditions to be obtained and how the desired results were to be brought about.

Some writers place all materials of a division in one grouping and then follow workmanship in another grouping. This is well enough in materials such as the ingredients of concrete or terrazzo, where they go to make up one substance, but in more cases it is better to follow the material and its description, immediately, with the instruction as to how it shall be installed. The other method, if carried beyond its logical use, results in much turning of pages and confusion, whereas, in the method suggested above, the whole story concerning a material, a type of surface or a manufactured article, is given at one time and one place.

Again, there are those who argue that the manner or method of installation should be left to the contractor, and that after describing the result that is required, hold him responsible for obtaining it. Only under certain circumstances is this sound judgment: such as cases where the operation is a very commonplace one and where it is certain that the contractor is one whose methods and quality of workmanship are known and approved by the architect. If used as a general principle throughout a specification a great deal of ignorance on the part of the writer can easily be hidden, and, in such a case, the impossible will oftentimes be required, or at least those results which will be far more expensive than is the intention of the architect or the wishes of the owner.

Also, it must be admitted that in many cases poor work-manship can be hidden and an inferior process used which will give, at least temporarily, the appearance of the desired result—the defects showing up only after a long period when it is too late to correct or to get redress from the contractor.

For an enamel surface we certainly should not merely describe the feeling and appearance of the final surface. Nearly all would agree that not only the product to be used should be specified, but also the number and method of application of the undercoats, their finish, and the conditions of moisture and temperature under which the work should be done.

Another example comes to mind: I remember seeing, as I stood under the dome of St. Paul's Cathedral in London, some months ago, the enormous job in labor, time and cost that is being expended to repair the careless workman-

(Continued on page 585)



# SERVICE DEPARTMENTS

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

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

QUERIES AND ANSWERS. In this department we shall undertake to answer to the best of our ability all questions from our subscribers concerning the problems of the drafting room, broadly considered. Questions of design, construction, or anything else which may arise in the daily work of an architect or a draftsman, are solicited. Where such questions are of broad interest, the answers will be published in the paper. Others will be answered promptly by letter.

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

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

#### THE MART

#### COPIES OF PENCIL POINTS

WANTED AND FOR SALE

A. Wetter, 4038 N. Keystone Ave., Chicago, Ill., has copies from January to July 1926, which he will sell at \$.25 a copy.

Morris David Koznow, 1575 Washington Ave., New York, wants copies of November 1922, and February 1924.

Owen H. Godwin, 54 Hudson St., Dover, N. J., wants The 1923 Boston Architectural Year Book and The Domestic Architecture of England during the Tudor Period. He has for sale Pencil Points for November and December, 1924, and October, 1925.

#### PERSONALS

BOHACKET & BREW, ARCHITECTS, have moved to Hiram Sibley Bldg., 311 Alexander St., Rochester, N. Y.

GEORGE FULTON, JR., ARCHITECT, has moved to 347 Madison Ave., New York City.

J. PHILIP McDonnell, Architect, has moved to 2111 Woodward Ave., Detroit, Mich.

J. THOMAS CAMLET, R.E., and N. R. MASTRANGELO, R.A., have formed a partnership and will practice under the firm name of Mastrangelo & Camlet, with offices at 639 Main Ave., Passaic, N. J.

E. A. GYLLECK has opened an office for the practice of architecture at 10 No. Clark St., Chicago, Ill., and desires manufacturers' samples and catalogues.

LEROY E. LANE has opened an office for the practice of architecture in the R-E-H Bldg., Edinburg, Texas, and desires manufacturers' samples and catalogues.

Mann & Stern, Little Rock, Ark., have dissolved their firm. George R. Mann has associated himself with Harry D. Wanger and L. Milton King, former partners of Mann & Stern. They will practice under the firm name of George R. Mann, Wanger & King, with offices at 1316 Donaghey Bldg., Little Rock, Ark. Mr. Stern will continue to practice at the A. O. U. W. Bldg., Little Rock.

#### QUERIES AND ANSWERS

Query: How was the model of the "Monument to an Aviator," shown in the August issue of Pencil Points, made? It strikes me as an interesting way to express designs and I should like to try it.

Answer: Miss Margaret J. Postgate, the sculptor who made this model from the design by Francis Keally, Architect, describes the process as follows:

"I used standard cakes of Ivory soap, as many of these being welded together as were needed for the design. The tools were simple; I used a knife with a long thin blade for cutting the soap and an orange stick or small pointed steel tool for incising.

"In joining the cakes of soap for the platform and tower of this model, two different methods were employed. The architect working in this medium may choose the plan best adapted to his particular job.

"In carving the platform, I heated the knife (so that it would cut the soap straight) and reduced the bars to a plane surface, cutting off sufficient soap so that the harder and drier outside surface was removed and the remaining soap was all of the same consistency. I then cut the cakes to the proper size to accord in scale with Mr. Keally's design. Along the edges of each cake I carved a groove and poured some soft soap—which I had melted by heating soap and water in a saucepan—along the grooves. The cakes were then pressed together and allowed to stand several hours before they were worked on.

"For the tower, I planed the soap as for the platform. I then fastened the bars by melting the edges and pressing the cakes together. After the lapse of a few hours, I cut and shaped this large piece to the right size and carved out the traceries and architectural motifs with the steel tool and orange stick."

The base of the finished soap model was ten and a half inches square; the tower, eighteen inches in height and one and three-quarter inches on each side.

#### FREE EMPLOYMENT SERVICE

(Other items on pages 78 and 86 of the Advertising)

Wanted: Several trained and experienced designers for large office in Middle West specializing in high grade commercial buildings. Permanent employment at high salary and opportunity to acquire interest in firm. State qualifications and experience in applying. Box A-113, care of Pencil Points.

Wanted: Five or six first class draftsmen who have had at least ten years' office experience. Those with British training or familiar with Medieval styles particularly desired. Positions permanent to those proving themselves capable. Comes, Perry & McMullen, Renshaw Bldg.,

Pittsburgh, Pa.

Position Wanted: Junior draftsman, recent graduate of Columbia School of Architecture. Good designer and renderer, some office experience. Salary secondary. New York City location. Box A-111, care of Pencil Points. Position Wanted: Architect, draftsman, designer, experienced, seeks position. 'M' Box 207, Allerton House, 143 East 39th St., New York, N. Y.

Position Wanted: Senior architectural draftsman, experienced on apartment houses and building superintendence.

Box A-121, care of PENCIL POINTS.

Position Wanted: Architectural draftsman, willing to start tracing. Salary secondary, excellent references. Box

A-114, care of PENCIL POINTS.

Position Wanted: Student of architecture, 1 year's experience in office mostly on residential and school work. Capable of making working drawings including perspectives and renderings. Box A-115, care of Pencil Points. Position Wanted: Construction superintendent, energetic, 10 years' building experience on finest types of construction. Thorough knowledge of handling men and details efficiently. Now employed, wishes better connection. Salary not main consideration. Hugh Graham, 212 West 69th St., New York.

