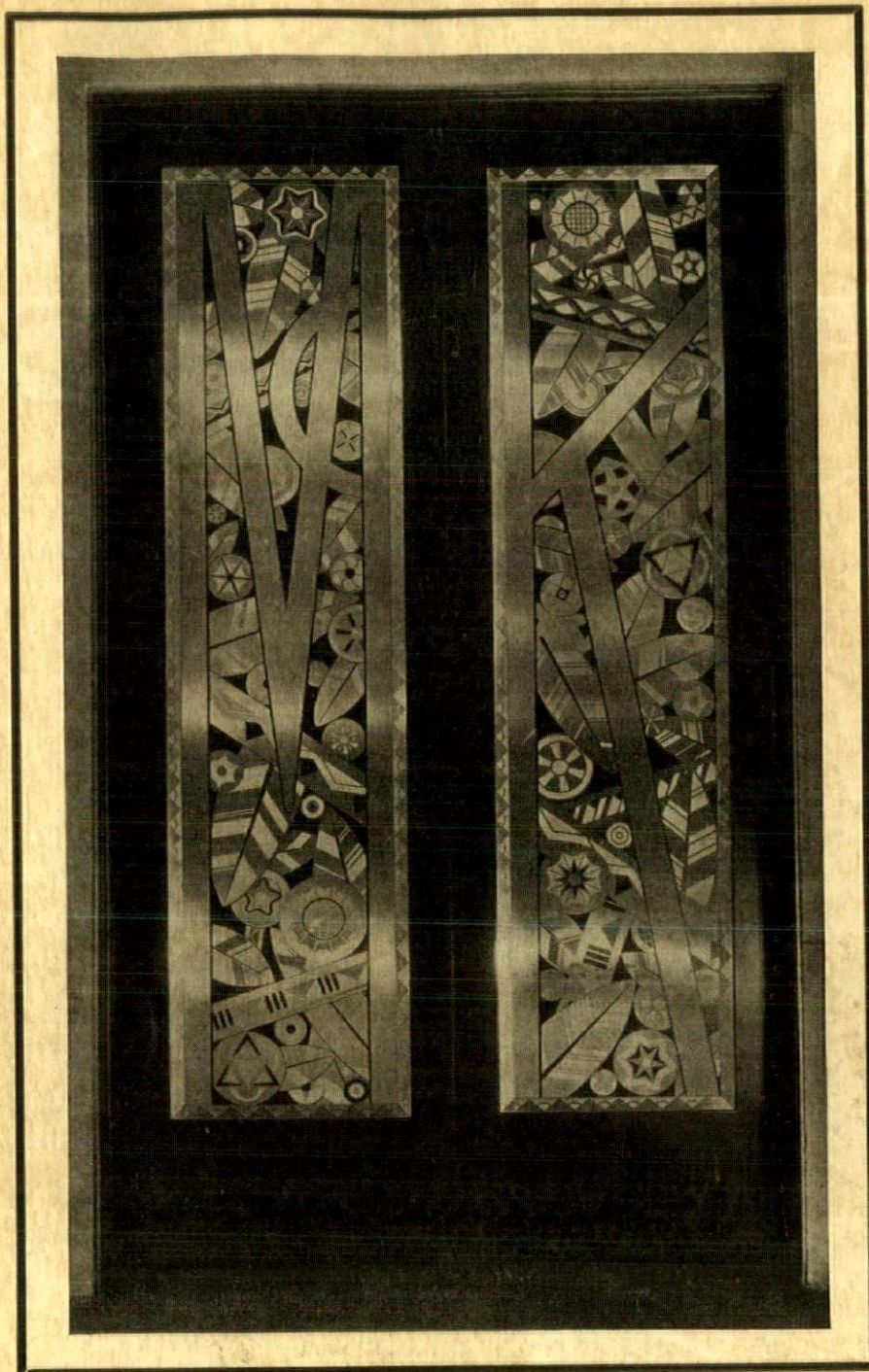




THE AMERICAN ARCHITECT

• FOUNDED 1876 •

October, 1930



Specify

**T H O R P
D O O R S**

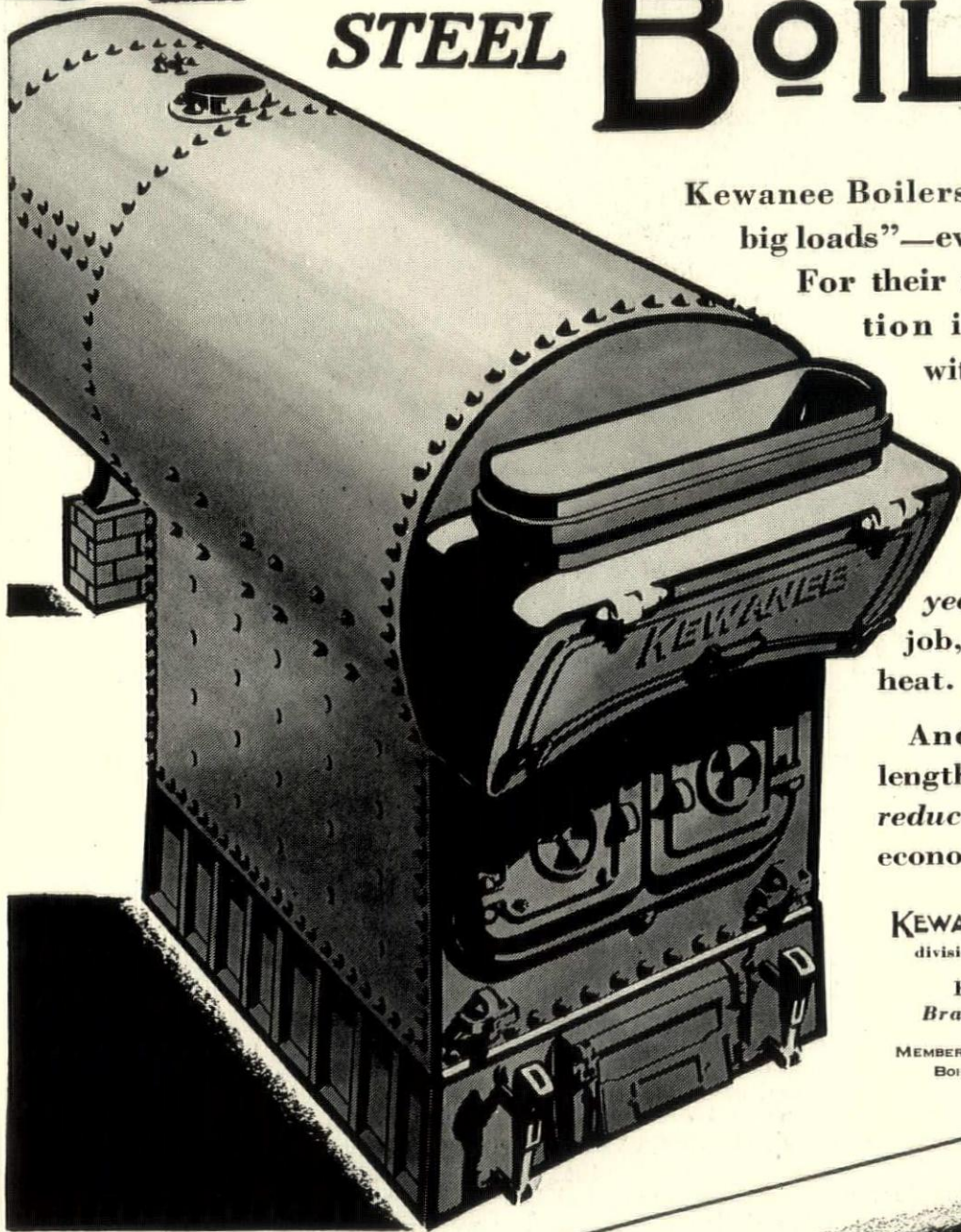
This strikingly modern elevator enclosure in the McKnight Building, Minneapolis, was designed by Hewitt and Brown, Inc., Architects. The design is worked out in etched nickel-silver on a black background.

The far-sighted owners of the McKnight Building believe in keeping pace with the competition of newer structures. Realizing that the lobby gives the most important impression of the building, they had Hewitt and Brown, Inc., design new elevator enclosures for the ground floor. The Thorp Organization made the doors with their usual skill and attention to the architects' specifications. The resulting effect imparts a new atmosphere to the entire building.

THORP FIREPROOF DOOR COMPANY, MINNEAPOLIS, MINN.

KEWANEE

STEEL BOILERS



Kewanee Boilers are built to "Carry big loads"—even heavy "overloads."

For their riveted steel construction is strong enough to withstand the worst punishment a heating boiler can get.

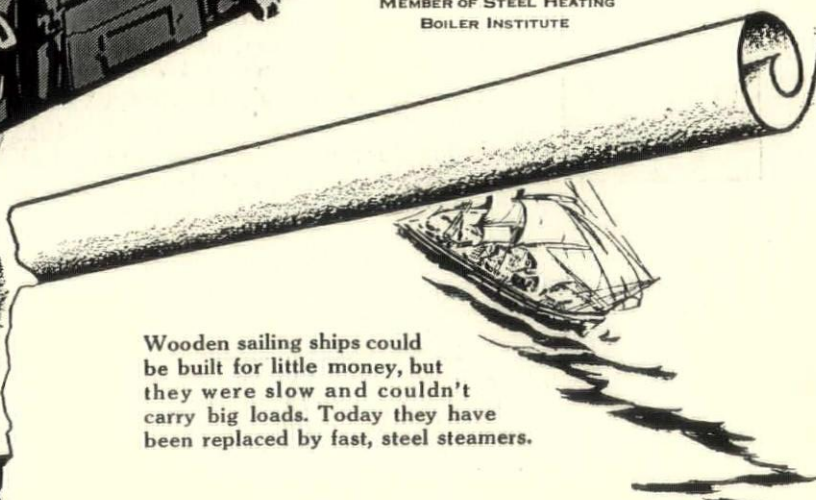
Countless Kewanee Boilers—*installed 40 years ago*—are still on the job, providing dependable heat.

And as a boiler's life is lengthened, its *actual cost is reduced*—making it a truly economical purchase.

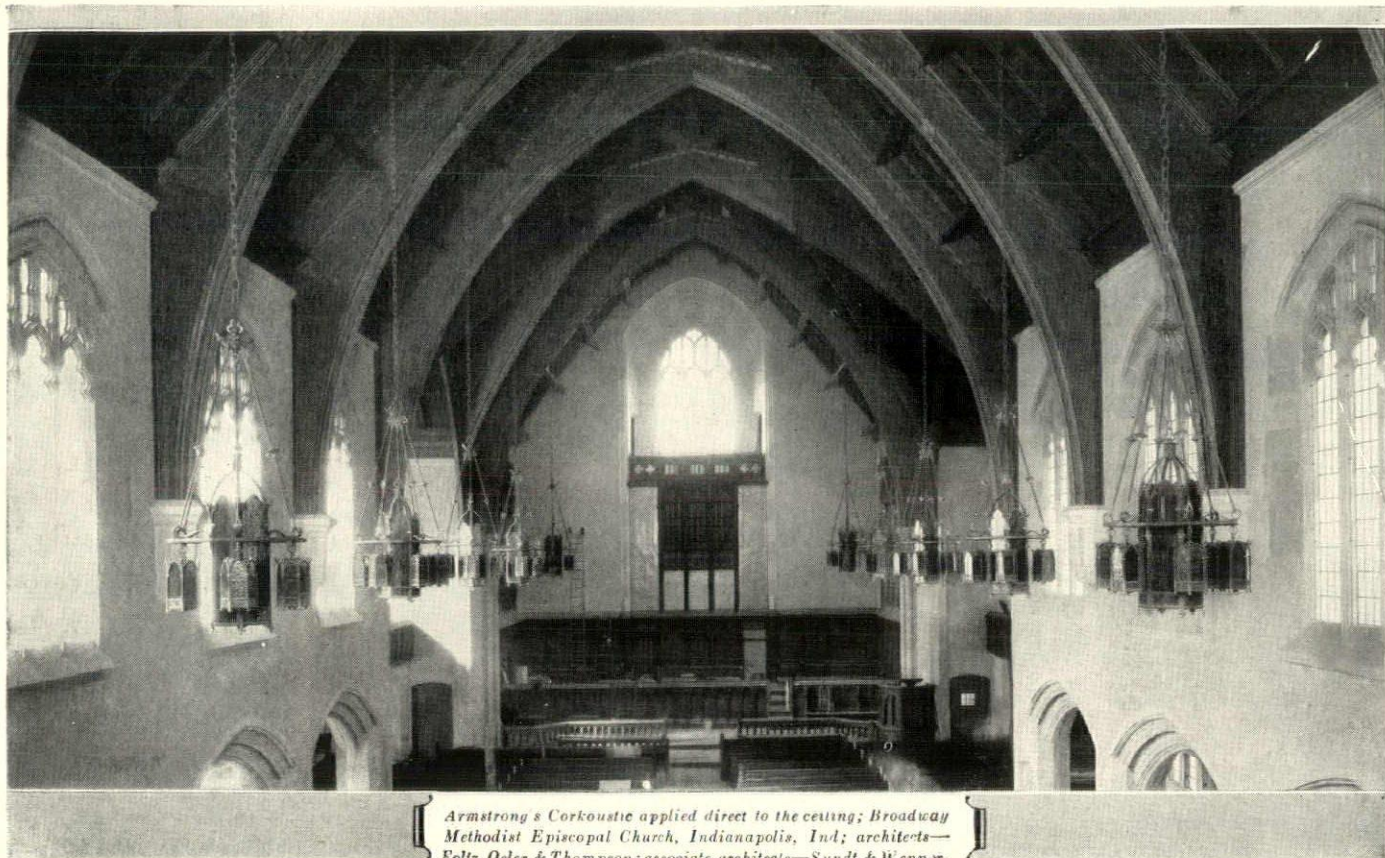
KEWANEE BOILER CORPORATION
division of American Radiator & Standard
Sanitary Corporation
KEWANEE, ILLINOIS
Branches in Principal Cities

MEMBER OF STEEL HEATING
BOILER INSTITUTE

It costs less to
OWN a KEWANEE

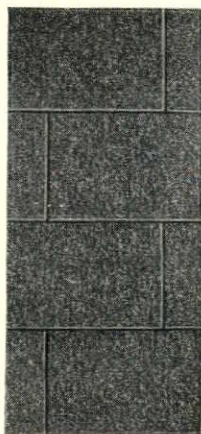


Wooden sailing ships could be built for little money, but they were slow and couldn't carry big loads. Today they have been replaced by fast, steel steamers.



Armstrong's Corkoustic applied direct to the ceiling; Broadway Methodist Episcopal Church, Indianapolis, Ind.; architects—Foltz, Osler & Thompson; associate architects—Sundt & Wenner.

Even Rear Pews can enjoy the service when the church is cork-quieted



THE notes of the organ fade—a moment's pause—then the clergyman begins his sermon. Must his congregation crane forward, noticeably straining to catch every word? In the church that has modern acoustical treatment this tension is never necessary.

Words and music are heard clearly, without distortion, in the auditorium where Armstrong's Corkoustic is used. The firm, strong cork panels, applied direct to ceiling and walls, muffle echoes and reverberations and quiet the disturbances of conflicting sound waves.

Corkoustic has another quality that is valuable in churches—and in any building where sound quieting or acoustical treatment is essential. It possesses high insulating efficiency, and so effects considerable savings in heating cost. Fur-

thermore, its use materially shortens the time required to heat the building and helps to maintain more comfortable temperatures, both winter and summer.

Decoration, too, is simplified with the help of Armstrong's Corkoustic. Where a conservative effect is correct, the rich, natural cork surface in blended browns is just right. But if life and color are needed, then spray coats of cold-water paint in stencilled design over the cork aid the decorator.

For a complete description of Armstrong's Corkoustic, write for the book, "Acoustical Correction." Each room, of course, offers distinct problems. So we suggest that you consult with our **Armstrong's** engineers. Armstrong Cork & Insulation Company, 936 Concord Street, Lancaster, Pennsylvania.

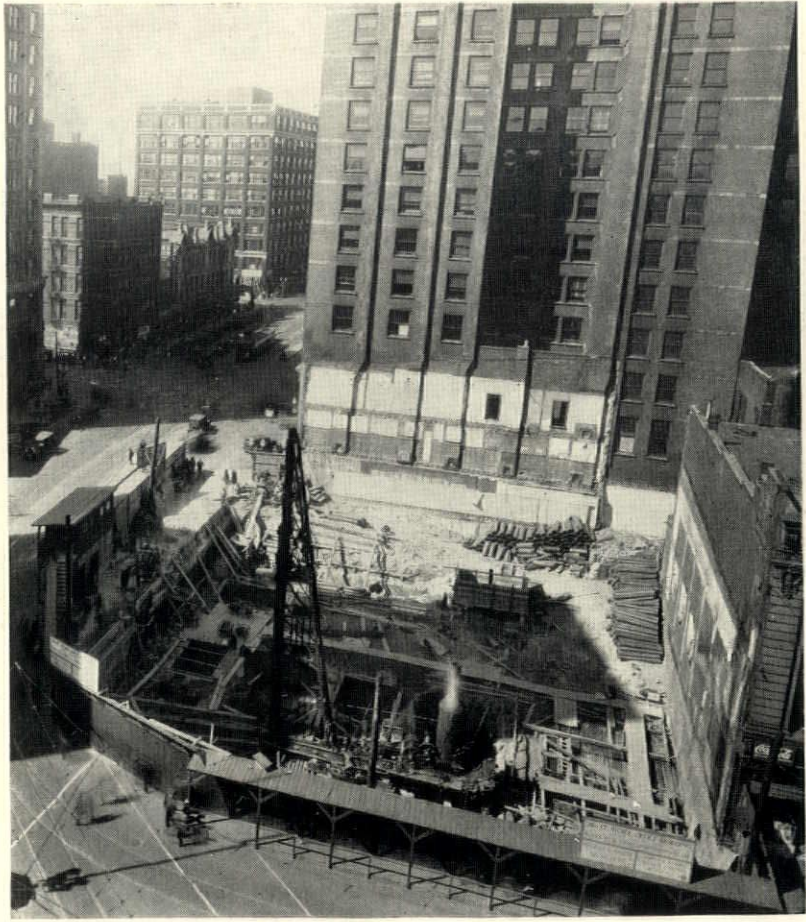


Armstrong's

CORKOUSTIC

THE MODERN ACOUSTICAL, INSULATING TREATMENT FOR ALL BUILDINGS

The American Architect, published monthly by International Publications, Inc., 57th Street at 8th Avenue, New York, N. Y.; Yearly subscription, \$5.00. Entered as second class matter, April 5th, 1926, at the Post Office at New York, N. Y.; under the act of March 3rd, 1897. Issue number 2588, dated October, 1930.



JOB 2627—FIRST NATIONAL BANK
BLDG., ATLANTA, GA.
Architects:
PRINGLE & SMITH
63 Gow System Caissons

JOB 2638—PEACHTREE & MARIETTA BLDG.,
ATLANTA, GA.
Architects:
PRINGLE & SMITH
502 Raymond Concrete Piles

Both under Raymond Supervision

This unusual picture shows a Gow job on the left, a Raymond job on the right.

Both for the same Engineer. Both running under separate organizations and supervision. Both under general supervision of experienced Raymond engineers. These jobs illustrate our policy of recommending for each particular problem that form of foundation best suited to the conditions.

The Gow system of caissons comprises the excavating of open holes, properly protected against collapse or failure by steel cylinders. The excavation continues until the proper

strata is reached, upon which the load is then placed by belling out the bottom of the hole and then filling with concrete.

The Raymond system of standard concrete piles provides for the driving of spirally reinforced steel shell into the ground by means of a heavy mandrel or finger, and then withdrawing this mandrel, leaving the shell in the ground, which provides a form into which the concrete is placed, thus insuring a perfect concrete pile from tip to top, every detail of which is known to the operator, even to the maintaining of the resistance created in driving.

RAYMOND CONCRETE PILE CO.
NEW YORK: 140 Cedar St. CHICAGO: 111 West Monroe St.

Raymond Concrete Pile Co., Ltd., Montreal, Canada

Atlanta, Ga.
Baltimore, Md.
Boston, Mass.
Chicago, Ill.

Cleveland, Ohio
Detroit, Mich.
Houston, Texas
Kansas City, Mo.

Los Angeles, Cal.
Miami, Fla.
Philadelphia, Pa.
Pittsburgh, Pa.

San Francisco, Cal.
Washington, D. C.
Buffalo, N. Y.
Milwaukee, Wis.

St. Louis, Mo.
St. Paul, Minn.
Montreal, Canada
Hong Kong, China

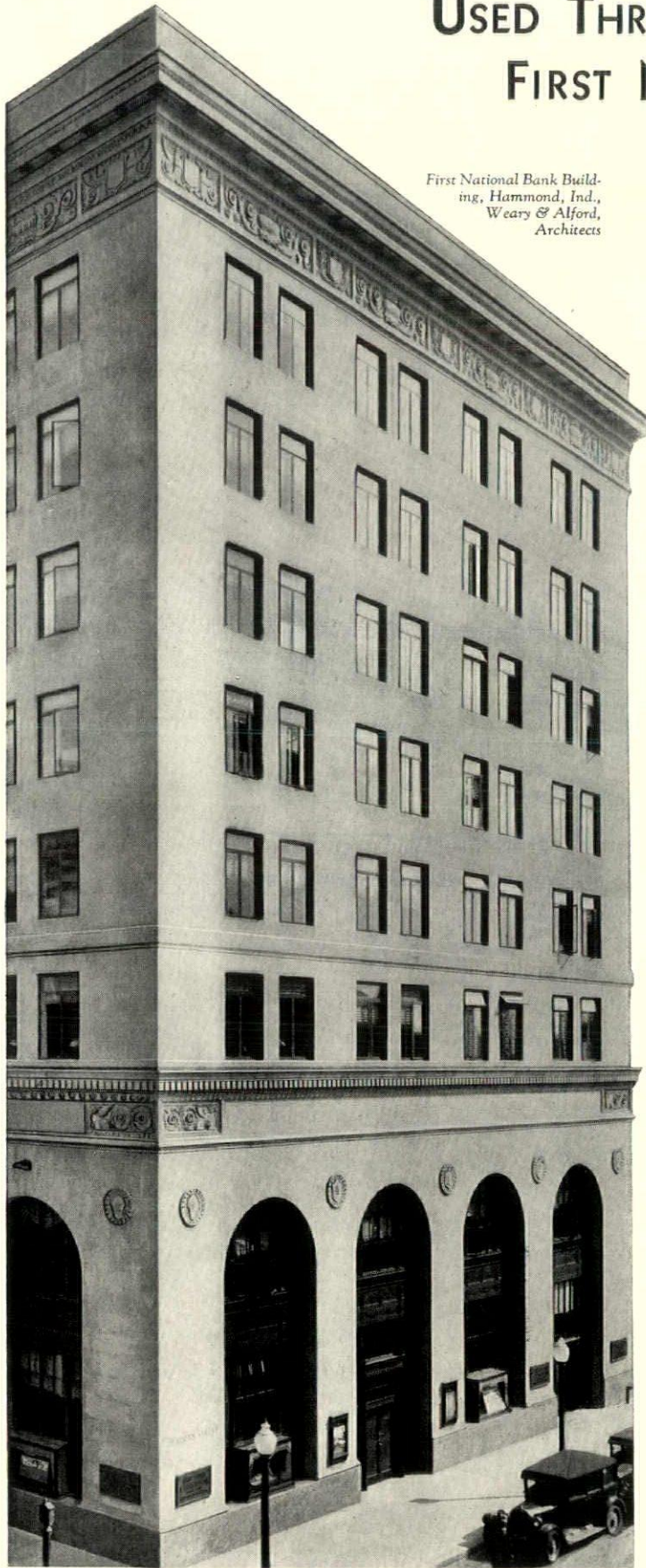
London, England
Maracaibo, Ven., S. A.
Caracas, Ven., S. A.
Bogota, Colombia, S. A.

Buenaventura, Col., S. A.
Omori, Tokyo-Fu, Japan
Portland, Ore.

GOW RAYMOND

CRITTALL CASEMENTS

USED THROUGHOUT THE HAMMOND FIRST NATIONAL BANK BUILDING



*First National Bank Building,
Hammond, Ind.,
Weary & Alford,
Architects*

AS AN example of the effective use of Crittall Casements in a modern office building, the home of the First National Bank in Hammond, Indiana, is extremely interesting from an architectural standpoint. Not only have Crittall Casements been employed in beautifying the ornamental portions—but also they have been installed *throughout the entire building!*

In the banking quarters, in the exclusive shops and in the private offices Crittall Casements serve a utilitarian as well as an artistic purpose. They provide abundant light—proper ventilation—and perfect protection against wind and weather. In addition, these sturdy steel windows operate easily and are free from sticking or rattling.

Today, Crittall windows are being more widely used than ever before. Built by the largest manufacturer of metal casements—with factories all over the world—they are available for all types of buildings.

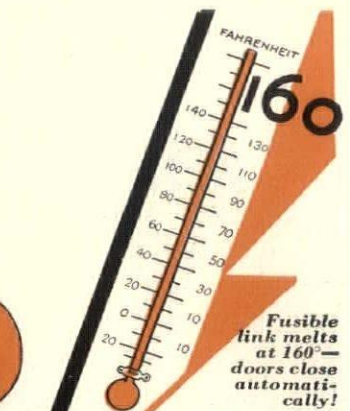
Three separate and complete lines are offered. Stanwin and Norman Casements are stocked in standardized styles and sizes—while Universal Casements are built to order in either steel or bronze.

Refer to our complete catalog in Sweet's—pages A1131 to A1200—for details and specifications.

CRITTALL CASEMENT WINDOW CO.
10924 Hern Avenue
Detroit, Michigan

STANWIN CASEMENTS
NORMAN CASEMENTS
UNIVERSAL CASEMENTS

the **STOP** FIRE with **R-W** AUTOMATIC Fire Door Equipment



Fusible link melts at 160°—doors close automatically!

Automatic closing . . . that's the certain protection afforded by R-W equipment. The doors *close themselves* at any temperature desired; they cannot fail! When closed, FyeR-Wall doors stop the passage of fire. Constructed with heavy corrugated galvanized sheets with thick sheet-asbestos between, yet they cost no more than tin-clad doors. No maintenance cost; and *guaranteed for 25 years!*

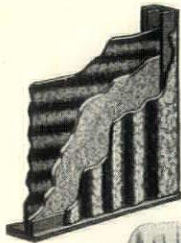
The label of the Underwriters Laboratories on this R-W equipment entitles you to 15% to 25% lower insurance rates. R-W Fire Door Equipment meets every conceivable condition; provides certain protection; brings tangible and important economies.

Consult an R-W engineer; write for catalog.

Richards-Wilcox Mfg. Co.

"A HANGER FOR ANY DOOR THAT SLIDES"
AURORA, ILLINOIS, U.S.A.

Branches: New York Chicago Boston Philadelphia Cleveland Cincinnati Indianapolis St. Louis New Orleans Des Moines Minneapolis Kansas City Los Angeles San Francisco Omaha Seattle Detroit Atlanta Pittsburgh Milwaukee Richards-Wilcox Canadian Co., Ltd., London, Ont., Montreal, Winnipeg



Note rigid construction of Fye-R-Wall doors with heavy steel frame. They cost no more than tin-clad doors.

50 years
1880/1930



International
Fire Prevention
Week
October 5 to 11



YOU ASK — Just what is this Gypsteel Pre-Cast Floor and Ceiling Construction?

BRIEFLY, it's this: Pre-Cast gypsum slabs 2" thick are suspended by fireproofed hangers from steel floor members, and joints are grouted, to form the ceiling. Re-inforced Pre-Cast gypsum floor slabs 2½" thick are placed on top of the steel members, and joints grouted to form an unbroken floor, ready for fill and for finish.

In the case of the floor slabs, projecting steel rods of adjacent slabs are tied together and imbedded in a gypsum grout, giving in effect a monolithic floor slab.

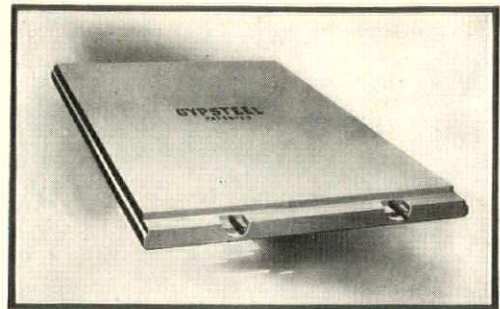
Where webs and flanges of girders project below ceiling slabs, they are fireproofed with Gypsteel Pre-Cast Soffit slabs, and by plastic gypsum or Haunch slabs.

NO FORMS • ANY WEATHER • NO WAITING

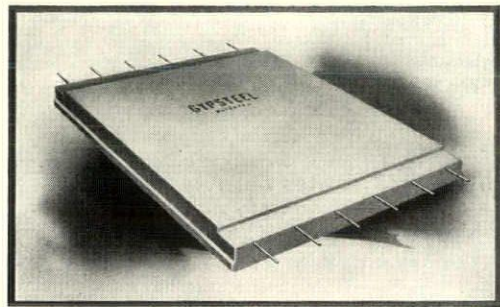
That's all there is to it. It's as easy and simple as that. No forms. No waiting. Practically no water used.

No especially trained workmen are needed to install Gypsteel Pre-Cast Floors. They go on in any weather, quickly and simply. And usually save money because their lightness permits economies in the steel structure.

In fact, Gypsteel Pre-Cast Floor and Ceiling Construction has 12 major advantages. Our Floor Catalog tells all about them. May we send it to you? Consultation with our engineers involves no obligation.



Ceiling Slab, suspended by hangers from floor members.



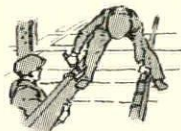
Floor Slab, tied together on top of floor members.

GYPSTEEL

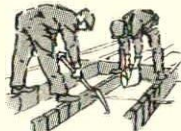
PRE-CAST FLOOR CONSTRUCTION



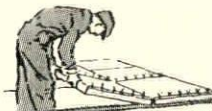
Hanging ceiling slabs



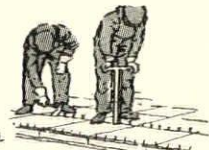
Climbing ceiling slab hangers



Grouting ceiling slabs



Laying Gypsteel floor slabs



Tying the reinforcement together.

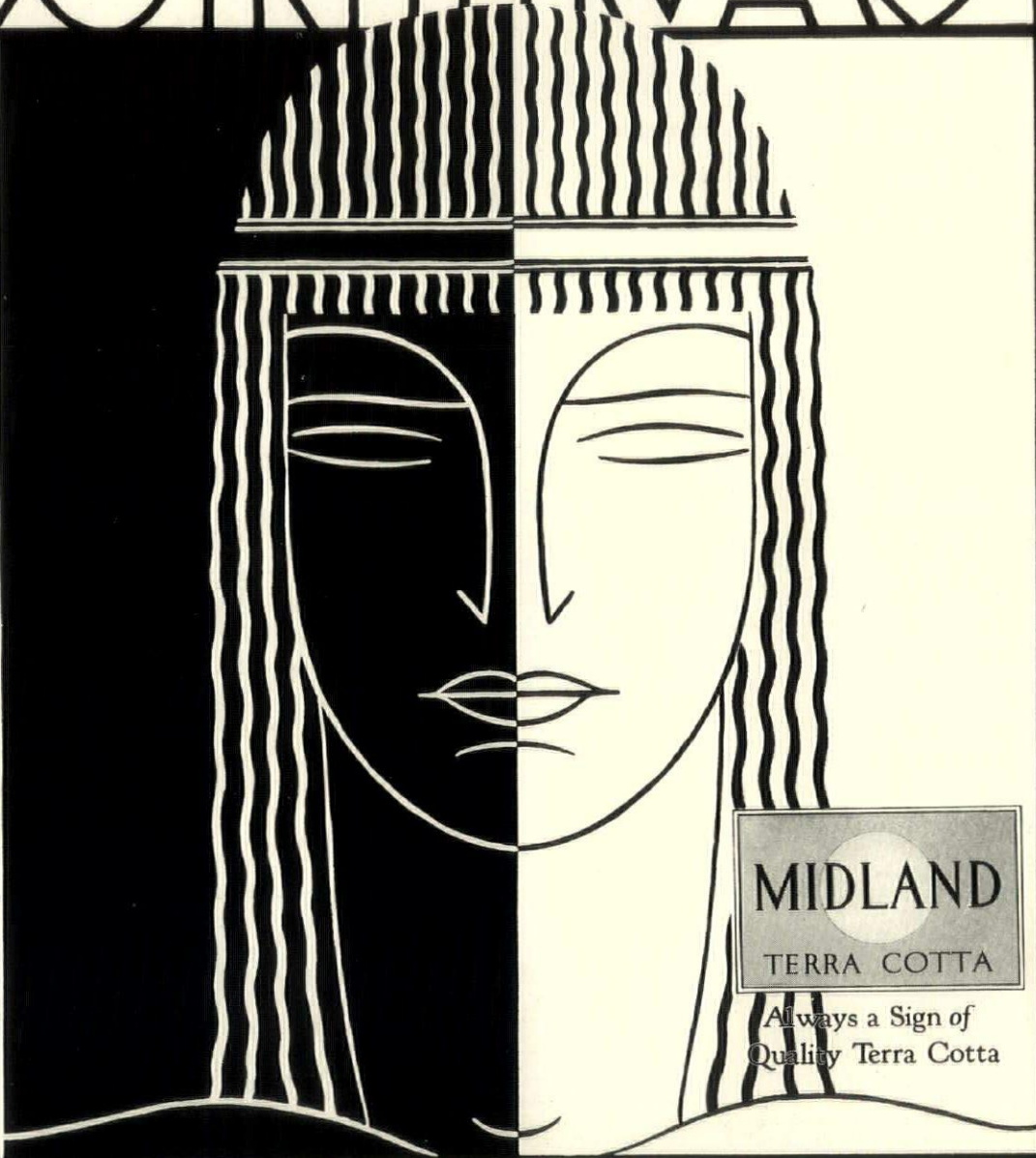
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STRUCTURAL GYPSUM CORPORATION

Sales Offices in
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CONTRAST



MIDLAND
TERRA COTTA

Always a Sign of
Quality Terra Cotta

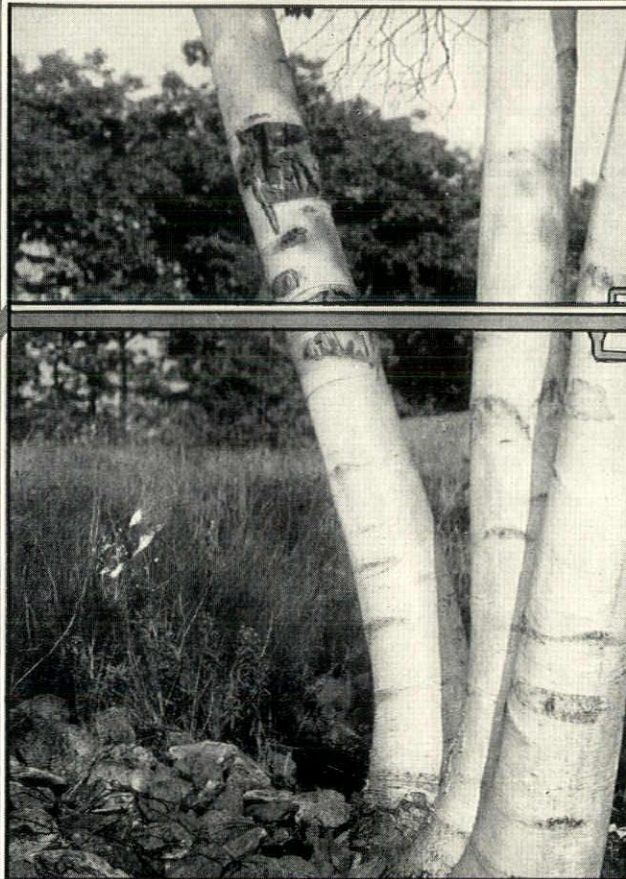
Midland Terra Cotta Company

105 West Monroe Street, Chicago, Illinois

MIDLAND TERRA ©TIA MIDLAND TERRA ©TIA MIDLAND TERRA ©TIA MIDLAND TERRA ©TIA MIDLAND TERRA ©TIA

Born Flat— and Kept FLAT

*A New Window Glass that is
Creating a New Standard
of Flatness, Clearness
and Easy Glazing*



HOLD a piece of Pennvernon Window Glass *across* the light, and then *against* the light to see that a great change has taken place in window glass making. A surprising new freedom from waves, streaks and bowed surfaces. A new brilliance of finish. No "right" or "wrong" side. Both surfaces alike.

And you will readily realize how much *better windows* Pennvernon will make—and how much *easier work* for the glazier.

The new process by which Pennvernon Window Glass is made is fully described and pictured in a new booklet that is yours for the asking. Simply write to the Pittsburgh Plate Glass Co., Grant Building, Pittsburgh, Pa.

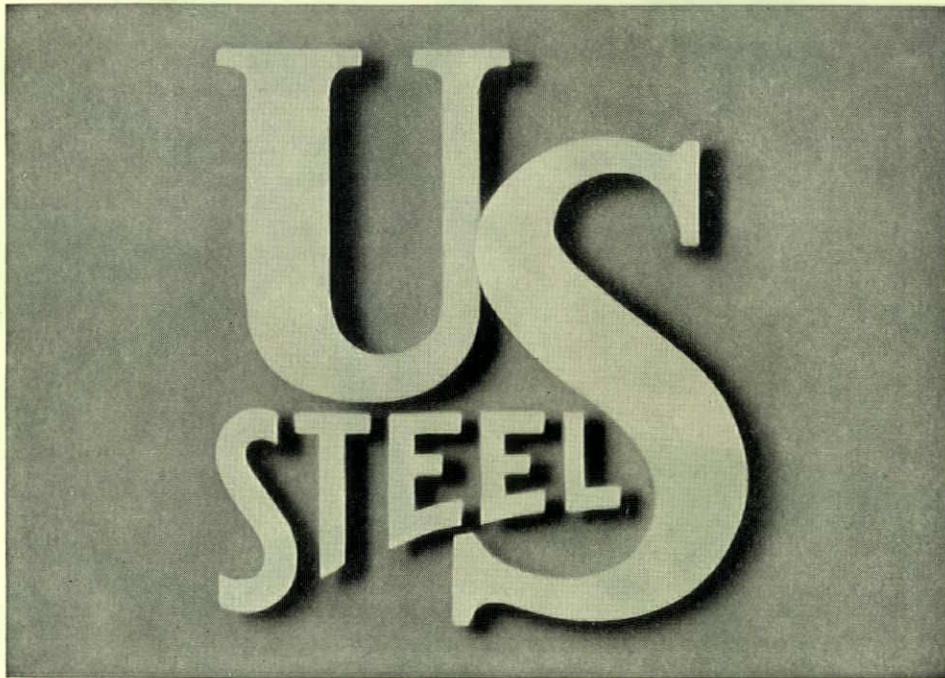
Pennvernon Window Glass is ready at all the warehouses of the Pittsburgh Plate Glass Company — located in every leading city.

PENNVERNON *flat drawn* WINDOW GLASS



A NEW IDENTIFICATION MARK

for the
UNITED STATES STEEL CORPORATION
and its Subsidiary Manufacturing Companies



THE Subsidiary Manufacturing Companies of the United States Steel Corporation hold in common this simple ideal of service—constantly to seek improvements for their products, and to make these products available on a basis that assures a full measure of value. The new mark here introduced to you stands for this ideal of service and is a symbol of quality. In future advertising and promotion work, it will be used by the Universal Atlas Cement Co.

Universal Atlas Cement Co.

Subsidiary of United  States Steel Corporation

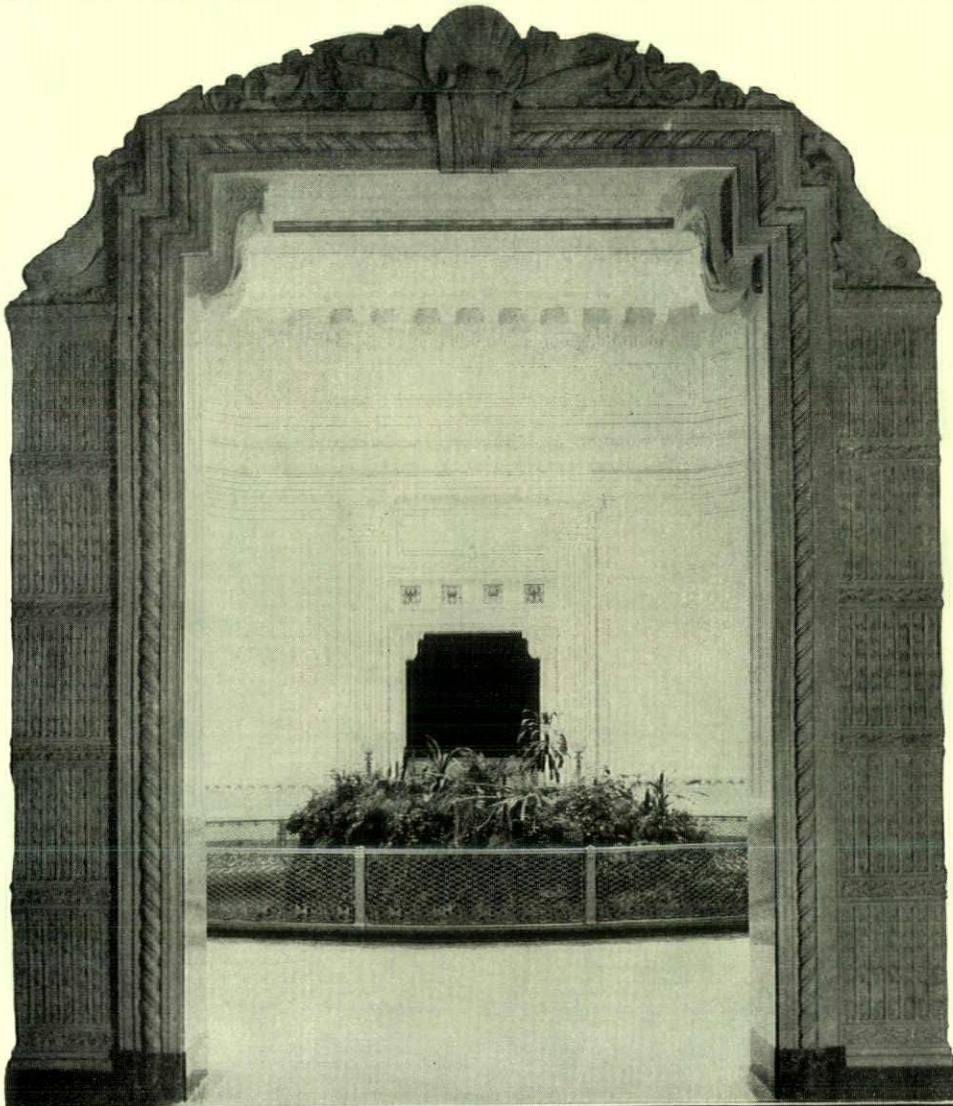
Concrete for Permanence

PRINCIPAL SUBSIDIARY MANUFACTURING COMPANIES OF UNITED STATES STEEL CORPORATION

AMERICAN BRIDGE COMPANY CARNEGIE STEEL COMPANY FEDERAL SHIPB'LDG. & DRY DOCK CO. THE LORAIN STEEL COMPANY
AMERICAN SHEET AND TIN PLATE COMPANY COLUMBIA STEEL COMPANY ILLINOIS STEEL COMPANY TENNESSEE COAL, IRON & RAILROAD CO.
AMERICAN STEEL AND WIRE COMPANY CYCLONE FENCE COMPANY NATIONAL TUBE COMPANY UNIVERSAL ATLAS CEMENT CO.

Pacific Coast Distributors—Columbia Steel Company, Russ Bldg., San Francisco, Calif. *Export Distributors*—United States Steel Products Company, 30 Church St., New York, N.Y.

FOR LASTING BEAUTY



Entrance to room containing tropical pool, Shedd Aquarium, Chicago. Art marble around pool, made with Atlas White portland cement, furnished by Chicago Art Marble Co. Stucco finish on pre-cast portal, also of Atlas White, furnished by California Stucco Products Co., Chicago. Graham, Anderson, Probst and White, architects; R. C. Wieboldt Co., general contractor; John A. Boland Co., plastering contractor, all of Chicago.

ATLAS WHITE PORTLAND CEMENT

On both exterior and interior of the beautiful Shedd Aquarium, Chicago, the use of Atlas White portland cement has added to the beauty and permanence of the new building.

Mortar made with Atlas White sets off the white marble exterior to excellent advantage and protects it against unsightly stains. Light-tinted blue and green stucco, made with Atlas White, gives the interior corridors an unusual and pleasing effect. Stucco applied over the pre-cast portals of each doorway strikes an unusual note. Art marble made with Atlas White decorates a tropical pool in the rotunda, the directors' room and various other rooms in the building.