Position Wanted: Young woman, 4 years' architectural training, 1 year's experience with New York and Parisian interior decorators; several months in New York architect's office. Desires to work on houses in the office of some good domestic architect. Box A-116, care of Pencil

Position Wanted: Architectural draftsman seeks position in office doing high class residence work. 11/4 years' prac-

tectural course at Cornell. Box A-117, care of Pencil.

Position Wanted: Architectural draftsman, about 4 years' experience. Office experience, superintending, heating and plumbing plans. Has done very high class work. Salary \$50 per week. Box A-119, care of Pencil Points.

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## ARCHITECTURAL SPECIFICATIONS (Continued from page 582)

ship which went into the masonry in the heart of the great masonry piers supporting that dome—piers which look as solid and secure as Gibraltar and which have stood for many years.

Now referring back to the five main functions of the specifications:

1: The conditions are in general cared for in the first division under the heading of General Conditions, with the supplementary general conditions, further amplified by particular conditions which appear in each division.

2: Who is to do it and when, is prescribed again in the general conditions with particular instructions to each

trade in its own division.

3: What materials, is a matter for special selection for each project, but there is good reason to have the names of acceptable materials and products on file and any necessary descriptive matter as to the requirements of strength or quality standardized and ready for incorporation as they are selected.

4: How to install materials, is a function which can be almost entirely standardized. Of all the ways of obtaining a result there are very few which are acceptable. These for each part of the work could certainly be thought out and put into written form ahead of time, and those which apply incorporated in the specification.

5. Where materials are to be installed, can best be indicated in schedules, the size of units and areas being

shown by the drawings.

The persistence with which the subject of standardizing specifications comes up is a hint that there is something in it. The method, once generally used, of compiling a specification by clipping and pasting from old documents, had a basis in common sense. And further, I feel convinced that even those who profess to write a new specification for each project, have some mental reservations. It is more than likely that if it is not called standardization, at least some parts of the specification—paragraphs

here and there—are repeated from that of a similar building.

Somewhere there is a place for at least partial standardization. Certainly concrete is poured in the same way whether the structure is a school, a church, or a library. A wall of waterstruck brick laid in Flemish bond and backed up with hollow tile is laid up the same for a pumping-station or a parish house. A good job of terrazzo can be installed under the same instructions regardless of

the type of building which requires it.

That the partial standardization which is practiced but in haphazard fashion and under other names, has not been thoroughly organized and recognized is largely because those who are competent to do it are always very much pressed for time on particular projects in hand. They cannot or do not take the time required, or the organization does not sufficiently realize the value of this work which is not demanded by the immediate situation, to invest the required time. It is often "a good idea some time, but just now we must get out the specifications on the Ward four school, you know those bids must be in on the seventeenth and here it is the first of the month—oh, yes, there is certainly something in it, and some time when things quiet down, we'll go into it."

These following two functions of the specification can be standardized: The listing of acceptable materials and products and necessary descriptive matter as to the quality, strength, etc., and The description of the methods of installation for different results and the description of all processes which are generally common to many projects.

By carrying standardization thus far, a great deal of time and money can be saved, fewer errors made, fewer omissions occur, and no danger of lowering the artistic

quality of the architect's work is involved.

I believe this is the sound line of division between the opinion of those who would standardize the soul out of architecture and those to whom the word "standardization" is an aversion.

(To be concluded in the next issue)

### PUBLICATIONS

### OF INTEREST TO THE SPECIFICATION WRITER

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

Roofing Tin, 7th Edition.—With 42 pages of detail drawings, standard specifications and much useful information on the subject of tin roofing, with especial reference to the advantages of copper steel alloy for roofing. 32 pp. 8½ x 11. American Sheet & Tin Plate Co., Frick Bldg., Pittsburgh, Pa.

Published by the same firm, "Copper Steel Galvanized Sheets", a companion booklet dealing with the subject indicated. "Facts Concerning Keystone Copper Steel", 8th Edition, a technical treatise on the subject, and "The Protection of Iron and Steel Sheets Against Rusting", a treatise on this subject in non-technical language.

Batchelder Pavers.—A catalog of tiles made for pavement work with 19 color plates and many pages of designs and patterns dealing with this interesting subject. A valuable brochure for every architect, designer and draftsman. Batchelder-Wilson Co., 2633 Artesian Ave., Los Angeles, Calif.

It is requested that application for this catalog be made on firm's letterhead.

Celestialite.—Booklet dealing with a new glass especially adapted to the requirements of modern lighting. Gleason-Tiebout Glass Co., 200 Fifth Ave., New York, N. Y.

The Porceliron Laundry Tray.—Booklet just published introducing this type of equipment for the consideration of members of the architectural profession. Complete details and all information required for specifying and ordering, together with sample of material. Ingram-Richardson Mfg. Co., Beaver Falls, Pa.

Arkansas Soft Pine Handbook.—This new edition just out illustrates a large variety of mouldings and other sections useful in the drafting-room. Tables, sizes, finishing instructions and much useful information on the subject of Arkansas Soft Pine Lumber. 50 pp. Arkansas Soft Pine Bureau, Little Rock, Ark.

Published by the same firm, "Standard Specifications, 1927 Edition", containing grading rules for Arkansas Soft Pine Lumber conforming to the American Lumber Standards. Many detail drawings and much useful data. Vest pocket size. 75 pp.

G. & G. Atlas Systems.—Leaflets Nos. 2600-A and 2600-B illustrate and describe fully these mechanical messengers, for a variety of uses. G. & G. Atlas Systems, 535 West Broadway, New York.

Superior Wiring Devices.—1927 Catalog illustrating and describing the entire Bryant Electric line. Tables of dimensions, wiring diagrams, price lists. 169 pp. 834 x 10½. The Bryant Electric Company, Bridgeport, Conn.

California Stucco.—New book just off the press. Shows in natural colors the latest textures for stucco interiors and gives complete specifications for producing them. A valuable handbook for the architect. California Stucco Products Co., 1503 South Almeda St., Los Angeles, Calif.

Webster Series 78 Thermostatic Traps.—Bulletin announcing a new line of Webster products for "process steam" pressures. A.I.A. File No. 30-c-23. Standard filing size. Warren Webster & Company, Camden, N. J.

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Williams Reversible Window Equipment.—A.I.A. Catalog No. 27-c-1 illustrating and describing this type of equipment for double hung and plank frame types. Specifications, diagrams. 16 pp. 8½ x 11. The Williams Pivot Sash Co., East 37th St. & Perkins Ave., Cleveland, Ohio.

The Story of American Walnut.—Attractive brochure illustrated in sepia showing the use of walnut through the ages. Period furniture. Advantages of walnut today. How to identify American walnut. American Walnut Mfrs. Assn., 616 South Michigan Ave., Chicago, Ill.