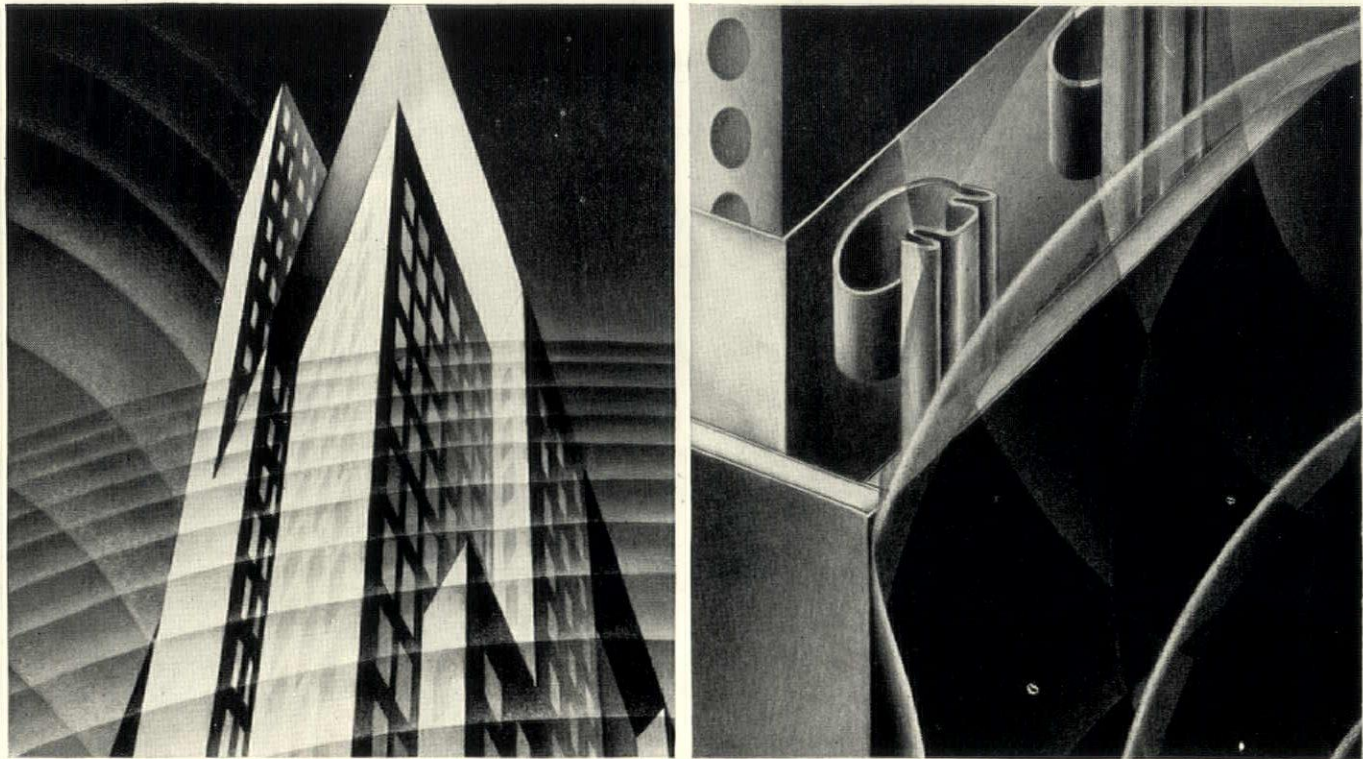
Booklets containing in detail the many uses of Atlas White portland cement will be furnished on request.

Universal Atlas Cement Co.

Subsidiary of United  States Steel Corporation
Concrete for Permanence

CHICAGO
NEW YORK
NEWARK
PHILADELPHIA
BOSTON
ALBANY
PITTSBURGH
CLEVELAND
COLUMBUS

MINNEAPOLIS
DULUTH
ST. LOUIS
KANSAS CITY
DES MOINES
OMAHA
OKLAHOMA CITY
BIRMINGHAM
WACO



The left illustration shows noise vibrations crashing against the exterior of a building, like waves breaking on the seashore. At the right is a USG sound insulated "floating" partition which prevents similar sounds created within the building from being transmitted from one room to another.

You Are Invited to Use This Service in Architectural Acoustics

THE United States Gypsum Company has undertaken to supply a new and comprehensive service in the field of Architectural Acoustics. For this purpose we maintain a complete sound research laboratory and an extensive department devoted exclusively to the solution of problems in the field of sound control.

In order to handle all assignments in Architectural Acoustics it has been necessary for us to develop Acoustone, the USG Acoustical Tile for sound absorption, and in addition a complete System of Sound Insulation for preventing the transmis-

sion of sound from one room to another or from one floor to another.

The USG System of Sound Insulation is a scientific method of floor, wall, ceiling and door construction so designed as to prevent the force of sound striking on one side of the construction from carrying through to the other side. The United States Gypsum Company furnishes all the special materials required, supervises the entire installation and assumes full responsibility for the predicted performance of the in-



Detail of USG Sound Insulative Door which prevents the transmission of sound from room to room. It is used in connection with the USG System of Sound Insulation.

stallation. This system has been used with highly satisfactory results in hotel, apartment and office buildings, industrial plants, schools, studios, etc. It may be used in any construction where noise abatement is desirable.

Architects are invited to write for particulars about the USG System of Sound Insulation and to avail themselves of our services on any problem in Architectural Acoustics. No obligation is involved. Address the United States Gypsum Company, Dept. 26K, 300 W. Adams St., Chicago, Ill.

USG SYSTEM *of* SOUND INSULATION

45 *variable* factors may affect the steam consumption of any heating system . . . No isolated figure of "percent saving" or of "lbs. per sq. ft." can be deemed conclusive without first considering every one of these factors . . . We have prepared a "check-list" of these 45 *variable* factors to help you check your steam consumption figures and estimates . . . Ask for a copy, or call in a Webster steam heating specialist to discuss this vitally important subject. Write Warren Webster & Company, Camden, New Jersey.

a Mod-5



This is one of a series of advertisements discussing the factors affecting heating steam consumption. The purpose of the series is to call attention to the methods of heating steam consumption analysis, estimate and heating cost accounting developed by Warren Webster & Company to provide a reliable basis for comparing heating system efficiency. Actual detailed facts and figures of steam consumption of a number of Webster Systems of Steam Heating, prepared in accordance with these methods, are available for your examination.

MARKED AND CERTIFIED

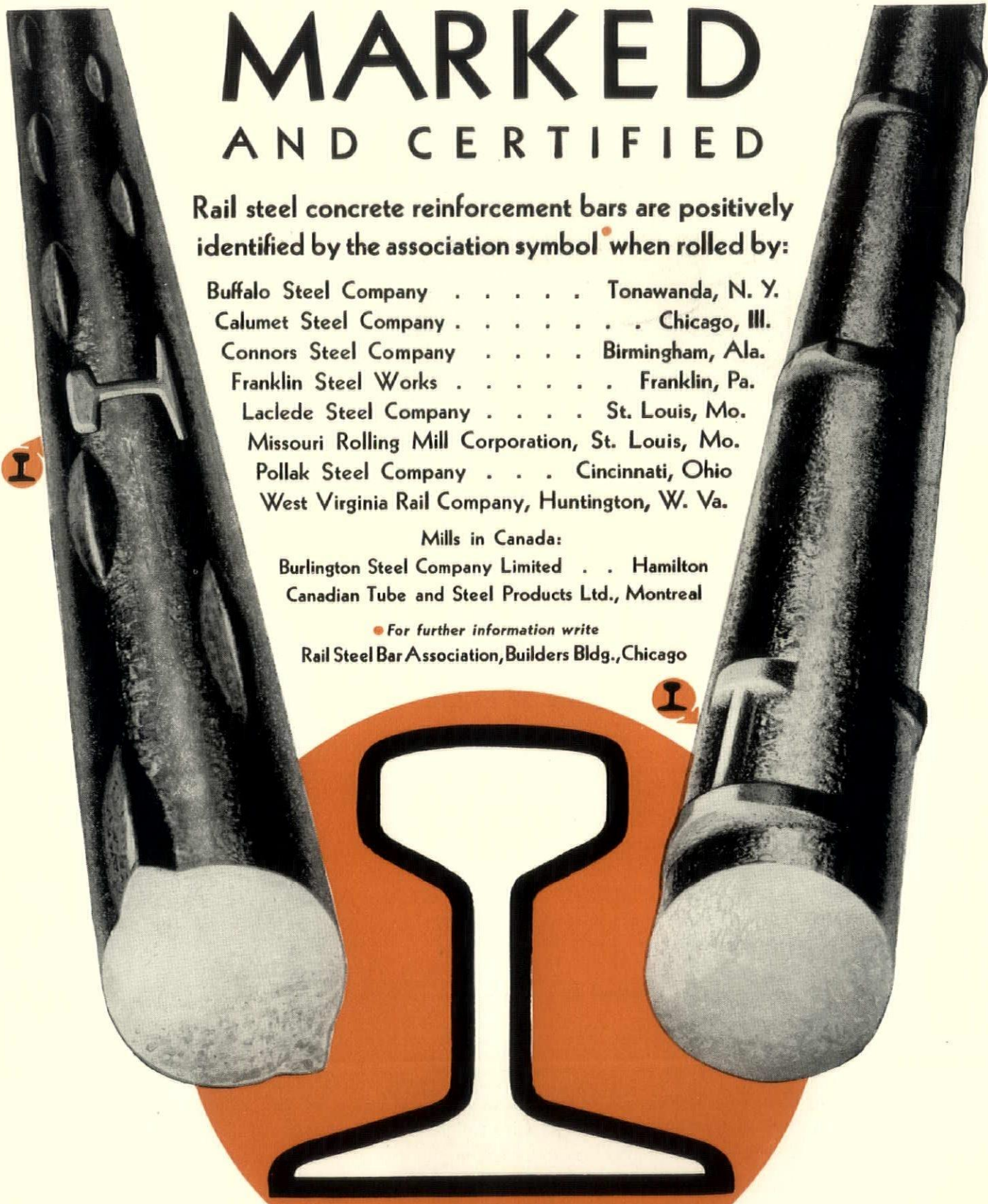
Rail steel concrete reinforcement bars are positively identified by the association symbol when rolled by:

- Buffalo Steel Company Tonawanda, N. Y.
- Calumet Steel Company Chicago, Ill.
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- Franklin Steel Works Franklin, Pa.
- Laclede Steel Company St. Louis, Mo.
- Missouri Rolling Mill Corporation, St. Louis, Mo.
- Pollak Steel Company Cincinnati, Ohio
- West Virginia Rail Company, Huntington, W. Va.

Mills in Canada:

- Burlington Steel Company Limited . . . Hamilton
- Canadian Tube and Steel Products Ltd., Montreal

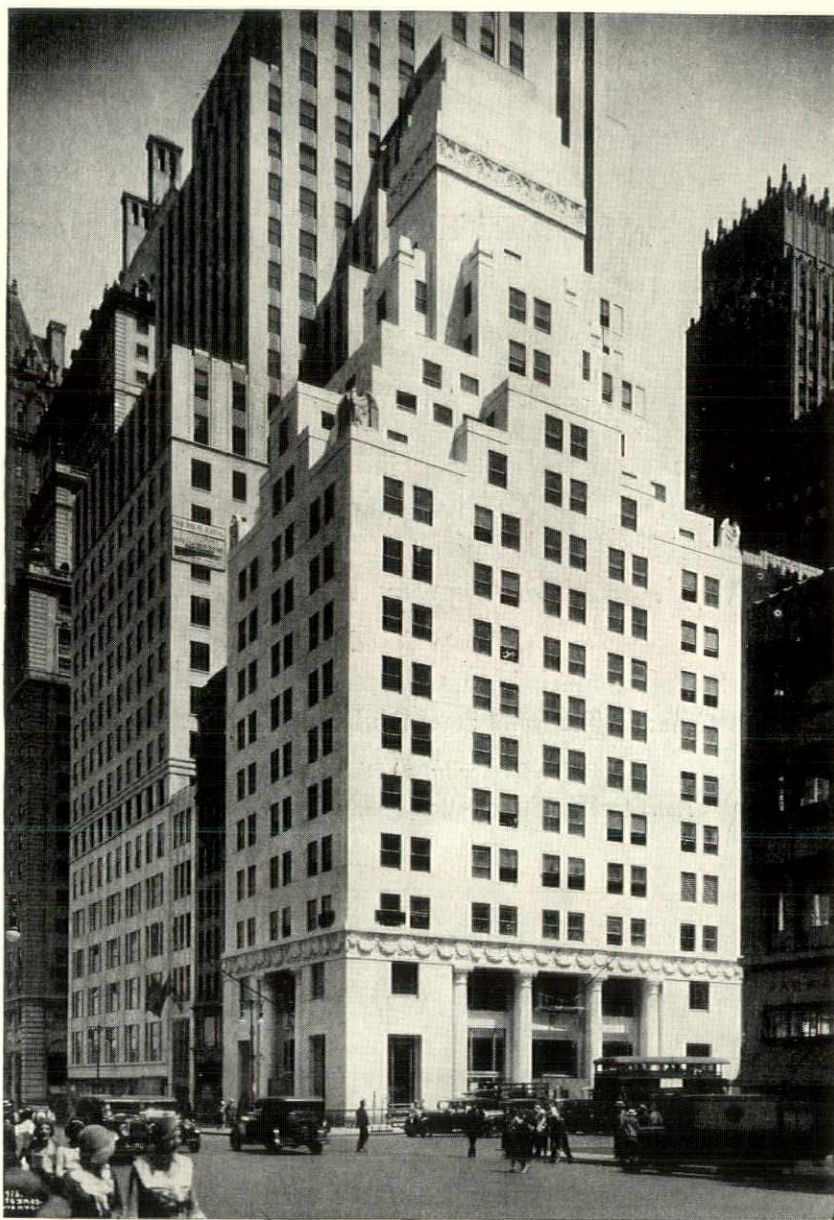
• For further information write
Rail Steel Bar Association, Builders Bldg., Chicago



RAIL STEEL

for concrete reinforcing

GEORGIA MARBLE



NEW YORK TRUST COMPANY BUILDING, 5th Avenue at 57th Street
Cross & Cross, Architects Thompson Starrett Company, Incorporated, Builders
Georgia Marble furnished by Domestic Marble and Supply Company, N. Y.

IT WILL BE A FAMOUS LAND-MARK

Here is a building that will become a famous land-mark on one of the important street corners of the world. It will stand here after many of its neighbors are gone. But the exterior, built of Georgia Marble, will remain sound and beautiful as long as the owners care to let the building stand. Because Georgia Marble is practically impervious to moisture, the punishing attacks of the weather have practically no effect upon it. There are many examples of Georgia Marble work in all parts of the country that are graphic testimonies to the durability of this time tried material.

THE GEORGIA MARBLE COMPANY • TATE • GEORGIA

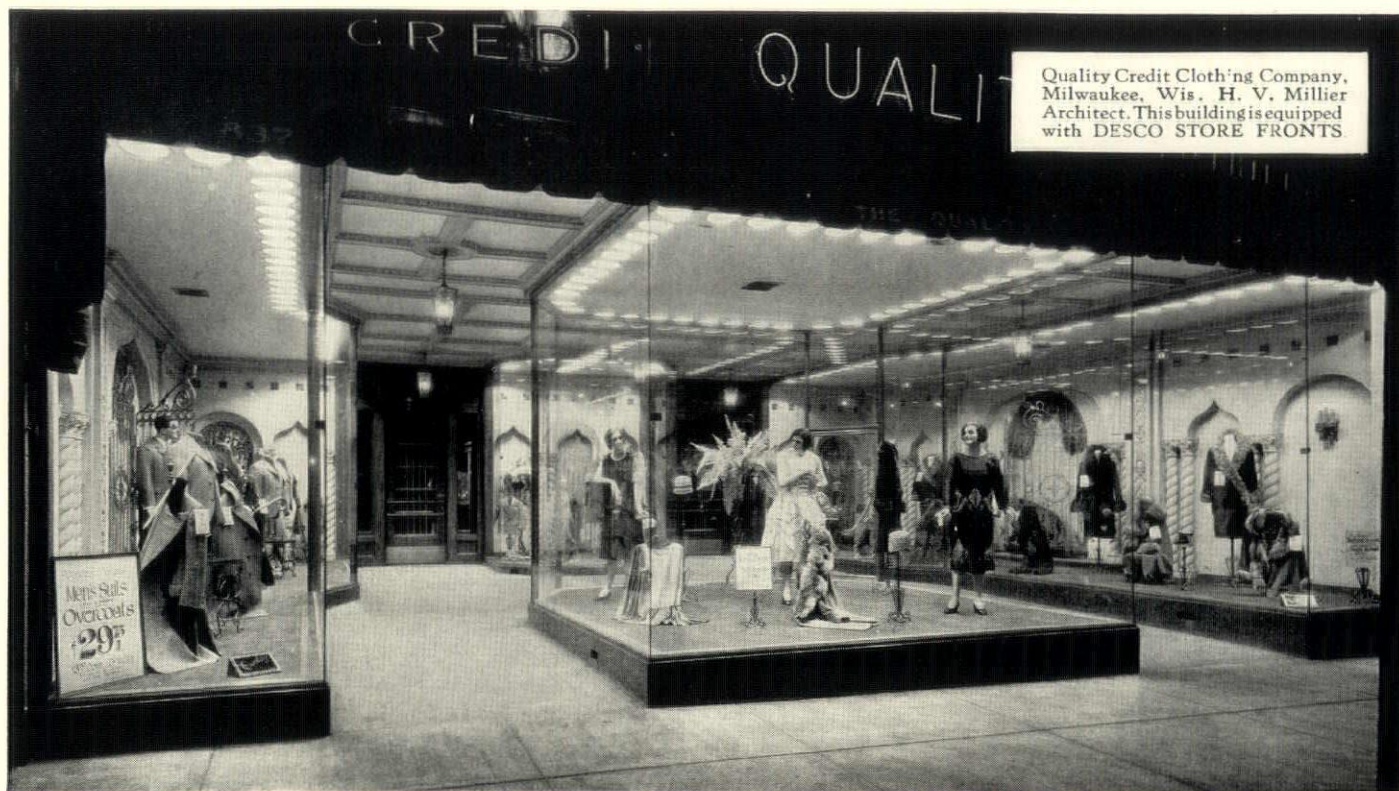
1328 Broadway
NEW YORK

814 Bona Allen Bldg.
ATLANTA

648 Builders' Bldg.
CHICAGO

622 Construction Industries Bldg.
DALLAS

1200 Keith Bldg.
CLEVELAND



For Good Display Windows

For full architectural details see Sweet's catalog. Write us for complete working data and price list. Remember, too, wherever you are there is a distributor near you. We also carry a complete line of "Desco" construction material in our New York City Warehouse.

To achieve display windows that suit the needs of every tenant, good store front construction is necessary. Desco Store Fronts are so often used because they are handsome in appearance and set off all shop displays to best advantage. Made in a wide variety of metals, including solid copper (plain or embossed), solid bronze in all standard finishes and aluminum alloy, they harmonize with every building design. Then, too, their flexibility protects the glass against abnormal wind pressure. These features make Desco Store Fronts preferred by architects and building owners alike.

DETROIT SHOW CASE CO.
1670 West Fort Street Detroit, Michigan

New York City Office and Warehouse—344-346 East 32nd Street
Pacific Coast Office—450 Skinner Building, Seattle, Washington

Desco
METAL
REG. U.S. PAT. OFFICE

STORE FRONTS



REQUIRES NO SLAKING

ALTHOUGH Brixment mortar is as smooth as a straight-lime mix, it contains no lime and therefore requires no slaking.

It is a true cement that can be mixed by hand or machine and used as soon as delivered on the job.

One part Brixment and three parts sand alone make a perfect mortar for every kind of masonry.

And as Brixment requires no soaking or slaking, it can be mixed from day to day in any quantity needed. This eliminates the danger of losses due to rain, freezing or unused batches. Louisville Cement Company, Incorporated, Louisville, Kentucky.

CEMENT MANUFACTURERS SINCE 1830

BRIXMENT

For MASONRY and STUCCO





A close-up view of a section of the side of the Empire State Building, New York City, looking upward. Nirosta strips between the windows climb in gleaming parallels from the sixth floor to the top.



A NEW SKYLINE OF METAL PROGRESS

Defying atmospheric corrosion is mere play for Nirosta Metal. Crowning the Chrysler Building with permanent lustre... tracing silvery ribbons of brightness up the sheer gray sides of the new Empire State Building... that is Nirosta on vacation—occupied with the easy business of being beautiful—permanently! » » Nirosta's indifference to much sterner tests—its ability to withstand corrosion at high pressures and temperatures—emphasizes and

guarantees its absolute permanence for exterior or interior architectural use. » » The fact that Nirosta is so easily workable—that it can be deep-drawn, forged, cast, welded, polished to brilliance or rich matte lustre—opens new vistas of inspiring possibilities for the architect. » » Far tougher and stronger than mild steel, therefore of great strength even in thin gauge, Nirosta makes possible many decorative and structural innovations

—combines the appearance of precious metals with the reasonable cost of the base metals. » » Only Nirosta can give Nirosta results, for Nirosta's maximum resistance and workability are obtained by exclusive processing under Krupp Nirosta patents. » » Interesting information is yours on request. Forty-eight producers are equipped to serve you. KRUPP NIROSTA COMPANY, INC., Headquarters and Exhibit Room 2638 New York Central Bldg., New York, N. Y.

BARS — CASTINGS — FORGINGS — PLATES — SHEETS — STRIP — TUBING — WIRE — AND INNUMERABLE FINISHED PRODUCTS THROUGH FABRICATORS

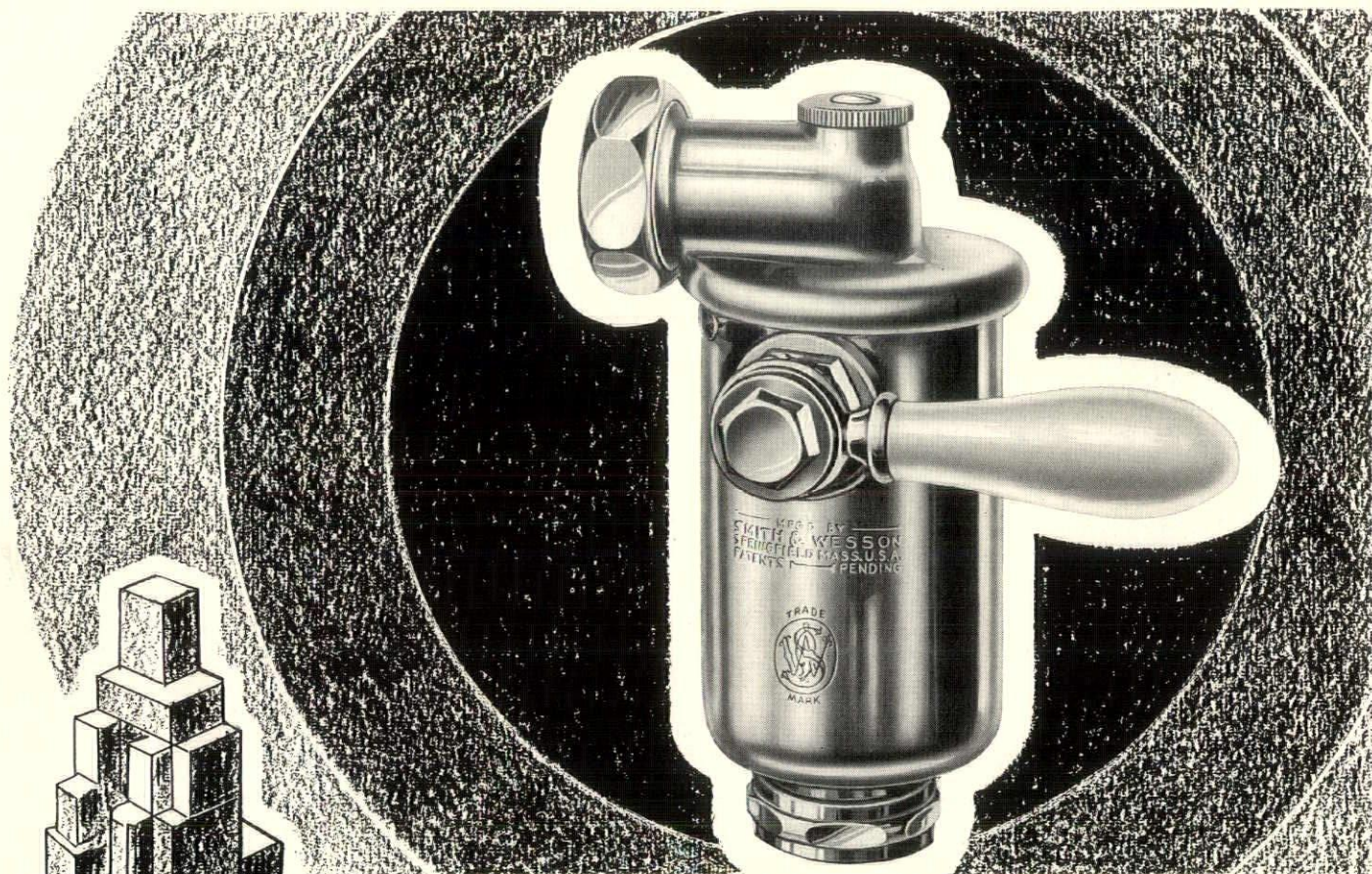
NIROSTA



METAL



"NIROSTA" AND THE INTERLACED TRIANGLES ARE THE TRADE-MARKS FOR HIGH-CHROMIUM NICKEL STEEL ALLOYS PRODUCED UNDER PATENTS OF KRUPP NIROSTA COMPANY, INC.



The **MODERN FEATURES**
of the **Smith & Wesson Flush Valve**
Recommend it for the Modern Building

The design of this valve will interest promoters of such construction as large commercial buildings, hotels, schools, institutions, and factories.

When selecting flush valves, the primary interests of these men are long life and *attention-free* operation. These qualities are assured by the all metal construction and other superior features of Smith & Wesson Flush Valves.

You can recommend these valves for installation with full assurance that *the need for organized servicing is completely eliminated.*

For Further Information Write

SMITH & WESSON

FLUSH VALVE DIVISION

SPRINGFIELD, MASSACHUSETTS



FOUNDED 1876



The Cover

Ville Close of Concarneau, France, one of the most picturesque ports of Brittany, contains within the walls of the town an old house which forms the subject of this month's cover. The water color was done over a Conte crayon drawing on Michallet paper.

John Petrina, the artist, has been honored by the French Government, which in 1929 purchased his "Chapelle sur le Pont, Avignon" for the national collection. He first exhibited at the Museum of the City of San Francisco and later at the palace of Fine Arts in that city. Since then he has been represented at many of the more important museums and exhibitions in this country and abroad.

Mr. Petrina studied at the California School of Fine Arts in San Francisco, at the School of the National Academy and the Art Students League in New York, and in Paris. He has traveled extensively in Spain, Italy and France.

Next Month

PANEL HEATING—As installed in this country for the first time.

ADVERTISING — A suggested plan for the architectural profession, as conceived by the vice-president of a leading advertising agency.

MODERNISM—Richard Bach of the Metropolitan Museum of Art expresses some personal opinions.

BENJAMIN FRANKLIN BETTS, A.I.A., *Editor*
ERNEST EBERHARD, *Managing Editor* HARRY F. CAHILL, *Advertising Manager*
RAY W. SHERMAN, *Editorial Director* EARLE H. MCHUGH, *General Manager*

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Typical Experiences with Oil-Fired HEGGIE-SIMPLEX Jacketed Boilers

75° Day and Night For Only \$120 Per Season

"With a Heggie-Simplex Residence Boiler, my fuel consumption for the past winter has been only 2,000 gallons of fuel oil, which at 6c per gallon cost \$120.00. I am heating an eight-room home and a large double garage to a temperature of 75° day and night."

J. A. Kuyper, Pella, Iowa.

Oil Consumption 20% Under Government Estimate

"The Heggie-Simplex Boiler which was installed in my residence last year is operating very satisfactorily. As this was installed in a new home, I, of course, have no comparative data, but I do know that the oil consumption was more than 20% under the estimated quantity based on government figures for this locality."

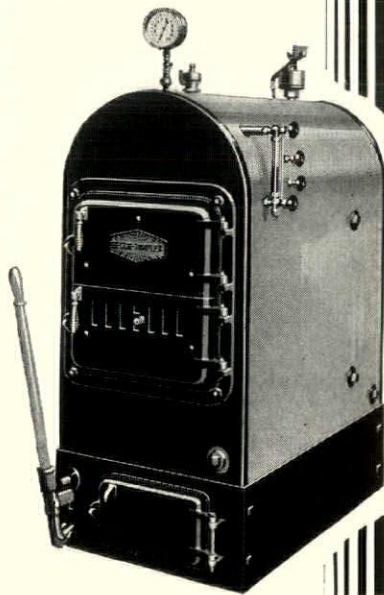
H. B. Finck, Baltimore, Md.

12 Rooms, Baths, Studio and Garage on 3,000 Gallons

"My residence consists of twelve rooms, two baths, two toilet rooms and basement. The garage accommodates two cars and has a three room studio above. In addition to keeping the house, studio and garage at the proper temperature, the Heggie-Simplex Boiler also supplied all of our hot water.

It was very economical to operate. Although the past winter was one of the most severe, only three thousand gallons of oil were used."

Wm. J. Lindstrom,
Architect,
Flossmoor, Ill.



Keeps 11 Rooms Comfortable With 2,000 Gallons

"Our Heggie-Simplex Jacketed Steel Boiler has given splendid results. My residence contains nine rooms, a basement and two bath rooms. The heating plant gave wonderful service, particularly during the severe, cold weather. It provided our hot water as well as heat. It was fired by an oil burner which used only two thousand gallons of oil for the entire season."

A. V. Lawless, Flossmoor, Ill.

850 Ft. of Radiation Kept at 78° for \$135.00

"During the last heating season, with a Heggie-Simplex Boiler, the total cost for oil was \$135.00. I have installed in my house 850 feet of hot water radiation and I consider this consumption very low, particularly so as I have kept the house at all times in the neighborhood of 78°. The Boiler has cost nothing for repairs and has been most satisfactory."

W. H. Gibbs, Glenbrook, Conn.

Cut Fuel Cost 25% With Oil

"During the season of 1928-1929 in my old boiler, we burned eight tons of coal. This winter, the Heggie-Simplex Boiler showed a 25% saving in fuel costs. It is the best investment I ever made in my house. Incidentally, the oil burner manufacturer was very pleased when told that his burner was to be installed under a Heggie-Simplex Boiler."

Frank A. East,
West Roxbury, Mass.



Heggie-Simplex Jacketed Boilers are constantly proving money-saving investments for owners of residences and small buildings. Their much larger combustion chamber gives any fuel—oil, gas, coal or coke—more room to burn. More heating surface is in direct contact with the fire; heat is absorbed faster. Numerous tubular flues, with an exceptionally large area of heating surface, unrestricted circulation and the *jacket's mineral wool lining* assure complete utilization of all heat units.

Of welded steel construction, the Heggie-Simplex Jacketed Boiler is crack-proof and leak-proof—a particularly important safeguard in automatic firing!

For details write Heggie-Simplex Boiler Co., Joliet, Ill.

MEMBER OF THE STEEL HEATING BOILER INSTITUTE

HEGGIE-SIMPLEX

STEEL HEATING BOILERS

What will the Public PAY?

By BENJAMIN F. BETTS, A.I.A.

SIX, eight, ten, twelve per cent—some architects find it difficult to obtain five per cent for their services, others have no difficulty in obtaining fifteen per cent of the cost of the work. While allowance must be made for the nature of the work and the reputation and ability of the architect, it shows that the public will pay in proportion to what it believes to be a fair price for what it obtains. The public is not willing to pay for temperamental, artistic ability that is not accompanied by good business judgment and other practical attainments.

When the American Institute of Architects, twenty-two years ago, adopted the minimum schedule of fees for architectural service it tended to stabilize the fee question. At the same time, as valuable as this schedule has been, it has been a mistake to impress upon the public that the fee authorized by the Institute is six per cent, when as a matter of fact it is a *minimum fee* for general guidance. Every architect knows that in many cases six per cent is an excessive charge for the services rendered while in others it is entirely too little.

Some architects believe that the percentage method of arriving at the proper fee is fundamentally wrong. But whether the basis of the correct charge is a percentage, lump-sum, or cost plus a fixed fee, it is an indisputable fact that the job production cost must first be known if the work is to show a profit. No fair fee can be determined until this fact has been ascertained.

THE question of what is a proper and adequate service charge must consider the size and type of building; the personal qualifications, ability and experience of the architect; the efficiency with which the office is carried on; and the cost of producing the service required by the client. It is possible to demonstrate the value of these to the client. When the public refuses to pay a certain price it is either because the price is too high or because the public does not understand what it receives for the money it spends.

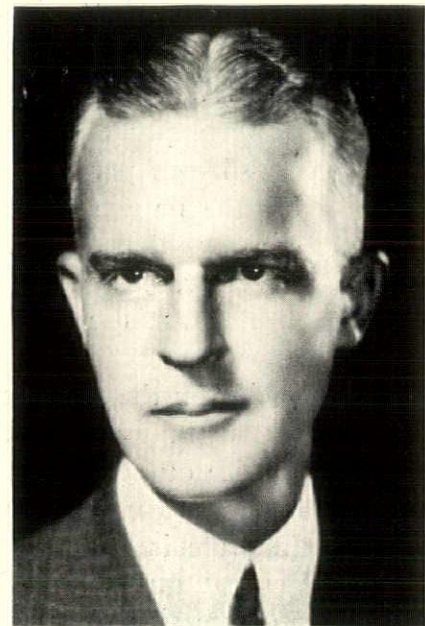
Arguments are often advanced to the effect that architects should receive higher fees than those now current. The public will not pay a higher fee for the sake of increasing an architect's income. The public will pay for what it is confident it will obtain. When the public is convinced that architects are worth their hire, it will pay accordingly. The man-in-the-street must be told of the true value and benefits of architectural service—and architects must know their office costs and render a service of high order. When these steps are accomplished, the question of adequate fees may be intelligently discussed if necessary. It will probably not be necessary.

Can Architects Advertise NATIONALLY?

By ALFRED E. FOUNTAIN, Jr.

Vice president, Lyddon, Hanford & Kimball, Inc.

"JUST what can advertising mean to architects?" That is a question which logically should be answered by an advertising man thoroughly familiar with the building field. Mr. Fountain was selected by THE AMERICAN ARCHITECT as such a man. He is vice president of one of the country's leading advertising agencies and specializes in building material accounts. Before entering the advertising business, he was for twelve years a member of the general contracting firm of Fountain & Choate, New York City.



It has been my experience that before any advertising and sales effort can be a complete success the individual or group of individuals who are to finance it and help make it a success have to:

1. Have a fairly comprehensive idea of what advertising in the generally accepted term means—its powers, its limitations and about how it works.
2. Learn how to think of their product in terms of selling rather than in terms of manufacturing.

And in the case of group or association advertising effort it is absolutely essential that all be willing to accept some sort of common denominator that will be expressive of their various products and that will allow the limitations of type, ink and paper to interpret them.

In the case of association advertising depending on the size and geographic location of the members, it often takes considerable time—sometimes years—to bring about this common understanding that must be so clear and comprehensible that it will remain so over the trying period when the individuals see no results from their advertising save requests for more contributions.

From what I can gather of today's comprehension of advertising by architects, any cooperative national advertising campaign would fall short of its possibilities. Certainly there would be loss and confusion, with the possibility of ultimate failure, if any considerable number of architects went into the project with doubt and reservations. Advertising is born of enthusiasm and is

calculated to spread enthusiasm, and must have the enthusiastic support of all connected with it. But with its parentage of common sense and experience it is of a nature to appeal to the architect of today—once he understands it. So, to my own question, "Can Architects Advertise on a National Scale?" I answer, "Not today." But in the same breath I also want to go emphatically on record as saying that "They can and will—and before very long."

If space permitted I could give a number of interesting instances of how cooperative advertising efforts have failed through lack of comprehension on the part of their contributors as to what it was all about. Any architect who has attempted to sell a new idea to a group of clients knows the problems and pitfalls. Right now, in New York City, an architect is trying to promote an all glass building—to my mind a perfectly practical and feasible idea. But his clients have not grasped the full significance of the idea yet. They see problems and uncertainties and all sorts of imaginary dangers. The contributing factors—financial interests, manufacturers, rental agents—are also doubtful because they don't fully comprehend this new thing. So they hesitate and think—and learn. Eventually it will be built but not until all concerned are a little more familiar with the idea.

FROM many sources I hear of the differences of opinion that exist among architects as to whether or not advertising is for them. Apparently some have already grasped its significance, some are trying to; others have closed their minds to it. From my experience, I smile at this seemingly hopeless and chaotic state of affairs.



ADVERTISING IS SELLING THESE PEOPLE *everything from cosmetics to quality bearings in their automobiles. Shall that power be used to sell the idea of employing an architect?*

There can be but one result. A little time, a little better comprehension of the force we call advertising—a little experience here—a little knowledge there, and there will be an architectural advertising campaign that will be a success. It's got to be so, for every architect I have heard from recognizes the fact that something must be done to save architecture—to keep it from losing its identity, if indeed it has not already lost it.

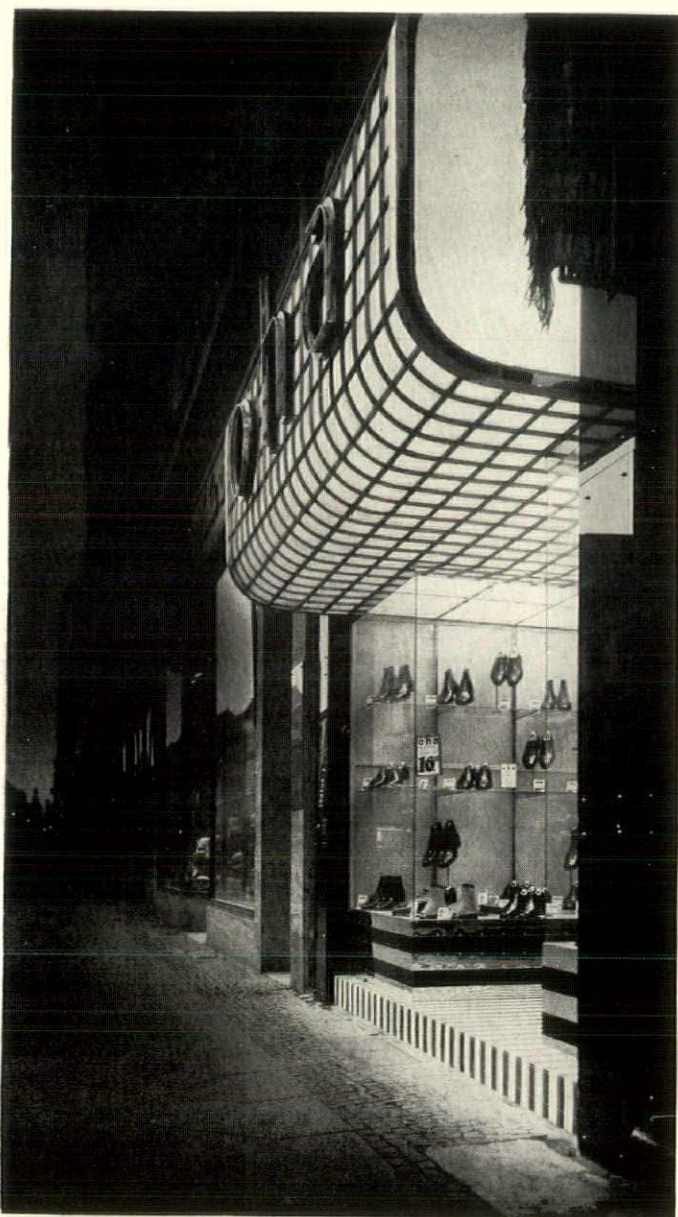
In a sense, cooperative architectural advertising is already here. Several chapters of the A. I. A. have already started various types of efforts and the Tennessee Chapter has retained an advertising agency of proven ability to act as council. The unfortunate thing about these disjointed and separate efforts is that without a unified concept of advertising on the part of all architects they will always remain disjointed and separate. As such they certainly lose in cumulative effect, and might even lead to misunderstanding and confusion on the part of both architects and public. Imagine, if you will, being commissioned to erect a great building and that, without an office or plan, you travel over the country ordering various manufacturers to produce material that you hope will fit together when it reaches the job. If all of the manufacturers with whom you placed orders got together they might possibly be able to get out material that would fit together. But I would not give much for the building until I saw it finished. Nor would I give much right now for the final structure that all the local chapters are attempting to build without a general plan that each can understand. We may get a beautiful tower—we may get a buzzing, thriving factory

—or, perhaps, we may get a great big barn—empty.

Like most people unfamiliar with advertising, architects are apt to see in it the panacea for all of their ills. But, as with any corrective medicine, you have to know how to administer it—know the dosage, the timing, the technique. Someone will tell you that there is nothing exact about advertising, which in the main will be true. You can't be exact in a business that has to keep pace with the changes in habits and modes of today's human life. But, in certain fundamentals, there is a technique growing up in advertising that through years of trial is proving successful.

Advertising does not *always* pay. But its failures can nearly always be traced to poor planning. I know of cases where the advertising that the public saw was all that you could ask of advertising, and the public acted exactly as it was expected to act. Notwithstanding, the advertising was a failure because the product or its distribution fell down. Advertising in the modern sense is the coordinated effort of many factors, and unless all act together the advertising fails. Moulding public opinion on a subject as big and hard to define as architectural practice is apt to be a dangerous thing unless worked out to a carefully conceived plan and directed at a very clear cut objective. Quite recently I have seen advertising clothed in the garb of publicity in the form of articles intended to advance the cause of architects, published in magazines of great and influential circulation, that came very near to picturing architecture as the practice of drawing petty details. This is a dangerous thing. It is born in ignorance, and undoubtedly is just the reverse of the

(Continued on page 102)



By ARTHUR H. GILKISON

"If a man makes a better mouse trap than his neighbor, . . . the world will make a beaten path to his door." The shoe shop Oha in Düsseldorf may not be in quite the same category as a mouse trap but Herr Bernhard Pfau, the architect, has incorporated so many novel ideas in design, materials and lighting in this little shop, that if comment in foreign professional journals is any indication, there is already somewhat of a pathway to Mr. Pfau's doorstep.

The problem was a men's shoe shop on a particularly narrow lot, the over all width of the façade being only 11 feet 7 inches, while the interior grows considerably narrower, being only 8 feet between piers and wall. Facility of movement in this narrow area is essential as is also good show window space and proper advertising display. The architect solved this problem by placing the customers' seats on a raised platform having adjustable foot or shoe rests which are lowered into the platform out of the way when not in use. This raised plat-

A SHOESTORE 8 FEET WIDE

at
Düsseldorf, Germany

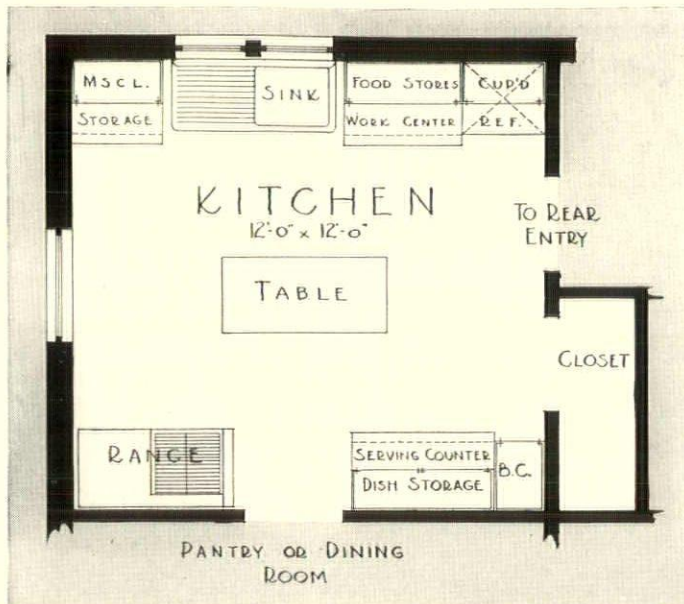
Bernhard Pfau, Architect

DISAPPEARING FOOT RESTS on a raised customers' platform solved the problem of making a narrow shoe store practical. The salesmen have sufficient room in which conveniently to move about; customers are assured comfort and a certain amount of privacy

form enables the salesman to fit the customer without using the customary stool, since the salesman does not sit down, gives him greater flexibility of movement and saves considerable space. Between the seats are display cases with pull out mirror arranged at the bottom, which may be revolved to the desired angle.

The façade is composed entirely of glass and rustless steel. The piers and lintel are faced with black opaque glass, while the glass of the show windows, set so there is no exposed metal moulding at the jambs, sill or head, and no frame at the corners, has a base of intermittent stripes of steel and autolack. The upper part of the façade is composed of panels of matt glass in a frame of rustless steel upon which is superimposed the firm's name. The glass panelling projects beyond the building line and continues in a curve to form the ceiling of the vestibule. This is brilliantly lighted from within by reflector lamps which also light the show windows through their matt glass ceiling. Thus (Continued on page 82)





A MANY EXTRA STEPS are demanded of the woman who works in this kitchen. The walls are so cut up by doors that space for desired additional equipment is unobtainable

TO many architects the kitchen represents only the problem of finding space for it. In reality it is a place where he may show his knowledge of how a house is operated and his ability to solve a practical problem.

No kitchen should be so large as to force the user to take unnecessary steps in the preparation of a meal or in the cleaning up afterwards. Neither should it be so full of openings as to preclude the possibility of obtaining sufficient storage, dresser or counter area. In kitchen A it can readily be seen that a woman would be forced to take many more steps in the performance of her usual tasks than she would have to take in kitchen C, yet there is no compensating increase of equipment. Kitchen D is not an unusual type. The dining-room door, the closet door, the cellar door and the back door—are all reasons why this kitchen can never be efficient—

Less area . . .
without loss
of

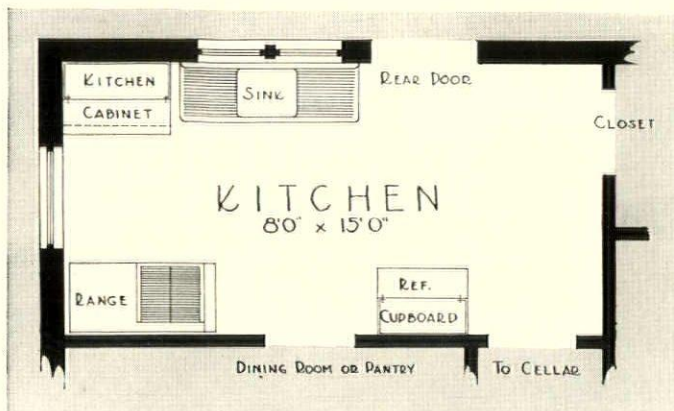
KITCHEN EFFICIENCY

By David M. Kendall

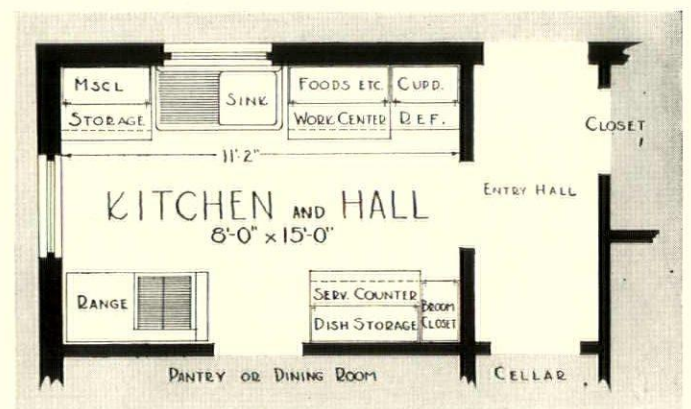
there is a dearth of storage space and a never-ending problem of where to put things.

The solution of many of these problems is simple. In kitchen E one finds the solution of the problem in kitchen D. By putting all doors except those leading to the dining-room or pantry in a hall taken from the kitchen area, it has been possible to increase the available wall space and provide a truly efficient kitchen.

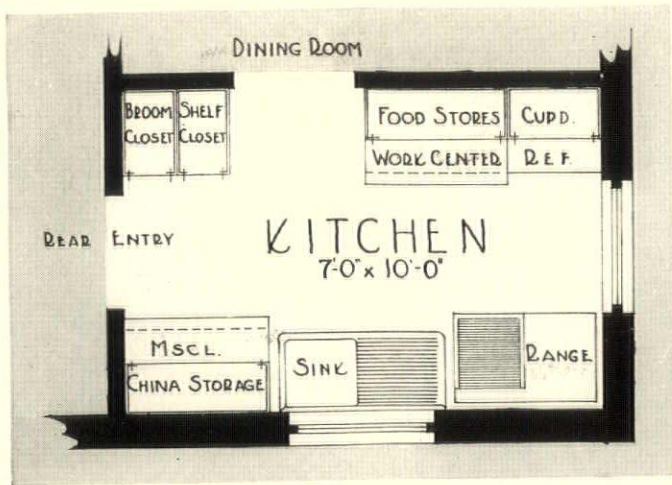
There are a few prime considerations that go to make or unmake a kitchen. It should have a definite work center, a place where foods and utensils used in the preparation of a meal can be assembled with the greatest ease. This work center generally takes the shape of a kitchen cabinet equipped with its various drawers for the storage of silver, cutlery, bread and linens. Above the porcelain counter are shelves for dry groceries, spices, condiments and the sugar and flour bins. It should be possible to locate this cabinet so that it is



D TOO MANY DOORS and too much waste space. Working units are scattered. Shelf area 27 sq. ft.



E SHELF AREA of plan D increased to 52½ sq. ft. and convenience of kitchen improved by use of entry hall



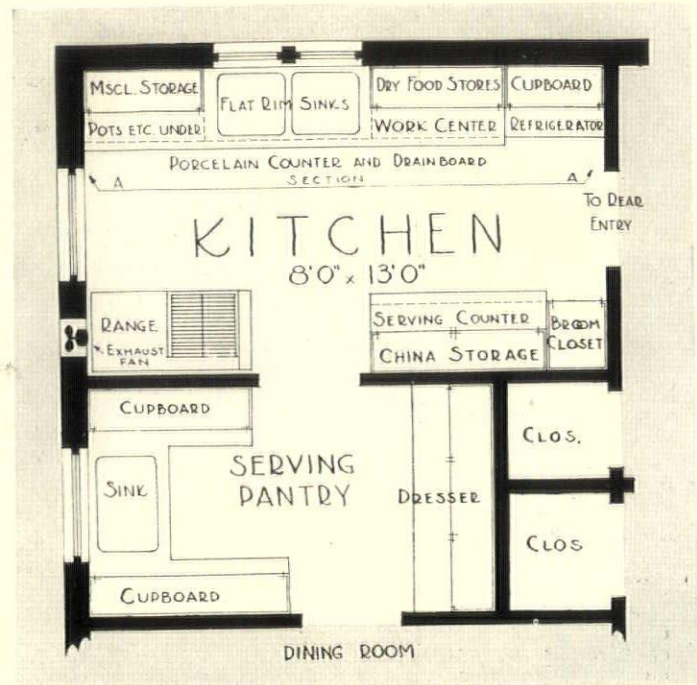
B SMALLEST PRACTICABLE kitchen. It has a floor area of 70 sq. ft. and a shelf area of 40 sq. ft. Equipment is placed for convenience

only one or two steps away from the sink, range and refrigerator.

At this work center the greater portion of all the food preparation takes place. Often this most essential unit of the good kitchen is found incorporated as a part of an assembly of kitchen units, built all along one wall, as in Section A-A of kitchen C. Here it is located between sink and refrigerator, and is only one or two steps from the range. Deliveries are made to this center and from here find their respective storage space. Foods requiring refrigeration are put away without making a move; the balance of the foods are stored above the counter to which they were delivered.

In this assembly of equipment it will be found that the sink is made a real part of the picture. It happens to be the flat rim type supported by the work counter drain board. This counter may be porcelain, tile, or any of the many sanitary surfaces available for such purposes. The front edge of this counter should project at least 3" beyond the face of the base sections in order to provide ample toe room. The depth of the counter should be not less than 24" to provide an adequate working surface.

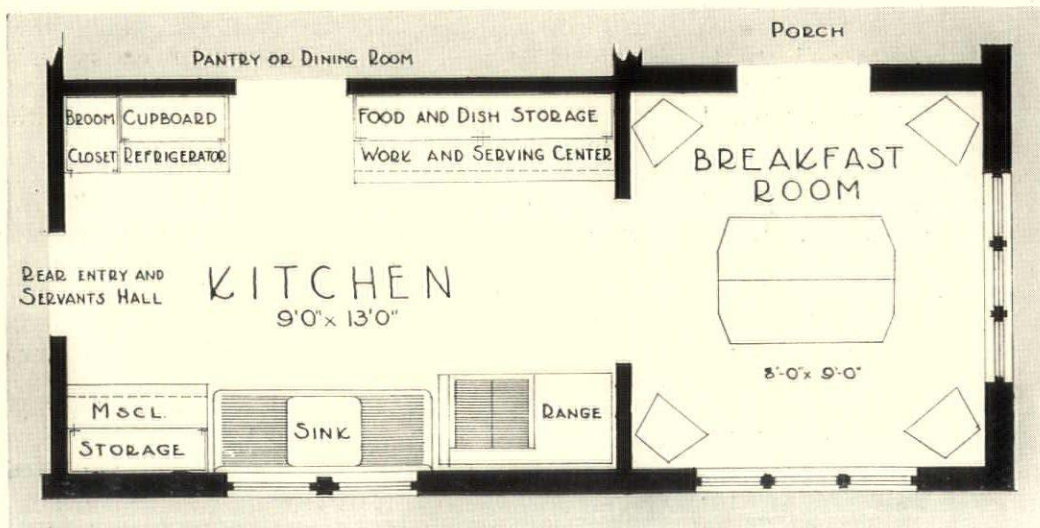
The range in the corner should be of sufficient size to



C MORE CONVENIENT than the kitchen shown in A, although both kitchen and serving pantry together have the same area as A. Floor area is 104 sq. ft. and shelf area 67 sq. ft.

enable the housekeeper to cook the meal with dispatch. Above the range is indicated an exhaust fan which not only exhausts foul air but draws in, from the outside, a supply of pure, fresh air, if desired. The service cabinet may or may not house the china. In case a pantry is not built, and in these days of strict economy of building most often it is not, this cabinet must house an increased china service, for present day dining-rooms do not often sport the built-in china closets of other days. However that may be, it is the logical center from which to serve to and from the dining-room.

In an out-of-the-way corner is located the broom closet and, if of sufficient capacity, it will house extra table leaves along with the broom and brushes. Whenever possible, in addition to the broom closet in the kitchen, a rear hall closet (Continued on page 112)



F SATISFACTORY type of breakfast room or dining alcove. Working units in the kitchen are concentrated in a small area

SOFT AS A 6 B pencil seems the roof of this old cottage at Coombe Cellars on the Teign River in southern Devon



THE WAY THEY ROOF WITH THATCH IN Lovely South Devon

by ALBERT M. STERLING



MY conception of Heaven is vague; it surely does not present the Biblical "pearly gates and streets of gold." But if it may be as fair as Devon, I shall surely do my best to be among the elect.

Of all the counties of England, none is quite so lovely as Devon. Lying between the Duchy of Cornwall to the west, Dorset and Somerset to the east, Devonshire stretches from the English Channel on the south to the Bristol Channel on the north, a diversified, undulating country, the central portion only rising in bleak or crowned hills—the Dartmoor of *Lorna Doone*.

Devon lanes and Devon roads flow between ivy laden walls, and ivy covers the forest floors, climbs the boles and limbs of trees, and pale, green moss festoons the twigs and branches so that they are never bare. There

is no straight line here—everywhere is a poetry of gentle, seductive, curving hills, and mossy, leafy ways.

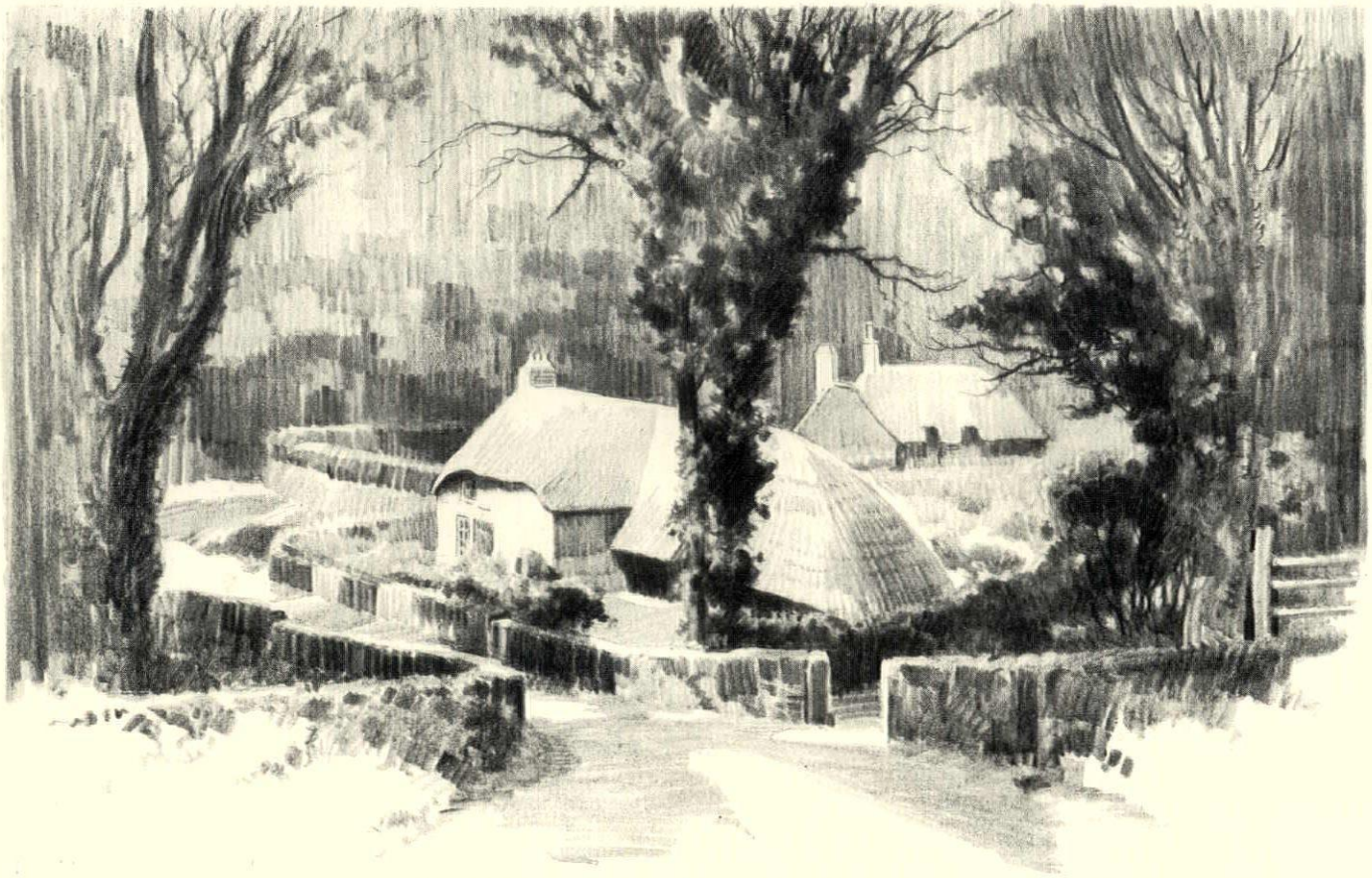
Everywhere, the primrose decks the hedge-rows, laburnum drops its yellow bloom over encompassing garden walls, roses clamber to the roofs of houses and cottages, and a languorous restfulness repels ambition and compels content:

"Pride and Ambition here

Only in far-fetch'd Metaphors appear."

And of all the features of this charming landscape, there is none which so completely satisfies as its thatched cottages—alone or in groups—tiny villages, all roofed with thatch which assumes such a protective covering that they sometimes look like warm beds under downy coverlets. It is impossible to consider these dwellings apart from their surroundings. The earth itself has crept up to form habitations for its creatures.

Thatched cottages are found throughout Great Britain and Ireland, but in no part is there such a harmony as here. Built entirely of (Continued on page 88)

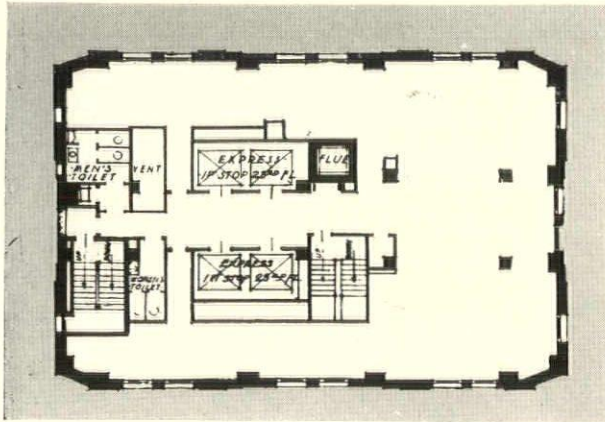


SOME FAIRY MIGHT HAVE BUILT a throne of dew drops to lord it over the exquisite setting of Buckland-in-the-woods, on the south border of Dartmoor



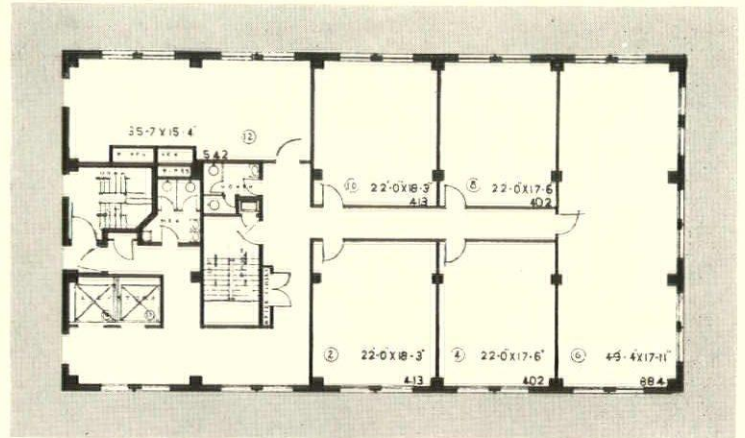
AUTOMOBILES ARE UNTHINKABLE in this most charming and famous of all Devon hamlets, quaintly known as Cockington Forge and located near Torquay

Tower Floor Plans of New York Skyscrapers Compared



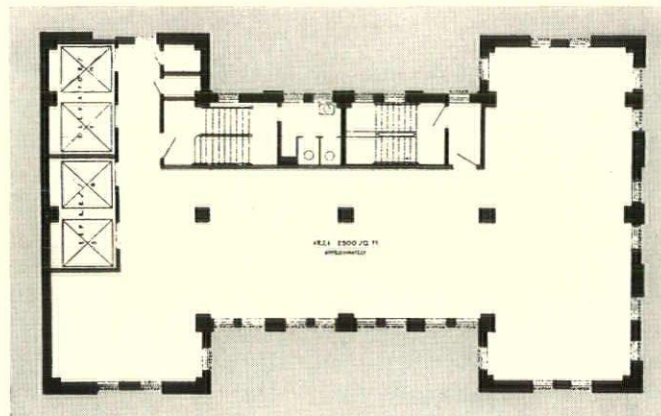
TRANSPORTATION

Center service reduces the rental area to two narrow strips. 34th to 42nd floors



EMPIRE TRUST

Office unit depth of twenty-two feet is good for a tower plan. Typical tower plan



LEFCOURT - COLONIAL

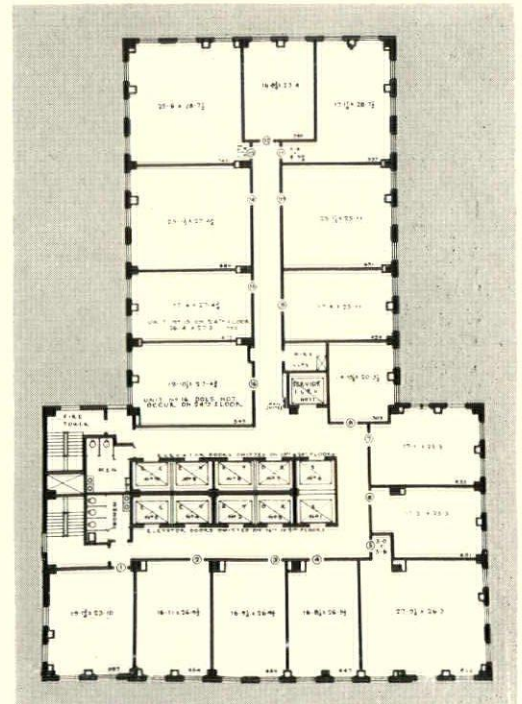
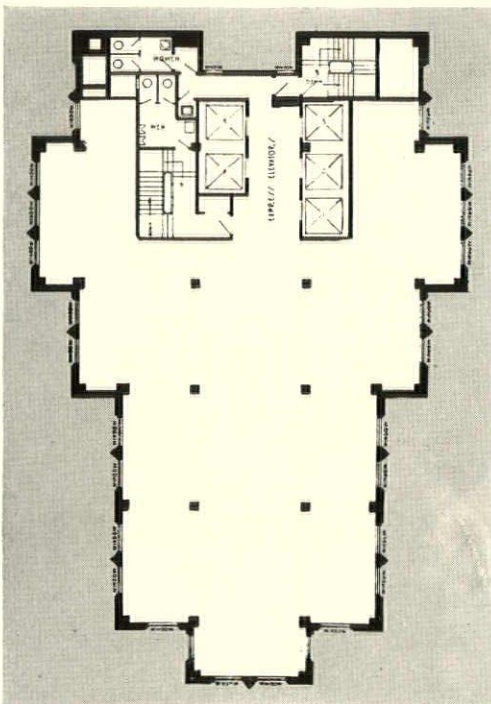
Columns located to give clear space for rental as entire floor or for subdivided offices. 22nd to 41st floors

LEFCOURT - NATIONAL

At left. End concentration of services makes easy access from public corridor. 23rd to 35th floors

DAILY NEWS

At right. Windows are equally spaced so partitions may be located behind any pier. 16th to 24th floors



By

WALTER H. KILHAM, JR.

of the office of Raymond Hood, Godley and Fovilloux

Of the many results of the Zoning Law of New York, none has made a greater appeal to the imagination than the appearance of the ever higher towers above the roofs of the older city. While the external effects may satisfy the eye, it is worth going beyond the surface to discover what developments have been taking place inside these structures.

In gathering material for a thesis on the Zoning Law of New York for Harvard University, a collection was made of the plans of various New York buildings. Many features of the plans of these buildings are worth study to the planner, but the towers have a particular interest. Further, perhaps, a comparison of a few of them may be of service to those who are designing the towers of the future.

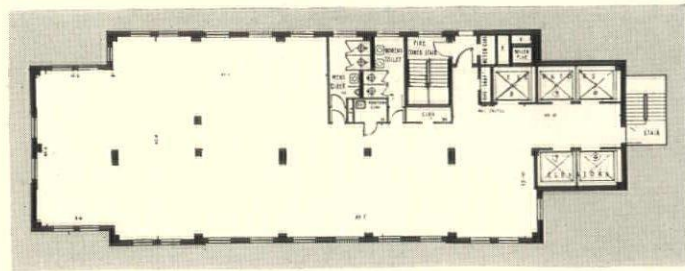
Briefly, from the legal standpoint, a tower in New York may be built to an unlimited height, the area not to exceed 25% of the area of the lot. There are, however, certain limitations relative to the nearness of the tower to the street.

Of the planning problems the greatest, perhaps, is the relation between the plan and the system of elevators. With two, three, and sometimes four series of elevators, comprising the groups from the local to the high rise banks, the disposition of the tower is not a simple matter. The plan becomes three dimensional, for one must think not only of the tower floor itself, but also of the first floor, the loading and control point of all cars, as well as an efficient service for the intermediate floors.

While the tower owes its development in large part to the elevator, at the same time the elevator is the main factor in limiting the economic height of a tower. Where maximum car speed is limited, as in New York, an elevator in the tower serves a smaller number of people, over a given period of time, than one of the low rise elevators because of the long travel it makes from the ground to the tower. In other words, it will take a greater number of cars to maintain the desired interval between cars serving a certain number of people in a tower as compared with the number required for the same number of people on (Continued on page 76)

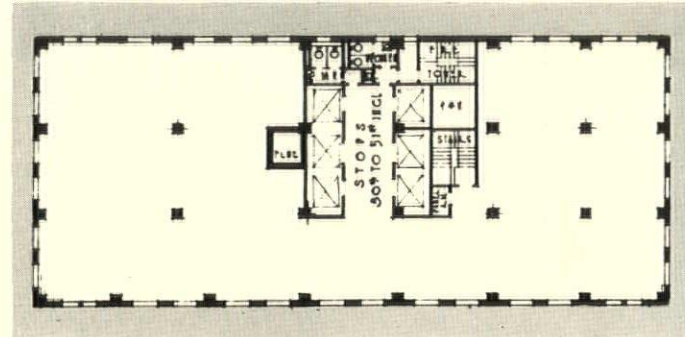
To solve the tower problem consider

- tower with respect to first floor
- elevator banks and rentable area lost by these and other services
- toilets and number required
- columns to secure efficient plan of maximum rental value



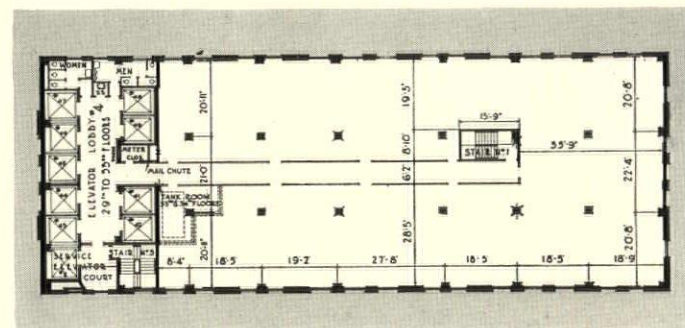
FRENCH BUILDING

Services arranged at one end to be accessible from central corridor in case of subdivision. 29th to 34th floors



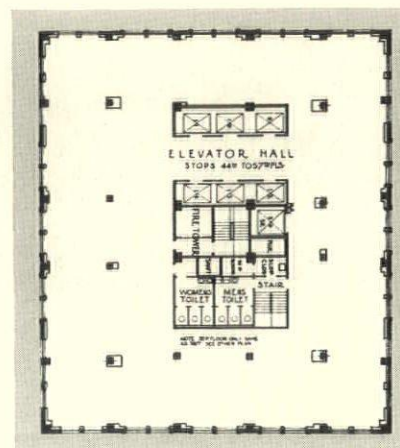
CHANIN BUILDING

Suitable for general subdivision. Service unit compactly planned but cuts floor area in half. 32nd to 51st floors



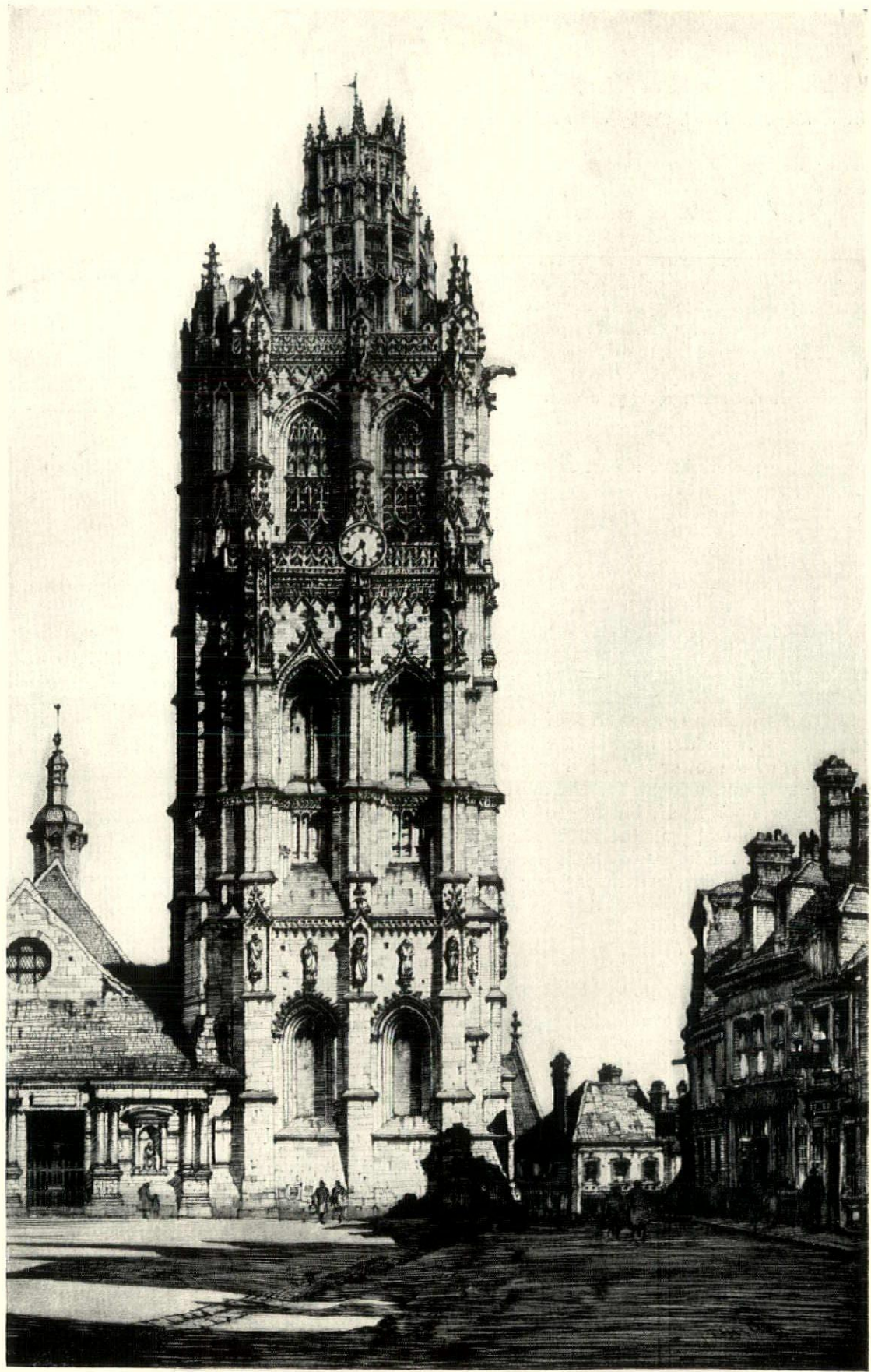
LINCOLN BUILDING

End service facilitates subdivision. Tower width permits standard office units on either side of corridor. 23rd to 47th floors



CHRYSLER

Maximum use of outside window afforded by service in center. Space is shallow if subdivided. 51st to 56th floors



"VERNEUIL"

TWO DRYPOINTS BY

THE AMERICAN ARCHITECT



"MARKET DAY IN LILLE BONNE"

SAMUEL CHAMBERLAIN

FOR OCTOBER 1930

What Good Are



by

HAROLD R. SLEEPER

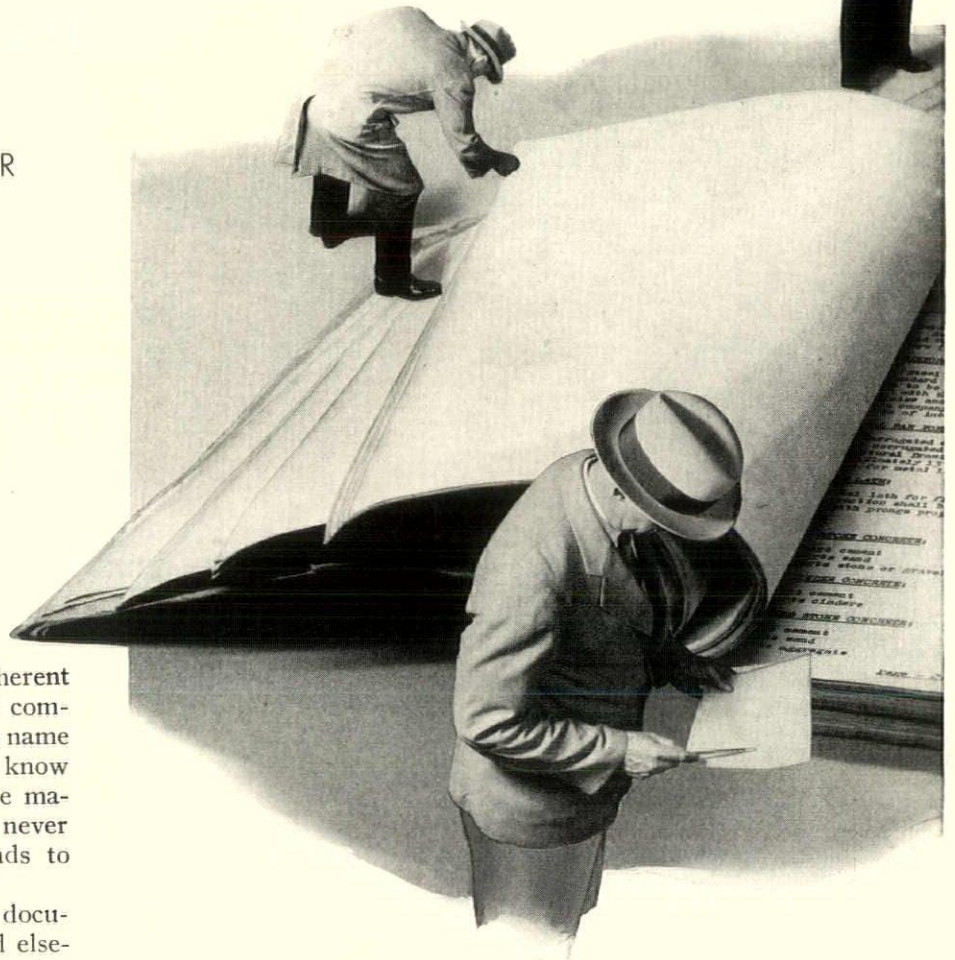
*of the architectural office of
Frederick L. Ackerman,
New York.*

SPECIFICATION copy is a result of so many diverse selections, opinions and decisions that it is never attributable to any one source or person. To attempt a clarification of its make-up necessarily brings to light the many inherent weaknesses in our present system of compilation. A specification may have the name of one architect on it, but we all know that he borrowed the majority of the material therein, that he never knew nor never will know everything that it pretends to formulate and dictate.

Mystery usually surrounds this document both in the architect's office and elsewhere. Its printed cover, stiffly housing page after page of nearly incomprehensible words, seldom leads the uninitiated to attempt an understanding. This book is resented by the draftsmen who struggle to find things of help therein, usually with little success. The trades resent it even more, as the architect has the habit of falling back on some obscure phrase or some weasel clause to uphold his viewpoint when a conflict arises. To the laymen this work is superhuman and they wonder how anyone can know enough to make such a compilation.

It would seem that such a volume might only be compiled by a colossus of knowledge and comprehension. To offset any such opinion one has only to study where and how the usual specification is written. The mystery vanishes and the writer appears a meek human striving to get much done in a short time with often little cooperation from others in his busy office. To get it out is his main idea, for bids must be secured.

However, if such a specification were perfect and if the writer knew all that the layman implied, then this layman's judgment would be justified. For these writers to have a thorough knowledge of the entire

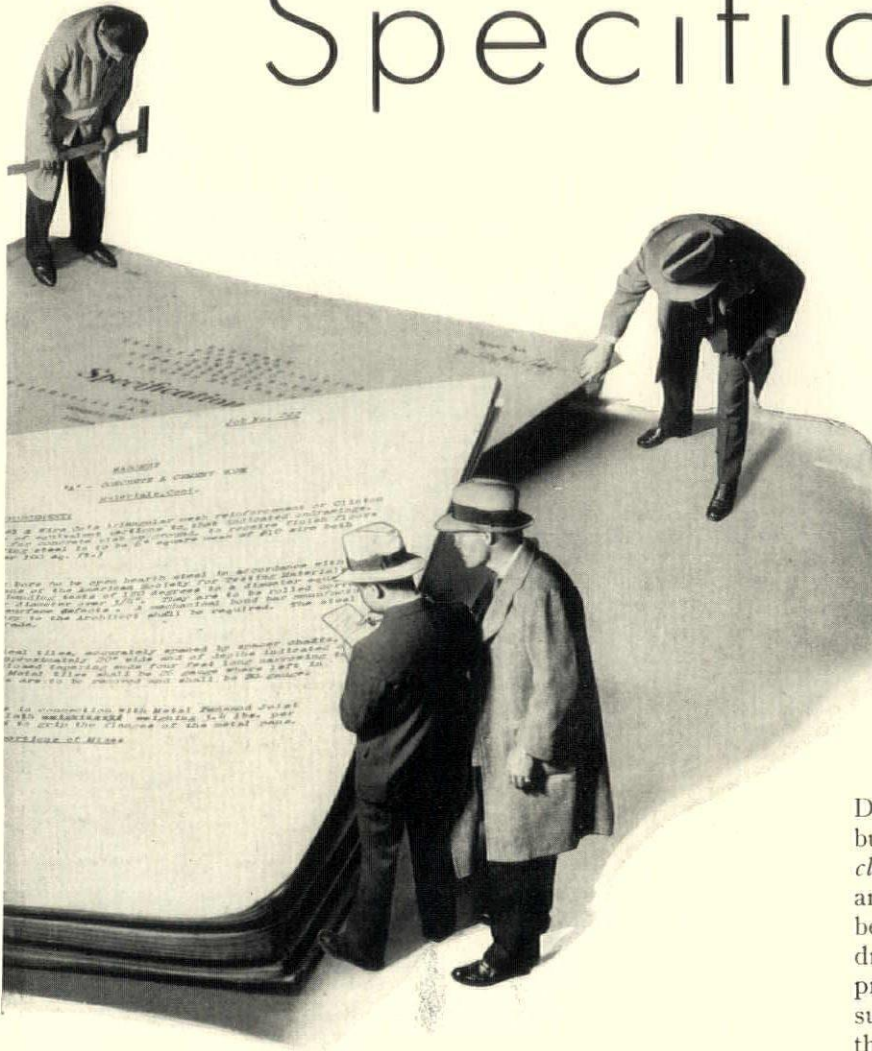


... if they are not

building field with its rapidly changing and expanding growth, would require the supplementing of their education with apprenticeships in all the trades, experience in testing and experimental laboratories, study of business, law, building and labor laws. Besides, the specification writer would need actual experience in a builder's office as estimator, expeditor and superintendent. If a man could go through this and still retain the architect's viewpoint he might emerge as the long hoped for perfect specification writer.

Well then, how do we manage to do such acceptable work with such woefully poor training? The answer is that much of our work is not well done. We don't know how often poor specifications have been bolstered by a good contractor or good subcontractors, nor how often the owner unknowingly pays for this man's errors, ignorance or poor judgment. We see only glaring mistakes such as a poor use of material or colors, faulty workmanship or such errors in judgment as are indicated

Specifications



Will they
B U I L D
what you
ORDERED?

checked in the office as are the drawings. Few offices insist on another person checking through a specification. Drawings are open to inspection by anyone, but the half finished specification remains a *closed book*. When the building is finished and the scaffold comes down, surprises may be traced to the specification rather than the drawings. Drawings are visualized but not properly correlated to the specification in such visualization. Except in a few offices the ensemble remains a secret until the final moment.

Many architects realize their deficiency in this regard and compensate for it by sticking to established precedent. We may term this the *Copy Spec.* and it is responsible for seventy-five per cent of most specifications. The re-use of old specifications by scratching out and inserting new words or by copying stock card specifications used on every

job is common but fundamentally wrong for good work. Standards as developed by testing organizations must, of course, be copied but they are really a small part of the specification.

MATERIALS and construction methods are now changing so rapidly that such practice leads to absurd practices and mistakes. A large part of such specifications must be entirely rewritten for every new job if the owner is to get the best available results both architecturally and financially. Nothing is static in the industry and specification writers must acknowledge it in their mode of specification writing.

We might term specifications prepared by that method *second-hand* specifications and they are sure to be full of errors, poor methods and poor materials. Hand-me-downs can't fit the second owner as they did the first and when they have been passed along six or eight times even errors in English creep (Continued on page 96)

understood?

by such things as too few elevators or too little hot water.

The man who does manage to write good specifications is the one who has acquired the knack of questioning those who do know the various trades, laws and materials, and piecing this information together for others to use. It is by instinct rather than knowledge that he can differentiate the good from the bad, by instinct he must accept what one man affirms and another denies. Daily he is faced with conflicting opinions; sometimes both opinions are wrong. What can he accept? What can he take for granted? Little or nothing, is the answer. Lacking the necessary technical education, he must rely to a large extent on common sense.

Daily we find mute evidence that many specification writers have failed to observe this first and last rule. Faults, failures and absurd work are apparent everywhere.

To add to this man's handicap we must consider that this phase of the architect's work is not as closely



MODELS
ON
THE SITE

WINGS? *A model of the building with wings was stripped into a photograph of the site. This model was twelve stories high*

NO WINGS? *The wings were removed from the model and a new photograph made. This was stripped into a picture of the site. This model was ten stories high*

WINGS

OR NO WINGS?



H O W M A N Y S T O R I E S ?

Models Make Decision Easy

By LEROY GRUMBINE

A NEW development in model-making that adds considerably to their flexibility is the making of removable sections. It then becomes possible to quickly change the model, making it easy to put on wings and take them off, and to add or subtract stories.

This procedure was followed in the model of the building designed by Morgan, Walls and Clements, architects, for the Domingues-Wilshire Company to be erected on Wilshire Boulevard, Los Angeles, Cal. The model was built to the scale of three thirty-seconds of an inch to the foot.

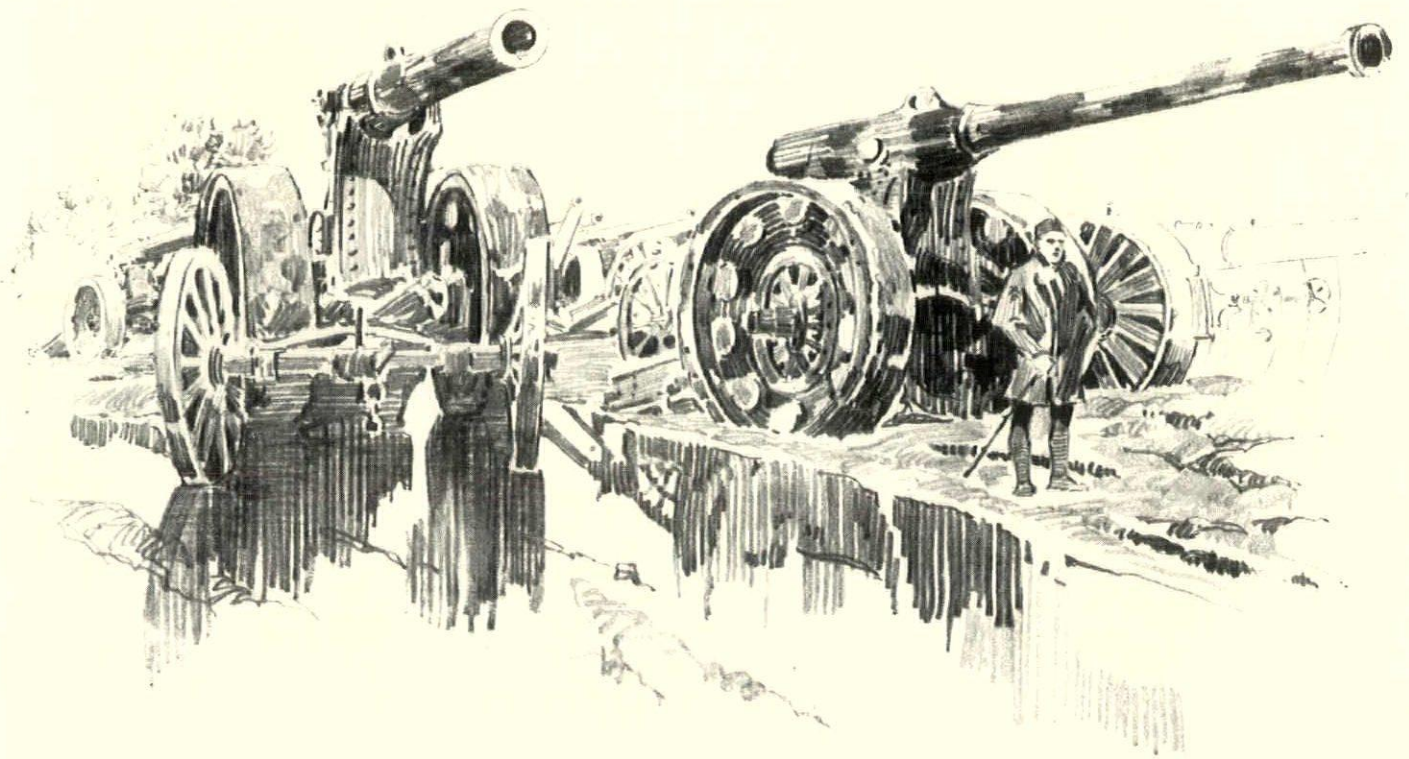
Since several schemes of varying sizes were being considered and since the expense of paying for several separate models could be saved if a model with removable sections were used, such a model was constructed of cardboard and celluloid in ten sections with removable floors and interchangeable wings. These sections were so arranged as to make it easy to assemble them in various ways to present the different arrangements under consideration. Thus, as various arrangements were being discussed, the model could be changed to visualize the size of the design and decisions made accordingly. This arrangement made several models and additional sketches unnecessary, and visualized the architect's thought for the client.

After the main schemes were decided upon, several

pictures were taken of the site. Then photographs were made of the model from the same angles and to the same scale as the photographs of the site. The pictures were assembled in a composite photograph so that the architects and owners could see exactly how the proposed building would appear on the actual site. Guesswork was unnecessary; everything was there.

Models have a quality of definiteness in expressing a concrete expression of the structure and a clear conception of scale and space provisions. They offer an uncompromising method of studying architectural design. Being an actual expression in three dimensions, they can be studied from any point of view. They reveal conditions not readily discernible from drawings and their very nature demands that all details receive equal attention and study. By an accurate representation of color and materials, a model provides a most satisfactory manner of studying the effects of those colors and materials in combination. Furthermore, the true relation of the structure to its site and environs can be shown by a composite photograph of the model and the site.

Details can be studied in scale and relief, night lighting experimented with, harmony of design checked so that the owner knows what he is to get and can express his opinion of the architect's conception before any material expense has been contracted for.