Published by the same firm, "American Walnut for Interior Wood-Work and Paneling."

Heating Homes the Modern Way.—Attractive booklet on the subject of modern oil burning apparatus. Diagram of complete Petro installation. 9 x 12. 14 pp. Petroleum Heat and Power Co., 511 Fifth Ave., New York, N. Y.

Drawing Board Accessories.—Pamphlet illustrating and describing accessories that make drafting easier. The C. F. Pease Co., 803 N. Franklin St., Chicago, Ill.

Published by the same firm, "Drafting-Room Supplies", Catalog M-03.

Tang-I-dust Air Filters.—A.I.A. Bulletin No. 30-d-3 illustrating and describing this new type of air filter. Specifications. The Cooling Tower Co., Inc., 15 John St., New York, N. Y.

Published by the same firm, "Bulletin No. 261, Water Cooling Equipment," A.I.A. File Nos. 32-e-2 and 34-i-3, "Impact Air Washers, Bulletin No. 277," A.I.A. File No. 30-d-2, "Atmospheric Cooling Towers, Bulletin 273," A.I.A. File Nos. 34-i-3 and 32-e-2.

Theatre Cooling.—Booklet describing centrifugal refrigeration and air distribution. 28 pp. 6 x 9. Carrier Engineering Corp., Newark, N. J.

Novoid Cork Tile Floors.—A.I.A. File No. 23-b. Bulletin illustrating and describing this type of cork tile flooring. Patterns, installation plan, specifications. Cork Import Corporation, 345 West 40th St., New York, N. Y.

Published by the same firm, "Novoid, Corkboard Insulation," "Novoid Cork Covering," "Corkansteel Homes."

Milcor Catalog.—New catalog No. 20-D devoted exclusively to Milcor 34" Stay-Rib Reinforcing Lath, and is a supplement to the 1927 edition of the Milcor Manual. A technical data book for architects, engineers and contractors. Milwaukee Corrugating Co., Milwaukee, Wis.

Andersen Frames.—Catalog No. 300 illustrates and describes this type of frame fully. Andersen Lumber Company, Dept. L-9, Bayport, Minn.

Houses of Stucco.—Attractive illustrated brochure with color plates, detail drawings, including elevations and plans of many interesting residences. 50 pp. 8½ x 11. Atlas Portland Cement Co., 25 Broadway, New York, N. Y.

Samples of Tracing Paper.—Four samples 17 x 22 of prepared tracing papers suitable for all types of work. George Vincent, 649 West 43rd St., New York.

Architectural Finishes.—Shows Bay State line of wall finishes, brick and cement coatings, brick and cement floor coatings and many other preparations for special uses. Color samples and specifications for special uses. Color samples and specifications, 32 pp. 8½ x 11. Wadsworth, Howland & Co., Inc., 141 Federal St., Boston, Mass.

The Sanitation of Swimming Pools.—Technical publication No. 21 covering subject indicated in text and illustration. Wallace & Tiernan Co., Inc., Newark, N. J.

How You Should Buy a Heating System.—Chart, 24 x 24, showing carefully points to be taken into consideration in considering a heating system. Warren Webster & Co., Camden, N. I.

Weisteel Compartments.—Catalog No. 11 describing compartments of all types. Blue prints showing construction and method of erection. Specifications, including hardware. A useful book to all in any way interested in industrial buildings, public buildings, schools, hospitals, etc. 32 pp. 8½ x 11. Henry Weis Mfg. Co., Atchison, Kansas.

Wheatley Tiles.—Portfolio of color plates showing application of faience tiles to floors, walls and chimney pieces, etc. Plates showing a large variety of tile inserts in polychrome. Stock mouldings in any color. 10 x 12. The Wheatley Pottery Co., Cincinnati, Ohio.

Casement and Vertical Fixtures.—Specification portfolio with illustrations, details and complete data.  $8\frac{1}{2} \times 11$ . The Williams Pivot Sash Co., Cleveland, Ohio.

Artists' Colors and Materials.—Catalog showing complete line of interest to all artists. 110 pp. 6 x 9. Winsor & Newton, 31 East 17th St., New York, N. Y.

Zenitherm, the Universal Building Material.—Brochure in sepia showing the application of the material on several interesting jobs. Detail drawings and complete data.  $8\frac{1}{2} \times 11$ . Zenitherm Co., 405 Lexington Ave., New York, N. Y.

Color Card and Specifications for MINWAX Brick and Cement Coating for Waterproofing and Decorating Concrete Brick, Stucco and Plaster.—A.I.A. Standard Classification File No. 25-e-2. 8½ x 11. Minwax Co., 270 Madison Ave., New York.

Published by the same firm, "Minwax Flat Finish," A.I.A. File No. 25-c-11.

Puritan Drinking Fountains.—Catalog B-2 illustrates and describes automatically controlled drinking fountains. Prices, dimensions, specifications and list of installations. 35 pp. The Halsey W. Taylor Co., Warren, Ohio.

The Thorp Reference Book of Fireproof Doors.—Contains the latest and best in Fire Proofing Door Construction and its application to modern conditions. Profusely illustrated, contains elevations and detail drawings, specifications, list of recent installations, etc.  $8\frac{1}{2} \times 11$ . 95 pp. Thorp Fire Proof Door Co., 1600 Central Ave., Minneapolis, Minn.

Pantry Sinks.—Illustrated booklet showing complete line of equipment in copper and other materials suitable for high-class residences, hotels, club houses, restaurants, etc. Detail drawings and complete data. 30 pp. John Trageser Steam Copper Works, 445 West 26th St., New York City.

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. I.

Universal Safety Treads.—Data sheet with practical information covering all types of safety treads for use in all types of buildings. Also data sheet specifically covering antislip metal tread type. Universal Safety Tread Co., 40 Court St., Boston, Mass.

Interiors Beautiful.—Booklet showing many uses of Upson Board. Suggestions for many types of buildings. 8 x 11. 20 pp. The Upston Co., Lockport, N. Y.

How to Use Valspar on Furniture.—Useful booklet with directions and specifications. Valentine & Co., 456 4th Avenue, New York.

The Book of Vermont Marble.—2nd Edition. A reference book for the architectural profession. Profusely illustrated with fine examples of marble work, construction details and much other useful information for the draftsman and architect. 70 pp. 9½ x 11. Vermont Marble Co., Proctor, Vt.

Zouri Store Fronts.—Catalog No. 14 and seven full size detail sheets illustrating in color and fully describing the Zouri Safety Key-Set and International Store Front Construction manufactured in solid copper or bronze. Contains also full size perspectives in color. A very valuable and useful document. A.I.A. File No. 26-B-1. 8½ x 11. Zouri Drawn Metals Co., 1608 East End Ave., Chicago, Ill.

Published by the same firm, "The Business of Buying a Store Front." Handsome brochure in color showing various and interesting treatments of store fronts. 8½ x 11. 31 pp.

The G&G Telescopic Hoist with Automatic Gear Shifting Brake Device and Silencer.—A.I.A. Classification No. 30-i-1. New catalog for architects and engineers. Illustrates pictorially and by mechanical drawings the G&G electric and hand power models. Short form of specification for each model hoist and longer one. Gillis & Geoghegan, 535 West Broadway, New York.

The Bathroom Beautiful.—Leaflet setting forth the advantages of the new Bakelite toilet seat. Illustrations of all models, prices and full information required in specifying. Phenolic Products Corp., 2208 Kishwaukee St., Rockford, Ill.



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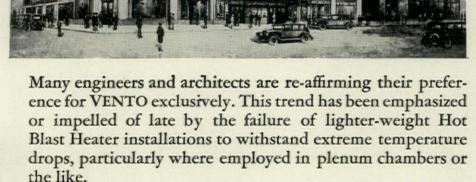
Such an effect as this wash drawing is in the mind of the artist as he contemplates his subject. He may not set it down on paper, but it is none the less real in his planning. The student is advised to actually make simple wash diagrams as preparatory to the pencil sketch. Have a single gray wash mixed in the pan and try to put it on absolutely flat in rendering the shadows. When working in pencil afterward strive also to lay in the shadows with equal simplicity. The accidental variations of tone will usually be found sufficient to prevent monotony. The more complicated the tones become, the more confusing the effect.

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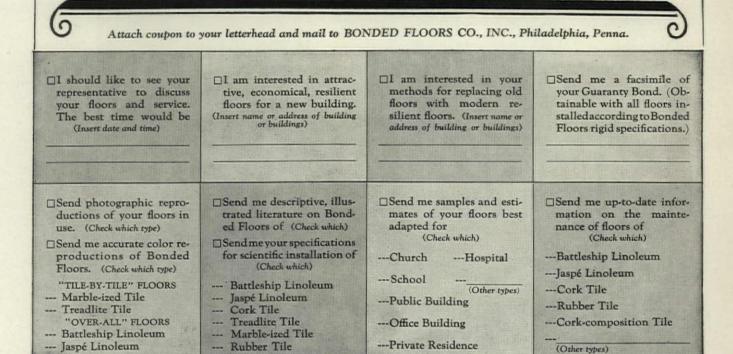
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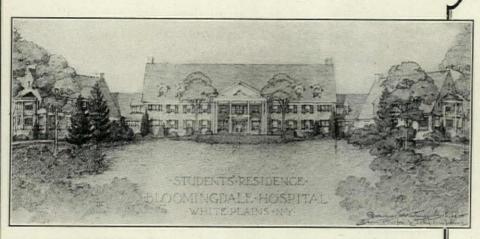
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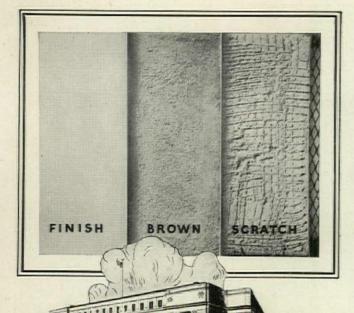
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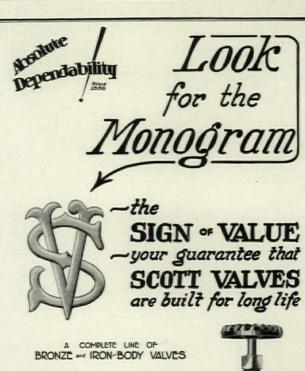


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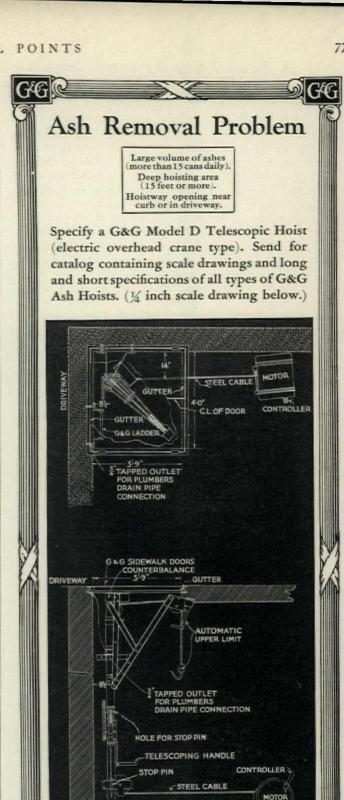
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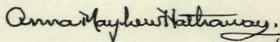
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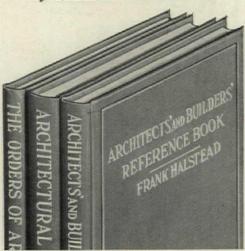
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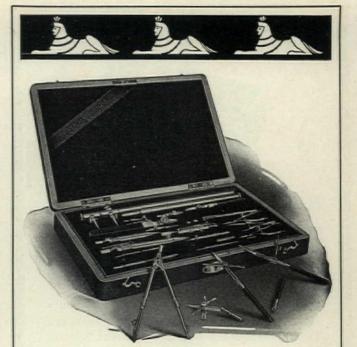
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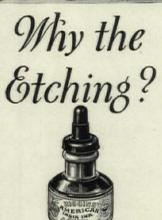
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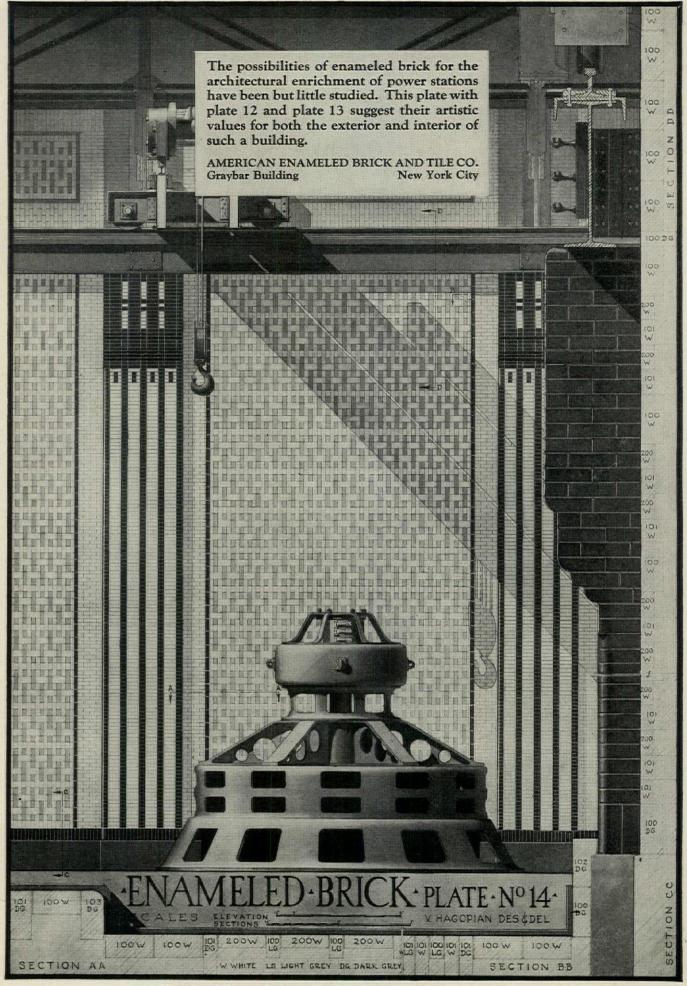
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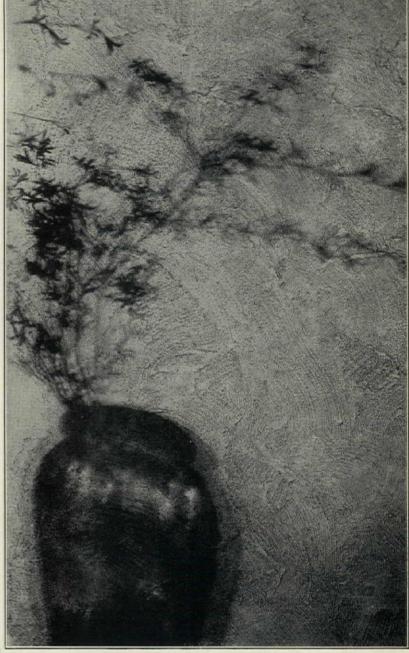
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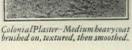