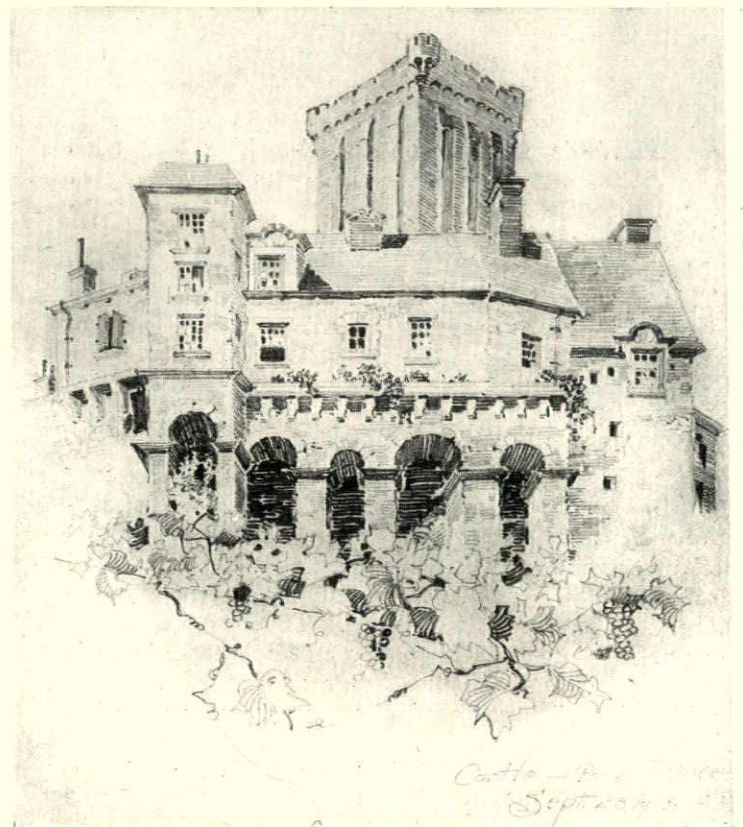
BIG GUNS, mud, and water—St. Sulpice, 1919

"OVER THERE"

Sergeant C... "King Cognac"
St. Sulpice, Nov. 23, 1918

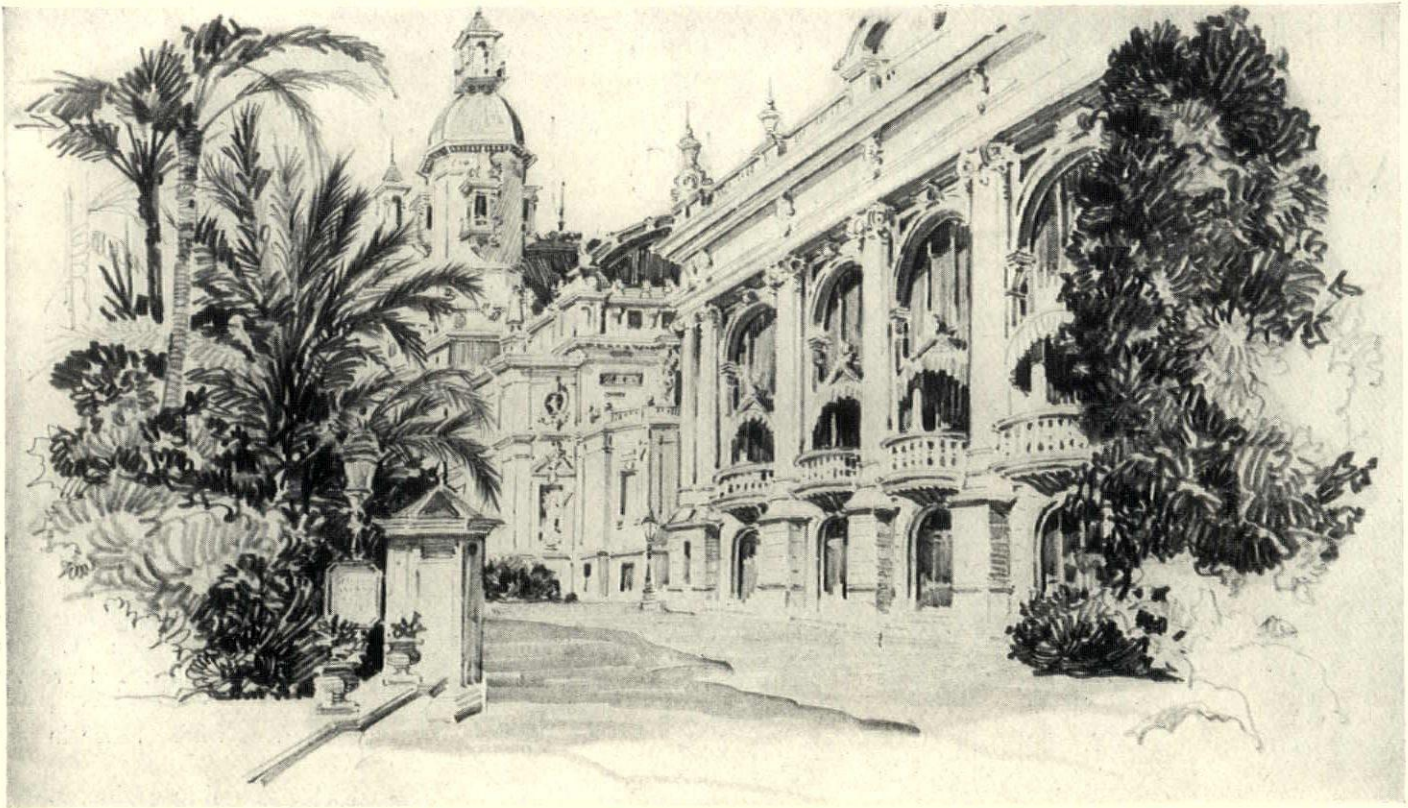


MANY architects who were "over there" found time to make quick sketches of picturesque and dramatic scenes and instances. Of value as records of an unusual experience, they are often equally interesting in technique and subject. The editors of THE AMERICAN ARCHITECT would like to receive more drawings of this kind to be published from time to time



Castle...
Sept 20, 1918

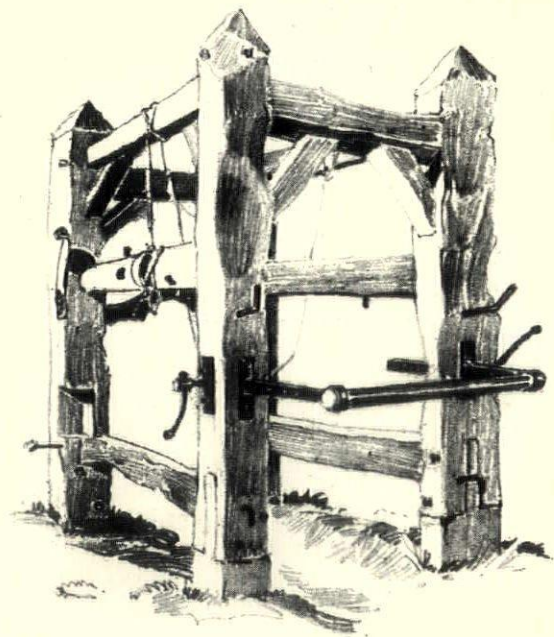
Wartime sketches from a five by eight overseas sketch



ON LEAVE *there was a chance to see something of Monte Carlo, too*



FARM BUILDINGS, *rambling, informal compositions, varied in mass and texture, found throughout France, offered endless opportunities for pad and pencil*



YOU WOULD NEVER GUESS *what it is if you have never seen one. To relieve the suspense, it is a rigging of the past quarter century used to shoe oxen. The sketch was made at Izon, France, on New Year's day, 1919*

book by Klir Alfred Beck, Sergeant 312 Engineers, 87th Division

THEY RATE SHIPS

why not Rate Buildings?

By CLYDE A. MANN

Director, Certified Building Registry

A NON-PROFIT organization has been formed to rate buildings in the same way that ships are rated—and for the same purposes. Its extension is advocated by many leading architects, representatives of the United States Bureau of Standards, of the National Association of Real Estate Boards, of the United States Chamber of Commerce, of the United States League of Building and Loan Associations, and of many producers of building materials.

The widespread use of such rating would mean:

- 1. Good construction would enjoy a higher loan value than poor construction.*
- 2. Investors in mortgage bonds would know that their investments are safeguarded by a "fortified mortgage."*

JUST ahead, propelled by the power of cheap money seeking investment, looms a new tidal wave of speculative building. Recalling the type of building that resulted from a similar wave that swept the country not so long ago, one is prompted to pause and consider whether or not something can be done to turn this construction into a channel of better quality. Viewing the situation in other fields of building one is impressed by the results that have been achieved in the field of naval architecture through the agency of Lloyd's Register of Shipping. What has been accomplished in the shipping world can be duplicated in the building world through a similar agency. As a starting point toward this end such an organization, known as the Certified Building Registry, has come into existence.

Lloyd's Register of Shipping is a service of inspection and rating of vessels that is entirely optional with own-

ers; no Government demand is in back of it. This registry has been in existence for more than one hundred years. Fifty years ago an authority commented upon its effect in these words:

"When I look back to the time (i.e. a quarter century previous) and compare the quality of ships then launched to those of the present day, it is impossible to question the great value of the services this institution (Lloyd's Register) has rendered to the country. . . . Here we have another instance of the valuable work done in this country without Government aid or interference in any shape or form."

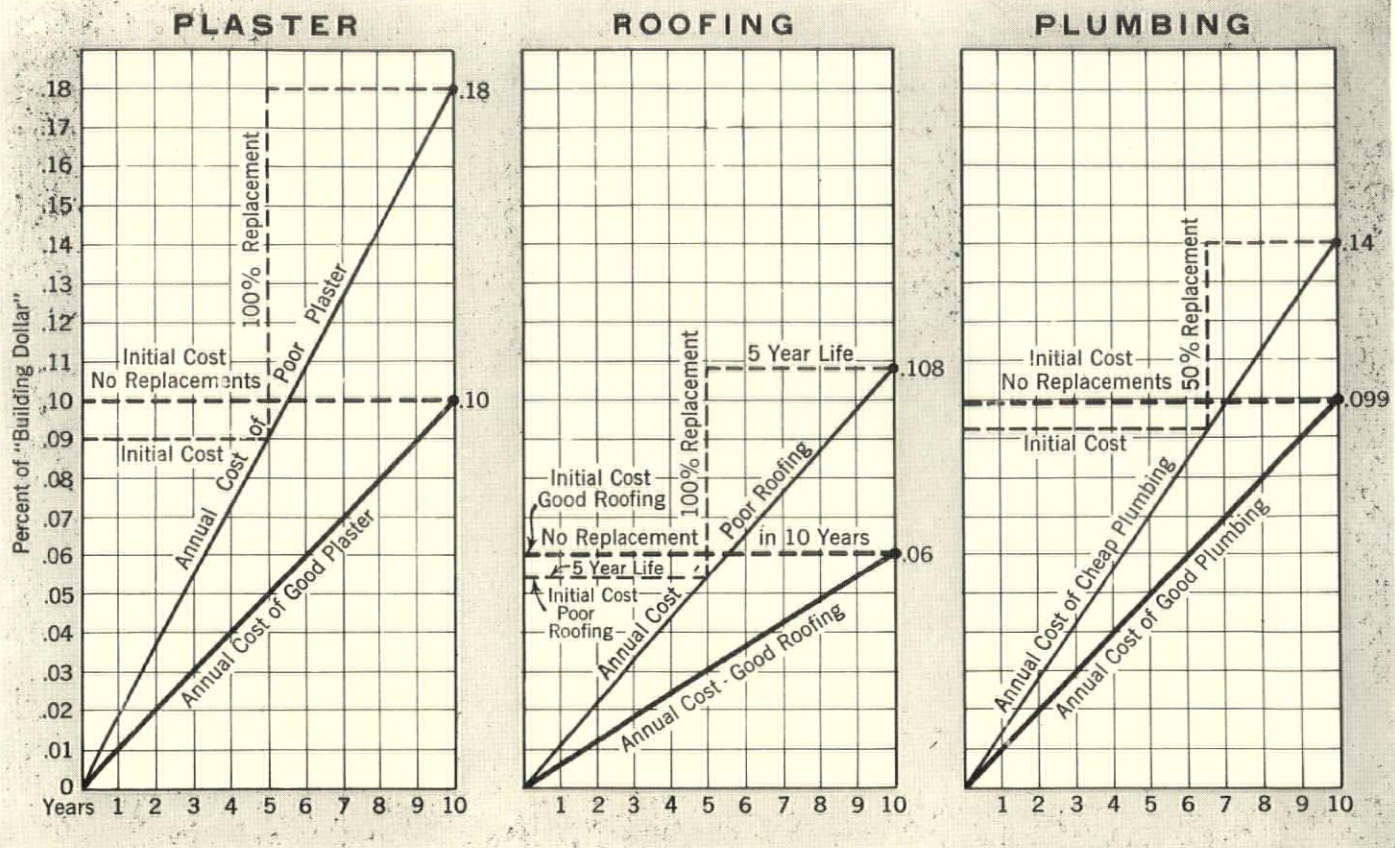
Today the case is rare where any ship of importance is not rated by either Lloyd's Register of Shipping or the American Bureau of Shipping. Standardization of quality in the shipping world has proven of great value in many ways, especially in resales, insurance, and to the profession of the naval architect. The application of the idea in the building industry can be made the means of safeguarding the investment of millions of dollars in future buildings.

The importance of reliable information as to the quality of the materials and workmanship that enters into a building project can hardly be overstated. Of the eighteen billions of dollars of building bonds estimated by the New York Real Estate Securities Exchange to be outstanding, how many of these issues provided the investor with any assurance of sound, economical construction? In fact, how many gave any clue to the structural merit of the security for the bonds? How many issues represented the best thought of the architectural profession, eager for creditable construction in America because sound, well planned buildings represent low depreciation, low upkeep, and high certainty of occupancy and demand?

Of that vast total, what percentage will be salvaged from the wrecks? Had it been necessary for speculative builders to show proof of quality, would there not have been less wanton disregard of all that every reputable architect demands?

Was this speculative building so poorly done? The best evidence as to this lies in the structures which, a few years after completion, advertise the speculative boom in nearly every city by the deterioration and vacancies in those structures. In and around New York, Chicago, San Francisco and other cities are buildings that are cracked, out of plumb and already shunned by tenants. In one city this year one trust company has begun two thousand foreclosures.

The origin of poor building in most cases has been in the financing, therefore the remedy must be attacked at



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3 PLACES WHERE GOOD CONSTRUCTION CUTS UPKEEP COST

Building and Upkeep Costs

THE CHEAP HOUSE
with no architect's fee

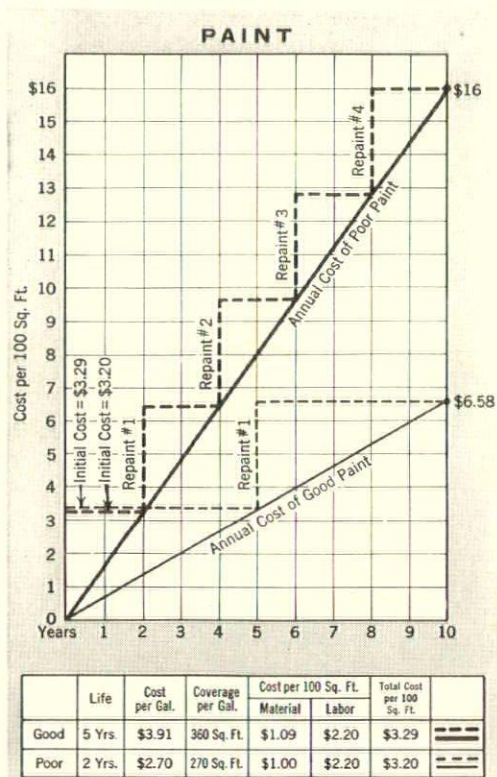
THE QUALITY HOUSE
includes architect's fee

Per Cent	First Costs	Secondary Costs	10 Years' Costs	The Material	Per Cent	First Costs	Secondary Costs	10 Years' Costs
.9	\$135	\$270	\$405	..... Screens	1.0	\$150	...	\$150
.7	105	210	315	... Flashings, Downspouts ...	1.1	165	...	165
1.8	270	...	270	... Excavating and Grading ...	1.8	270	...	270
2.0	300	300	600	..... Hardware	2.9	435	...	435
2.7	405	270	675	Electric Fixtures and Wiring	3.25	487.50	...	487.50
5.4	810	810	1,620	..... Roofing	6.	900	...	900
9.4	1,410	465	1,875	..... Masonry	10.	1,500	100	1,600
10.6	1,590	310	1,900	..... Stucco, etc.	10.6	1,590	100	1,690
9.3	1,395	700	2,095	..... Plumbing	9.9	1,485	100	1,585
7.0	1,050	250	1,300	..... Heating	7.7	1,150	...	1,150
27.2	4,080	500	4,580	..... Carpentry	29.2	4,380	...	4,380
4.5	675	800	1,475	.... Painting and Glass	6.	900	450	1,350
8.7	1,305	...	1,305	..... Financing	1.6	240	...	240
...	...	...	...	..... Architect's Fees	4.5	675	...	675
3.0	450	...	450	..... Landscaping	3.	450	...	450
6.8	1,020	...	1,020	..... Builder's Profit	9.4	1,410	...	1,410
100	\$15,000	\$4,885	\$19,885	..... Totals	107.95	\$16,187.50	\$750	\$16,937.50
								Credit items for fuel savings..... 2,250.00
								Net cost "quality" house..... \$14,687.50
								Saving, "quality" house compared to "cheap" house, 10 years..... 5,197.50

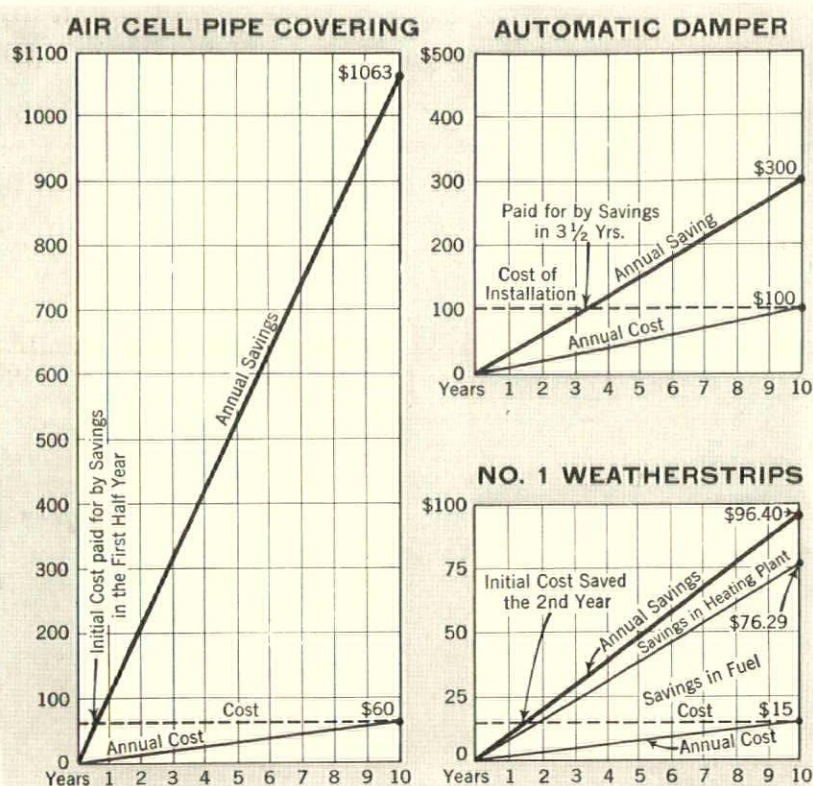
PER CENT OF SAVING DUE TO QUALITY CONSTRUCTION 26%

Copyright, 1927, Certified Building Registry

It costs \$5,197.50 in ten years to cut quality on a \$17,000 house



Copyrighted 1930, Certified Building Registry



Copyrighted 1930, Certified Building Registry

Spending 9 cents saves \$9.42, spending \$60 saves \$1,003, spending \$15 saves \$81.40, spending \$100 saves \$200

WHAT OTHER SAFE INVESTMENT PAYS SO WELL?

that source. I have before me a letter from an architect in San Francisco who said:

"Your appraiser friends who tell you that bankers do not want to know the facts do not have to be keen observers to come to this conclusion. I do not think that this general statement is true of all banks, nor do I think it is true of all insurance companies and investors. However, I do believe that agents, brokers, mortgage companies, in fact, all agencies who sell money and make a commission or earn their profit in providing an outlet for money, are more interested in securing that profit than in knowing whether buildings are good or bad. Of course, no such agency would admit this to be true, but I have actual information in my files from fellow architect acquaintances showing that when the loan companies' agents ask the architects for appraisals they first attempt to determine if the architects would be willing to appraise at the amount that the loan company has decided will be necessary for establishing its loan. I feel certain that the insurance companies who buy these loans would not make this their policy, and if they knew that it was a general practice, they would not buy the loans."

As in the case of rating of shipping, the inspection and supervision of construction calls for close cooperation with the architectural profession. The Certificates of Rating can be made to provide the due and desirable recognition in the money, insurance and realty markets of the standards which the architectural profession seeks to provide.

Lloyd's Register of Shipping, which is separate from

Lloyd's insurance, and the newer American Bureau of Shipping render to owners an inspection service which consists of close inspection of materials and of construction, for the purpose of furnishing ratings of ships accepted by underwriters, lenders, banks and investors, in a way which puts a premium on quality.

It is proposed that a similar service in the building field be put upon an authoritative, accepted basis for inspecting and rating according to codes prepared for each type of building. Lloyd's Register itself has commended the plan as practical. Its experience in securing such competent, honest "surveyors" of ships that the reputation of Lloyd's is not questioned, encourages the belief that well paid men of competence and integrity can be had for "surveyors" of buildings. As conditions change the rating codes should be revised by Code Committees consisting of architects, engineers, managers and others, much as Lloyd's "Rules" are revised by a Technical Committee, which includes representatives of the Institute of Naval Architects, North East Coast Institute of Engineers and Shipbuilders, Institute of Engineers and Shipbuilders of Scotland, English and Scottish Forgemasters Association and Iron and Steel Institute.

Until that system be established by which due recognition of merit of construction can be given by lenders, underwriters and investors of buildings, why should speculative builders care much for structural excellence, the product of architectural skill? Why should speculative builders turn to reputable architects to aid in an effort for quality? If lenders discriminate little in their

loan basis—necessarily playing safe, but lending less than good construction is entitled to expect on first or second mortgages,—why should and *how can* builders refrain from skinning the quality from foundation to roof?

Back of the system of rating of ships is the authority of money, either from the public or bankers and underwriters; there is authority to demand materials and workmanship which the public, the bankers, or the underwriters have been led to expect. With that lacking on buildings erected without competent architectural supervision, substitution and elimination become the rule. That was true during the last flood tide of construction; it will be true again.

The Certified Building Registry, as a non-profit service organization, began by inspecting and rating dwellings with success, notwithstanding that the authority of a system, accepted by money and insurance interests, had not been established. It has developed graphic proofs showing that costs go down as rated quality goes up.

From Certified Building Registry studies of costs constituting the building dollar, graphs have been made of "replacement items" and "profit items." These items include those which by their use produce savings of fuel or other necessities that represent great potential returns on the original investment over a ten year period. Heat in-

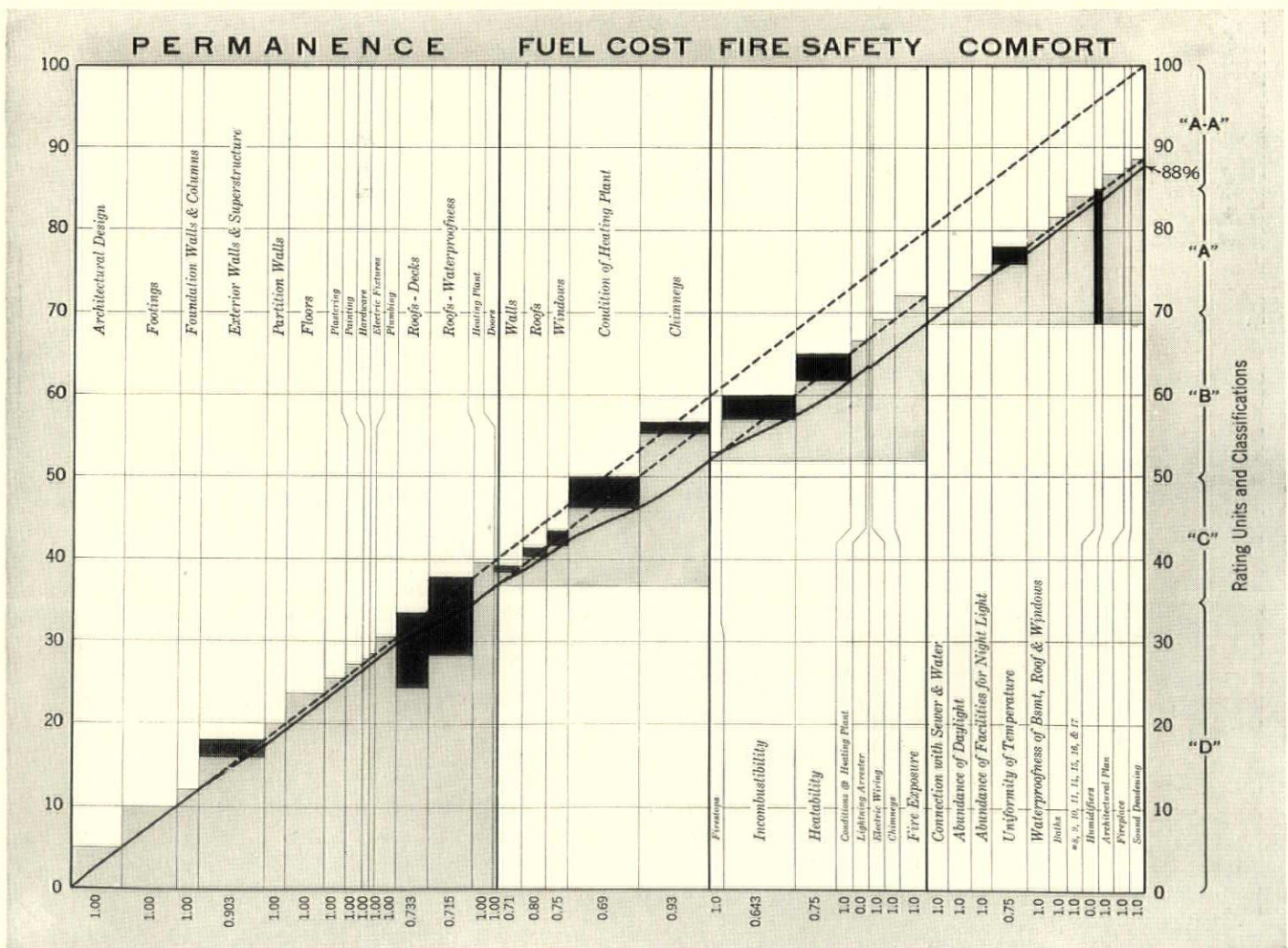
ulations, pipe covering, weather strips, automatic damper control equipment, humidifying apparatus and storm sash are among the items considered as "profit items."

"Replacement items," including paint, roofing, flashing and plumbing, are graphed to show how the original cost is stepped up by necessary replacements over a ten year span, with comparison to quality items which do not in ten years require replacement.

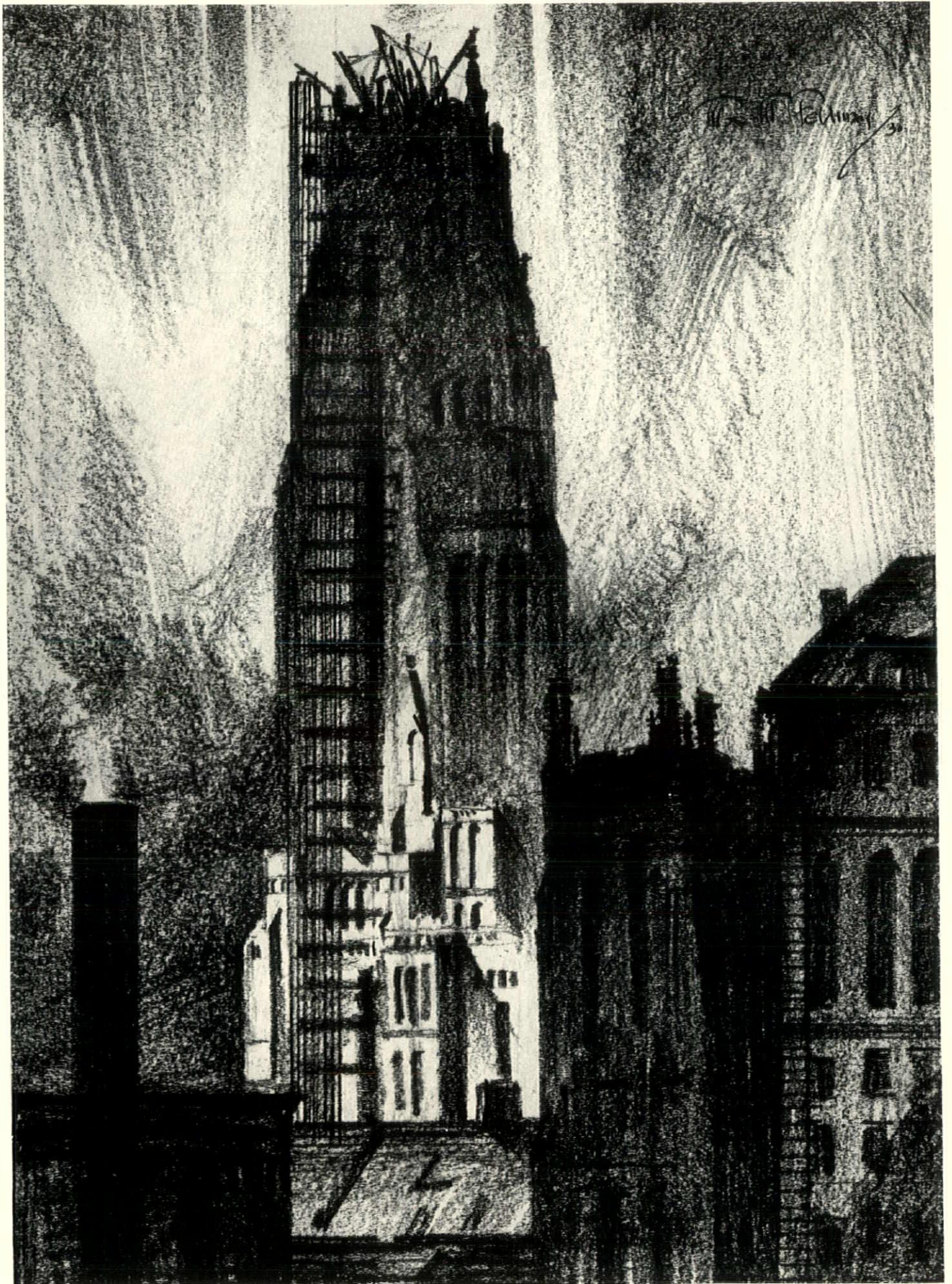
THE graphs of replacements are based upon actual costs in a group of houses, checked with costs that are accepted as average by a loan bureau of the Metropolitan Life Insurance Company in a western city. A composite graph submitted to the Mortgage Bankers Association of America shows that the margin of safety of loans on good houses actually increases whereas it is extinguished by the end of a decade in the case of poorly built houses.

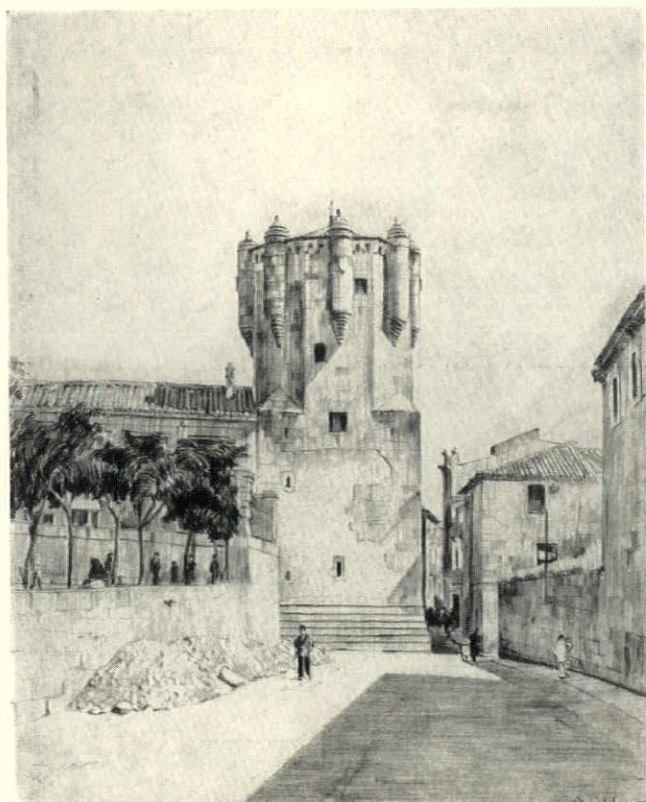
A system of accepted "rating" of buildings will furnish a basis for true costs of construction, those figured for a decade instead of first costs only. A new lending system, one that departs from that of the last flood of building which penalized good construction, waits upon means to measure true costs. Failure of conservative leaders to properly (Continued on page 78)

OFFICIAL RATING OF A TYPICAL HOUSE: The dotted lines indicate 100% at each respective division



Copyrighted 1930, Certified Building Registry





Torre de Chevero
Salamanca

and

The Alcazar
Segovia

by

Arthur H. Gilkison

•

Building the Transept
St. John the Divine

and

Riverside Church
New York

by

Max M. Feldman



SKETCHES

FOR OCTOBER 1930

45

How I HIRE and why I FIRE DRAFTSMEN

By Alexander Carl Guth, A.I.A.

Secretary and Treasurer Wisconsin Chapter A. I. A.

THIS article was written in answer to the request which appeared on page 31 of the August issue of THE AMERICAN ARCHITECT.

Before writing it, Mr. Guth talked to a number of other architects practicing in his city. His subject, therefore, practically becomes, How They Hire and Why They Fire in Milwaukee.

THE gauge that an architect may use in the choice of his assistants may be divided into three sections which may be arbitrarily termed experience, education, and recommendation. There appears a diversity of opinion as to which of these should be placed first, but a questionnaire conducted in Milwaukee indicated the above order.

In the offices immediately requiring men, the matter of experience was of the greatest importance and some of the other items were entirely overlooked. But where a more discriminating eye was cast upon the applicant, the requirements of education and recommendation were taken into serious consideration. Likewise were other points. From the questionnaire previously referred to the following tabulation of requirements was developed. Each office had its own requirements which, when finally sifted down, could well be placed under one of the following headings.

- | | |
|------------------------|---|
| 1. Experience | 10. Living at home (if single) |
| 2. Education | 11. Manner and bearing |
| 3. Recommendation | 12. Has he any weaknesses—mental, moral, or physical which would adversely affect his efficiency. |
| 4. Age | |
| 5. Salary | |
| 6. Personal Appearance | |
| 7. Conduct | |
| 8. Courtesy | |
| 9. Married or Single | |

There is no doubt but that every architect will or has developed his own yardstick which he prefers to use as his guide. But the line of questioning of an applicant can hardly deviate from the above.

Between the interviewer and the applicant there should be a thorough understanding on a number of other items. Chief amongst these should be the subject of salary. There should be an agreement on this before the applicant takes off his coat and puts on his smock. There is probably no more fertile ground for misunderstanding or misapprehensions than on this subject.

Then there is the subject of pay while sick, or disabled, and pay for days off. The number of working hours per day, the days to be employed per week, vacations and whether or not the engagement will be permanent or for a limited time should all be fully and finally discussed, as should the number of days' notice that one will give the other concerning termination of the period of employment. Then the subject of advancement may well be discussed to the mutual benefit of both parties concerned, and this many times will be the crucial point in the interview.

Physical, ethical and social characteristics have little practical bearing and so may be omitted. But mental characteristics should be on the list, likewise should natural aptitude, habits and association, the last especially because of the effect that these may have on an individual's daily work.

Some of these questions may seem especially trivial because in this day of standardization of the hours and number of days per week of employment the subject of vacations, overtime, etc. are largely governed by local practice or custom. They vary, however, in different cities and so when an out of town applicant presents himself these points should all be stressed before the applicant is finally engaged.

There are two perfectly good controversial subjects which are generally ignored. They may both arise at some future date and become of real magnitude. The first is outside work by the applicant. Naturally, a draftsman's time outside of office hours is his own. But whether or not he should be permitted to work for a brother architect outside of office hours is another question. Some employers discourage this practice and quite rightfully. A man who works all hours of the night, and thus burns the candle at both ends is not in fit mettle to tackle the day's problems. He is bound to be sapless, peopless, listless; in other words, evening work eventually results in a man's decreased efficiency in the day time. Again, some offices permit it with the proviso, however, that the assistance should be only in the nature of helping to finish a set of drawings and, for obvious reasons, not to plan or design for this second employer.

And the other controversial subject is this; suppose a draftsman's uncle John or cousin Frieda wishes to add a sun porch to the old manse and, of course, "our young architect" is given an opportunity of displaying his ability. Well, what is the boss going to do about this? Most offices, according to the before mentioned questionnaire, do not object to the men picking up these so called little jobs. But most of the architects



"YOU SAID
YOU KNEW
STEELWORK"

Men who misrepresent their experience do not last long. But when an employer hires solely on the basis of experience, how can the younger man get a job?



interviewed wished to be informed of these jobs and also reserve the privilege of being the judge as to whether the job is too important or too large to do on spare time. If it is deemed so the draftsman is advised to bring it into the office where he should be given the proper credit for the work. A small job is, however, a real experience and good training for a draftsman and he should have every encouragement from his employer in connection with it. So speak to the applicant about this outside work and explain your practice and attitude toward it.

EXPERIENCE is the very byword of most assistants and well may it be so. Suppose an architect is desirous of increasing the size of his organization and his work is generally along ecclesiastical lines. Surely, when a number of applicants present themselves he is going to give preference to the one who has had experience on church buildings. Again, when a large firm doing only monumental work wishes to hire a man an applicant interviewed is going to be quizzed as to his past experience; when it is learned that he has been doing only residential work, is he going to become a member of this organization? Never—with emphasis. Of course, when an

applicant presents himself who has had a well rounded experience ripened by years of contact with all sorts of structures, that lends a different angle to the picture and any architect who does not get up immediately and lock the door behind such an applicant's back, pay him a week's salary in advance, and then put him to work, should be shot at sunrise.

The recommendations of a brother architect should go a great way in the selection of an assistant. A man may have proven his real metal as an assistant to another architect. Due to some business readjustment, the desire to extend his field of experience, or the periodical migratory flight which affects all draftsmen, may mean a change. Though the change may cause irritation in the mind of his late employer, it should never influence him to give an averse opinion of the ability and the qualifications of his former employee. He is in a better position to give an opinion of the man's ability than any one else. His word should have a far reaching effect and his recommendation will in most cases be of greater assistance in the finding of another job than self-eulogy or any other methods to which the applicant may resort.

In some offices the educational (Continued on page 86)

"Build Your Home
Architecturally
Correct"



Consult Your Architect

Northeastern Lumber Company

Main Yard and Mills — N. Eleventh St. and City Line
Temple Yard — Kutztown Road and Shafter Ave.
HENSON HILL, PENNSYLVANIA
READING, PA.

\$250,000 to be spent

ADVERTISING

good architecture and

"Consult your Architect"

FOR years architects, and those of us in the building industry with an understanding of good architecture, have watched with dismay the continued building of houses of atrocious design. Houses which should have been a treat to the eye are, instead, deformed in design, becoming hideous nightmares to scar the beauty of towns and villages all over the land.

These houses were not confined to any type or size, for mansion and cottage alike suffered from the blight of poor design. Every precept of art, of balance and proportion was violated. Instead of a house of inviting appearance there grew up a strange monster of startling aspect. That is what the public was asked to accept and call "Home."

Year after year the numbers of these houses have increased; the variety of their ornamentation and effects has been astounding. Apparently there has been nothing the builders of such houses would not attempt. The "masterpiece" of such an "artist" often would be laughable, were it not in fact a serious matter. Fads and fancies have held full sway, new ones coming so fast that often a house was antedated before it was finished.

This situation, prevalent throughout the country, has led to a condition which today demands serious consideration. The nation is literally freckled with millions of these houses which, for want of a better name, may be termed "mongrels." They represent an initial investment of billions of dollars and a loss in loan and resale value of altogether too large a part of that amount.

No community, no matter what its size or type, has escaped the blight of eyesores that are a serious detriment to healthy development. Owners find themselves burdened with "white elephants" difficult or impossible to sell and a serious hindrance to the sale of the property on which they stand.

As we study the situation and go into it more carefully, we must admit that the majority of houses built during the past thirty-five or forty years reflect but small regard for good architecture and unity of design, inside and out.

This condition is, to a large extent, true even today



By W. D.

SAWLER

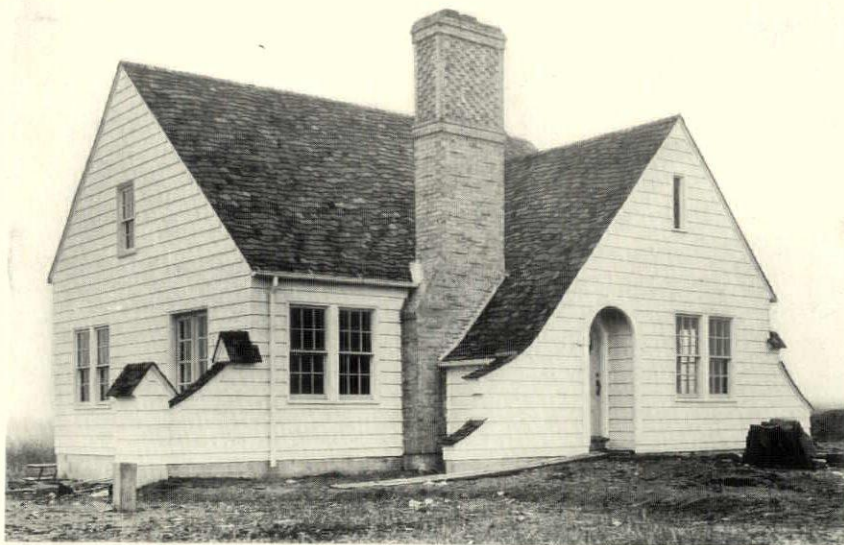
Director
Sales Promotion
and Advertising
Morgan Woodwork
Organization

in spite of the general impression that the public has come to have a much better appreciation of what constitutes good taste. Clothes, automobiles, furniture, and incidentals show the skill of designers of artistic ability. But still "mongrel" houses continue to be built and buyers try in vain to reconcile them with their other better designed possessions.

One reason for this condition, of course, is the fact that much of this work has been too often left in the hands of speculative builders, irresponsible contractors, or "jelly builders." These have, to a large extent, dictated house styles of the day. They have, perhaps unconsciously, foisted on the public these houses of poor design—architecturally incorrect, inside and out. In nearly every case, it may be presumed that their motives have been the best; they have endeavored to fill a great economic need, but yet the fact remains that most of the houses built by them are undesirable.

The word, undesirable, tells a big story, for it means resale is difficult, which in turn is a blow to value. As value decreases loan possibilities shrink accordingly.

The home buyer is the one who, in the final analysis,



SOLD BEFORE IT WAS FINISHED



STILL FOR SALE These two houses faced each other in an Illinois town

shouldered the burden. He accepted the building design because he didn't know any better. No one warned him nor did he realize that his house would be out of style—or even obsolete—in a few years.

Leaders in every branch of the industry have come to a full realization of the situation. They have seen the entire country as it is today blanketed with these "mongrel" houses, all representing a closed avenue of future sales, for their owners cannot sell or trade them and even feel it useless to attempt remodelling to produce a better result. Further, these houses check, in a measure, the desire for home ownership, an end which has taken so long to develop.

Mr. Charles H. Cheeney, A. I. A., recently stated that

If the public is taught to look to the architect for guidance on its building problems, public, manufacturer, and architect will benefit

three-fourths of the buildings erected in 1929 were so ugly, so badly planned, as to make them liabilities from their inception. That is indeed a scathing indictment of the work of a good industry. Yet the truth of it must be admitted.

Secretary of the Interior Wilbur stated publicly, "Small house architecture in American towns in the past has been wretched . . . people are only beginning to realize that home charm may be achieved at small cost. Indeed, the American people have endured the blight of homes built along incorrect architectural lines long enough."

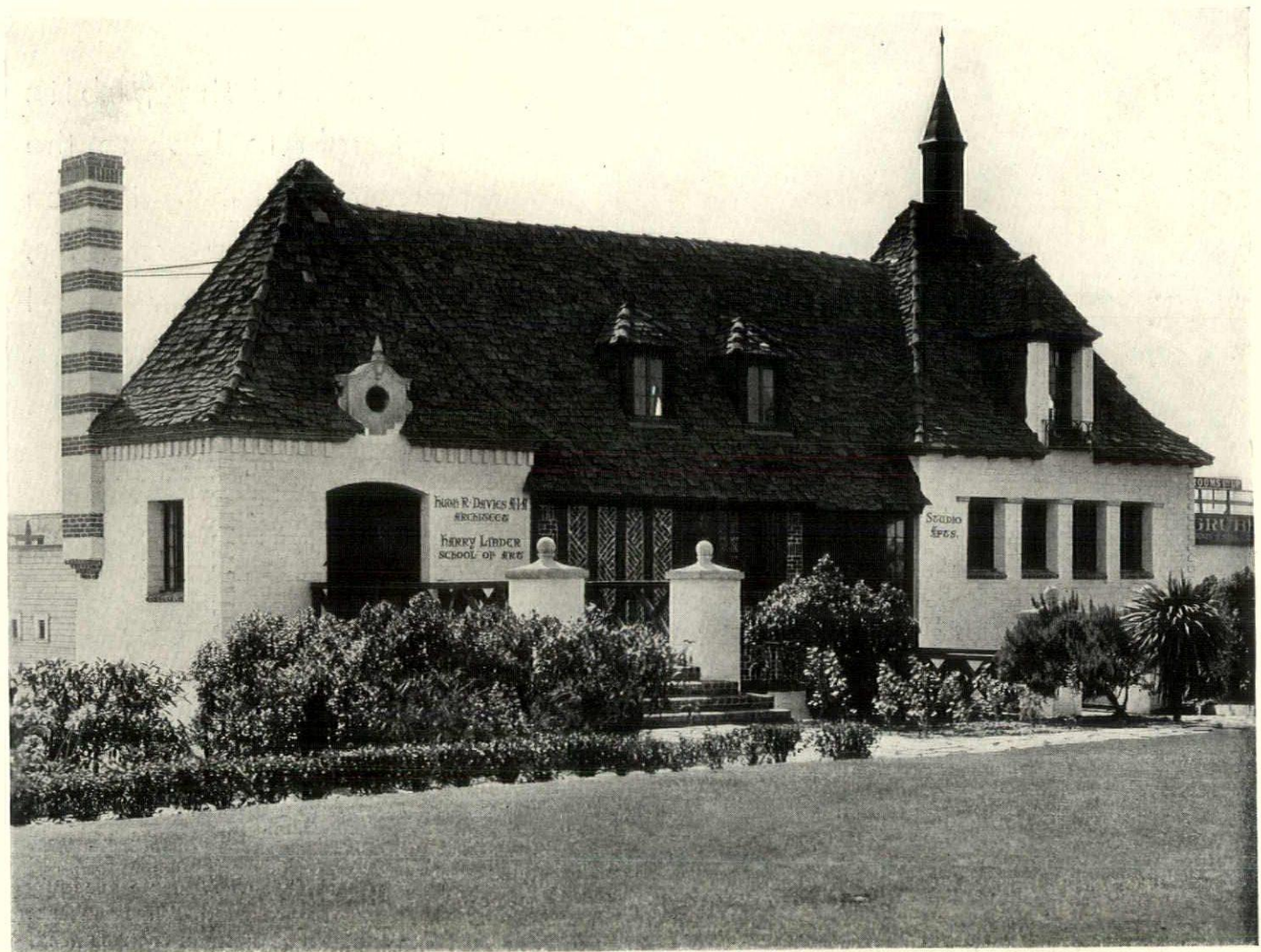
We must admit the crying need for a remedy, which should be a very radical change in house building.

There is no question that the house market needs stimulation today as it has not needed it for a long time. To help business regain a normal tempo, we must use our best efforts to encourage the buying of houses—houses of good architecture throughout. The public has lost interest in purchasing largely because very little in the way

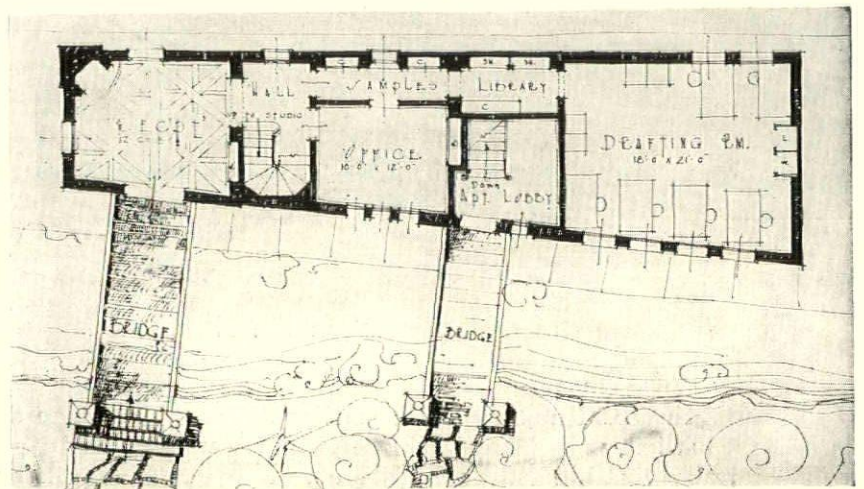
of practical or desire-inspiring designs have been offered. They have, perhaps, come to feel that the building industry can offer them nothing better.