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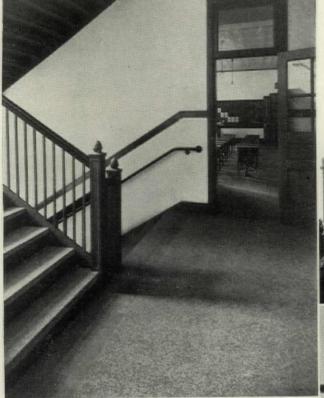
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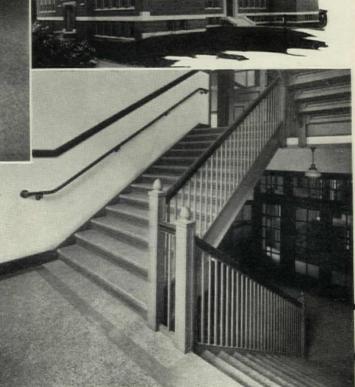
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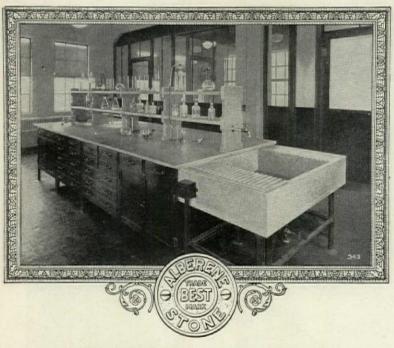


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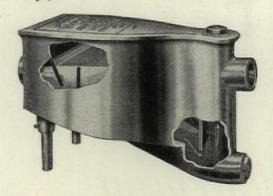
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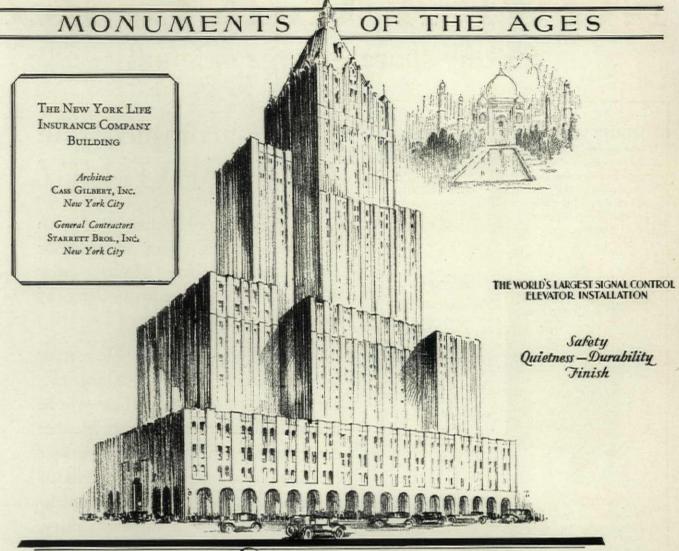
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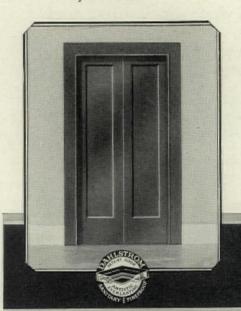
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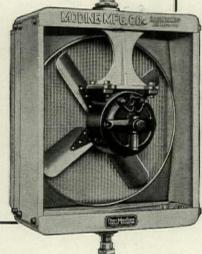