As a constructive step in this direction, the Morgan Woodwork Organization has prepared and is now carrying out a comprehensive merchandising and educational program backed by a large line of authentic woodwork produced for stock distribution. This is expected to help overcome the present lack of appreciation and understanding of good house design and to supply the materials essential to the producing of good architecture.

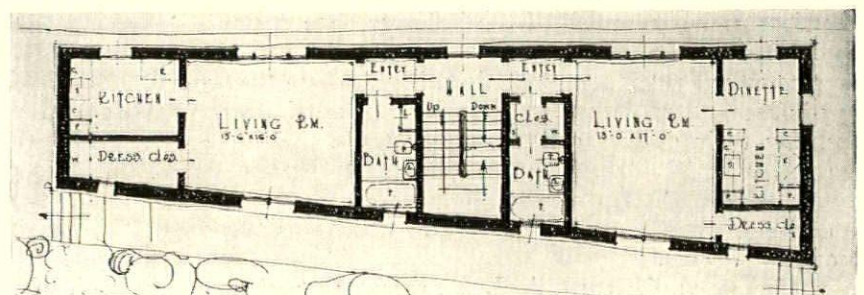
This program has been prepared after a careful and thorough study of each and every requirement. It is the fruit of years of earnest (Continued on page 66)



FIVE STORIES HIGH, although the park level presents the appearance of a one story building. The architect's studio is on the fourth floor; an art school is on the attic floor. The lower three floors are devoted to apartments, two on each floor

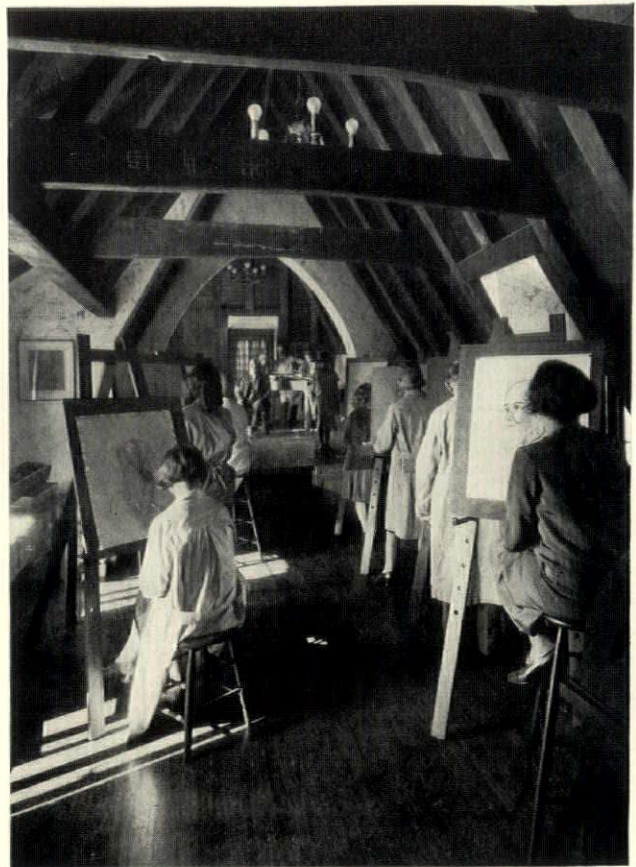


HUGH R. DAVIES
A.I.A.
Architect

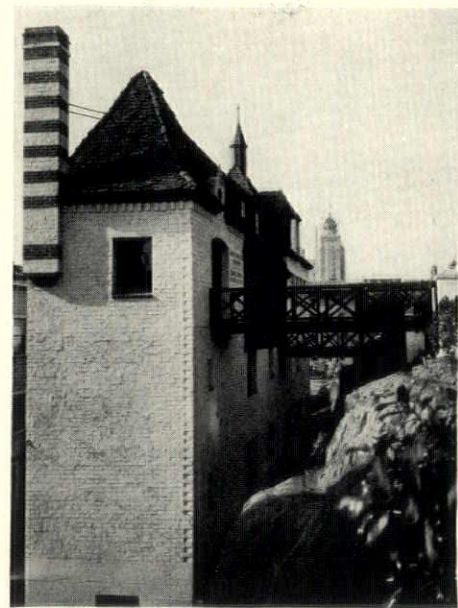


On a NARROW SITE

an architect's studio
in Long Beach
California



ART SCHOOL *on the attic floor*

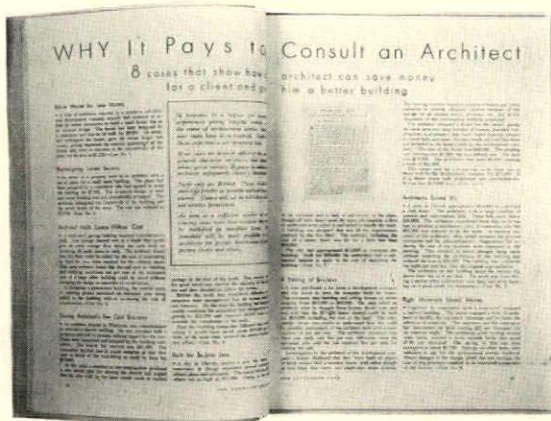


DIFFICULTIES OF THE SITE are shown in this picture. At one end, the site was 12' 9"; at the other end, 19' 6". Difference in level was 26'

RECEPTION ROOM of the studio shows unusual floor treatment

have YOU any Experiences

Economies in building that have
. . . and have saved



OF THE FIFTY cases so far received, eight were printed in the September issue, and six are printed in this issue. More are desired. Please mail before October 15th

Worth \$1,800 More

- A real estate operator built a house for himself at a cost of \$16,000. A friend wanted to build a house of about the same size but with certain changes in the plan. The realtor said that for \$500 he would sell the plans to his friend who could get the same contractor and merely explain the changes required. The realtor consulted the builder and found that without any changes the house would cost \$17,500, which with plans brought the total cost up to \$18,000.

The friend then went to an architect with his problem. Today he has a house designed for his individual use which, in addition to the space in the realtor's house, has a study 12 ft. x 14 ft., a glazed porch above the study, and a high grade oil burner. The cost of the house, including the architect's fee, was \$17,200. The house cost \$800 less than the speculative house without changes and there is at least \$1,800 difference between the intrinsic values of the two houses.—Case No. 9.

He Didn't Have an Architect

- A contractor acquaintance of a man who intended to build a three-story building advised the owner that an architect's fee could be saved if the contractor designed the building. The contractor made the plans and wrote the specifications for a building containing stores on the ground floor and apartments on the two upper floors. Before the building was finished the owner discovered a number of things about the building that even he, as

a layman, did not think were being properly executed. He withheld \$5,000 then due the contractor. The stores and apartments were rented. It was not long before complaints began to be received from the tenants that plaster was coming off the walls, that the roof leaked, and that various other things were not what they should be. One of the tenants brought suit against the owner after being struck on the head by falling plaster.

The owner then concluded it was time to see an architect. He took along the contractor's plans, specifications and a copy of the contract. The architect inspected the building and found that numerous items called for in the contract documents had been omitted. An estimate was made of the cost of putting the building into usable condition.

About this time the contractor brought suit against the owner to collect the balance of his contract. The owner brought counter suit for a larger amount than he owed the contractor with the result that he saved the \$5,000 he had withheld from the contractor and used it to repair and recondition the building.

This owner still has a cheaply constructed and inefficient building, but he has learned his lesson and if he builds again he will call in an architect.—Case No. 10.

Save 5.2¢ per Cubic Foot

- A few years ago a commercial building—a six-story warehouse—was built in a large eastern city from plans by a well known firm of architects in that city. A firm of engineers insisted that the owners permit them to submit plans. Contractors' bids obtained by the architects amounted to 22.3 cents per cubic foot. Bids based upon the plans made by the engineers were \$67,000 more or 27.5 cents per cubic foot.—Case No. 11.

For \$30,000 Less

- An automobile dealer believed that a certain piece of property in his city would be a strategic location for his business. He mentioned this to the owner of the property. The owner in turn consulted a well known local contractor. The contractor urged that he be allowed to handle the entire project on a cost plus basis with a guaranteed maximum figure. There was no question as to the ability of the contractor to build a good building so far as materials and quality of workmanship was concerned. But it would have been necessary for the contractor to employ an architectural draftsman or commission an architect to produce the necessary drawings, and the cost passed along to the owner.

The owner deduced that the maximum cost set by the

to put in this Book? . . .

been effected by architects
their clients money

contractor represented the maximum amount that would be necessary to erect a reasonably good building. He decided to engage an architect and obtain competitive bids. In two months the plans were completed and bids received. The average bid was well below the maximum figure originally set by the contractor, whose own bid was below it. The final cost of the work, including several thousand dollars in extras due to unforeseen water conditions, was thirty thousand dollars less than the bid of the contractor who wanted to design and erect the building.—Case No. 12.

A Difference of \$6,000

• A gasoline station was to be built in a middle western city. The owner went to a firm of architects after he had obtained a rough sketch of the building and an estimate from a contractor. The contractor had offered to build the station for \$13,000. The architects made complete plans, details, and specifications for a building that met the requirements of the problem. Several bids were taken. The highest bid received was much less than \$13,000. The contract was let for \$7,000. Since the building as erected met the needs of the owner, either the contractor-designer had proposed a building larger than necessary or else was charging the owner a commission of \$6,000. The architects' fee was about \$500.—Case No. 13.

They Got What They Wanted

• A church in a small eastern town wished to install a modern heating plant. The committee consulted numerous heating contractors and received bids and layouts from each. There was a marked difference in the amount of the bids. The layouts differed as much as 1,000 feet in the radiation called for. It was at once apparent to the committee that it had no reasonable basis for comparing the bids and so it went to an architect for advice. The bids and layouts were thrown into the waste basket and the architect made a heating plan of the church which, accompanied by a set of specifications, was submitted to the original contractors. The contractors had an equal basis upon which to estimate the cost of the work. The contract was let to a responsible contractor and the heating plant is today giving satisfactory service. Had the committee let the contract to the low bidder on his own layout the installation would have been inadequate and unsatisfactory. Had the contract been let to the high bidder on his own layout the church would have paid for an oversized heating plant. They paid for what they needed, no more.—Case No. 14.

you are going
to BUILD

ECONOMIES
in building that have
been effected by arch-
itects to the advantage
of their clients

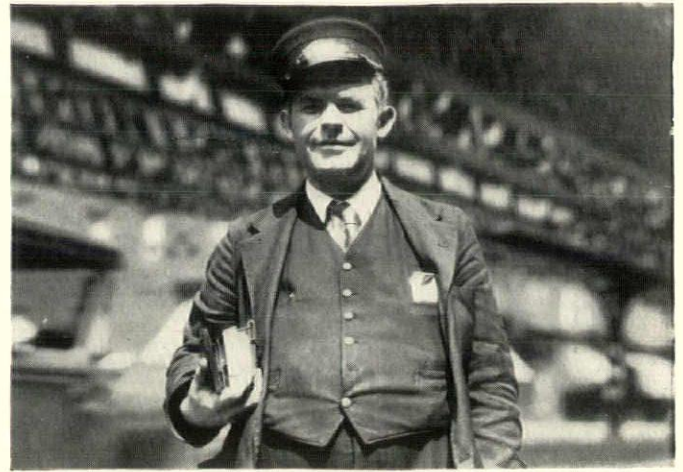
PRELIMINARY DUMMY

of booklet to be issued by THE AMERICAN ARCHITECT for layman distribution. This booklet will contain a brief introduction outlining the value of architectural service. Actual experiences that have proven the economic value of architectural service will be included in this little volume.



THE MERCHANT

"Their estimates are faulty"



THE CONDUCTOR

"I'd hire an architect"



THE TEACHER

"An architect's low estimate nearly ruined a friend of mine"

what do T H I N K

An investigator for
asked the Man-

"WOULD YOU HIRE

By William

FIND out what the man-in-the-street thinks of an architect. If he were going to build would he hire one and if not, why not? Get a real cross section of opinion."

Thus instructions came to us from the czar of the editorial sanctum, to go forth on the highways and byways and get a real statement of what people think of architects. As the editor spoke he made adjustments on his electric fan to get the maximum relief from the torrid heat. We were sure he would be nice and cool in the office as we sallied forth into the blazing summer heat trying to reason it all out. "It must be the heat that's got him," we thought.

What would the average man-in-the-street know about architects? In our great reportorial wisdom we knew something about the profession but why the average citizen should know anything about it or even care was beyond us.

We always pictured an architect as about the sixth witness for the prosecution at a murder trial. He was

generally a little, dignified man with a bundle of blue prints under his arm who climbed on the witness stand after the corpus delicti had been proved. He always answered questions from the prosecutor with frankness, in a matter of fact tone. Often under the fire of cross examination he seemed hurt by the implied suggestion in inquiries from the defense that he might have been mistaken in some small detail. It invariably turned out that he was correct and that the defense was just trying to discredit him in the eyes of the jury. We looked on him as a man of learning and achievement and held him in high regard but could not see why the man-in-the-street should know anything about him.

Our theory about this general lack of knowledge concerning architects and their work was soon blasted. It seems that almost everyone knows something about architects. Some average citizens like them and approve of them. Others would like them a lot better, according to what we learned, if they did business a little differently. Most of those opposed to architects base their



THE POLICEMAN

"I could buy plans cheaper"



THE NEWSDEALER

"Sure! Vat is an architect?"

"THEY" OF US?

The American Architect
in-the-street

AN ARCHITECT?"

H. Gregory



THE MECHANIC

*"You wouldn't take your car
to a plumber, would you?"*

objections on the inaccurate estimates of cost given to them or their friends by members of the profession. There seems to be little doubt that the value of an architect is appreciated by the average man.

There also seems to be little objection to paying the architect a decent fee but the home builder for the payment of that fee expects some supervision of construction so that the contractor will be forced to adhere strictly to the plans and specifications. Lack of supervision and low estimates seemed to be the real complaint of the man-in-the-street who had real knowledge of the profession.

The persons interrogated were picked at random, on the street, in street cars and at railroad terminals. The inquiry was not designed to prove anything but simply to ascertain the attitude of the average citizen toward architects in general. After explaining that the writer represented THE AMERICAN ARCHITECT the question asked was, "If you contemplated building a home or large structure, would you employ an architect?" This

question was followed by others to learn why the one interviewed held his views. We herewith present the answers to our question which are recorded in the language of those interviewed.

BLUE PRINT MANUFACTURER—"I certainly would employ an architect. I would have to do so anyhow if the building cost more than \$10,000 because the law in New York State requires the signature of a registered architect for such a building. This law was passed to protect both the public and the architects. It prevents people from being fooled by incompetent draughtsmen with a smattering knowledge of architecture and by alleged architects who drift in from other countries and states.

"It is better to employ the best man available to do your work because his estimate will be fairly close to your final cost. The gyp architects are away off on their estimates and often work with the contractor and split on the 'extras.' I would avoid, (Continued on page 74)

WHAT ARCHITECTS



NEW SHELL OIL BUILDING,
San Francisco, is lighted at night
by 370 floodlighting projectors

THE first passenger tunnel ever designed with the idea of reducing noise to a minimum through proper acoustical treatment will be built in Chicago on State Street between Eighteenth Street and Chicago Avenue.

CHARLES BULFINCH, "the first American architect," is urged for election to the Hall of Fame by the Board of Directors of the American Institute of Architects. In 1818 President Munroe appointed Bulfinch as architect to restore and remodel the Capitol which had been destroyed by the British in 1814. He designed other governmental buildings. In addition to his architectural work, he was distinguished for his political activities, having been chairman of the Board of Selectmen in Boston and also Superintendent of Police in that city. Bulfinch died in 1844.

WORK will soon be begun to prevent the Leaning Tower of Pisa from eventual collapse. According to the report of the architectural commission, appointed in 1927, it

Hotel for Ford Airport

First Planetarium in United States
Completed

Automatic Arc Welding for Battledeck Floors

was found that the slant of the tower had increased ten millimeters between 1918 and 1929, indicating immediate repair as being necessary. Cement will be injected into the subsoil of clay and sand to fill holes and fissures to provide a firm foundation which the tower has always apparently lacked.

THE first planetarium in the United States has been completed in Chicago—the Adler Planetarium. The dome is roofed with copper insulated with two inches of cork-board to avoid condensation. The projector inside the dome throws a pattern of points of light on a white hemisphere so as to represent some 4,200 major stars, the Milky Way, the planets and the moon. By shifting the projector, the night sky of any latitude can be shown together with the motion of the earth, the phases of the moon and the movement of the planets. These are all speeded up so that the spectators, listening to an astronomical lecture, can see the movement of the solar system over the year in a few minutes. Five hundred spectators are accommodated. The first planetarium ever built was constructed at Munich.

A NEW building material was recently tested for the Bureau of Building of the City of New York by Professor Albin H. Beyer of the Department of Civil Engineering, Columbia University. This material rises like bread to from two to three times its original volume, is from 66 to 75 per cent lighter than concrete, and has unusual fire resistive properties. It is composed of Portland cement concrete, lime, a small quantity of aluminum powder, and soda.

The tests were made on a floor, part of which was 4½ in. thick and part 10½ in. deep with a half-inch Portland cement mortar finish. A load of 150 lbs. per square inch was applied and a furnace generating more than 1,700 degrees F. placed under the floor. Temperatures on the upper surface of the thinner floor rose two degrees at the end of one hour; at the end of four hours the highest temperature noted was 207 degrees. On the thicker floor, one section was warmer by one degree, another by seven degrees, and a fourth section was actually less by two degrees; at the end of four hours the hottest surface showed an increase of only eleven degrees. When the test was finished, the floor construction was tested for strength and showed up excellently.

THE first apartment house in New York City was built in 1869 on East Thirteenth Street between Third Avenue and Irving Place. It was designed by Richard M. Hunt and was called the "Stuyvesant."

AN automatic arc welding machine was used on the battle-deck type of floor construction for the first time in an addition to the Wendell Garage, Pittsfield, Mass. Once started on a seam, the machine was almost automatic in

ARE TALKING ABOUT

New Building Material Tested

Mujica Proposes New Type City Plan
for New York

A.I.A. to Contact with General Contractors

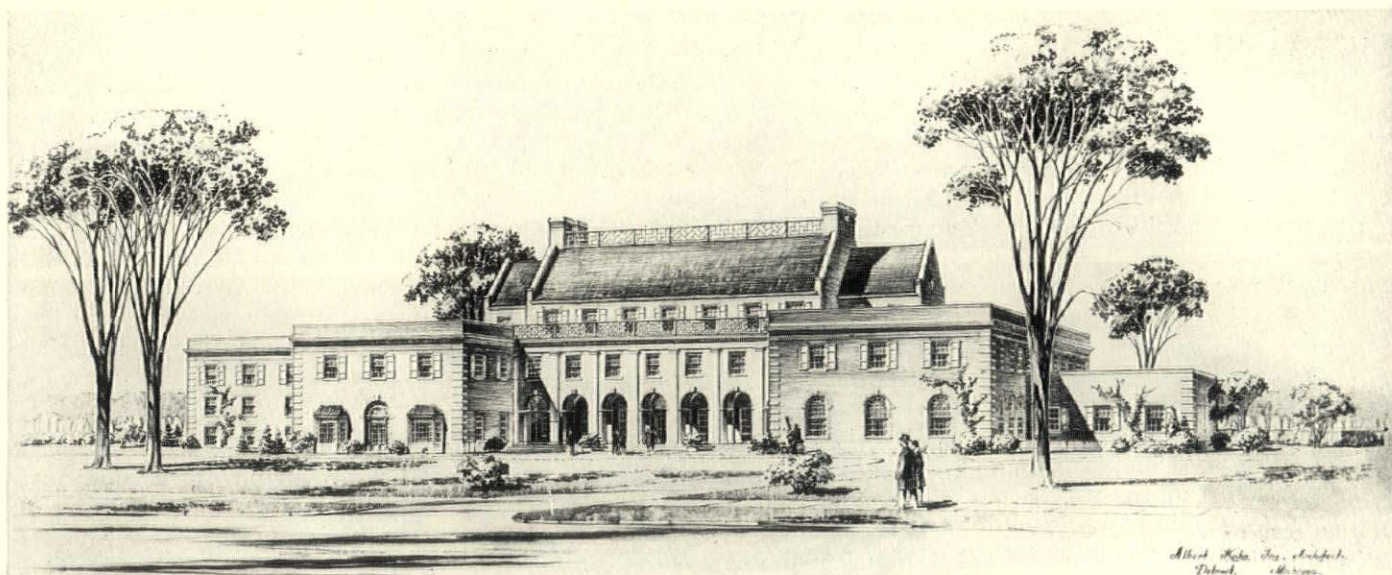
operation. About thirty minutes was required to weld twenty feet of the $\frac{1}{4}$ -in. seam using $\frac{5}{32}$ in. electrodes. The type of weld used presented a smooth surface and not only joined the steel plates but also welded them permanently to the I-beam below. The span was sixty feet; sixty-four cars are accommodated on the battledeck floor. Weight of the floor construction is fifteen lbs. per sq. ft.

TELEPHONES that ring automatically will be used for the first time in the new Waldorf Astoria Hotel, New York. As soon as the connection is completed, the telephone automatically begins to ring. Each of the 1550 double rooms will be equipped with a double extension; two telephone outlets will be bridged from this extension with an additional portable instrument so that a guest may either use the telephone from a bed table or from a desk.

THE Wire Reinforcement Institute has been established with headquarters in the National Press Building, Washington, D.C., according to an announcement of the manufacturers of welded wire fabric reinforcement. The purpose of the Institute will be to exploit the technical and utilitarian merits of wire as used for concrete reinforcement, providing authentic information, data and statistics relevant to welded wire fabric and its uses. Royall D. Bradbury will be in charge. The services of the Institute are at the disposal of architects without cost. (Continued on page 108)



EUROPE'S HIGHEST BUILDING
to be erected in Vienna. Of steel
construction. Rudolf Frass, architect



HOTEL FOR FORD AIRPORT to be erected by Henry Ford opposite the airport for the accommodation of passengers. Flat roofs provide observation spaces. Albert Kahn, Inc., architect

. . . As It Looks

Georgia A.I.A. Wants Advertising

PAID advertising is being considered by the Georgia Chapter of the A. I. A. Two proposals have been made. One is for the expenditure of \$5,000 over a period of one year covering a series of advertisements for twenty-four issues of each of three newspapers. The second proposal would limit the expenditure to \$1,512 to be spent in one local paper for twenty-four weeks. Architects would be divided into three classes and assessed \$25, \$20, and \$15 per month for a year under the first plan or \$15, \$10, and \$5 under the second plan. If a campaign of paid advertising is adopted it would seem advisable to select the first plan as being more effective. But unless the advertisements are properly designed to sell architectural service to the public, neither plan should be undertaken. A properly planned advertising campaign, like a properly planned building, is money well spent.

Will It Produce Results?

THE Thirty-third Architectural Exhibition of the Philadelphia Chapter and the T-Square Club will be held in the new Architects' Building in Philadelphia from November 18 to November 29, 1930. It will be recalled that the Thirty-second exhibition was held last year in the Wanamaker Department store with unusual results from the standpoint of attendance by the general public. It will be interesting to learn whether fifteen thousand or more people will go out of their way to view the exhibition this year. The odds are that they will not.

Little Things Change Lives

A CONSULTING engineer was at one time employed in one of the largest electrical manufacturing plants. In hot weather, for comfort, he wore linen knickers. One day the superintendent told him that knickers were not a proper working attire and that he could no longer wear them. Whereupon he resigned as an employe of the corporation and, in order to make sure that he could wear knickers, set up a business for himself. Today he earns much more than before—and wears knickers.

Registration of Architects

ACTIVITIES to secure a State law in Massachusetts governing the licensing of architects in that State have been started by the Boston Chapter of The American Institute of Architects. The Texas Chapters of the Institute will again introduce a registration law in the State Legislature next January. On August 5, 1930, the Governor of Kentucky signed the registration law recently passed in that State. Seventy per cent of the

States now require registration to practice as an architect. It should not be difficult for the remaining States to pass similar laws since a majority of all the States favor legal control. The next step is to secure the revision of these laws to make the requirements of the right to practice more nearly uniform.

Fire Protection, If and When

THE Building Committee of the Institute has been authorized to "take estimates and to install a fire detecting system throughout The Octagon, if and when it can raise the money to pay for such installation." The fire hazard that exists at The Octagon has been recognized for some years. Documents are available that would permit the rebuilding of this historic building should it be destroyed or seriously damaged by fire. But would The Octagon rebuilt be the same or as valuable? Neither time nor money should be spared to afford the headquarters of the American Institute of Architects every reasonable safeguard against destruction. There should be no "if and when." It should be done now before it is too late. A fire detecting system, if that is the answer, can not be so costly that it would seriously inconvenience the treasury.

Wren and St. Paul's

WHEN St. Paul's Cathedral was built, tradition has it that Sir Christopher Wren passed through a period of wrangling and controversy over his plans and the construction of the building. Wren is said to have protested the poor quality of the mortar used in the piers and the permitting of supporting walls to be built of rubbish dumped in between the outside facings. St. Paul's was completed in 1710. Wren was then 78 years of age. The story goes that as he stood gazing upward at his masterpiece someone asked him how long the dome would stand. He prophesied that it would need repairs in about two hundred years. London had occasion to recall his statement in 1910 when it became apparent that the Cathedral was in a serious condition and needed immediate attention to preserve it. How many architects can today forecast as accurately as Wren how long their buildings will stand or how long it will be before repairs will be required?

Acoustical Article by Friend

LAST month THE AMERICAN ARCHITECT published an article entitled "How to Design an Auditorium Where It Is Easy to Hear" by W. K. Friend. Through some mischance, the last page of this article was omitted. The missing material will be found on page 65 of this issue.

to the Editors . . .

No More Slurs for Architect in Book

AN editorial in the August issue of *The American Architect* took exception to a statement made in Arthur's "New Building Estimator's Handbook" to the effect that "architects are apt to be too artistic unless restrained by what the man-in-the-street calls common sense." The editors of *The American Architect* have received a cordial letter from Charles F. Lurcott, president of the Scientific Book Corporation, publishers of the book, stating, "We have taken this matter up with our author and suggested that this reference be eliminated when the next edition of the book is prepared." Publishers are, on the whole, extremely fair minded and only need to have things like this called to their attention to remedy them.

Cumulative Effect of Advertising

DENNISON Manufacturing Company has compiled a chart showing the cumulative value of its advertising. In 1925 there were 123,771 inquiries received as a result of advertising; in 1926, 163,093; in 1927, 236,158; in 1928, 432,371; and in 1929, 549,753 inquiries. It is significant that the advertising expenditures for 1928 and 1929 were exactly the same, yet 27 per cent more inquiries were received in 1929 than in the previous year.

Architectural societies which spend a small amount of money for advertising for a year or so and then brand advertising a failure would do well to take the above figures into consideration. Advertising is often largely a matter of experiment until the right appeal is determined, often a matter of building a foundation before fruitful results may be expected. For instance, some years ago a specialist in mail-order advertising laid out a campaign with twelve mailing pieces intended to sell \$100,000 worth of stock in a West Coast company. Eleven pieces brought in but some \$11,000. The twelfth piece saw the issue oversubscribed. Stopping the campaign at the eleventh piece would have branded it a failure, for it was these preliminary pieces that laid the foundation for the twelfth. So it often may be as regards advertising architectural societies.

Physicians' Advertising

PHYSICIANS who are members of the Atchison County Medical Society, Kansas, are conducting an advertising campaign. One of their recent advertisements reads: "Stop making your family physician wait and wait and wait for his money. Pay him that past due bill now—you may need his services, in an emergency, and you cannot afford to be on his 'dead-beat' list." Then follow the names of fifteen doctors with the words, "Members of the Atchison County Medical Society." The final paragraph is: "Northeast Kansas physicians and surgeons

exchange 'credit' information. You cannot afford to be on the doctors' 'dead-beat' list." Architects who like to compare their profession to that of the physician as an argument against advertising would do well to ponder that advertisement, which is part of several campaigns now being run in newspapers by medical societies in various parts of the country.

Advertising "Consult An Architect"

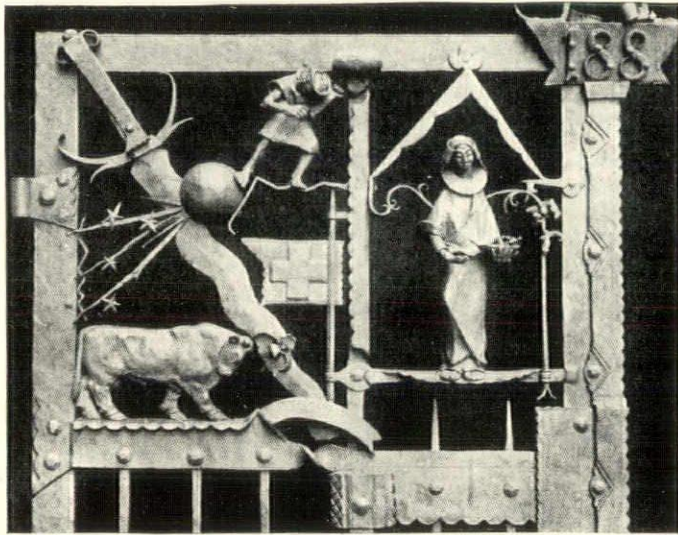
THE number of manufacturers who are advising prospective customers to consult an architect seems to be on the decided increase. Among those recently noted, and not mentioned before in these pages, is Libby, Owens, Ford Glass Company which uses the phrase, "Consult Your Architect," in its advertising appearing in magazines of popular circulation. Follansbee Bros. Co., Pittsburgh, recently sent *The American Architect* a blotter on which it stated: "'Consult Your Architect.' We are incorporating this slogan in our correspondence with prospects for Follansbee Forge Metal Roofs and Follansbee Fresh Air Heating Systems. The repetitive employment of this slogan, 'Consult Your Architect,' will be helpful, we believe, in promoting business improvement through better building construction." The Spencer Heater Company has likewise called the attention of the editors of *The American Architect* to the fact that their recent booklet, "The Fire That Burns Up-Hill," advises consultation of an architect. Shevlin, Carpenter & Clarke Co., in "Pine Homes and Pine Interiors," advise, "it is wise to secure detailed drawings from capable architects."

Is Percentage Fee System Obsolete?

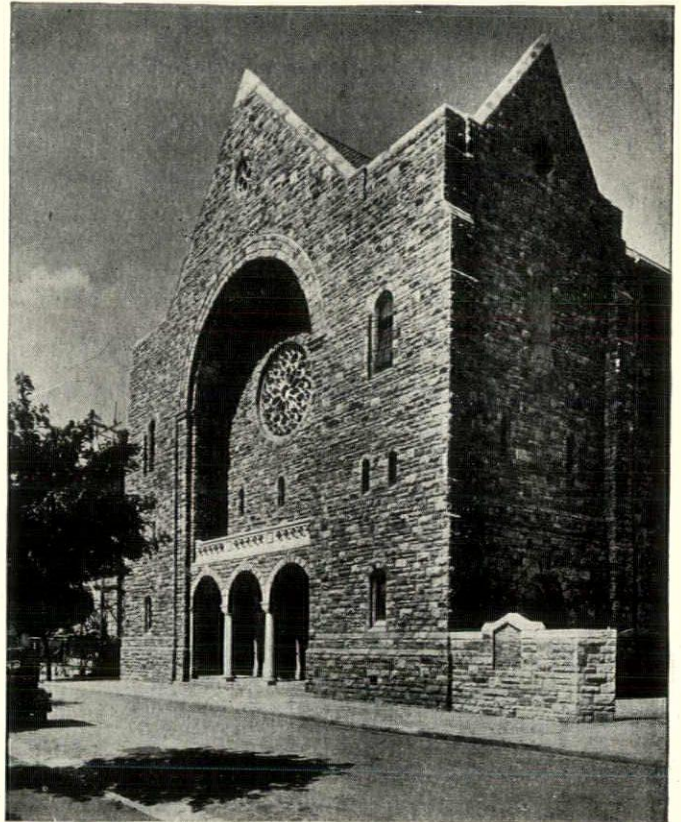
STRUCTURAL engineering service has been standardized by the Structural Engineers Society of New York. Complete service, which includes everything of a structural engineering kind, is described as "Standard Full Design Service." Recognizing that limited service in any professional employment is often justified by circumstances, the full service has been divided into various classifications intended to facilitate negotiations between the engineer and the client. Special services are also defined. A bulletin issued by the Society states that compensation for certain classes of service should be based upon the cost of the work and that in others the floor area designed should be made the basis of professional charges.

Business conditions are changing, many of them have changed completely. Isn't the practice of charging for architectural service on the basis of a percentage of the cost of the building a poor business principle? Perhaps, like the engineers, architects should adopt a standard of service and classes of service, together with some better and more satisfactory system of arriving at the cost of the service to the client.

...and ABROAD



MODERN TREND in wrought iron design. Detail of a pair of gates designed by Jaroslav Vonka, Industrial Art School, Breslau. From "Diekunst"



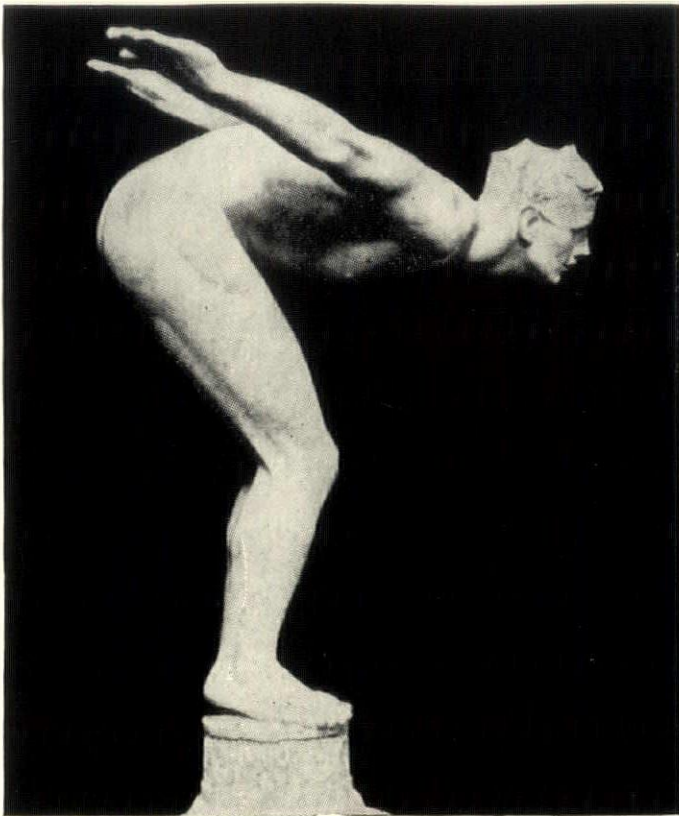
VARICOLORED, hammered "mountain stone" of South Africa was selected for the exterior of St. Mary's Cathedral, Johannesburg. Sir Herbert Baker and F. L. H. Fleming, associated architects. From "The Architectural Review," issue July, 1930



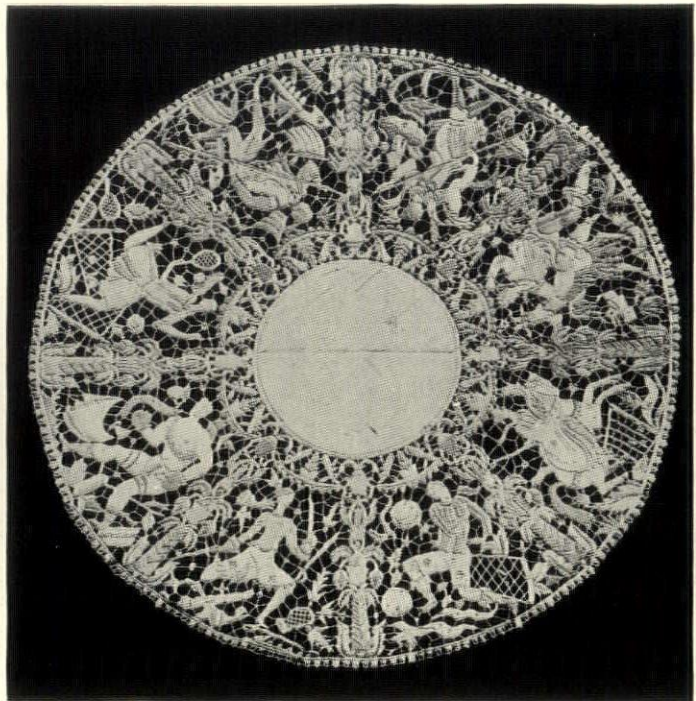
BELL-TOWER and clock of the Archiepiscopal Seminaries, Bamberg, Germany. Ludwig Ruff, architect. "The Architectural Review," July, 1930



SUFFOLK PUNCH STALLION, bronze by Herbert Haseltine bought by the French Government. From "Apollo" issue of August, 1930



THE PLUNGER. Tait McKenzie, sculptor. Griffin Armstrong, intercollegiate diving champion of America, was the model for this statuette. From "The Architectural Review," issue July, 1930



SPORT. A table center in Pointe de Venise, designed by Giulio Rosso and made by work girls at Jesurum's. "The Architectural Review," June, 1930

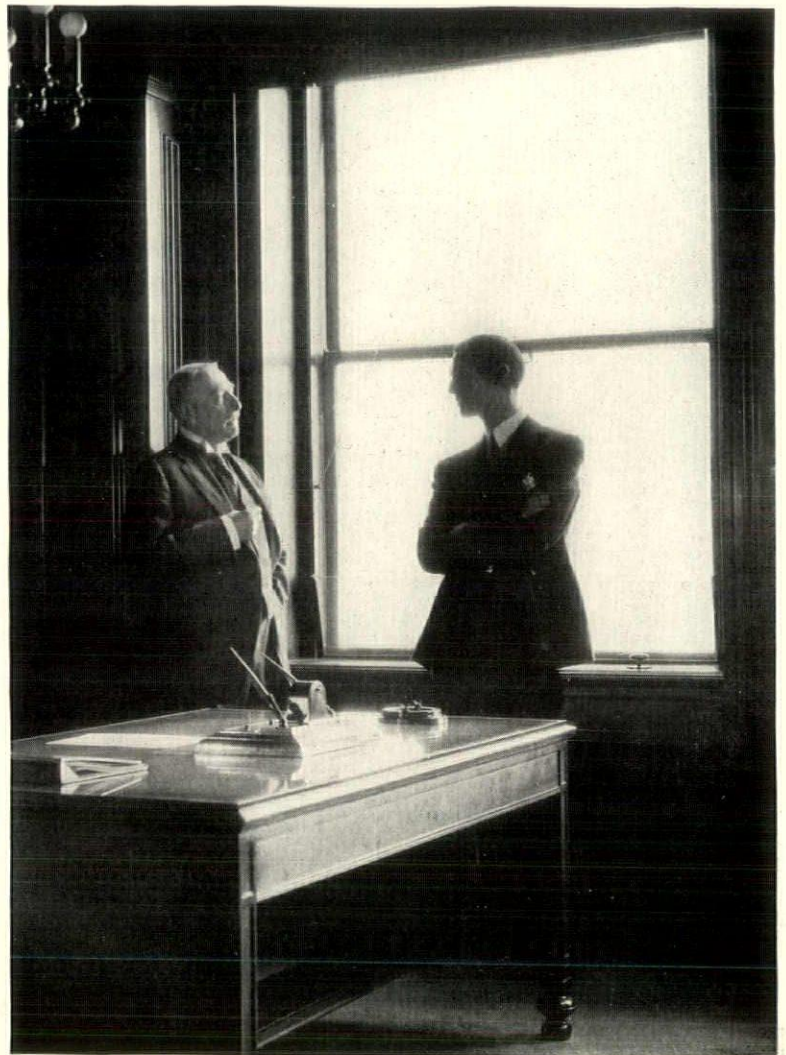


ST. GEORGE AND THE DRAGON. Memorial to the missing, Vis-en-Artois, France. Ernest Gillic, sculptor. From "The Builder," August, 1930



VANITY weighed in the balance and found wanting. Carved wood panel, Duomo of Florence. "The Architectural Review," issue of June, 1930

I'm going
to start
IN
BUSINESS
FOR
MYSELF



"S O, young man, you really think that you are smart enough to make a success as a practicing architect on your own? Just what makes you think that?" And the old timer leaned back against the panelling, sizing up this young man who had come in to ask his advice.

"Well you see, sir, I've had a good education, won a prize or two, and have travelled abroad a bit. And I've had enough practical experience in architectural offices to feel I know the ropes."

"Got any capital?"

"Some, enough at least to keep me for two or three years until my business gets big enough to pay my way. And I am sure that I can handle the jobs I get."

The older man smiled at the youngster's enthusiasm. "But how are you going to go about getting your first job?"

"This way. I'm going to build up a list of prospective clients. And I'm going to write them, see them, and sell them on the fact that I'm the man to handle their architectural work."

"Fine! But how are you going to build up your prospect list?"

"That's exactly the question I came here to ask you. How do *you* do it?"

The older man smiled thoughtfully, lighted his dead cigar, and said. . . .

W H A T W O U L D Y O U S A Y ?

THE building of a prospect list is of vital importance to every architect. How to do it is a question that architects all over the country are pondering daily, especially when times are slack and stock plan or other organizations are obtaining work that logically should have gone to architects.

The editors of THE AMERICAN ARCHITECT will pay seventy-five dollars for the answer to the question.

"How can an architect build up a list of prospective clients?" The article should be about fifteen hundred words long, tell how names are secured, how they are followed up, and what results are obtained from this particular method of locating prospective clients. The article should be in the office of the editors of THE AMERICAN ARCHITECT, 57th Street at Eighth Avenue, New York City, by October 31st.

THE READERS

Have a Word to Say

• THE COMMITTEE BALKED AT AN A. I. A. COMPETITION UNTIL . . .

Editor, THE AMERICAN ARCHITECT:

The interesting editorial in your issue for May, 1930, was possibly inspired by the competition for the new high school at Yonkers, N. Y. Therefore you may be interested in the ultimate outcome of this situation.

As you perhaps know, the Committee of the School Board was rather hostile to the idea of any meddling with their affairs on the part of the American Institute of Architects.

Of the seven architects who were invited to compete, only two were members of the Institute, and when, at the initial meeting, I was asked whether I would accept the invitation to compete, I replied that I did not know that I would be permitted to do so; Mr. H. Lansing Quick, the other member of the Institute, then stated that his position would be the same as mine.

After some talk, we were given a week in which to decide whether we would be permitted to enter the competition on the terms laid down by the Board of Education.

Feeling that the situation was largely born of ignorance of the true purposes and functions of the Institute, I wrote a letter to Mr. Delano, President of the New York Chapter of the Institute, suggesting that in my opinion, if he could call upon one of the members of the Committee, whose office was in New York City, the whole thing could be straightened out.

Mr. Delano was called out of town but got Mr. Egeron Swartwout to go in his place, and the latter was so plausible that the Committeeman was impressed, and promised to see that the matter was further investigated.

Later on, but before a decision had been reached, I suggested to the Chairman of the Committee that if Mr. Swartwout could be retained as the professional adviser in the matter, it would be agreeable to all concerned.

Finally, to make a long story short, the Committee reconsidered its former attitude, as a result of which Mr. Quick and I were notified that the Board certainly wished to have us included in the list of competitors, and would do anything we wanted in accordance with the ethics of the Institute to make it possible for us to compete.

This, of course, was a signal victory for the position I assumed, and thereafter a meeting was held at which Mr. Swartwout was present. A program was prepared, received his approval, and the competition was held as one approved by the Institute; and I am glad to say that your humble servant, who in the beginning had run a risk of getting himself so thoroughly disliked that he would have been left out altogether, turned out to be the proverbial ugly duckling and won the prize.

Subsequently, the Chairman of the Committee, who

originally had been most vigorous in his opposition to any meddling by the Institute, told me verbally that I was absolutely right, and that he was glad I had taken the position I had.

The whole case was just another illustration, to my mind, of the necessity, in matters of this kind, for presenting the purposes of the Institute to laymen in such wise that the latter will not get the idea, unfortunately so prevalent, that the matter is being taken out of their hands, and a whip held over their heads.

Mr. Swartwout who, as you doubtless know, is a very agreeable gentleman, was able to convey this idea in a pleasant and diplomatic manner so that everyone was satisfied, and the ultimate outcome of the thing was satisfactory to all concerned.

It is evident to my mind, however, that it is a personal touch which is essential in matters of this kind to save the situation, and that letter-writing or codes of ethics, and even personal objection by a competitor, must be supplemented by a personal interview with some prominent member of the Institute qualified to explain matters, if misunderstandings of this kind are to be overcome.—*G. Howard Chamberlin, At., Yonkers, N. Y.*

• WHY EMPHASIZE "CAPABLE ARCHITECTS" ?

Editor, THE AMERICAN ARCHITECT,

Dear Sir:—

Regarding Mr. V. C. Pettit's bulletin, "Architectural Services," on page 68 in the September AMERICAN ARCHITECT.

I have yet to read a better explanation of an architect's services, for it tells the public, in plain language, just what it should know. It is splendid, up to the last 13 words (unlucky number), "and be sure he is a regular practicing one and a good one."

The poor "Public"—how that spot must hurt by this time, how conscious it must be of the fact that there are bad (?), unreliable, untrained and what not architects in our glorious profession. Just like a boxer who is being hit on the same spot again and again, it becomes bigger and bigger, hurts more and more until it overshadows all else, until he can think of nothing else, and the fight is lost.

Such words as unreliable, inexperienced, etc., to my mind only help to confuse the public. Seeing this sort of thing again and again, must it not say to itself, "Is it really wise to employ an architect? Don't they admit there are incompetent men practicing architecture? How will I know that the one I have selected may not prove to be unreliable?"

We admit there are men calling themselves architects who should be employed at something else, but really now, is it as bad as that? Is the percentage so great

that the public must be warned of this great danger? I think not. As a draftsman I have worked and traveled this country over and found no less than 95% of the architects I came in contact with good, reliable fellows. Mighty few men who are not in love with dame architecture can court her and get away with it.