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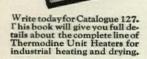
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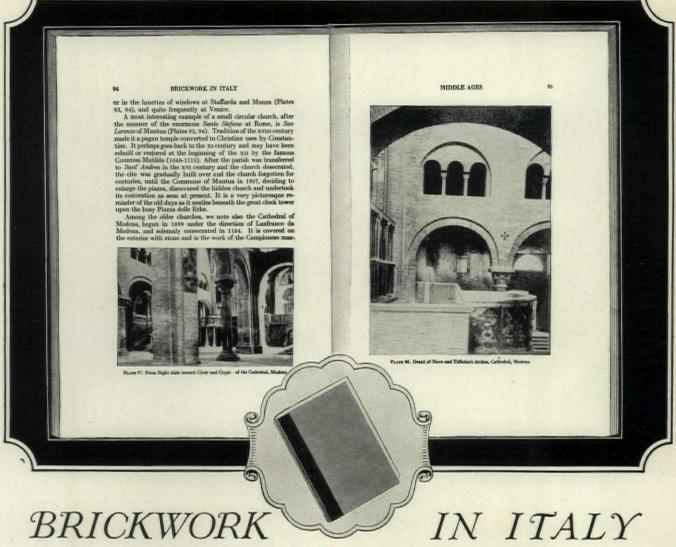
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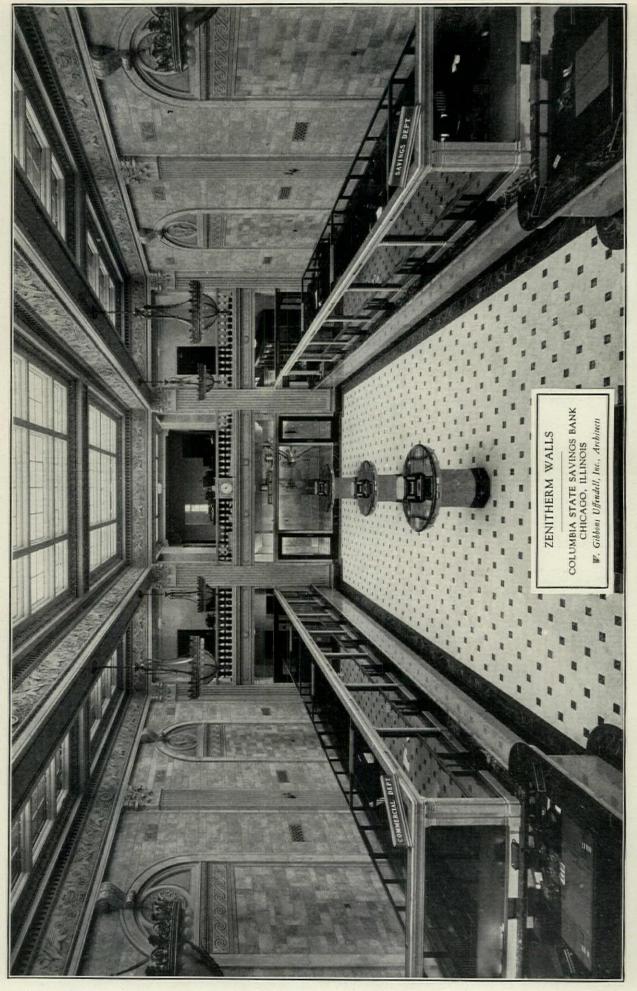
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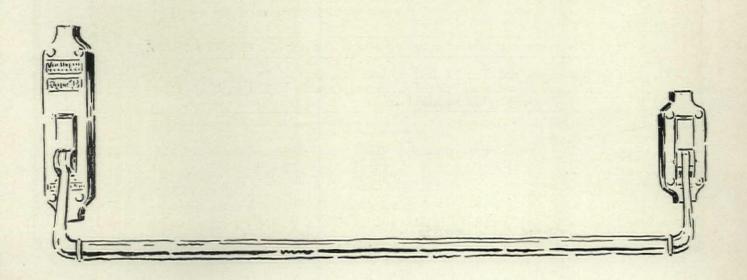
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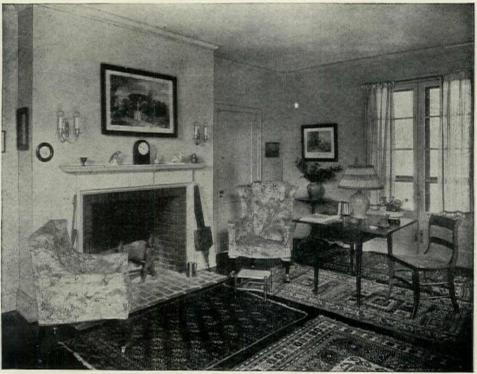
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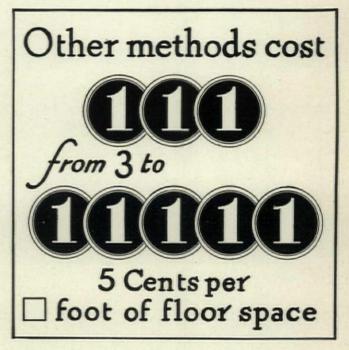


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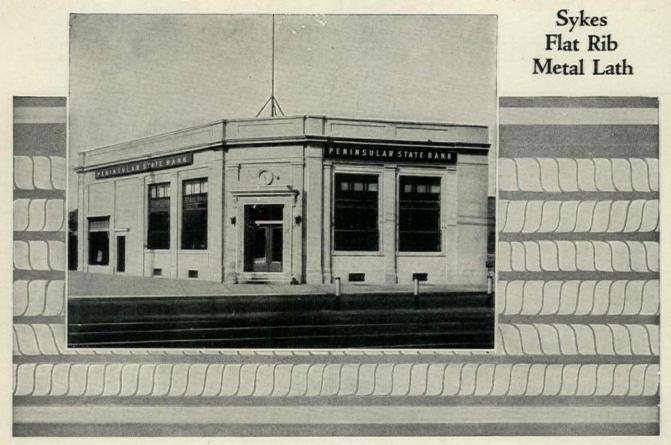
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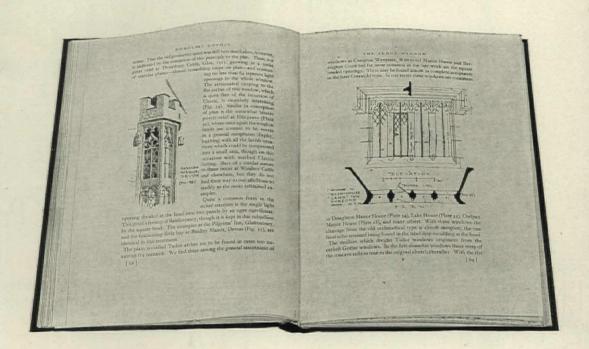
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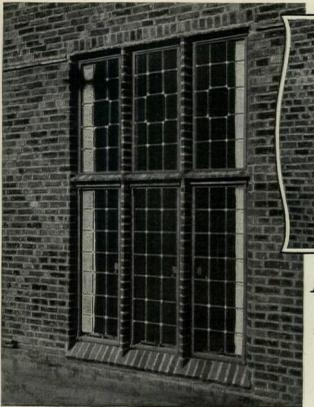
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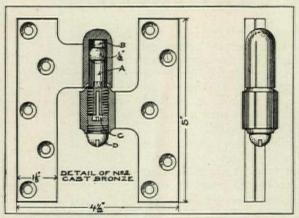
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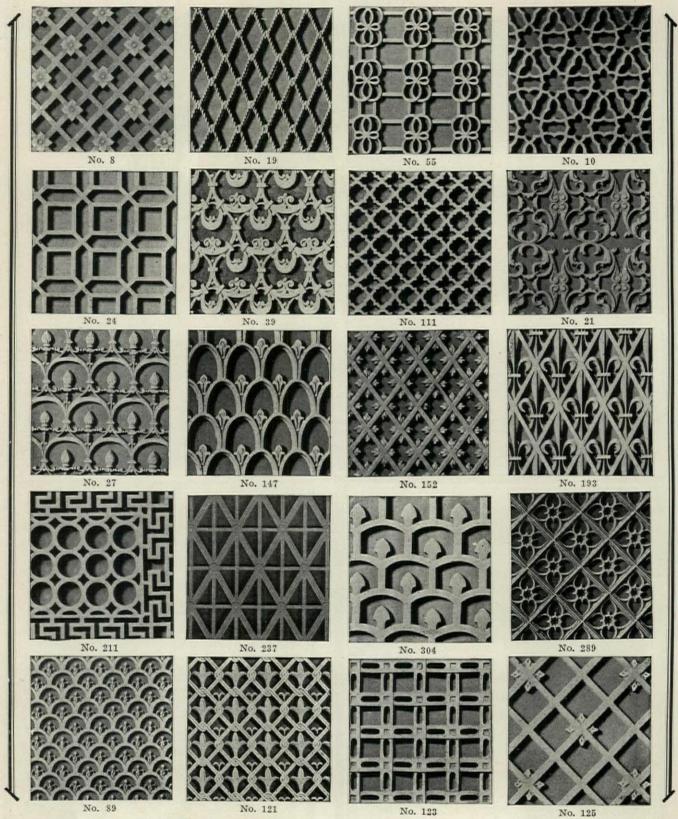
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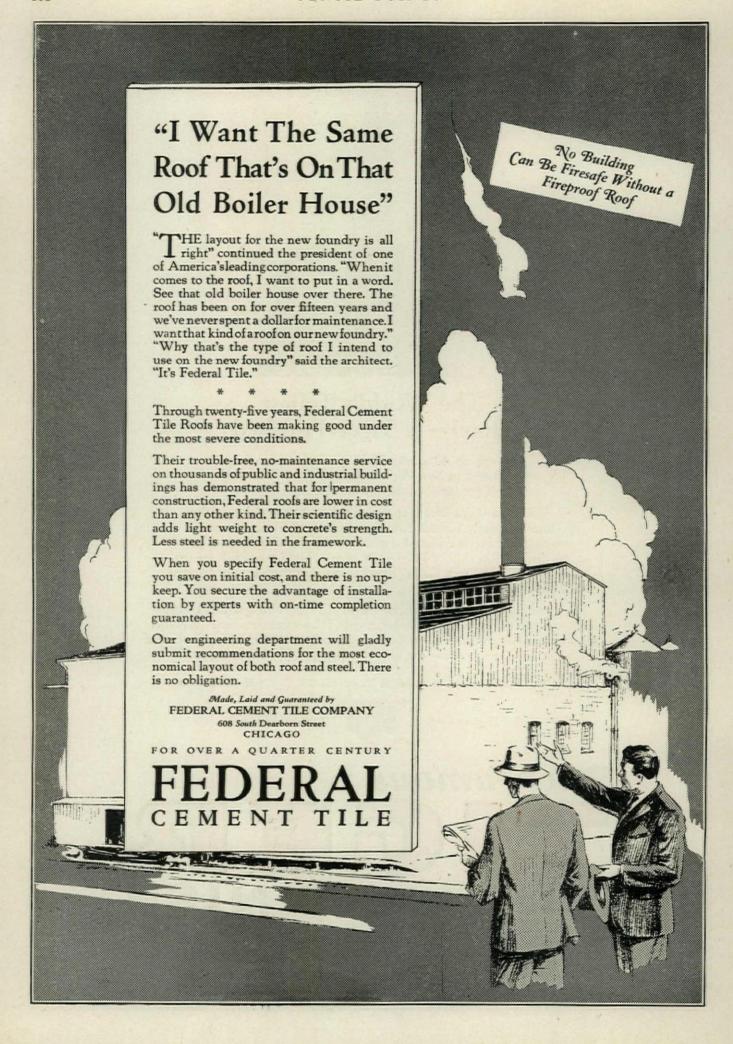
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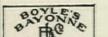
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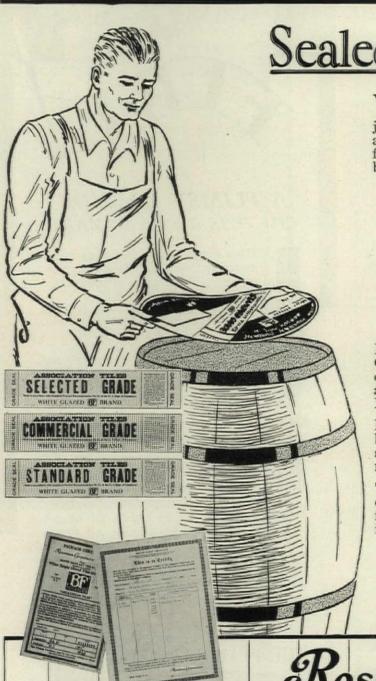
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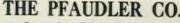
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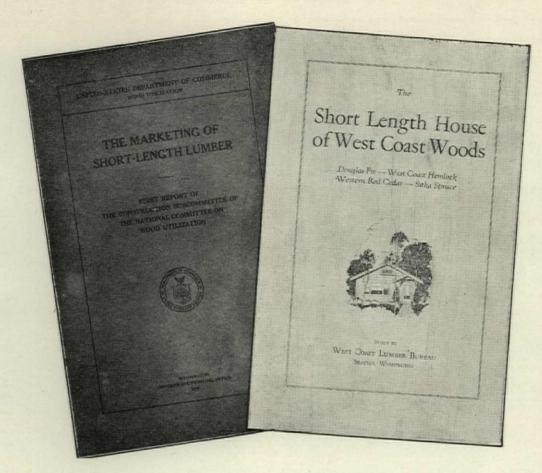