My appeal to all those who are doing their best to bring before the public the need for architectural services is, stop using "consult a reliable architect," "select a competent architect," etc. Give the public a chance, give it credit for being able to use its own good judgment. No good architect need fear inferior competition. Sell the public one big idea, and the rest will take care of itself.—*A. E. Kluesselberg, architect, New York City.*

• WASHINGTON, D. C. CHAPTER, A. I. A., CRITICIZES DESIGNS

Editor, THE AMERICAN ARCHITECT:

The Washington, D. C., Chapter of the Institute has a committee which organizes a jury to criticize architects' designs for proposed buildings. The jury is composed of representative architects in Washington, whether or not they are members of the Chapter. This jury began functioning in 1922, and has been carrying on with increasing success each year.

The procedure is to have a jury of three men who meet with the Assistant Engineer Commissioner every Thursday afternoon during the year. One new man comes on the jury each week, and one man drops off, so that there is a continuity of thought. The plans filed for permit are gone over and sorted into five classes. A letter is then sent to the owner and the architect, giving the classification and constructive criticisms for the betterment of the design which might lead to a reclassification.

The work of this weekly jury is reviewed each month by a board of review consisting of five architects in whom the profession as a whole has confidence which at the last meeting, by way of illustration, raised the classifications of certain awards made during the past month, and lowered others. This board of review has the sole authority to make awards for the highest class, which is "Distinguished Architecture." This award is given only upon the completion of the project, differentiating it from the other awards, which are made on the plans submitted.

At the outset, the work of the jury met considerable opposition, especially from operative builders. It has now reached a stage where the comments of the jury are looked forward to and not infrequently heeded.

One thing is certain: the good work of the Architects Advisory Council has changed the character of operative building in the city of Washington. Whereas in years previous to its beginning it was customary to draw one plan for a row-house development and repeat this plan an endless number of times, at present entire elevations of groups are prepared, with interesting variations in the fronts. Furthermore, as the result of the comments of the Council, the insistence upon uniform front porches has been done away with, and terraces or small entrances worked in to advantage. Likewise, we have made a decided dent in the prevalence of the fake mansard roof.

The work of the Council has not been limited to oper-

ative builders. We are encouraging the submission of plans in preliminary stage, and the best architects in Washington have profited by the suggestions.

One might think that it would be difficult to get continuous service without charge week after week and year after year by the members of a busy profession. This year it was suggested that during the summer months the work of the Council might be dropped. The members of the juries assigned for summer service, when the question was put to them, unanimously agreed that the work should continue. They not only feel their opportunity and their responsibility, but any architect who has given this service feels that he has gotten more than he has given in the sharpening of his powers of analysis and criticism. From a feeling of detachment in the various offices, which may have existed to a greater or less extent prior to the beginning of the Council, the attitude has changed to one of interest and cooperation in and with each other's work.

The Architects' Advisory Council of Washington has no legal standing, but it has accomplished its results in the manner indicated, through publicity of its findings and through the support of the various local citizens' associations, which are our substitute for wards or corresponding political bodies in other cities. There are between forty and fifty of these associations, to which copies of the findings relating to their sections are sent; and many of them have committees cooperating with the Architects' Advisory Council. This has brought to the Council a moral support which has been invaluable.

We are so thoroughly sold on the results of the work in Washington that we would be glad to see it extended to other cities, and to help in any way in the extension. I believe that the Cincinnati architects are organizing along similar lines.—*Horace Peaslee, Secretary, Architects Advisory Council.*

• IF WE DO NOT ADVERTISE . . .

Editor, THE AMERICAN ARCHITECT:

If a man writes a better story in steel and stone or builds a better house than his neighbor, in this day he had better make pronouncement of it in phrases set in san serif bold, in words of popular wave length and in letters of neon light, else the pathway to his door will remain a path and not become a highway beaten by the world seeking the way to him.—*Ernest O. Brostrom, A.I.A., Kansas City, Mo.*

STOCKHOLM is the subject of the entire August, 1930, issue of the Architectural Review of London. Baron Ramel, Swedish Foreign Minister wrote an introduction to the issue and Sir Harold Wernher, President of the Anglo-Swedish Society is the author of an excellent article on the social and industrial progress of Sweden. This issue contains forty pages of illustrations showing Swedish furniture, glass, textiles, metal work, interior decoration and the architecture of the exposition held in Stockholm. The editors are to be congratulated on the splendid variety and care shown in selecting and presenting the subjects.

THE Georgia Marble Company has subscribed the sum of \$5,000 to be used as a scholarship fund by the A. I. A. in memory to the late Milton B. Medary. This is the first gift received for the fund.

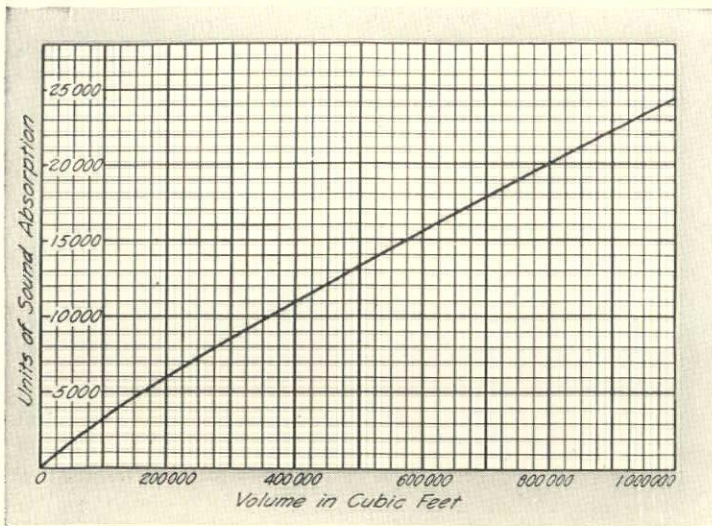


FIGURE TWO

FIGURE 2: Graph showing the amount of absorption needed to secure a satisfactory reverberation time

FIGURE 4: Effect which different types of seating can have upon the reverberation time in an auditorium with various sized audiences

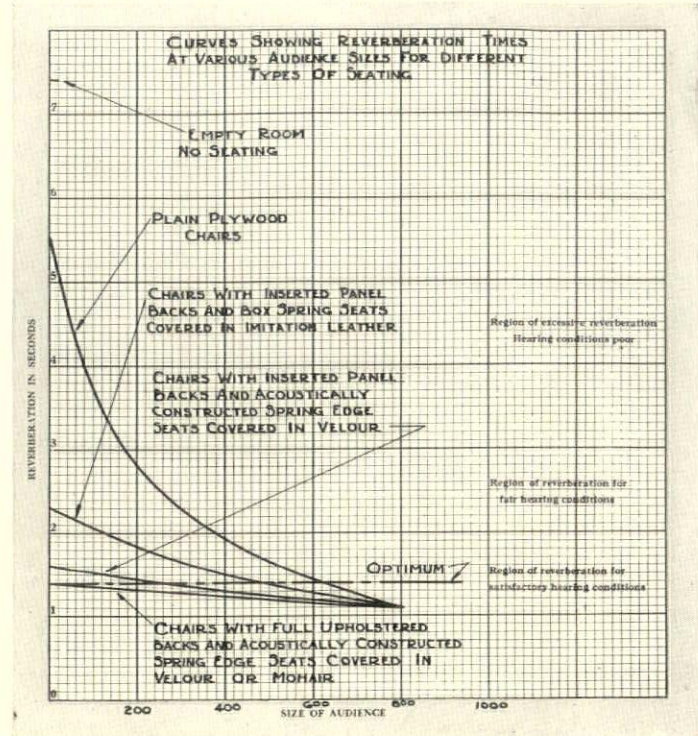


FIGURE FOUR

HOW TO DESIGN AN AUDITORIUM WHERE It is EASY to Hear

by W. K. FRIEND

Acoustical Engineer, American Seating Company

This and the following page are the continuation of Mr. Friend's article, unfortunately omitted from last month's issue

WHEN a sound is produced in a room it is reflected back and forth from the seats, floor, walls, ceiling, a portion being absorbed at each reflection until its intensity is so reduced that it becomes inaudible. The ordinary plaster surface absorbs only about 3% of the sound energy at each impact. The other 97% is reflected. Owing to the high speed of sound, which is about 1120 feet per second, or equivalent to the speed of a rifle bullet, there may be many of these reflections in the course of a few seconds before enough energy is lost to make the sound inaudible. In such a case, the trail of sound following one syllable of speech or tone of music will not die out before the next syllable or tone is uttered. This is what is called reverberation. There is a lingering of the sound with consequent confusion in which nothing can be heard clearly and distinctly and hearing is difficult and tiresome.

The method of correcting excessive reverberation is found in the installation of materials and furnishings

which possess the ability to lessen the reflections by absorbing sound energy and thus decreasing the time it takes for each syllable to become inaudible. Such materials are certain kinds of upholstered seating, special wall treatments, and heavy drapes and carpets. Sabine found the properties that determine the absorption qualities of a material are its porosity and compressibility. Thus, in the use of covering materials for seating and drapery, the heavier, deep pile fabrics such as velour and mohair produce the most satisfactory results.

Watson has worked out a graph which has proved helpful in determining the amount of absorption needed in various sized rooms to secure what he has experienced as satisfactory reverberation time. This chart is shown in Figure 2. After the amount of absorption in a room is computed, the additional absorption needed to arrive at the Watson optimum reverberation is readily obtained by taking the difference between the number of units of absorption indicated for the given volume on the graph and the computed absorption.

The amount of absorption needed in a room to insure against excessive reverberation can be accurately computed mathematically. The methods used in such computations have been published many times and will not be repeated here. *(Continued on page 66)*

There has been much discussion among acoustical investigators as to what is a satisfactory reverberation time in a room to attain best results. Most musicians contend that for the best reception of music the reverberation time should be longer than that allowable for satisfactory speech reception. If the musicians are right in their contention, they are the ones who must be the losers in auditoriums where both speech and music are used. It may be that our supposedly better appreciation of music when produced under reverberant conditions as compared to that produced under "dead" conditions is a matter of training and that we can be educated to find as much satisfaction from music in less reverberant rooms.

Dr. V. O. Knudson, in extensive experiments, has shown that speaking is better understood as an auditorium is made successively less reverberant with sound absorbing materials, thus imitating an outdoor theatre. F. A. Waugh also cites the perfect acoustics of outdoor theatres. Watson goes so far as to say that sections surrounding the seating space should be as "dead" as possible under all conditions. He adds further that speakers and musicians may better be surrounded by or have back of them reflecting surfaces to reinforce the sound. This allows them to hear themselves and thus adjust their performance to give best results, and also benefits the auditors.

Reflecting surfaces, when used on the stage, should not be more than 28 feet from the sound source and should not be arranged so as to concentrate the sound. Flat surfaces are best for this purpose. Reflected sound which follows direct sound by .05 seconds or less gives beneficial reinforcement. This means that the path difference of the two sounds must not be more than $1120 \times .05$ or 56 feet. Hence the distance of 28 feet as the limiting position of the reflector back of a speaker.

An audience has a vital bearing upon the acoustics of a room. This is due to the inherently high sound absorption qualities of people as customarily dressed when attending public gatherings. Sabine, early in his work, determined the absorption of an average adult. Within the past year, however, as a necessary step in making

acoustical computations more accurate, determinations have been made of the absorption of average adults seated in various types of theatre and auditorium chairs. These recent measurements differ materially from Sabine's, due mostly to changed customs of dress and manner of seating.

Because of the sound absorption qualities of people, hearing conditions with ordinary plywood or veneer chairs in a room change rapidly with changing size in audience. As the room approaches capacity the reverberation is reduced because of the added absorption and acoustic conditions are consequently improved. This modulation of the acoustic conditions, due to changing audience size, is undesirable. What is desired is a low, satisfactory reverberation time, practically unchanged, for all audience conditions, and this is possible to obtain through proper seating. What is done is to build as much absorption as is necessary into the chairs and to design and place it so that the absorption of the chairs is cancelled when the chairs are occupied, the absorption of the chairs being replaced by that of the auditors occupying them. This prevents the amount of absorption in the room from changing with changing audiences and produces a constant reverberation time for all audience conditions, or what may be termed a flat reverberation curve.

Figure 4 shows graphically the effect different types of seating can have upon the reverberation time in a room designed for various sized audiences. The graph illustrates an actual case of a room of 85,000 cubic feet in volume. The graph applies only to the room under consideration. Rooms respond to acoustical treatment differently unless they are identical in all respects.

The absorption of acoustical wall treatments is not counterbalanced by the audience to prevent changing acoustical conditions, because it is not in a position to have its absorption cancelled and replaced by the audience. Such treatments, however, perform a very necessary function in lowering the reverberation in a room with no audience so that the balancing function accompanying the use of the proper seating is effected within an acceptable reverberation range.

Consult Your Architect

(Continued from page 49)

labor and study to produce a new stimulus which the entire industry needs. It will not only increase residential buying but can at the same time put a stop to the building of poorly designed "mongrel" houses.

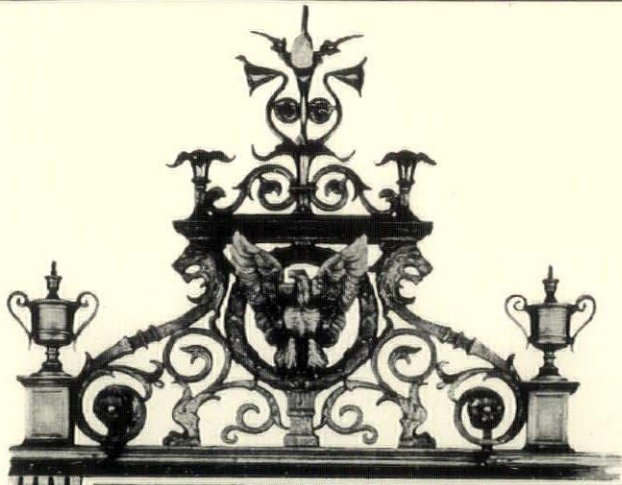
Briefly the remedy may be summed up in the slogan: "Build Your Home Architecturally Correct—Consult an Architect!" This is the answer to the consumer's house design problem. It tells the secret of successful house building. It urges more than "Build a Home," the words "Architecturally Correct—Consult an Architect" setting it apart from many ordinary, trite slogans common in the past. It is effective because it gives a constructive command.

Not only will this theme slogan run through the advertising of the Morgan organization itself, but hundreds of thousands of mailing pieces containing it will

be used by material dealers all over the country. It is estimated that this expenditure will run well past \$250,000.

The swing to better designed houses has already started. Buyers have helped tremendously by demanding better design. Builders who have sensed this tendency and build better designed houses find they can sell their products much easier. Their houses create greater customer satisfaction, which in turn brings additional jobs from the buyers' friends and others.

After all, what is there in a "mongrel" house to awaken the desire for home ownership? Not much! On the other hand, a house well planned, pleasing in appearance and well built, no matter what its size, has instant and lasting appeal that assures happiness, satisfaction, and a safe investment to its owner.



FEDERAL RESERVE BUILDING

CLEVELAND, OHIO
Interiors of Banking Lobby



The side walls and pier facings in the Main Banking Lobby of this building are of Convent Sienna Marble, the floor—Tennessee. The barrelled ceiling is richly decorated in gold and color in the Roman manner. Lobby bays between the piers are screened with Iron grilles. Each bay, a private space adjacent to the Banking Screen, is allotted to Member Banks for business transactions. The grilles were originally designed for Wrought Iron. For economy, however, the work was Cast and the desired Wrought effect obtained by a baked enamel finish—in imitation of rusty iron. The arched window openings on the outer wall, shown in the background, are screened with glazed grilles. These were produced by similar methods of handling. The entire Metal equipment of this building was fabricated by Flour City Ornamental Iron Plant,



WALKER & WEEKS, Architects

A DIVISION OF
GENERAL BRONZE CORPORATION

DISTINCTIVE PRODUCTIONS IN ALL METALS
LONG ISLAND CITY, N. Y.

"I want to
DUPLICATE
THAT
BUILDING
for \$250,000"

By GEORGE F. KAISER, LL.B.

WHAT HE DID. Wynn was employed as architect to design and prepare all necessary drawings, plans and specifications for a \$250,000.00 five-story store and office building on a corner plot owned by his client. Payments were to be made at certain specified intervals and Wynn's fee was fixed at five per cent of the total cost. At the request of the client, the architect accompanied him to another city to see a certain building the client fancied. When the architect said the building would cost much more than \$250,000.00, the client said he would communicate with him later, but instead sold the corner property, on which a building was erected.

WHY HE DID IT. The client contended that he had the right to sell the property and abandon the project without paying Wynn, claiming that the latter had



broken the contract by failing to draw plans for the desired building so that the same could be built for a sum reasonably near \$250,000.00.

WHY HE SHOULDN'T HAVE DONE IT. When the architect sued, the Court rendered judgment in his favor. When his client appealed, the higher Court, in affirming the judgment for the architect, pointed out that as he had rendered some services he was entitled to recover some amount in view of the fact that the project was abandoned by the owner when the property was sold. The architect could not be said to have broken the contract because a duplicate of a building could not be constructed within the cost limit. Since he so informed the owner, all the architect had to prove was he was ready, able and willing to carry out the contract.

Registration Laws and City Contracts

WHAT HE DID. Sometime before January 1st, 1930, Brown, an architect, had entered into an agreement with a city to prepare plans and specifications for and to supervise the construction of a high school. Brown failed, however, to apply for an examination or for a certificate of registration as an architect prior to the date set by a State law enacted before the agreement was entered into and so was not legally authorized to practice architecture after that date. The city accordingly notified him of its intention to cancel the contract because of his failure to qualify for the practice of his profession. Thereupon Brown brought suit against the city and obtained a temporary injunction restraining it from interfering with the carrying on of the contract; next he applied for a continuance of the injunction pending the outcome of the litigation.

WHY HE DID IT. Brown claimed to be entitled to a continuance of the injunction on the basis that the statute impaired the obligation of contracts and interfered with personal liberty and private property in contravention of the State Constitution, which declares no person shall be deprived of life, liberty or property without due process of law.

WHY HE SHOULDN'T HAVE DONE IT. The Court denied his plea, saying, "Police power is the inherent and plenary authority of the State, within constitutional limits, to protect the lives, health, morals, comfort and general welfare of the people, and is paramount to all rights under any form of contract," and pointed out that the act was passed for the very purpose of safeguarding life, health and property.



*Detail of residence of William Chamberlain, Esquire, Winnetka, Illinois.
S. S. Beman, Architect, Chicago. Roofed with IMPERIAL Antique Shingle Tiles*

LUDOWICI-CELADON COMPANY
Makers of IMPERIAL Roofing Tiles

NEW YORK: 565 FIFTH AVENUE

104 S. MICHIGAN AVENUE, CHICAGO

WASHINGTON: 738 FIFTEENTH ST., N. W.

FOR OCTOBER 1930

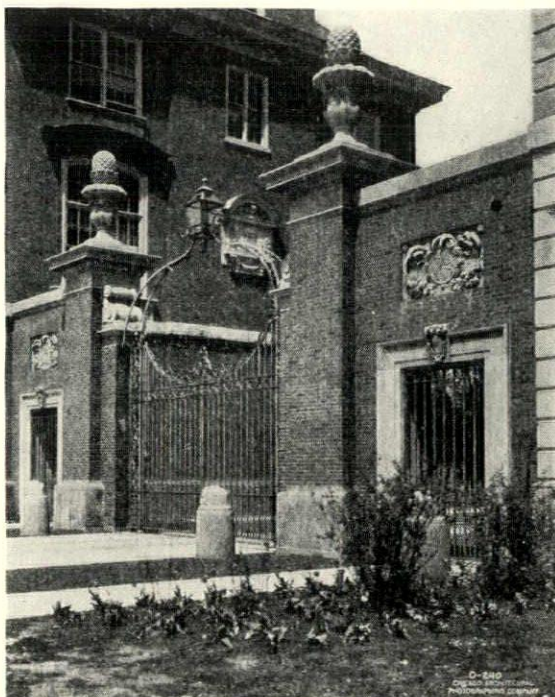
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HISTORY OF THE CAMPUS PLAN OF THE UNIVERSITY OF ILLINOIS

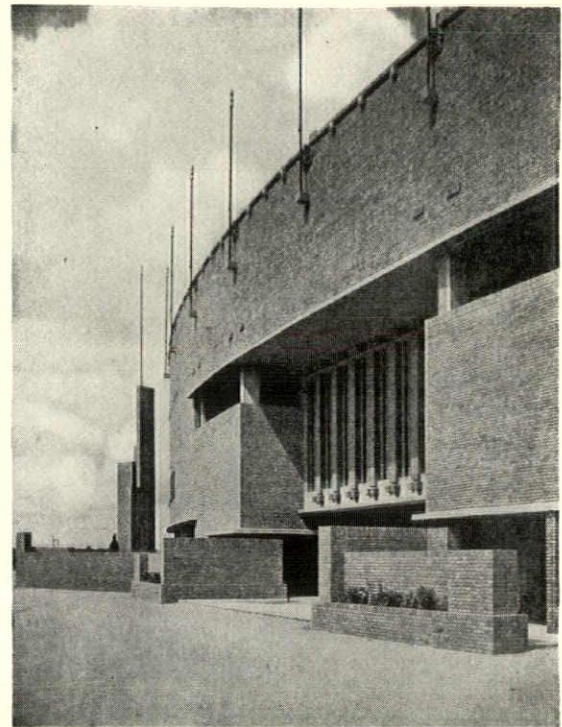
By Leon Deming Tilton, B.S.,
A.S.L.A. and Thomas Edward O'Donnell,
M.S., M. Arch., A.I.A. Published by the
University of Illinois Press, Urbana, Ill. Illustrated; 245
pages; price \$5.

AN interesting study of the process of planning the physical equipment of an institution that is growing rapidly—the University of Illinois. Many prominent architects have had a hand in the development of the campus plan of this institution as well as its buildings: Holabird & Root, Daniel H. Burnham, C. H. Blackall, and many others. Thus there has been a varied character to the assistance lent, making possible the development of entirely new points of view as conditions changed and enabling the University to incorporate in its plan of development valuable plans and details. The whole scheme shows a far sighted vision as to how the University might grow and how possible new buildings should be placed. The result is that the University has a workable campus plan, a correlated landscape plan, and a new architectural tradition.

Each of the various important plans developed over the years is reproduced with comments and criticisms. There is an appendix containing a list of chief buildings belonging to the University and a tabulation of building data such as year completed, cost, etc. There is also a collection of letters from prominent architects relating to the problems of campus planning and development. The book is extensively illustrated.



Gateway between Architecture and New Commerce Buildings. From "History of the Campus Plan"



Stadium at Amsterdam. Jan Wils, architect.
From "Nieuw-Nederlandsche Bouwkunst"

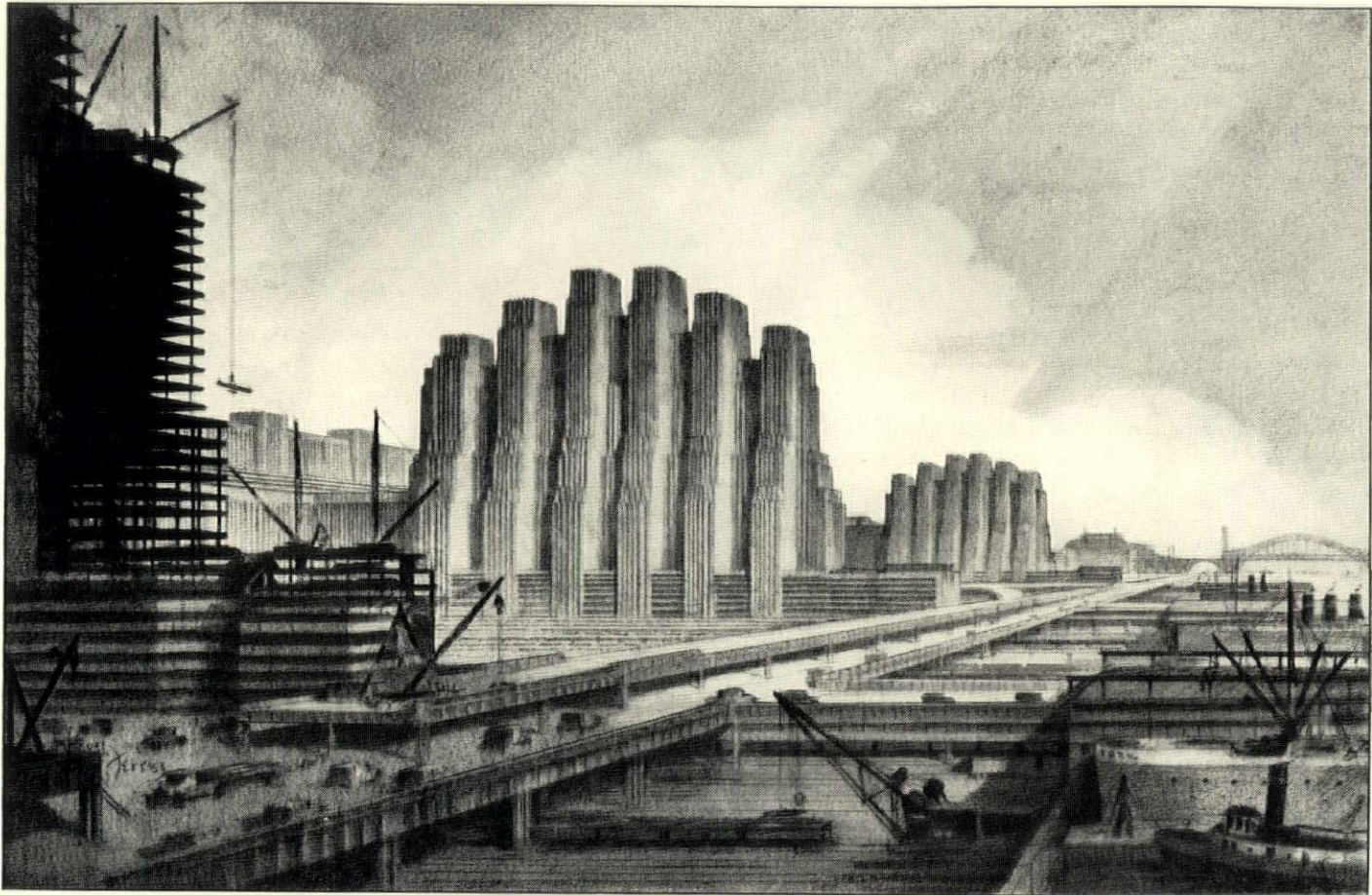
NIEUW-NEDERLANDSCHE BOUWKUNST

By Prof. Ir. J. G. Wattjes. Published by N. V. Uitgevers-Maatschappij "Kosmos," Amsterdam, Holland. Illustrated; 358 pages; size 9½ x 12½; price Fl.17.50

"EVERYBODY in Holland now builds twentieth century architecture. The word 'modern' has little sense there because no opposite tendency exists. . . . The younger architects are becoming conscious of the fact that much which was considered striking and extravagantly modern is essentially and closely related to the best examples of the Dutch architecture of the past and stands much nearer to that past than nineteenth century imitations of old styles. . . . This collection is offered to architects and interested laymen in Holland and abroad as an illustration of present day Dutch architecture which, although it cannot claim unqualified approval, yet deserves attention as a creation of typical architecture by one nation of today."

These extracts from the preface to "Modern Architecture in Holland" give the spirit of the book, which is a collection of pictures of various types of Dutch buildings, in some cases accompanied by plans which help to make clearer an understanding of the architecture. The captions under the pictures appear in several languages, including English.

STRUCTURAL STEEL CREATED THE SKYSCRAPER
THE TIDE OF STEEL RISES FAST



"STEEL SEAPORT"—IMAGINATIVE DESIGN BY HUGH FERRISS. AN ENLARGEMENT, ON SPECIAL STOCK FOR FRAMING, WILL BE MAILED WITHOUT CHARGE TO ANY ARCHITECT, ENGINEER OR BUSINESS EXECUTIVE.

STEEL bears the burdens of the sea . . . facilitates the handling, storage and distribution of cargoes ashore. The same safe metal that makes worthy ships and mighty cranes carries railroads and highways over and under congested city streets, leaps deep gorges, lifts priceless floor-space to the skies. . . . And on this swiftly rising tide of steel, progress rides!

As the matchless strength, adaptability, permanence and economy of steel become common knowledge, there is increasing demand for its use in structures of every kind and size. To homes, schools, apartment and mercantile houses, to industrial plants and small as

well as large bridges, steel brings those identical qualities which make possible the most amazing structures the world has ever seen.

Structural steel will not shrink, rot, crack or deteriorate with age. It is fire-safe, fool-proof. It comes to a job ready to go into place. It is quickly erected in any weather, any climate.

Before building anything, find out what steel can do for you. The Institute serves as a clearing house for technical and economic information on structural steel, and offers full and free co-operation in the use of such data to architects, engineers and all others interested.

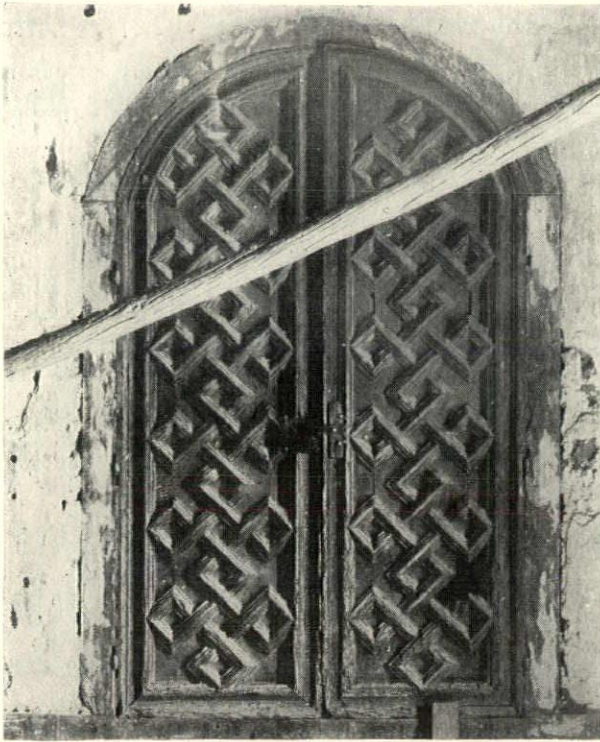
The co-operative non-profit service organization of the structural steel industry of North America. Through its extensive test and research program, the Institute aims to establish the full facts regarding steel in relation to every type of construction. The Institute's many publications, covering every phase of steel construction, are



available on request. Please address all inquiries to 200 Madison Avenue, New York City. Canadian address: 710 Bank of Hamilton Bldg., Toronto, Ontario. District offices in New York, Worcester, Philadelphia, Birmingham, Cleveland, Chicago, Milwaukee, St. Louis, Topeka, Dallas, San Francisco and Toronto.

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

STEEL INSURES STRENGTH AND SECURITY



Cupboard doors in a dwelling. "Mexican Houses"

MEXICAN HOUSES

By G. Richard Garrison and George W. Rustay. Published by the Architectural Book Publishing Co., 108 West 46th Street, New York. Illustrated; 173 pages; size 10¼x13¾; price \$15.

A BOOK of photographs and measured drawings made by the authors, who were commissioned for that purpose by the Secretaría de Educación Pública de Mexico. This country was at one time extremely rich and powerful. Much wealth was lavished on building, the domestic work being done by craftsmen inspired by the larger buildings. The workmen were skilled and the character of their ornament shows the influence of the Aztec tradition.

The result of this old work is interesting. The authors have made an excellent selection with the result that they present a collection of material from a little known source that contains many ideas of value. The measured drawings are well done and plentiful; there are a few pages of free hand pencil sketches, mostly of groupings of buildings.

DRAWING IN LEAD PENCIL

By Frank M. Rines. Published by Bridgman Publishers, Pelham, N. Y. Illustrated; 63 pages; size 8¾ x 11¼; price \$2.50.

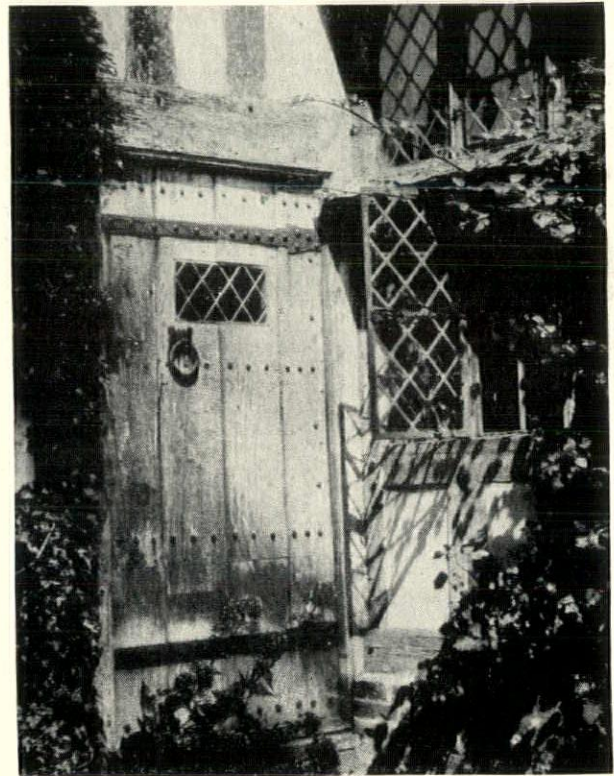
ARCHITECTS who like to sketch in pencil will find many valuable hints contained in this book for the majority of the subject matter consists of illustrations reproduced page size with facing comments explaining how the artist secured certain effects and why he did it that way. There are twenty-two of these full page illustrations, each an excellent bit of art, and mostly architectural in subject. There is an introductory chap-



West River, Vermont. From "Drawing in Lead Pencil"

ter of twelve pages explaining the principles of drawing in lead pencil, accompanied by sketches.

Mr. Rines is an excellent artist. Some of his work has already appeared in the July, 1930, issue of THE AMERICAN ARCHITECT. He is instructor in drawing at the Cambridge School of Landscape Architecture and the Massachusetts School of Art. His book is worthy of a place in the library of every architect or draftsman interested in pencil drawing.



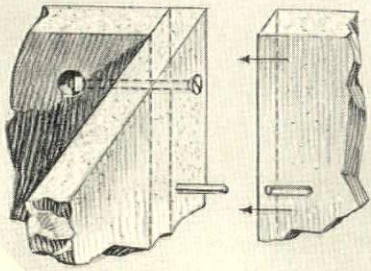
Doorway detail, Gifford's Hall near Wickhambrook. From "Tudor Homes of England"

TUDOR HOMES OF ENGLAND

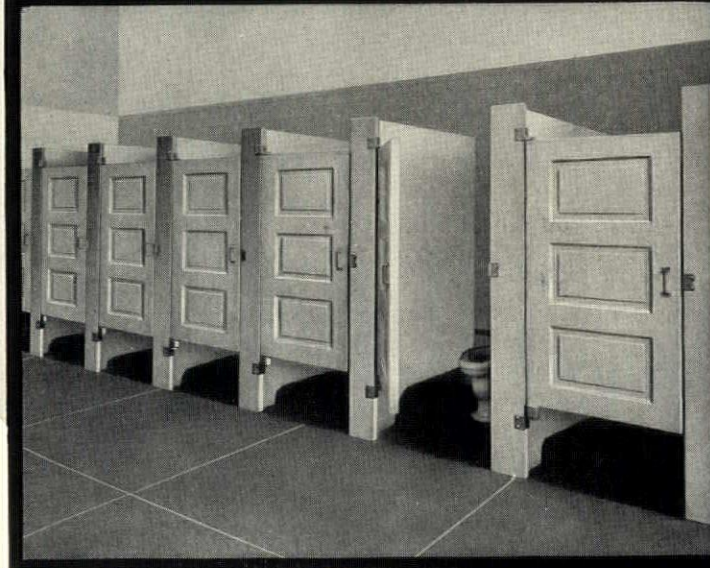
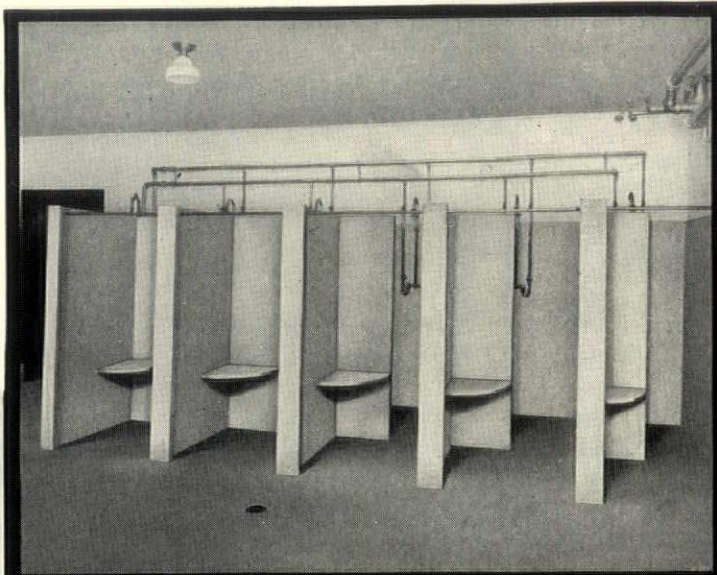
By Samuel Chamberlain. Published by the Architectural Book Publishing Company, Inc., 108 West 46th Street, New York City. Illustrated; 246 pages; size 12¼x16¼; price \$27.50.

WHEN Samuel Chamberlain sets his artistic ability to the production of a book on architectural subjects, where artistic judgment can be display to

A slightly higher first cost is true economy in unsupervised parts of school buildings.



Method of joining partitions and back slabs.



Alberene construction stands the gaff

THE carelessness and rough usage to which shower and toilet rooms in schools are subjected makes it imperative that partitions be durable. Any attempts at economy through the use of materials which are cheaper and which cannot be fabricated properly for the purpose, reacts unfavorably by increasing upkeep costs.

Alberene Stone aside from its proven methods of construction (rigidity and permanent waterproofness of joints) is selected by architects because it is easy to clean and keep sanitary. Considered from every angle it is the most economical form of partition.

A Bulletin containing details and specifications is available. May we send you a copy? Alberene Stone Company, 153 West 23rd Street, New York. Branches: Boston; Chicago; Newark, N. J.; Washington, D. C.; Cleveland; Pittsburgh; Richmond; Philadelphia; Rochester. Quarries and Mills at Schuyler, Va.



ALBERENE STONE

TOILET PARTITIONS and SHOWER COMPARTMENTS

excellent advantage, one naturally expects that something superior should result. There is no disappointment when one opens "Tudor Homes of England," for it is an exceptionally fine selection of houses and the various details erected during the Tudor period, although some examples from later periods are included.

In addition to the many photographs, there are a number of Chamberlain's sketches. There are also a number of measured drawings by Louis Skidmore, known to readers of *THE AMERICAN ARCHITECT* as the architect

who painted the water color reproduced on the cover of the January, 1930, issue. Mr. Chamberlain's sketches have frequently been reproduced in the pages of this magazine. Two of his etchings are reproduced in this issue of *THE AMERICAN ARCHITECT*.

The book is entirely informal, embracing any material which seems to offer worthy suggestions to architects of today in the field of domestic architecture; this material is classified according to counties. There are introductory chapters for the various counties.

What Do They Think of Us?

(Continued from page 55)

organization because the cost of maintaining such an organization is paid for by the patrons. The cost of a good architect would not run over ten per cent at most and should be about six per cent."

A REAL ESTATE MAN—"Sure I would employ an architect but I would be very careful who he was. A fellow who did not have too much business would be best because he would aid in supervision. Another advantage would be that his estimate would give me a fairly accurate idea of the cost of the house. Some of the less capable architects give estimates that are too low. There should be some way of holding this type responsible. The architects themselves would inspire more confidence if they would take some action against the fellow who is always running into big extra bills."

NEWSPAPER REPORTER—"If you don't employ an architect you are in all kinds of hot water from the start. His fee only amounts to six per cent of the cost and his service is worth twice that amount if he is real and wants to protect your interests. For his fee he gets you what you want, in the way you want it constructed, he supervises construction, insists upon proper material being used and supplies the building with artistic beauty. I know one architect who inspects all steel used on buildings he constructs at the plant where it is turned out and again when it reaches the job. Every architect should do this. By doing so he would make many friends and not leave his customer with a headache as so many of his professional associates do. The cost of six per cent means nothing."

DRUGGIST—"How are you going to build the house you want unless you have an architect? If you buy canned plans that the mail order houses sell, your house will not satisfy you and the cost will mount up because of the changes you are sure to make. I don't know what an architect's services cost but I don't think they would be much."

BROKER—"Why bring up anything about architects? I built a house and learned plenty about them. His inaccurate estimate of the cost of my home made me sick and he was too high hat to even go out to supervise the work. I think the architects should get together and in some way curb the activities of the inaccurate fools who pose as real architects. They cost me plenty."

NEWSPAPER DEALER—"Sure! Vat is an architect?" That was a pay off.

BUILDING INSPECTOR—"If you don't get an architect, don't build. It is true that some of them are

useless but a good firm will save plenty on any building operation. A good architect more than pays his own fees by his supervision. Buying standardized plans is unsatisfactory because of the changes you make."

STREET CAR CONDUCTOR—"If I knew enough to build a house I wouldn't be collecting change for the B. M. T. Sure I would get an architect if I ever get money enough to build. I don't think they charge much or so many people would not employ them."

MERCHANT—"I built a house and I don't like architects. If they were honest in their estimates and did not try to impress prospects by how smart they are in drawing plans that did not cost so much when you looked at them on paper and then jumped up when you built they would be better off. The architects should drive such men out of their business."

POLICEMAN—"I don't think I would get an architect when I could buy the complete plans for a house much cheaper. I'd have to pay someone to build it anyhow and I'd see that whoever did the work would follow the plans. I guess they need an architect on a big building all right, to see that the contractors don't run the cost too high and that they put in the materials called for. I understand that the architect of the X——— Building estimated it would cost 12 million and then it cost them 18 million. If you think that bird was much help to have around I don't."

BARBER—"Sure get an architect. He knows his business and will save you money. He also will build the house the way you want it and this is more satisfactory than having a house arranged as some architect for a standard plan company thinks you should have it."

LAWYER—"Some architects know nothing about ethics. They are in a cutthroat business and don't seem anxious to do much about it. I have a client who accepted the plans of one firm because they offered to do his work for three per cent after another and more reputable firm asked six per cent. The result was it cost my client more for extras than if he had hired the higher priced architect in the first place. Why can't the reputable architects wipe out these incompetents in their profession. Maybe your magazine would do them a great service by advocating a house cleaning. It certainly would improve the standing of the profession."

SALESMAN—"An architect should be employed in all building operations but just which one is a question that would puzzle me if I were going to build. I guess they are like lawyers and doctors with a fair percentage of good ones and plenty of bad ones that would cost

THE "MANHATTAN" BATH FIXTURE

*has five
special
features*

No other bath fixture can claim *all* these advantages:

1. Face plate on shower head comes off in a few seconds merely by loosening the Center Screw.
2. A diverter valve which allows water to be tempered at the spout, then immediately switched to the shower by merely lifting the lever; lever dropping back automatically when water is shut off and bringing diverter back to tub position, thereby avoiding scalding or unexpected showers.
3. A one-piece fitting for tub and shower supplies.
4. Complete accessibility of all working parts from the *front* of the installation.
5. Valves made with a standardized interchangeable unit that can be renewed as easily as changing a light bulb.

This Waste is Built for Endurance

This improved waste, under test at our factory, has been operated tens and tens of thousands of times — sufficient to give practically unlimited service without care or repair.

All of these features are incorporated in the new "Manhattan" Bath Fixture. You will like this fixture once you give it a trial. Why not write now for a copy of our new 1930 catalog?

THE CHICAGO FAUCET COMPANY
2700-22 North Crawford Avenue, Chicago, Ill.



CHICAGO FAUCETS

you money to experiment with. I don't think the fee of an architect would be such an important item if he gave you what you wanted."

SALES MANAGER—"If an architect would take a real interest in your building he would be a big asset. I would hire one but he would first sign a contract to supervise the construction to protect me from the contractor and I would get a contractor that he did not recommend. If he did the job according to what I wanted done his fee would not be important."

AUTOMOBILE MECHANIC—"Sure I'd get an architect if I was going to build. You wouldn't take your car to a plumber to fix would you? Well, why should I let a contractor build a house for me? I think the cheapest and best way to do anything is to get the best man in the line."

TEACHER—"I most certainly would hire an architect but I would be careful who he was. A friend of mine was nearly ruined by getting a very low estimate

from an architect for her home. She had difficulty in getting money to pay extras. I do not think it would cost much to hire a good architect considering his work."

Our experience with the man-in-the-street convinced us that as a general rule the architect and his work are appreciated. However, there seems to be a pronounced tendency among those who have had experience with the profession to criticise architects for their inability or refusal to prepare fairly accurate estimates of cost.

The man-in-the-street had scant criticism of the fees paid architects but he held that their services would be much more valuable to him even at a slightly increased fee if he were assured of their personal supervision.

We no longer look on architects simply as necessary witnesses at a murder trial. We have a new conception of them and a better one. When all members of the profession supply fairly accurate cost estimates and pledge themselves to supervise all construction, the architect will be held in greater esteem by all.

Tower Floor Plans

(Continued from page 31)

a lower floor. Also an elevator, that makes stops only in the tower, takes shaft space out all the way through the building. With space limited, as it is in the average tower, it is a perplexing question to determine how few elevators you can have, and yet maintain good service for the tenants.

The number of toilets depends directly on the number and class of tenants.

To satisfy the New York City Building Code, regardless of the size of the tower, at least two stairways are required, one to be accessible to the outer air.

A stack is not shown in all towers as, in many cases in New York, steam from a central plant is available.

The tower plan must, further, be one of maximum efficiency, for it is the most expensive space to build. A tower floor is not to be considered as one more floor added to a building, but as one more floor pushed up from the bottom with its necessarily heavier foundations, and heavier steel throughout. With the exception of the ground floor, tower floors receive the highest rental per square foot, which offsets increased construction costs.

To find an ideal solution of all these problems in one plan is not to be expected. Any criticism that may follow, therefore, is not to be taken as determining how a plan should or should not have been arranged, especially since the relation to the rest of the building is not shown. Rather, it is hoped, that certain underlying principles may be found that may be of interest or assistance to those who are designing towers.

Of the smaller towers, the Transportation Building was one of the earliest. Because of the large proportion of space taken by the services it presented one of the more difficult problems of attaining an efficient plan. While small floors may be expected to rent as single floors to one tenant, yet they should be flexible enough to be easily subdivided. In this case the arrangement of the services in the center of the plan so cuts up the rental area that there are two rather narrow strips on each side. While it is said that a tenant can always be found for odd shaped spaces, it is safer to provide rental

area that conforms to the requirements of the average tenant. In this case it might have been better if the services could have been concentrated in one end.

The arrangement of the services themselves is noteworthy, for in case of subdivision all the stairs, elevators, and toilets, are accessible from the elevator lobby.

The tower of the Empire Trust Building is about the same width, but somewhat longer than that of the Transportation Building. In keeping the services concentrated in one corner, a somewhat more adaptable plan is achieved. The meter closet is located on the public corridor for accessibility. The separation of the entrances to the toilets so that they are not in view of each other is also a desirable feature. The office unit depth of 22' is very good for a tower.

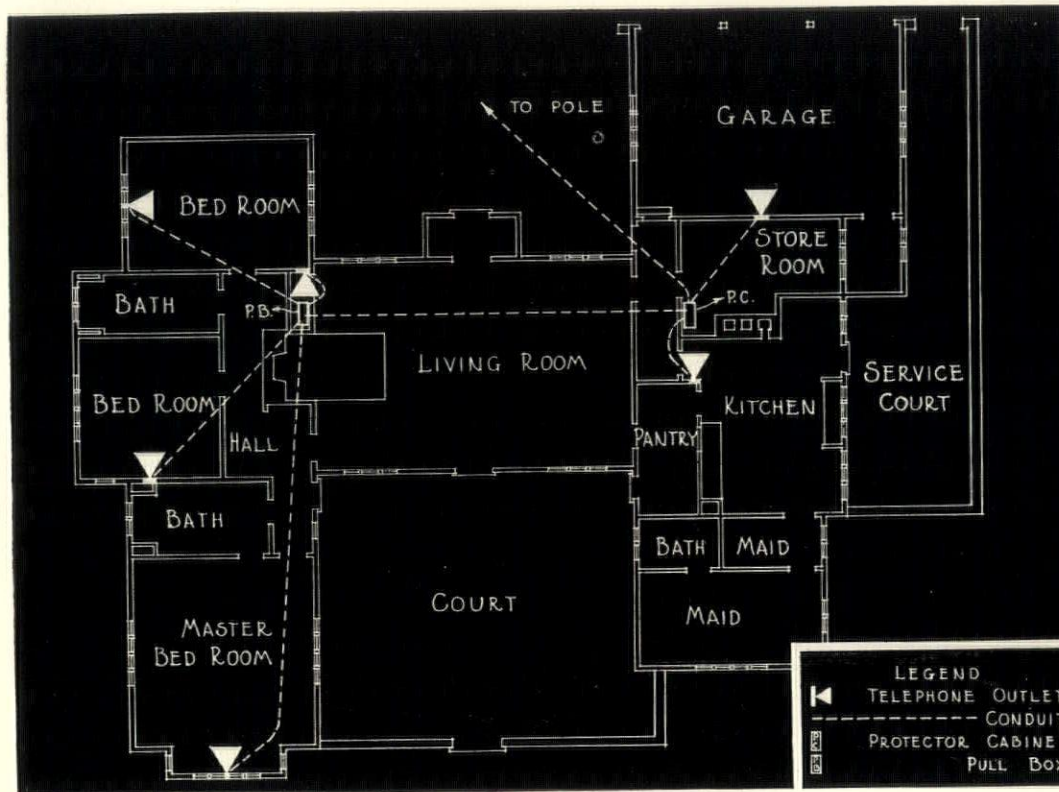
For one of the latest of the small plans the Lefcourt Colonial is not without interest. Here the rentable area is equally adapted to rental as an entire floor or as subdivided. The location of the columns gives unusually clear space, as they would come in the corridor partition, if erected. The location of toilets on alternate half floors, while not so desirable, is an interesting way of conserving space.

Of the larger towers, the French Building was among the first, under the new Zoning Law, to show the economic possibilities of a tower on a lot that was not, at that time, considered large enough. The subsequent construction of two more towers next to it along the avenue prove the soundness of the policy.

Examining the plan, we find the services concentrated in one end. In the subdivided floor, the stairs, elevators and toilets are accessible from the central public corridor without extensions. All the columns would come in the central corridor partitions if erected, giving added freedom in laying out the interior office units. The depths of the units, about 16 feet, is rather shallow.

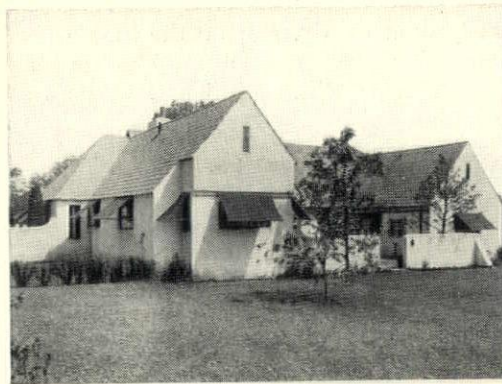
Of the adjacent towers the Lefcourt National is the latest. Again we find everything grouped in the rear, and also, an arrangement where everything may be reached from the lobby. No special attempt has been

The modern Home provides for both Present and Future Telephone needs



Complete telephone convenience is provided in the residence of Dr. George W. Hawley, Bridgeport, Connecticut, by six telephone outlets, including one in the garage. The telephone wiring is carried in conduit bidden in the walls and floors. FRED C. JOHNSON, Architect, Bridgeport.

PROVISION for complete telephone convenience is an important and attractive feature in the design of the modern residence. Telephones throughout the house, placed where they will save steps and time, greatly increase the comfort and livability of the home, and help to simplify household management.



Planning in advance for the telephone arrangements has many advantages. It provides conduit, concealed within the walls and floors during construction, and telephone outlets in all the important rooms. This gives improved appearance, guards against certain types of service interruptions and

provides a flexibility of telephone service that is most desirable.

Although at first only such outlets as may be needed immediately are used, the others are always available for possible rearrangement of the service to take care of the growing requirements of the family.

Your local Bell Company will gladly help you plan the telephone arrangements for new and remodeled residences. It will also arrange for conferences to explain to your clients the telephone equipment which serves different household needs. No charge is made for this advisory service. Just call the Business Office.



made to locate the columns so they would not come in the rental areas when the floor is subdivided. Otherwise the floor is readily adapted to any use.

With the development of the Grand Central Zone, buildings rivaling the Woolworth in height began to appear. The first of these was the Chanin Building. Based on a simple rectangle, it is not only an economical building plan but also, with a width of 57' and typical column spacing, it presents a plan that is at once suitable for general subdivision. While the elevator group is centrally located, it does not cut the floor in half. As a service unit, the group is very compact.

Not far from the Chanin on Forty-second Street, is the Lincoln Building, with another large tower of over sixty stories. Again, the simple rectangular plan was used, and of a width that permits standard office unit depths on either side of the central corridor. With the elevators at one end the large open floor area should give little trouble in subdividing.

While not as high as some of its neighbors, the News Building should not be overlooked, for several ideas and experiments are carried out in its plan. For one thing instead of pairing the windows in each bay, as is frequently done, the piers are, as far as possible, of equal width between windows. This means a partition may be located behind any pier with equal ease. Of special interest is the location of the interior columns. Considering that the frame of a building should not be

designed from the point of view of the most practical engineering, but from the standpoint of what the space it encloses is to be used for, the columns have been located so that practically all of them come within the corridor partitions. Even in the rear wing, which is of even greater width than usual, there is only one interior column to each bay and that one is decentered to give a maximum of clear space. If deep girders seem expensive when compared to the cost of the steel in three equal spans, this is offset by the saving of a column and its footing for each bay, and increased valuation in the rental space.

After what has been said, the tower plan of the Chrysler Building seems to refute the opinions previously expressed, although it has had the benefit of the others' experience. Grouping the services in the center gives a maximum use of the outside windows, but in this case it means that much of the space in a subdivided floor will be rather shallow. Further, it will generally be found that more public corridor is required in proportion in this type of plan over one which serves offices on both sides. However, considering the fact that the building was to be the tallest in the world, some sacrifices were undoubtedly made to devise a plan that would achieve an exterior of good mass. The approximately square plan, also, has the economical advantage of enclosing the greatest area with the least perimeter, which means a saving in the cost of exterior wall.

They Rate Ships, Why Not Buildings ?

(Continued from page 43)

reward quality construction permitted the wildcat loans which also disregarded quality in quite another fashion and lent too much. A middle ground will stabilize building finance and, as a result, construction work, whether of big buildings or of single family dwellings and housing in general. Concerning this, Lawson Purdy, executive secretary of the Charity Organization Society of New York City, who has had wide experience with the financing of housing to replace the slums, said:

"The country has suffered from poor planning of dwellings, single family, two family and multi-family, and the poor building of such houses. A system of giving a rate to a dwelling of any class, which would fairly weigh the different qualities the building should have and then give it an appropriate rating, would be of enormous assistance to buyers, lenders and the public generally.

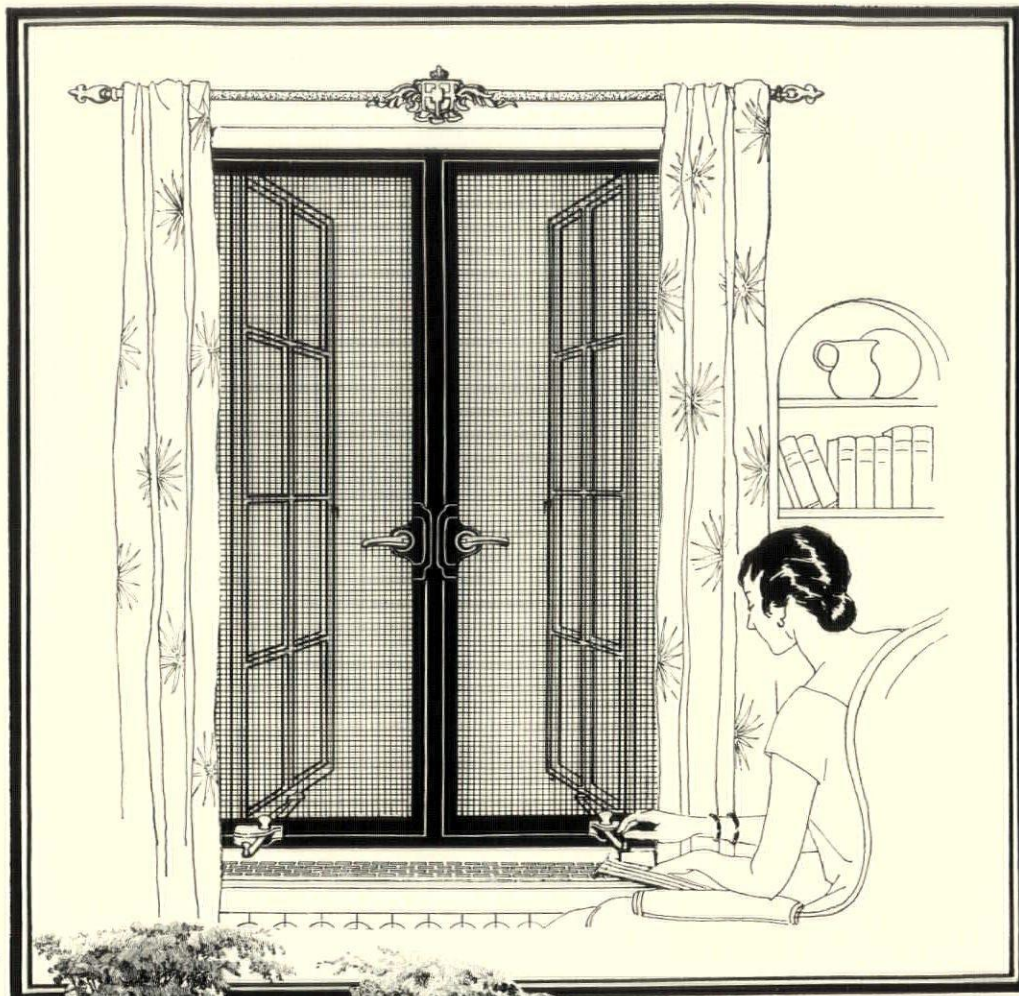
"It is essential to the proper conduct of the corporation, for such service, that it shall have on its governing board men who represent architects, engineers, building experts and, I should hope, city planners and housing experts. A board so composed could see that a good job was done and would carry with it the confidence of the public."

The authoritative acceptance of ratings of buildings as backing for fortified mortgages in money markets also will serve to avert the threatened advance of fire insurance rates because the conflagration hazard on poorly built areas will find a master, and will act as an incentive to speculative builders to secure premium loans, much more nearly in keeping with the justice of

the case than has been the rule of lending in the past.

Measurement of "the cost to own" of buildings of different types can be easily accomplished as it already has been done in the case of single family dwellings costing \$25,000 or less. The ratings would be arrived at on the basis of codes for rating worked out for that purpose by code committees of architects and other technical men of national standing for the Certified Building Registry. The Code for Rating Dwellings, which is now in use and about to have annual revision, was worked out in that way and then passed upon by two divisions of the Bureau of Standards at Washington. That code, for buildings of that class only, rates four factors, including fuel cost along with permanence, fire-safety and comfort. Permanence is stressed. The report submitted to the Chicago and New York chapters of the A. I. A. as a result of an inquiry in Detroit, in behalf of the Board of Commerce of that city, included the statement, "It will circumscribe the activities of unscrupulous and inefficient builders and promote business of those organizations conscientiously seeking to produce a better building for less money."

Those who hope that the new era of building activity will not permit speculative construction to proceed again to wanton offense against the standards for which the architectural profession stands, should take action to urge the rating service. The opportunity is thus provided for the profession of building architect, like that of the naval architect, to work with authority, shoulder to shoulder with the lender, the underwriter and the owners of structures and bonds.



Colonial house at Saddle River, New Jersey, equipped with Fenestra "Fencraft" Casements. Aymar Embury II, Architect.

Architect AYMAR EMBURY II

chooses Fenestra "Fencraft" Casements . . . *Opened . . . Closed . . . Locked . . . without touching* Inside Screens

In selecting Fenestra "Fencraft" Casements for this Colonial house, Mr. Embury considered their unique advantages to his client, including: *screen-free* operation; and the fact that fly tightness is permanently insured by the non-warping, metal-to-metal contact of the *flat screen frames* held firmly against the *flat casement frames*.

"Fencraft" Casements are of heavy solid steel sec-

tions, with hardware of solid bronze or nickel silver in a variety of distinctive finishes. Craftsmanship of the high type you would expect from America's oldest and largest steel window manufacturer. Ask for "Fencraft" catalog.

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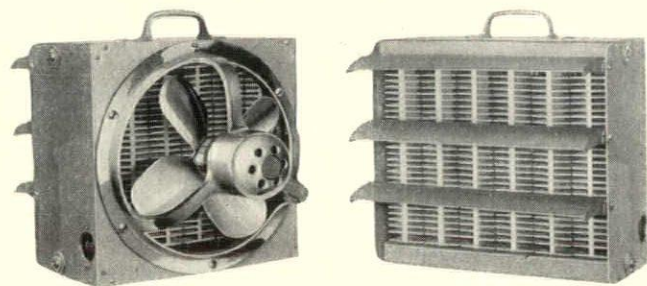
Factories: Detroit, Mich., and Oakland, Calif. Convenient Warehouse Stocks

Fenestra

STEEL CASEMENTS (Screened)

NEW MATERIALS & EQUIPMENT

BRIEF REVIEWS THAT MAKE IT EASY
TO KEEP IN TOUCH WITH THE
PROGRESS MADE BY PRODUCERS



Electric Space Heater

A new type electric space heater for industrial and commercial heating needs has been placed on the market by the American Foundry Equipment Company, Mishawaka, Ind. This unit combines the characteristics of both the steam unit heater and electric heater into one device. Can be used either for permanent installation or as a portable heating unit.

New Insulating Board

In-cel-wood is the name of a new insulating board now being introduced by the Cornell Wood Products Company, 307 North Michigan Avenue, Chicago. It is made of new wood fibre, weighs 600 lbs. per thousand sq. ft., has a thermal conductivity of .32 B.T.U., is a full half inch thick, and has a plaster bond of 2140 lbs. per sq. ft. Board is light cream in color, smooth on one side and slightly textured on the other. Can be sawed, nailed and is easily installed. There is also an In-cel-wood lath made with ship-lapped edges to reinforce the joints and reduce heat leakage.

Window Laces for Period Interiors

Window laces authentically styled to period interiors is a decorative idea now being inaugurated by the Scranton Lace Co., Scranton, Pa. Successive style series will be presented at regular intervals, each series being a unit in itself and comprising a variety of designs characteristic of a specific school of interior decoration. The Colonial series initiated the idea; the next series will be the Georgian.



Headley Asphalt-Base Aluminum

This is a coating composition for application over steel, iron and other metals, wood and fabric, for the prevention of corrosion, disintegration and destruction from the action of moisture, acids or alkalis, chemical fumes, salt air, etc. The ingredients are aluminum flake and Mexican asphalt with a volatile solvent to produce a good brushing or spraying consistency. It is shipped ready mixed. Drying is complete within an hour or two, even in cold weather. Made by the Headley Emulsified Products Co., Franklin Trust Building, Philadelphia, Pa.

New Radiator Control Valve



A valve stated to cut steam consumption and to give all the advantages of hot water heating in steam heating systems. Made by the D.G.C. Trap and Valve Company, 1 East 43rd Street, New York City. The valve controls the steam flow into the radiator in a new way and mixes the steam with the air and vapor already in the radiator, circulating this humid mixture throughout the entire radiator. This new radiator control valve can be used with any trap or on gravity systems and needs no special installation.

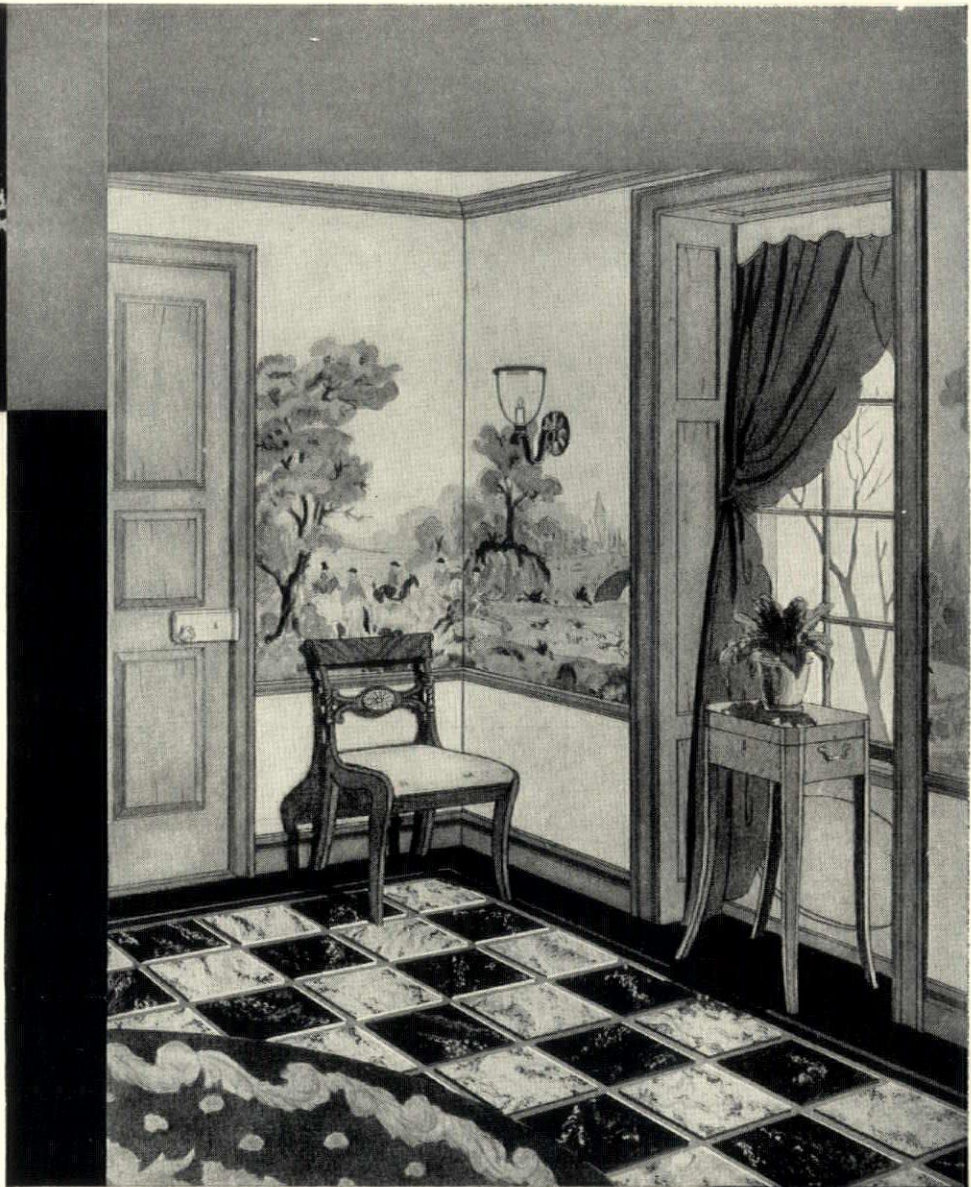
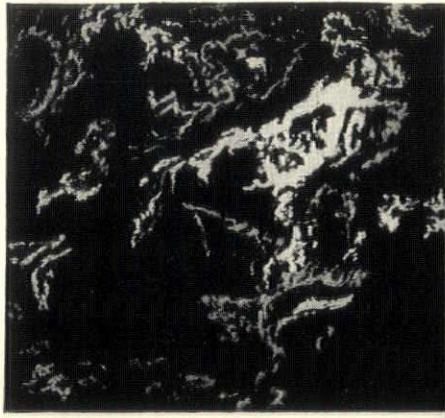
control valve can be used with any trap or on gravity systems and needs no special installation.

Headley Emulsified Asphalts

A waterproofing, dampproofing and general protective coating composed of emulsified asphalts. Can be applied at any temperature above 35 degrees F. without the display of special skill. Made by the Headley Emulsified Products Co., Franklin Trust Building, Philadelphia, Pa.

Hardwood Made Flexible

Flexwood is wood veneer made as pliable as canvas. It consists of a thin veneer attached to a backing that readily rolls like canvas, for this new product is extremely flexible across the grain and fairly flexible with the grain. It comes in walnut, oak or mahogany, is made in large sheets or rolls, and is cut with scissors or with a knife. It is readily applied to plaster walls, wall board, or to metal with ordinary paper hangers' tools. It can be applied either to curved or plain surfaces. Made by the Flexwood Company, 919 North Michigan Avenue, Chicago.



SINCE most halls are not large enough for elaborate furniture groupings, decorative interest centers on walls and floor. Wall paper in hunting scenes, red taffeta curtains, and embossed linoleum in black and cream marbled squares, make a striking background.

WE should like to send you an "idea book" on the use of linoleum in modern interior decoration. It contains a wealth of suggestions beautifully visualized, in full color. The illustration reproduced above is one of many covering the more important rooms of the home.

You will also find carefully made color plates of 52 smart linoleum patterns—beautiful examples of the progress that has been made in modern linoleum design.

We'll gladly send a copy to any architect or decorator. Ask for the Architect's Edition of *Color and Charm in Home Interiors* and address Architectural Service Department, Congoleum-Nairn Inc., Kearny, N. J.

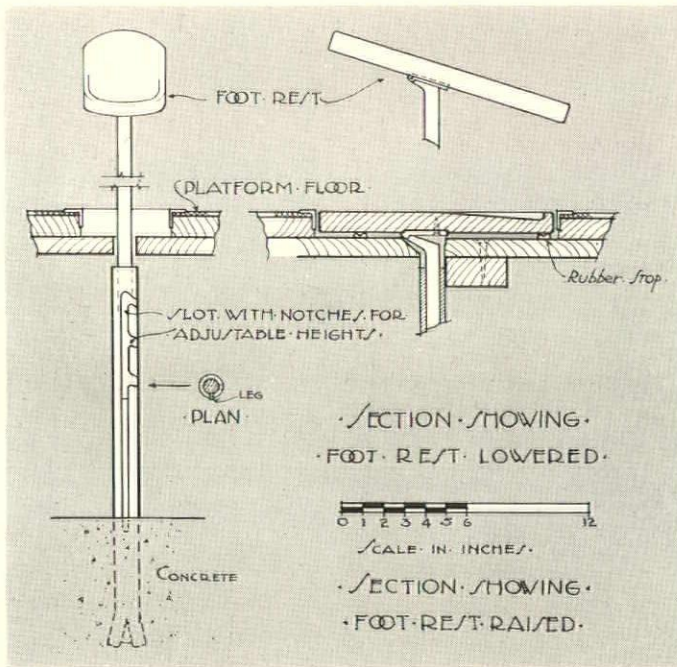
BONDED FLOORS

BONDED FLOORS are floors of Sealex Linoleum and Sealex Treadlite Tile, backed by a Guaranty Bond issued by the U. S. Fidelity and Guaranty Company. Authorized Contractors of Bonded Floors are located in principal cities.





The street frontage is eleven feet seven inches



Detail of disappearing foot rest

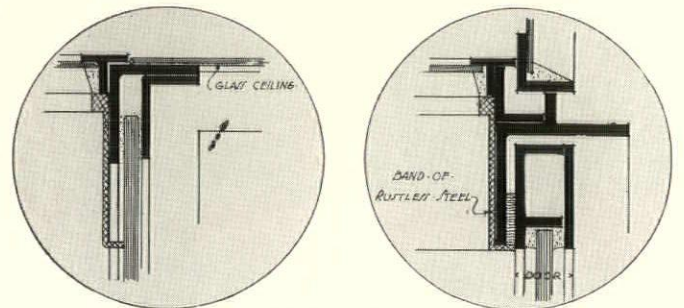
a shoe store 8 feet wide

(Continued from page 25)

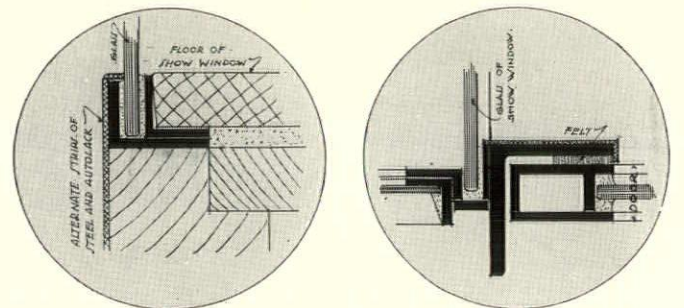
the entire lighting of the exterior, vestibule and show cases is through the ceiling and sign panel.

The interior is treated very simply. The wall opposite the platform is occupied by shoe cases. A combination package and cash desk, located near the entrance, facilitates quick delivery. The walls are light red and the floor is of grey linoleum in alternate light and dark stripes. The platform is covered with a grey material, and the seats are dark red. Mouldings are conspicuous by their absence both on the exterior and interior.

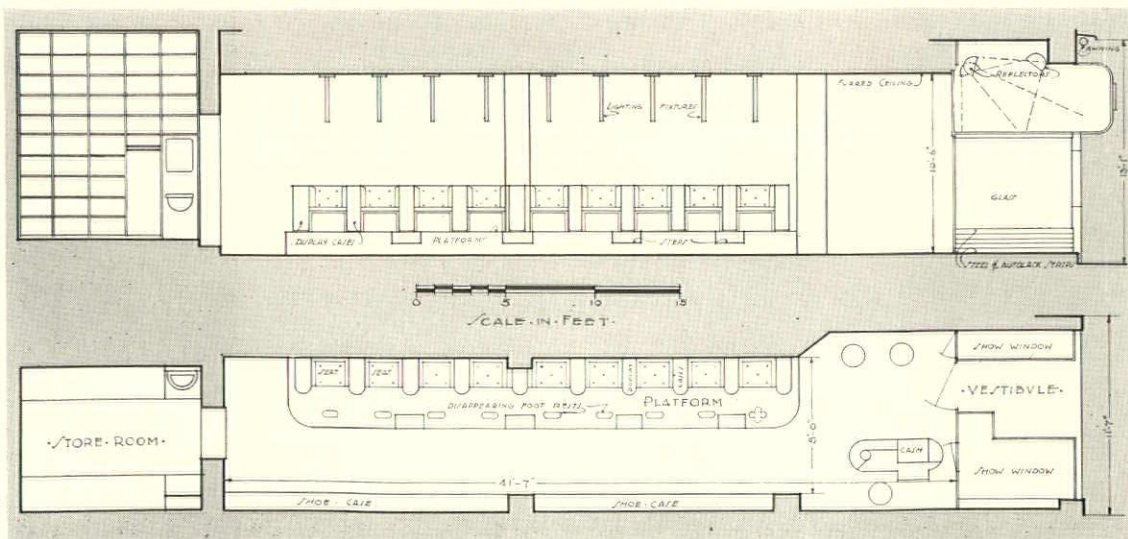
The lighting of the interior is by nine ceiling fixtures consisting of glass cylinders each containing three tubular bulbs. This gives effective illumination that is augmented by the brightly lighted display cases between the seats.



Detail of head of show window and door frame



Sill of show window and detail of door jamb



Section and floor plan of the Oha shoe store, Dusseldorf. Designed by Bernard Pfau, architect

The Proper Sales Setting . . .

Inspire it with an appropriate floor


THE ultimate sale of almost any product depends largely on how well it is displayed. The architect who plans the interior of a successful showroom gives careful thought to the decorative scheme. If the room is to reflect an inviting personality that stimulates sales, then a colorful linoleum floor may be employed as the foundation for a most effective scheme of decoration. The decorative theme of the interior shown here is based on Armstrong's Linoleum (Handmade Marble Inlaid No. 83). No matter what the interior—there is an Armstrong Floor to suit the effect you wish to create.

Armstrong's Linoleum Floors perform two distinct duties as business floors. They are attractive and serviceable. In addition, they are comfortable because they are resilient. The surface is spot-proof, stain-proof, because it is Accolac-Processed. Light waxing and polishing keep it gleaming. Or where frequent washing is necessary, the surface may be renewed when needed with Armstrong's Linoleum Lacquar. Properly installed over a layer of linoleum lining felt, with seams sealed tight and trimly tailored to the walls, these floors give satisfactory service at



In the smart Fifth Avenue display room of the Fostoria Glass Company this Armstrong's Linoleum Floor (Design No. 83) helps to stimulate sales.

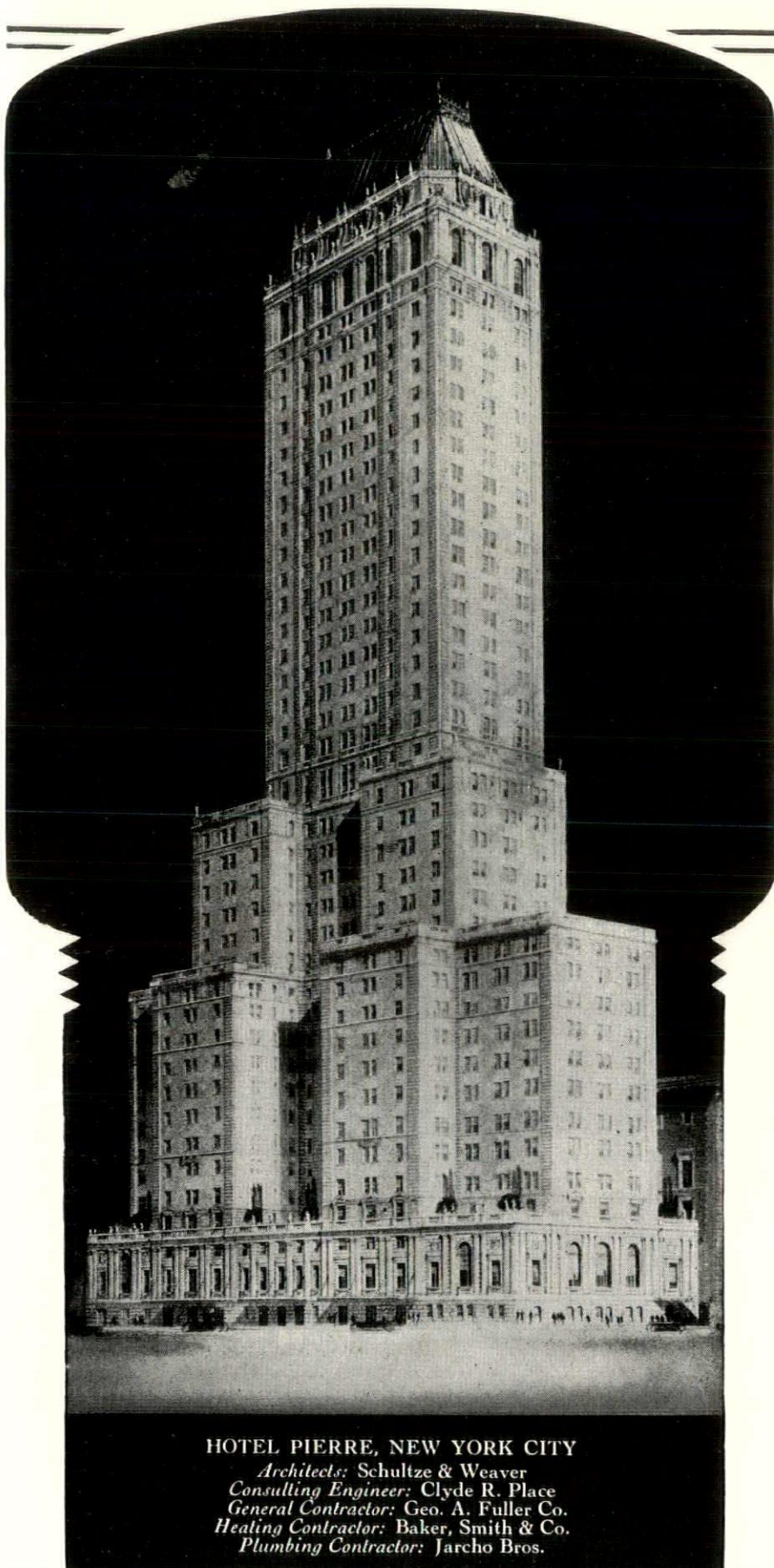
low maintenance cost for years.

Our file-size specification book may be had upon request, together with colorplates and samples of Armstrong's Linoleum. Look for our listing in Sweet's. Armstrong Cork Company, Floor Division, Lancaster, Pa. 

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for every room in the house

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*Architects: Schultze & Weaver
Consulting Engineer: Clyde R. Place
General Contractor: Geo. A. Fuller Co.
Heating Contractor: Baker, Smith & Co.
Plumbing Contractor: Jarcho Bros.*

ONE OF FIFTH AVENUE'S FINEST

A GAIN uptown New York comes to the front with the erection of the palatial new Hotel Pierre. This ultra-fashionable hostelry . . . beautiful lines of Georgian architecture . . . slender, graceful facade of granite and cream-colored brick . . . rises forty stories above Fifth Avenue at Sixty-first Street.

The unique interior arrangement reveals how splendidly the architects and engineers have achieved spaciousness and distinction through modern design and construction. That extremely careful consideration was given to mechanical equipment, particularly the piping, is evidenced by the specification of NATIONAL for the major pipe tonnage. In addition to National Pipe for the heating lines, National Copper-Steel Pipe (especially resistant to atmospheric corrosion) was selected for the soil, waste, vent lines, rain leaders and fire lines.

Architects and engineers interested in the protection feature of copper-steel pipe should write for Bulletin No. 11, describing National Copper-Steel Pipe—

The Original Copper-Steel Pipe

NATIONAL TUBE COMPANY

Subsidiary of United States Steel Corporation

PITTSBURGH, PA.



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Architects come back again and again for PeerVents

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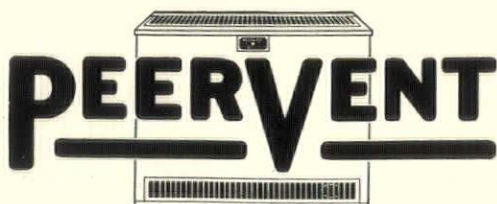
A public school in Hackensack, New Jersey, built in 1914, was equipped throughout with PeerVents. Fifteen years later, or last year, a new school building was completed. The PeerVent System was again installed, so efficient and satisfactory were the original PeerVents.

In Lackawanna, New York, in 1923, Public School No. 3 was PeerVent equipped. In 1924 Public Schools No. 2 and No. 5 were so equipped. Finally, in 1929, four new schools—the new High School,

the Washington School, the Bethlehem School, and the Roosevelt School—were all completely equipped with PeerVent System.

Repeat orders such as these are convincing proof of the satisfactory and efficient operation of PeerVents.

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BRIDGEPORT, CONNECTICUT

Pioneers in Unit Ventilation

Resident Engineers in Principal Cities from Coast to Coast

How I Hire and Why I Fire

(Continued from page 47)

qualifications of an applicant are considered of prime importance. It is the belief that an architect's assistant should have a thorough grounding in theory and in the architectural precedents and their application, as well as an intelligent understanding of them. With this as a background and a knowledge of building requirements and the way a building is put together, he is prepared to assume a position in any architect's office except probably a designer, which requires special training.

And as for the applicant, well, bluffing his way along may do for a time. The late office manager of a large eastern organization bluffed his way into a senior draftsman job in a city of the middle west. In a week's time he proved to be a keen disappointment to his new employer and finally was put *hors d'concom* entirely. So it seems needless to add that perfect candor should mark the interview between applicant and interviewer.

Every office has or has had its quota of men who gained entree into the organization because of the friendship or influence of some individual. Likely as not the architect was not in a position where he could very well say no. Naturally, cases arise where the architect would many times like to terminate the services of such an individual—but then an architect is always expected to be a diplomat. Draftsmen are only architects in the making and since there are also good and bad architects there must be the same two species of draftsmen.

THE subject of firing takes all the fun out of this article. Ella Wheeler Wilcox once wrote, "When the court of the mind is ruled by reason, I know it is wiser for us to part." And so it should be. Ah, then, suppose he did use the other style of architecture or put the plumbing pipes in the wrong place or indicated the outside walls too thin, or even if he didn't get into his work that thing we call beauty. Why he must be fired. It's a hard, cold word (and a world also) at that. We recall firing a man because he had a nagging wife at home. The dear thing upset him so that some days he proved to be of little worth in the drafting room. And then there was the man who was fired because he was not satisfied with the number of thumb-tacks doled out to him, so he cornered the entire supply of the drafting room and thus by his bullish tactics he gained the enmity of the boss. This was really funnier than its narration appears. And we parted company with one of the fellows because his mean and selfish ways almost disrupted the entire office. All offices have had to fire the individual who lacked what is usually termed cooperation. This is about the worst type an architect can acquire, and the sooner he parts with him, the better.

The function of the interviewer should be stressed. The architect, chief draftsman, or business manager should accept the role, and he has an exacting part to play. He should be a good judge of human nature in all its varied moods. He should bear in mind that "learned men are those who have done a thing often enough to know that it will be perfect if handled one way and imperfect if handled another." And if he will display these qualities he will be able to make an intelligent selection of the most important member of an architect's family—a draftsman.

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1. Seymour H. Knox residence, Aiken, S. C., Peabody, Wilson and Brown, Architects.

2. L. H. Shearman estate, Manhasset, L. I., J. W. O'Connor, Architect.

3. General Howard S. Borden residence, Rumson, N. J., George S. Chappell, Architect.

4. Thos. A. Edison Junior High School, West Orange, N. J., Guilbert

& Betelle, Architects.

5. State Capitol Building, Raleigh, N. C., Atwood Nash Inc., Architects.

6. United Piece Dye Works, Lodi, New Jersey.

7. Richmond Borough Hall, St. George, S. I., Carrere and Hastings, Architects.

8. S. L. Rothafel Bronze Tablet, Roxy Theatre, New York.

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SPECIALISTS IN ORNAMENTAL METAL WORK

Thatch In Lovely South Devon

(Continued from page 28)

material native to the spot, they possess the charm which only the indigenous can give, and blend into natural setting so closely that definite outlines are sometimes lost.

Thatch is, of course, a natural roofing material employed by primitive peoples from earliest times, its character depending upon latitudes, which determine climate—climate producing various growths which may be suitable. It is the oldest known means of roof protection—it was probably first used after the expulsion from the Garden of Eden. It has a known history of far more than a thousand years in England.

Even within so small a compass as Great Britain there is a wide variety.

In the Highlands of Scotland the characteristic heather provides one of the best and most durable of materials. The earliest of nature's products to be used were the reed and the rush; both are still largely employed in Norfolk, Suffolk and in North Wales, where the existence of salt marshes encourages a luxuriant growth of these water grasses. The reed is the most lasting of all thatches, and will continue to shed rain and weather

for two or more generations without repair. It is also the most fire resisting, and birds and insects do not disturb it.

Other natural roofing materials are furze, or gorse, and the grain grasses—rye, wheat, oat and barley straw. The first two are the ones used for cottages in the south and midlands of England, the latter being employed only for such temporary coverings as those placed upon ricks of hay and straw.

Rye or wheat straw designed for use as thatch is gathered with care, cut by hand, and either threshed with a flail or a heading machine, so that the straws may not be broken. In Devon, wheat straw is generally sold for thatching in "niches;" *i.e.*, bundles of 28 pounds. The price used to be one shilling a niche. The first step in preparing straw for thatching is to thoroughly wet it. This is usually done on barn floors during rainy weather when outside work is prohibited. Carefully piled in heaps, the straw is saturated with water to make it pliable.

The unit of straw comprising a thatched roof is called a "yealm," which amounts to as much as can be held firmly in both hands. From this a few straws are pulled out from one end, turned down and wound around the

top of the yealm, forming what is known as a "staple." As the yealms are completed they are laid crosswise on a short rope or cord, the thick and thin ends alternately. When of sufficient number and weight for a man to carry, the rope, which should have a running noose, is drawn round the yealms, which may in this way be conveyed to the roof.

The thatcher's outfit consists of a bill-hook, a paring knife and pair of sheep-shears for trimming the edges of the eaves, a large "thatching fork" to hold the yealms, and a wooden hand-rake, with iron teeth with which to comb down the thatch after it is fastened to the roof.

A double thickness of thatch is laid at the eaves as in a shingle roof, and but a few inches of the long straws are laid to the weather, so that even in a new roof, it is several inches thick. In roofs of great age, the thatch acquires a thickness of nearly two feet, for, in repairing, the old thatch is not removed—a new layer is applied. This accounts for the languorous, rounded eaves about dormers and gables; the uncertain ridges which add so much



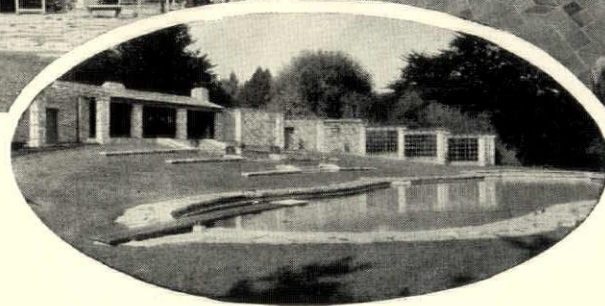
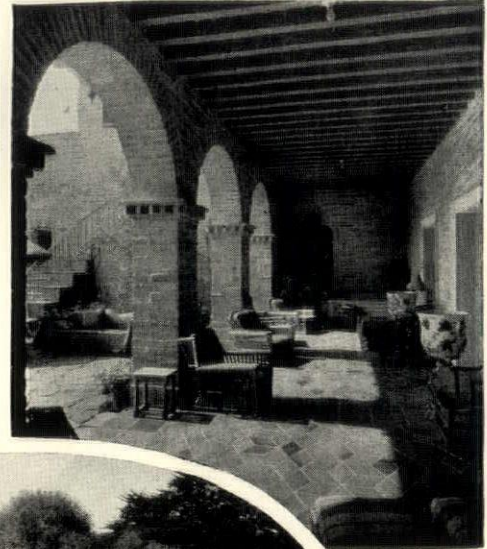
EAVES-TROUGHS ARE RARE on thatched dwellings, but they are used on this old house on New Street, Honiton

of the picturesque to the slumberous beauty of Devon cottages.

In old cottages the rafters are frequently of poles at a pitch of 50 degrees, the cross pieces, or "stringers" as they are called, of saplings, being about six inches apart. The yealms are tied to these with hazel sticks, or are held in place by rods laid across them, the rods being tied or sewed to the rafters. In some districts turf is first laid on the rafters and the ends of the yealms are thrust into or between the turves; or ropes of straw are stretched over the surface, crossed at right angles at intervals of a foot or more, these weighted down by stones hanging from the ends of the ropes. The latter is, however, a more primitive method not employed in Devon.

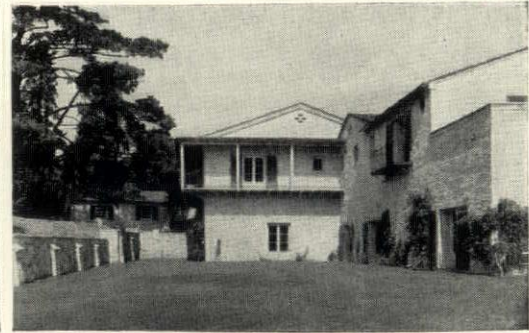
At the opening of the Century, thatch was beginning to be looked upon as an obsolete material. Restrictions were placed upon its use by community governing bodies because of its relative inflammability. It should be remembered that this comparison is made with slate or tile as there are no wood shingle roofs in England. In place of the delightfully individual dwelling so long a feature of the English country-side there came into existence the card-board style of alleged architecture,

Concrete pays tribute to fine architecture



CONCRETE, in many forms, has been skillfully employed by the architect in designing this home. The exterior walls are of concrete masonry units, in slightly irregular sizes and varied colors. Building frame and floors throughout are of reinforced concrete—*one unit*, of utmost strength and rigidity. The roof is attractively tiled. So constructed, a home is *firesafe* and long enduring.