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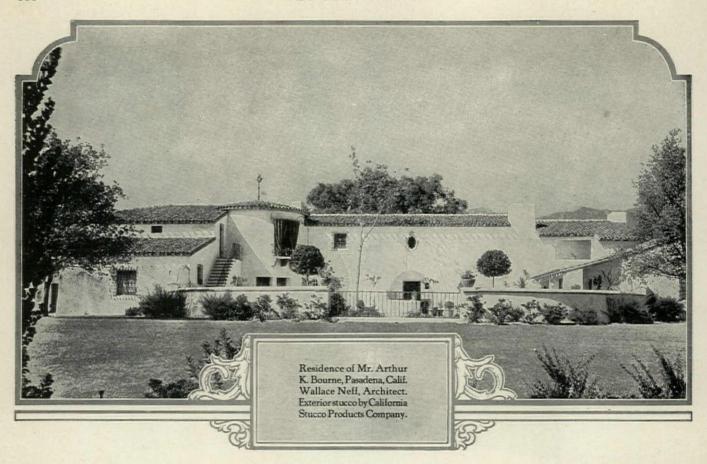
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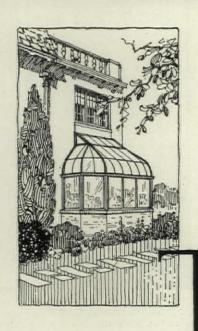
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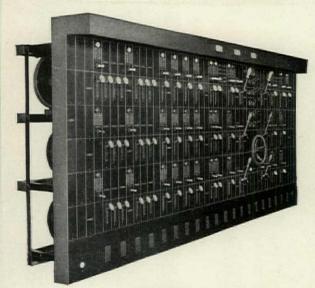
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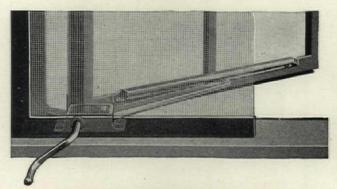
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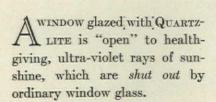
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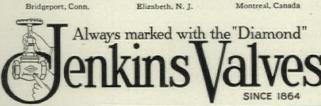
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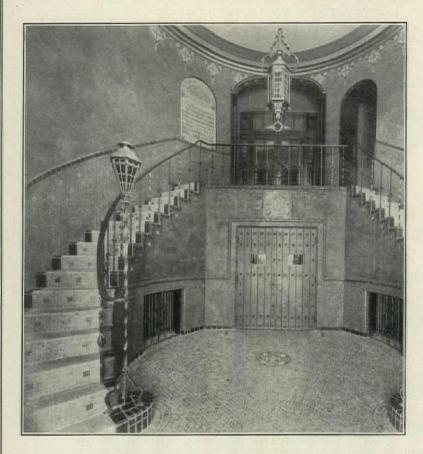
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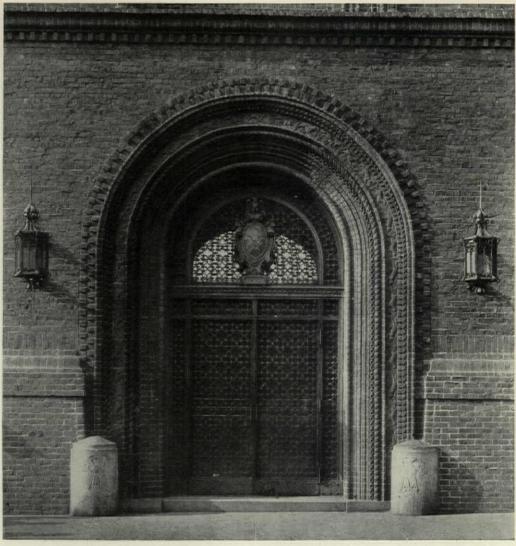
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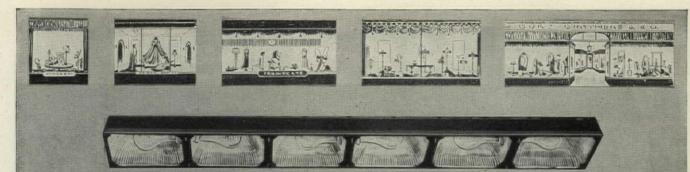
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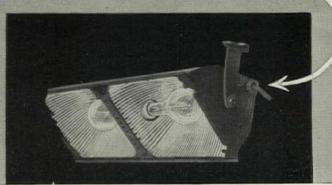
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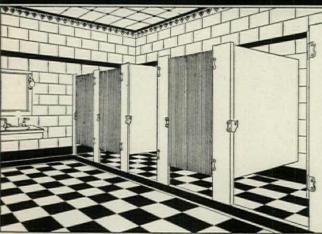
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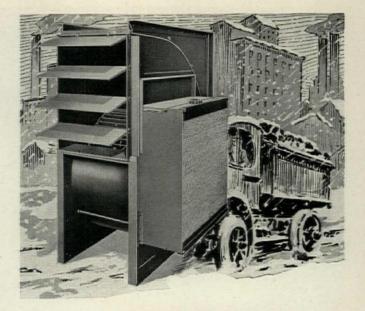
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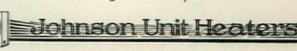
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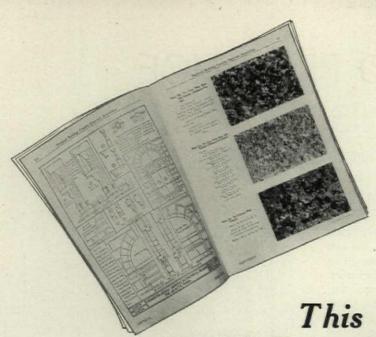
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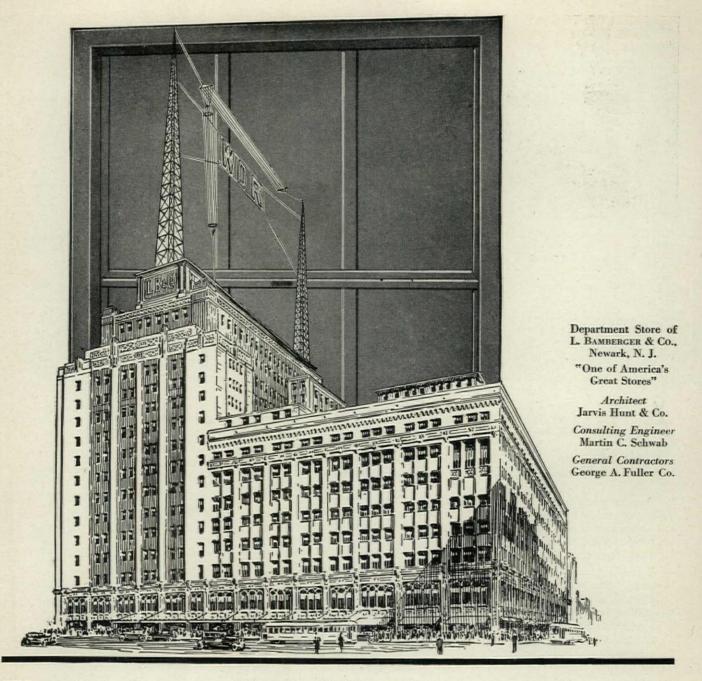
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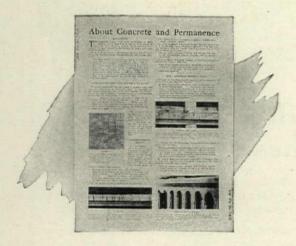
NNOUNCEMENT was made recently by Warren Webster & Company, manufacturers of Webster Systems of Steam Heating, that they had acquired the inventions of James A. Donnelly and the physical assets of the Donnelly Systems Company of New York. The business of the Donnelly Systems Company has been liquidated. Orders for repairs and replacements to existing installations of Donnelly Systems will be taken care of from the home office of Warren Webster & Company at Camden, New Jersey.

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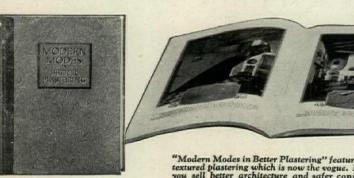
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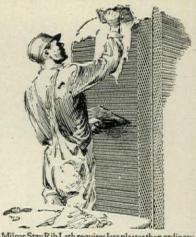
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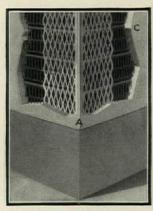
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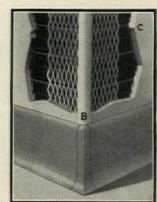
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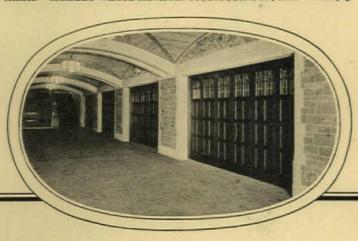
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