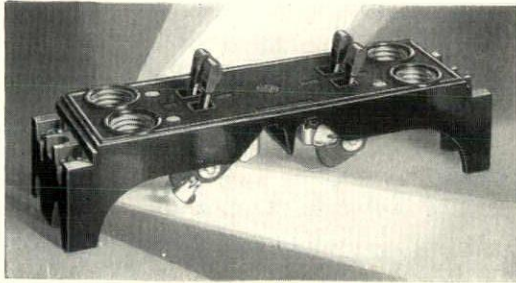
The views on this page are of a home that is distinguished in both architecture and construction—the home of Robert B. Henderson, in Hillsborough, California. Gordon B. Kaufmann, Los Angeles, Architect; Dowsett-Ruhl Company, San Francisco, Contractors



PORTLAND CEMENT Association

Concrete for permanence and firesafety

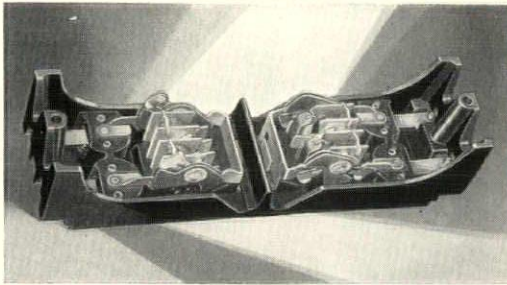
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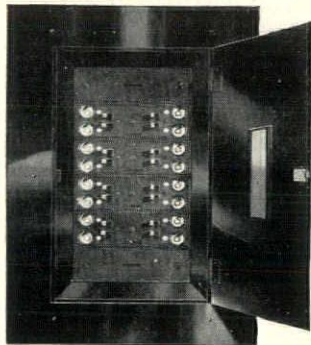
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with its monotonous pattern—its stereotyped roofs of asbestos composition. But since the War, thatch has come back into favor, and largely for economic reasons. A thatch roof can be constructed or repaired for less than half the cost of a slate or tile roof, and that is no meagre factor in a land so burdened with taxation and business depression as is England. And a straw thatch will last for thirty years without repair. How many other roofs continue to protect those beneath them for so long a period?

And thatch, with age, grows so mellow. Not only do its lines become more seductive, but its color undergoes a transformation. Its older layers are an ebony, but the newer strata are of golden browns and warm yellows. And time adds another beauty unknown to our more practical age: sweet green mosses find lodgment under the shade of great beech or oak trees, or old roofs may be found sprouting a veritable garden of field flowers whose seeds have been deposited there by the birds or the vagrant winds.

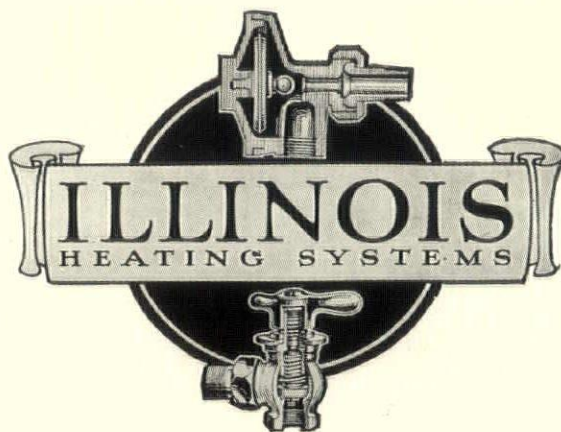
The walls of most old Devonshire cottages are made of "cob," a composition of sandy earth, chopped straw and lime. The old Devon saying about cob wall is: "Give 'em a hat an' a good pair o' butes an' her'll last forever;" meaning by "hat," a good thatch, and by "boots," a good foundation—a few courses of masonry or brick. Cob and thatch are almost inseparable in South Devon. Together they produce that "warm in winter—cool in summer" interior which make them cosy fortresses against climate—the more rigorous days of winter—the summer's hot suns or the moist "zoggy" days of warmth and soft rains which produce the luxuriant verdure of the Channel Coast.

A "cob" wall is practically indestructible if its "hat" and "boots" are kept in repair. I recall that the Anne Hathaway cottage of Stratford is of this construction. It was built as late as the middle of the 16th Century, and occupied by the Hathaway family until it was purchased by the Shakespeare Birthplace Trustees in 1892. But I have seen along Devon and Dorset ways the crumbling walls of former cottages which were slowly sinking back to their original shapeless masses of clay because the roofs had been left without repair.

A word as to the most serious indictment against thatch roofs—their inflammability. Basil Oliver's recent delightful book, "The Cottages of England," tells of a smithy near Cambridge upon which the sparks have fallen in thousands for seventy years without damage; and of a thatched house in which the thatch refused to burn, finally falling upon and extinguishing the burning ruins.

There is at Cockington, near Torquay, an unbelievably lovely huddle of thatched cottages and an old forge which dates from the fifteen hundreds, nestling near the Fourteenth Century church and its modest manor house. Parenthetically, the forge still operates, but only on Fridays, when miniature "lucky horse-shoes" are made there, which, according to a carefully lettered card underneath the wide, protecting roof of the thatched porch, may be secured on other days "at the house with the laurel over the gateway." Ordinarily, this would be written: "at the first house to the left," but there is a poetic influence exercised throughout all this lovely country-side, so all prevailing that commonplace figures of speech seem incongruous there.

Speaking of Remodeling is This ECONOMY?



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The following figures furnished by Mr. E. L. Ladenburger, Superintendent of Building, are accurate, as all steam is supplied by the Illinois Maintenance Co. and is accurately metered. These figures prove conclusively that no owner can afford to overlook the economies and satisfaction obtained with ILLINOIS specialties.

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Cost	\$9,569.12
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Money	\$6,155.38

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ANNOUNCEMENT

The Fourth Biennial Architectural and Allied Arts Exposition will mark an important epoch in architectural history as it will commemorate the Fiftieth Anniversary of the founding of the Architectural League of New York. Fifty years of service—during which time American architecture has had its greatest development.

This exposition will be a comprehensive presentation of Architecture, Sculpture, Arts and Crafts, Decorative Material, Building Materials, Utilities and Equipment and will command the attention of representative architects of America and the leading minds of the building world at a time given over to the study of what is progressive and worthy in modern building.

Your participation as an exhibitor is invited. If you will indicate your interest by letter or telephone, we will be pleased to forward our official prospectus and needed information.


President,
The Architectural League of New York.

1881 FIFTIETH ANNIVERSARY THE ARCHITECTURAL LEAGUE OF NEW YORK 1931
FIFTY YEARS OF SERVICE

TE-PE-CO

Vitreous China Penn Urinal

TE-PE-CO recommends the Penn Blow Out Urinal for Toilet rooms where it is desired to keep all piping above the floor. It affords ample room — measuring 18-inches in width, is cleanly, durable and *cannot be clogged*.

Its flushing rim, large water surface and jet action assures a positive and thorough cleansing of the entire inner surface. The entire trapway being larger than its opening in the bowl will obviously pass anything that enters it. Projecting but 13-inches from the wall it requires little floor space and leaves a clear unobstructed floor that is easy to keep clean.

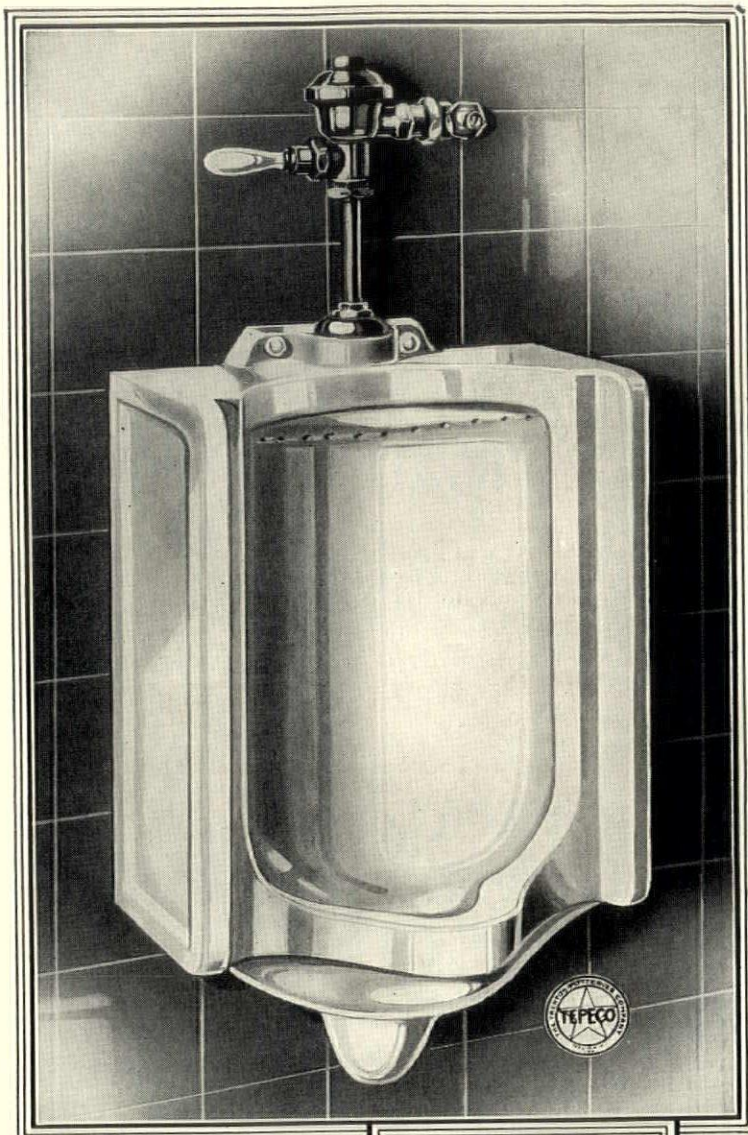
While a comparatively new fixture, its merits are so evident that it has already been installed in many buildings, the most notable of which are the News Building, Irving Trust Building, 40 Wall St. Building; all in New York City and the new Pennsylvania Railroad Office Building in Philadelphia, Penna.

THE TRENTON POTTERIES COMPANY

Trenton, New Jersey, U. S. A.

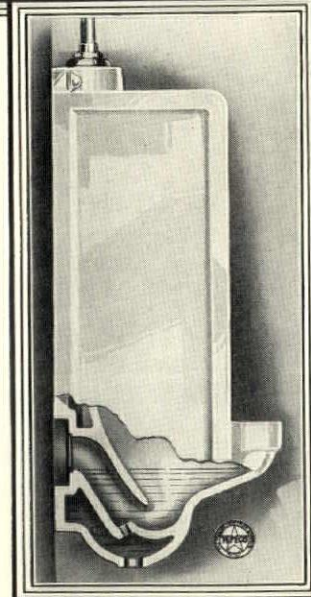
National Showroom — New York City
101 Park Ave., Entrance on 41st St.

Branch Offices: Boston, Philadelphia, San Francisco
Export Office: 115 Broad Street, New York City



OUR GUARANTEE

We make but one grade of ware — the best that can be produced — and sell it at reasonable prices. We sell no seconds or culls. Our ware is guaranteed to be equal in quality and durability to any sanitary ware made in the world. The Te-pe-co trade mark is found on all goods manufactured by us and is your guarantee that you have received that for which you have paid.



THESE TWO PAGES ARE

To the man who wishes to upon terms which do not call for

THERE are many thousands of business men who have delayed the buying of sound stocks because they have not been in the position to make substantial cash outlay.

On the page opposite there are facts of interest to every man who wishes to make a conservative investment upon terms which meet such a situation.

This offering of preferred stock meets in every respect the requirements which experience has proved are essential to sound investment.

- 1 It must have ample earnings to meet dividends.
- 2 These earnings come from established and diversified sources.
- 3 It must have in back of it a record of accomplishments.
- 4 It must have a quick liquidating market.
- 5 As it makes possible a larger number of shareholders, thus broadening its distribution, it is advantageous to have it made available on terms which do not put an immediate drain on present cash reserve of the purchaser.
- 6 Its attractiveness is increased if it provides purchasers an opportunity to share in earnings through a participation additional to the fixed stipulated rate of return. In short, the security as well as the company, must have an inviting future.

This offering of HEARST CONSOLIDATED PUBLICATIONS INC. meets the above requirements in every respect as well as affording you an opportunity to save money instantly and have each months savings earn 7% per annum starting from the day each payment is made—You are asked to read first, the statement of earnings.

7% Cumulative Participating Class A Stock

HEARST CONSOLIDATED PUBLICATIONS, INC.
1008E Hearst Building, San Francisco

Kindly send full details about your 7% Cumulative Participating Class A Stock

NAME

ADDRESS

.....

OF SPECIAL INTEREST

make a Profitable Investment

a large immediate cash payment

BELOW ARE A FEW FACTS REGARDING THIS OFFERING

(The coupon will bring you full details)

On your investment you will receive 7%.

This stock is preferred both as to assets and dividends.

The price of one share is \$25.

This one share (or as many as you wish to subscribe for) may be purchased with an initial payment of \$5 followed with \$2 per month. Your installment payments will earn you 7% interest from the date of payment to the date on which you make the last payment.

Application will be made to list this stock on the New York Curb, Chicago, San Francisco and Los Angeles Stock Exchanges.

The dividend will be paid four times a year.

Owners of stock have the opportunity to participate in additional profits to the extent of an extra 3%.

These properties have been long established. They are leaders in what has become through the eager, incessant daily demand of the public, one of the great industries of America.

Further, these newspapers serve cities which are growing in population and which will continue to offer markets growing as America grows.

Whether you are a large regular investor or whether you have never made a purchase of stocks, the opportunity to acquire an interest in a carefully administered growing corporation is presented to you. For the first time participation in these properties is offered to the public.

The coupon is for your convenience and will bring you full details.

These are the earnings

Year	Net Earnings*	Times Dividend Requirements on Class A Stock
1926.....	\$10,009,806.....	2.86
1927.....	10,162,284.....	2.90
1928.....	11,044,777.....	3.15
1929.....	12,854,626.....	3.67
Average	\$11,017,873	3.14

*After depreciation, interest and Federal Income Tax.

These earnings come from the operation of these profitable newspapers

	Established
New York Evening Journal.....	1896
Chicago Evening American.....	1900
Pittsburgh Sun-Telegraph.....	1841-1906
Detroit Times.....	1900
San Francisco Examiner.....	1880
San Francisco Call-Bulletin.....	1856-1874
Oakland Post Enquirer.....	1886
Los Angeles Examiner.....	1903
Los Angeles Evening Herald.....	1911
Seattle Post-Intelligencer.....	1865
The American Weekly.....	1882

Opportunity to acquire, in one investment an ownership interest in eleven metropolitan newspapers is now made available to the general public through

HEARST CONSOLIDATED PUBLICATIONS, INC.

What Good are Specifications?

(Continued from page 35)

in to show-up the antiquity of the document. Even when materials and methods are repeated on several jobs, improvement by reason of experience on the first job should be acknowledged and corrected in the others. How else will we ever learn? Architects must be alive and ever improving or they fail in their usefulness.

In recent years various specification manuals have made their appearance. These have been helpful and have made it possible for young architects to improve the form as well as the substance of their specifications. But when accepted in toto just as are the cards before referred to, they become harmful and dangerous. They are necessarily written to cover a certain type of work and must be so considered when used as a reference.

The New York Building Congress' new specifications must be considered in the same light, according to my opinion. These were written to be used as a supplementary specification, to save re-writing standards now accepted by the trades, and these documents unless re-edited frequently will soon be out-of-date.

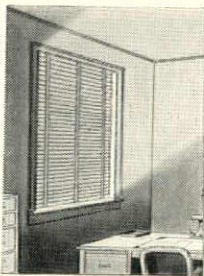
Some offices have enough curiosity to make some efforts at research on their own or to engage laboratories to do so. Money and time at their disposal is limited and they can hardly be expected to devote their whole fee to experimental work. Until some master agency for this type of work has been established for use by the entire industry common sense will be the best judge of what of the new to select and of the old to retain.

Someone may ask how can any specification remains static when the pressure from manufacturers by mail, magazines and salesmen is constantly urging the architect to try this and that new method or material. That is true in some offices where no sign of static conditions is apparent. Anxious to use the latest and most modern devices, they never worry about previous specifications when preparing a new one and boldly plunge toward the unknown. Their works are evident and they represent the extreme in the other direction. Their mistakes are due to acceptance by prima facie evidence rather than by experience or even commonsense.

Unfortunately, the architect's greatest source of information is blocked by reason of modern selling practice. Where should he turn after reading a catalogue of a likely product to get more detailed information? To the manufacturer? Suppose he does. Who appears? A pleasant smiling lad, very willing, very eager, but often dumb and painfully ignorant of his own material. To illustrate I cite the case of an insulation salesman who when asked whether his product was fireproof or not promptly said, "Oh, yes." Then I borrowed a match from him and as his sample flamed his face fell. He was really disappointed and was full of apologies. Such salesmen are not universal and most organizations, if pressed, can give real help, but it is rare to find a manufacturer's representative who knows his own goods and knows their limitations as well as their merits.

GREATER VALUE

from Your Window Openings



AIR and sunlight pour into window openings like water through an opening in a dam . . . in uncontrolled volume. But break up this torrent, diffuse it, and you gain all the advantages of adequate light and ventilation without the objectionable features of glare and drafts.

See how Victoria Venetians with their true, even slats (readily adapted to any angle desired) break up the light, diffuse it. Light enters even the farthest corner. You gain the

advantages of having all the available sunlight and with it, ventilation.

Not expensive either. Victoria Venetian Blinds sell at a price that in a few short years represents a very substantial saving over any other kind of window equipment.



Better work is done when the mind is free from agitation by personal discomforts. Good blinds add to productive effort. An office in the Standard Oil Co. of Ohio, Builders Exchange Bldg., Cleveland.



VICTORIA VENETIANS

The Better Blinds

THE BOSTWICK-GOODELL CO.

Blinds Since 1894

Norwalk, Ohio

Representatives in Principal Cities

THE AMERICAN ARCHITECT



Good general illumination and ample show case illumination prove excellent aids to merchandising.

STYLE TRENDS IN STORE LIGHTING

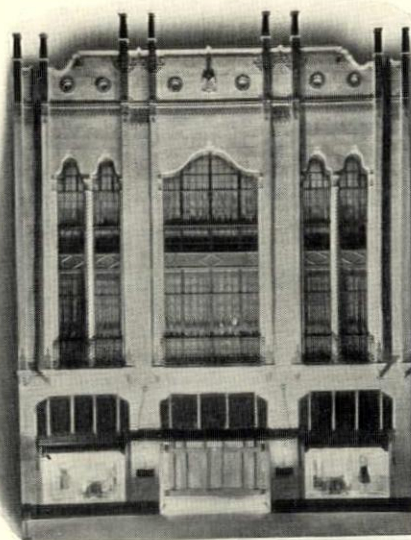
demand adaptability in wiring

By H. A. LORENTZ

*of Lorentz and Lorentz, Architects
Canton, Ohio*

Early studies for the Lefkovits store in Canton, Ohio, indicated the need for an electrical layout capable of taking care of changing requirements for light. For the modern store, responsive as it must be to style developments, watches for improvements in lighting and in the use of electricity as closely as it watches markets and style trends in merchandise.

It was natural to turn to the wiring and lighting bureau of the electric service company serving the territory for information that would help provide continuing adequacy and protect the building



Floodlighting and intensive display window lighting provide an attractive exterior.

against early electrical obsolescence. Here was found a broad background of experience and a valuable store of information that made

it possible to project the course of future electrical requirements.

The lighting installation decided upon with the help of this lighting bureau provides seventy-five window reflectors with 200-watt lamps on one-foot centers and floodlighting from five 1000-watt projectors. In the interior of the store general lighting of 18 foot-candles is provided and in addition there is ample show case lighting.

Provision is made in the wiring for the installation of extra circuits whenever the style trend in lighting makes them desirable.

In this day of rapid electrical developments provision for meeting future electrical requirements is an important consideration in the design of any building.

For information about trends in lighting standards, and about adequate wiring standards, call on the lighting bureau of your local electric service company, or write direct.

NATIONAL ELECTRIC LIGHT ASSOCIATION, 420 LEXINGTON AVENUE, NEW YORK, N. Y.

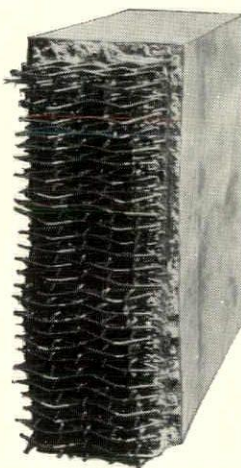


Also Means a
LARGER Bank Vault
 for the Investment

At no greater cost than that of the small all steel vaults of other days, the banking house can now have a larger vault, built the Steelcrete way. Not only larger, but a *stronger* vault that within all practical limits is proof against cutting flame, fire, drill, explosives and shock—the most complete protection known to engineering science.

Steelcrete vaults protect the resources of some of the greatest financial institutions in America. Yet their cost is easily within reach of the smallest bank! Your local contractor can easily and economically construct a Steelcrete vault according to plans built to your client's requirements.

Send for the FACTS about Bank Vaults—the results of tests, and certified endorsements from bankers and architects who thoroughly investigated before selecting the Steelcrete Bank Vault System.



This partially-concreted section of Steelcrete shows the dense, impenetrable armor mat that greets felonious assault. Remember—walls, floor and roof constitute 90% of the area subject to attack, and need protection equal to that of the vault door.

THE CONSOLIDATED EXPANDED METAL COMPANIES
 Steelcrete Building, Wheeling, W. Va.

Branches: Boston Cleveland Philadelphia Pittsburgh Chicago
 New York Buffalo Detroit



OTHER STEELCRETE PRODUCTS FOR SAFETY
 FRAME BAR and Industrial Mesh for Window Guards . . . Industrial Mesh for Safety Guards and Partitions . . . Metal Lath . . . Expanded Metal Concrete Reinforcement.

Manufacturers are missing an opportunity to help the architect in this respect. An unqualified salesman is worse than none at all. It would be far better to depend rather on the printed word for giving data than on well-meaning but ignorant human to sell their product.

More errors have been incorporated in specifications, because of this failure, than seems credible. Remember, architects' organizations are in the main small offices where limited experience and little internal help is at hand. They are forced to look outside for help in formulating specifications, but cannot get reliable information from manufacturers while such unscientific selling is the vogue.

What does the client do for the specification? This varies from nothing to too much, depending upon the type of work and kind of client. Architects, grateful for an interested client, are definitely handicapped by a dictating one. The client's influence on the specification varies so greatly in different types of work that no standard exists. The young architect tends to argue his own choice against the client's, whereas the more experienced one gives way on minor matters that are not absolutely incompatible to the whole.

In certain types of commercial work the client's choice is law. In domestic work it is more often the architect who does the choosing. In monumental work the architect has little help from the client in the matter of decisions as to materials and finishes. The client should always be brought into the picture as often as possible to make known his viewpoint and preferences. A clever architect can select what a client needs rather than inflict a choice upon him against his will and later the client may boast of his own selection. In other words, he should know the client's needs and tastes better than can the client himself. It requires diplomacy to so arrange decisions. Clients can be led around to existing work in such a way that they may compare, with their own eyes, several possible solutions.

THE client should make, or appear to make, all decisions possible. He will more likely be better satisfied with the completed work and the architect will have a more definite viewpoint upon which to make other decisions which are strictly up to him if the owner shows some definite trend in his selections. I need not add that the course of such a job will flow smoothly if the owner has his way.

National advertising, no doubt, plays a part of some import in many choices made by the client. He does want to use articles or materials that he knows, in fact, he takes delight in approving an article that the architect suggests and that he knows all about. Sales resistance has been overcome. Many architects on the other hand feel that they are not altogether on the job if they can't suggest some better but more obscure material that only the profession could know about. The attitude is one of, "Why-ask-an-architect-to-use-a-nationally-advertised-product?" Such architects always have their college degrees hung near the entrance where the clients can't avoid seeing them. Their specifications are full of platitudes, worn out phrases, and redundant clauses that seldom demand either respect or attention.

The old question of whether architects learn through advertisements and whether they use material because

BEST BROS. PIONEER PLASTERS



for
CASTING,
MOLDING,
GAUGING
and FINISH

PIONEER PLASTERS have "made good" from the very start! On jobs everywhere, these quality plasters . . . with more than 40 years' manufacturing experience back of them . . . have produced the excellent results that Best Bros. products give with unvarying regularity.

On any job of casting, molding, gauging or finish it will pay you to investigate Best Bros. PIONEER PLASTERS. They pay long-time dividends in durability, good looks and satisfaction.

NEW!

BEST BROS.
FAST FINISH
KEENE'S CEMENT

FAST FINISH Keene's Cement . . . Best Bros. newest product . . . needs no admixtures. Used with good aged lime-putty, it will set up fast enough for finish troweling without waiting. FAST FINISH sacrifices none of the characteristics of Best Bros. (Regular) Keene's Cement. It produces the same durable, perfect ceilings and walls and is readily adaptable to all types of modern interior finishes and color effects.

FREE BOOKLET

A new Booklet which more fully describes Best Bros. PIONEER PLASTERS and their varied uses will be sent to you promptly on request. Write for your copy.



BEST BROS. KEENE'S CEMENT CO.

1060 W. 2nd Ave., Medicine Lodge, Kansas
Sales Offices In: New York, Chicago, Toledo, St. Louis, San Francisco, Kansas City, Philadelphia. (38)





architectural
TERRA COTTA

Bank of Manhattan Building
New York, N. Y.

H. Craig Severance
Architect

For small structures as well as
the world's highest buildings

TERRA COTTA

meets every architectural need
for color, modeling, textures
and glazes.

NATIONAL
TERRA COTTA
SOCIETY

230 PARK AVENUE
NEW YORK

it is advertised can be answered by "Yes" and "No." Until the question has been limited to a certain architect and a certain material no definite answer can be given. Architects of all sorts, however, are more sensitive to their visual reaction than most groups and until manufacturers and advertisers learn to present their material on this basis they are wasting a large part of their effort. Good advertisements will receive notice from the profession, and badly presented advertisements may cause actual negative results. Again, it is like the salesmen in that no advertisement at all is better than one that will leave a sour taste in the architect's mouth. For instance, a shingle manufacturer who broadcasts poor pictures of bad looking houses is gaining nothing by keeping his name before the architect.

Architects are in no way immune from contagion, and specification items are contagious especially in congested cities where many architects can see the works of many other architects. Whether these items have been carefully investigated or not often is forgotten in the haste to follow suit in something that is the vogue. Many materials are practically given away for the first large job for just that reason.

ARCHITECTS daily see and hear of new materials and construction methods. These only *take* when their minds are open to new suggestions. In other words when May 15 comes around straw hat advertisements are really noticed by those whose old ones went into the discard. Show windows full of head gear are surrounded by men interested in seeing whether their old hats "will get by." In September such interest wanes and straws get no attention. So the architect's mind is receptive only when he has a live problem to solve.

Many minds are perpetually sealed to new impressions and such men constitute the group whose work may be excellent but who will never give the clients their real money's worth. In other words, they don't achieve the best solution for every little problem presented but rather a second-rate or antiquated one.

Books, cards, advertisements, old specifications, salesmen, new buildings, magazines—all play their part in the foundation of our specifications. Those written by one method may be as good as those written by another, but the point of view of the architect is all important. Does he copy word for word? Does he discard everything? Does he question this and that, seeking a better answer? Curiosity, perseverance and common sense will make a good specification, by whatever method the writer chooses to use. The technique has very little to do with the final result as disclosed by the completed structure, but the humans who write it have everything to do with this result.

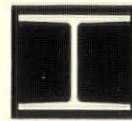
There are literally thousands of decisions to make in assembling a specification. These should be influenced directly by the job in hand; its character, its cost, and its use. Haste in settling points under our hurried system offends all three of these requirements continually. We don't get all the facts. Snap judgments give us answers that are too often wrong.

Above all, an idea of unity for an entire project must dominate all selections and decisions. In small offices a definite point of view must prevail for each job or the work loses distinction. In large offices such unity can be secured only by some dominant personality whose



■ **FOUR-FIFTY
SUTTER
BUILDING,
SAN FRANCISCO**

**FRAMEWORK
OF
BETHLEHEM
WIDE-FLANGE
STRUCTURAL
SHAPES**



BETHLEHEM STEEL COMPANY

General Offices: Bethlehem, Pa.

**District Offices: New York, Boston, Philadelphia, Baltimore,
Washington, Atlanta, Buffalo, Pittsburgh, Cleveland,
Cincinnati, Detroit, Chicago, St. Louis.**

**Pacific Coast Distributor: Pacific Coast Steel Corporation,
San Francisco, Los Angeles, Seattle, Portland, Honolulu.**

**Export Distributor: Bethlehem Steel Export Corporation,
25 Broadway, New York City.**

BETHLEHEM



New House at Summit, New Jersey. Architect, Duncan Hunter, New York City.
Insulated with Cabot's Quilt.

To Sell Houses and Keep Them Sold

It is becoming more and more necessary to insulate. A house or apartment without insulation will soon be as rare in America as an Eskimo hut.

Most important of all, when you *do* insulate, use Cabot's Quilt.

Cabot's Quilt is highly efficient (by Government tests,) low in price, installed quickly and cheaply, will not rot or harbour vermin, is fire-resistant and will not pack down. It has been in constantly increasing use for almost 40 years.

Send in coupon below for valuable information for Architects, on the uses of Cabot's Quilt in construction.

Clip Coupon below, or write to

Cabot's Quilt



Samuel Cabot
Inc.

141 MILK STREET, BOSTON, MASS.

Gentlemen: Please send me your new
Quilt Book, "Build Warm Houses."

Name

Address

AA-10-30

conception of the job is impressed on those who have decisions to make.

Our system of preparing specifications is ridden with weaknesses and negative influences not wholly anyone's fault. A cooperative effort on the part of architects, builders and manufacturers may remove many of these handicaps and bring about a more satisfactory product. The test of our product lies not only in an aesthetically pleasing structure, but in one that serves the owner conveniently and economically.

There are many architects accepting praise for their beautiful buildings which may have failed utterly to meet the *use* or *economic* requirements. In other words, they have been blind to two-thirds of their obligations. Such solutions have gained for the architect a reputation most difficult to overcome and one which will be erased only through better specifications and through le-junking.

Can Architects Advertise Nationally?

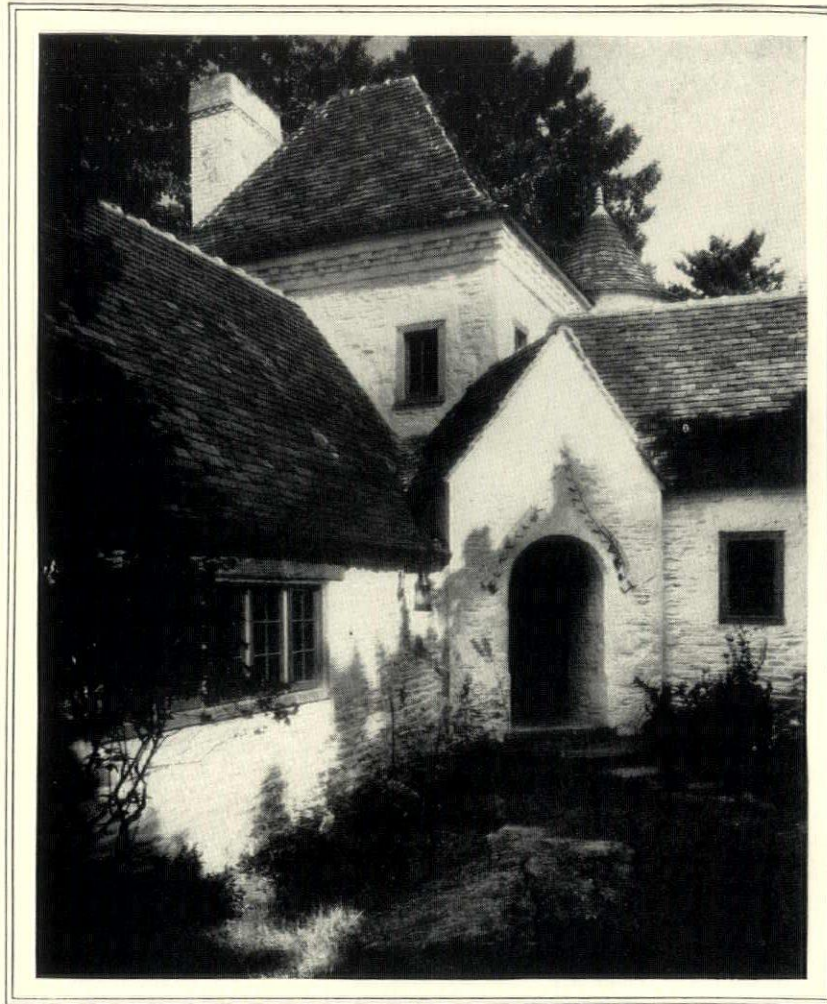
(Continued from page 23)

picture paid advertising would want to picture.

Besides the rather uncertain conception on the part of any individual as to just what architectural service is, and besides the architects' own lack of understanding as to what advertising is and how they can use it, I seem to sense another interfering factor that stands in the way of any near acceptance of a broad gaged advertising campaign. At the recent Washington convention a powerful anti-advertising group, much to the chagrin and even disgust of many of their brother members, voted against advertising. Why? Well, I suppose they had good and sufficient reasons which, try as they would they could not make clear to anybody but themselves. From the reports I certainly can't understand them except it be ignorance of advertising. I call it that anyhow, for that is understandable and entirely pardonable. But some say it is a question of ethics. To that reason I say, "Bosh."

It happens that I am personally acquainted with a large number of architects in many parts of the country, some of them the very pillars of their profession. I have erected buildings for some of these men; others I know socially. I'd like to state right here that from 20 years' experience with architects they are not one bit more ethical than an equal sized group of manufacturers who don't turn up their noses at admitting publicly that they sell by the printed word. The only difference that I can see between a group of architects and a group of manufacturers is that the manufacturers are better merchants and man for man earn far more money than do architects.

For these architects who still refuse to consider dignified advertising as a perfectly ethical means of increasing their income, let me refer to a little book by George H. Palmer, Professor of Philosophy Emeritus in Harvard University, entitled, "Trades and Professions," published by Houghton Mifflin Co. May I suggest that every architect and business man who can, get a copy of this book. He says, "On the whole, then, I am obliged to conclude that the kind of work we do does not make us professional men, but the spirit in which we do it. There is no fixed number of professions. One may



October Good Housekeeping describes a Norman type country house designed by Frank J. Forster, A.I.A. and presents the plan and interiors of an Early 19th Century residence by Henry Ives Cobb, Jr., A.I.A. These interiors were actually constructed and furnished by Good Housekeeping Studio and may be viewed at any time during October.

PROMOTING GOOD DOMESTIC ARCHITECTURE

STAUNCH support on a nation-wide scale is being given the cause of good domestic architecture by Good Housekeeping magazine. Every month the 1,750,000 families it reaches—families of a most receptive sort—are learning the need and the value of the architect's services.

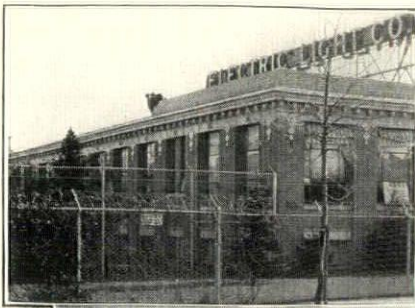
The practice of good domestic architecture, rather than the theory, is the predominant note of this new editorial service. Houses actually built

and being lived in are illustrated and described. Each is selected as a happy example of beauty and good taste which yet meets the practical needs of living. Good construction, the planning of gardens, in fact every interest of the home builder will be treated with sympathetic understanding.

Probably no magazine of large circulation is better

able than Good Housekeeping to shoulder the cause of good domestic architecture. Its readers are drawn mainly from among those families who, by environment, incomes, ideals and aspirations, are essentially home owners and the primary market for the architect's services. In fact, there is a common bond between the architect and Good Housekeeping, for both are teaching people to know that there are attainable ideals in living.

GOOD HOUSEKEEPING



**COST
\$9000.00
TO REBUILD
◁ ▷
NEEDLESS
EXPENSE**



Building showing parapet partially removed—lower view, tearing down the leaky parapet

**THRU-FLASHING WILL PREVENT
SUCH DISASTERS AND EXPENSE**



INTERLOCKING WALL FLASHING

Eight Hundred Dollars for Cheney Flashing solved the seepage problem in the parapet illustrated. Far cheaper to have installed Cheney Flashing in the beginning.

Cheney Flashing is the only Ready-to-use Thru-wall Copper Flashing that runs entirely through the masonry wall and forms a positive unbreakable key-bond in every direction within the mortar bed.

It scientifically solves the problem of seepage in masonry walls and positively prevents leaks, efflorescence, disintegration of the walls, and the rusting of steel spandrels and lintels from this cause.

It does not break the bond because it is keyed both horizontally and vertically on both sides of each strip. The ends of the strips hook together to form a continuous course.

Cheney Flashing is economical in cost and application as it requires no soldering, special fitting or loss of time. It is built into the mortar bed as the masonry progresses.

Valuable information on the use of Cheney Flashing is available for Architects and Engineers, without obligation. Send for the new Cheney Catalog Today.

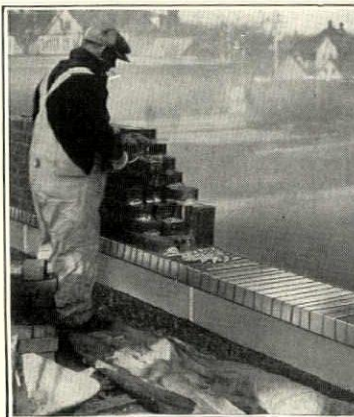
THE CHENEY COMPANY

953 Main Street Winchester, Massachusetts

NEW YORK

PHILADELPHIA

PITTSBURGH



Rebuilding Parapet with Cheney Flashing installed above roof line



Note—Cheney Flashing also installed under Coping Stones

be found anywhere, for professionalism is an attitude of mind. Wherever, outrunning the desire for personal profit, we find joy in work, eagerness for service and a readiness for cooperative progress, then trade has been left behind and a profession entered."

If churches, hospitals, governments, fraternal orders, even religion itself can and have been advertised ethically, successfully and in a dignified manner, why can't architecture? The only thing that has come to my hand that is an actual matter of record as to just why the A. I. A. repudiated "paid" advertising is the report of the Committee on Public Information in which it sets forth that the reason the Institute is against paid advertising is because of its possible adverse effect on its publicity campaign. This is, as every advertising man knows, a fallacy. There is no reason why publicity can not be had in as great quantities when a paid advertising campaign is being run as when it is not. And from an advertising standpoint the publicity and advertising both are much stronger when run simultaneously. I also understand that in turning down advertising the architects stressed the "paid advertising." I wonder if they call publicity free, especially when one man receives a salary of \$10,000 to run it.

As an advertising man, I have a grave suspicion that a lot has to be done to architecture to make it possible to advertise it economically and with a minimum of waste. Perhaps architecture has not yet vamped itself for today's requirements—for the comprehension of today's intellect. Today there are many advertising campaigns for commodities that are taking on the look of defeat because the commodity is outmoded, or about to be, by the swift change in life and life's needs. As I see it, before architecture can be advertised in a national way, it will have to be put in such shape that it can be put on a table and scrutinized and *understood* by those who are to plan and execute the campaign.

Right now many attempts are being made to put architecture on paper and state *exactly* what it is. The wisdom of this minute procedure at this time is doubtful. True, a common denominator, comprehensible to all, must be set. But to attempt to interpret architecture *now* in such a way that it can be used as part of an advertising campaign a year or so from now is putting the cart before the horse. Architecture may be what architects think it is, but what it is may not make good and interesting advertising. I am afraid that for architects to put architecture on paper, as they see it today, would result in a narrow and rather dry affair. But let a man outside of the profession tell the story, as both public and architects themselves would like it to be told. Then with nothing but facts to work with, you would get a picture of architecture that would stir it to its depths and line it up eye to eye for what it is—one of the world's noblest and most useful professions—far bigger than any set of tight rules.

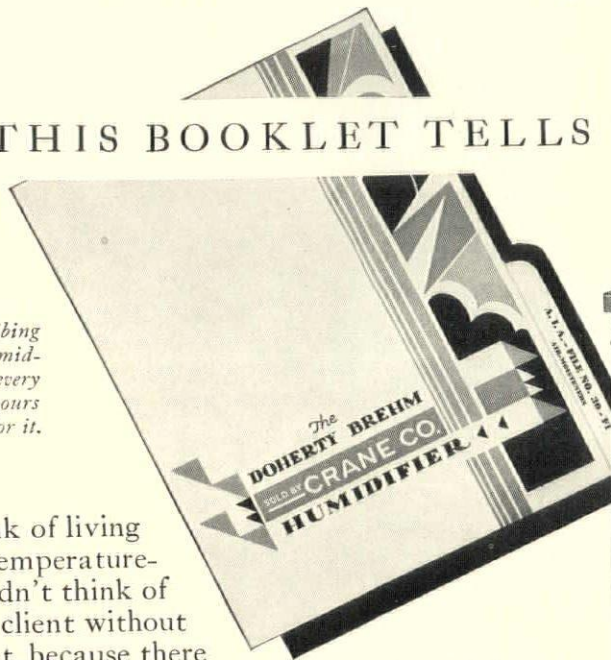
What architecture needs, in fact what the entire building industry needs, is a leader. Not a czar, but a thinker and a doer, and above all a merchant or salesman.

For some reason or other advertisers are seldom able to see themselves in the way the public would like to see them. That is one of the reasons for the advertising agency. Through a knowledge of the public mind, through training and experience, they are able to visual-

Banish *Thirsty Air* ... in the homes you plan

THIS BOOKLET TELLS YOU HOW

This book fully describing the Doherty-Brehm Humidifier, should be in every architect's files. It is yours for the asking. Write for it.



You wouldn't think of living in a house without temperature-comfort. You wouldn't think of planning one for a client without modern heating. Yet, because there has heretofore been no economical simple way of providing humidity-comfort and humidity-health, you've lived in, and planned houses for your clients, without provision for correct humidity.

Now there is a way . . . the Doherty-Brehm Humidifier. It completely solves a many-years' search of engineers for a way to banish Thirsty Air. Automatically, silently, constantly, it supplies the correct amount of moisture to the air in any home with radiator heat—steam, hot water, or vapor.

Into hundreds of fine homes, it is bringing the breath of spring-time all through months of winter. It is giving fresh, moist air in every room, comfort and healthfulness throughout the house. Architects throughout the country are specifying it for living comfort in the homes they plan.

To provide this comfortable and healthful atmosphere, the Doherty-Brehm Humidifier evaporates astonishing quantities of water—20 to 100 gallons a day! There is a size and type for every home heated with radiators. *One of these humidifying radiators centrally located will properly moisten the air of an entire house or an individual apartment.*

Both a heating and a humidifying unit, the Doherty-Brehm Humidifier is installed in the heating system like an ordinary radiator and needs no more attention. No pans to fill; no belts, fans, or motors; no noise, steam, or odor. Enclosed in a charming console of wood or metal in keeping with furnishings of finest homes. Or it can be recessed in a wall.

\$150 to \$225, f. o. b. factory, installation extra, in beautiful metal cabinet. Supplied also for recessing in wall. Types and sizes for any building heated by steam, hot water, or vapor. Water fed in at the top spreads out over horizontal first section, the overflow going down and spreading out over the second section, and so on until the last section is reached.

Sold on the **CRANE Budget Plan**

It is sold through dependable heating and plumbing contractors by **CRANE** Branches on the *Crane Budget Plan for 10% down, the balance monthly.* See it at Crane Exhibit Rooms. Ask us to send literature or a representative to explain it fully.

DOHERTY-BREHM CO.
333 North Michigan Avenue, Chicago

**DOHERTY-BREHM
HUMIDIFIER**



ASBESTONE

Magnesia Flooring

It is not the cost *per foot* for flooring, but the cost *per year* that counts. ASBESTONE lasts so much longer that it costs less over a given period of time.

For the price of the most ordinary flooring materials you can use ASBESTONE. The first cost is moderate and because of its amazing wearing qualities, there is practically no upkeep expense.

Durable

Non-dusting, fireproof, waterproof. Preserves its fresh appearance under years of terrific wear.

Sanitary

Smooth, jointless, easily cleaned; may be waxed and polished.

Comfortable

Easy to the tread, non-slippery, noiseless.

Easily Applied

Over any new or old sub-floors, at any angle, over and around any irregularities.

Distinctive Appearance

A large variety of rich colors.

Service

Our own chemical laboratory and technical department test and verify every shipment for uniform, high quality. A large staff of skilled mechanics insure completion of the largest contracts on schedule.

Guarantee

A uniformly high standard product, backed by the integrity of the Muller name and more than 20 years of manufacturing experience.

May we send you samples and descriptive literature?



FRANKLYN R. MULLER, Inc.

Manufacturers of Asbestone and Sana-bestos Tiles

110 Madison St.

Waukegan, Illinois

Established 1906

ize and erect an advertising structure more practical and suitable to the client than an untrained man can. For years the heads of the Postum Company thought that they were great and expanding manufacturers of wheat products.

They grew to a certain size and stopped. Along came a merchandiser in the form of an advertising agency and pictured them as dispensers of health. People are but mildly interested in wheat and are intensely interested in health. The Postum Company, without any change whatever, ceased to be what its owners thought it was and became what the public hoped it was—a dispenser of health. The resultant growth of the company was tremendous.

The same is true of the Packard Motor Co. When they stopped selling automobiles—pieces of machinery—and started to sell luxurious transportation they immediately assumed a leading position in the motor industry. Ivory Soap stands for cleanliness, a chewing gum stands for health, a washing machine for freedom from drudgery. All of which is honest and fair and profitable advertising. It is simply interpreting a product in terms that the average buyer is interested in and understands.

So it will be with architectural service. Of course there will have to be pamphlets and booklets that explain in minute detail how the machinery of architecture works and what it will do for its user. But they will be used only after the prospect is interested and intrigued by a broad vision of a service that lies very close to the lives of every individual. Exactly how architects design buildings and draw plans and details and how they serve the client will never be of interest except to a relatively few people. I don't believe that one reader in ten thousand can say positively what kind of roller bearings, or what make of tires his car has. Yet when he bought it he felt confident that it was a good, safe and worthwhile investment. He was satisfied to buy it and pay everybody the profit that went with the transaction. Advertising did that. It will do the same thing for architectural service. It will make it the usual and accepted thing to employ it.

But to reach that point architects will have to be visioned as more than makers of plans and details, or even designers of striking towers and houses. Architecture *is* more than that. It is or can be a great economic force in contemporary life. The building industry is at this moment on the brink of a great and revolutionary change, brought about by the economics of modern life. Who is to lead this change? Who is to get the credit for it? Behind a great, broad gauged and dignified advertising campaign, paid for by architects themselves, they would, whether they deserved it or not, get the credit. And if I know human beings and the effect of fine advertising on their daily life, I believe that before the advertising had been going on for very long you'd see architects everywhere stepping out proudly as leaders in human existence. There is nothing closer to human life than the shelter that covers us, except the food that sustains us.

And the ten thousand men who create the shelter can, by being known for their works, become respected and acclaimed by every one.

Next month there will be another article by Mr. Fountain which will explain just how the architectural profession might go about organizing an advertising campaign.

CARNEGIE BEAMS

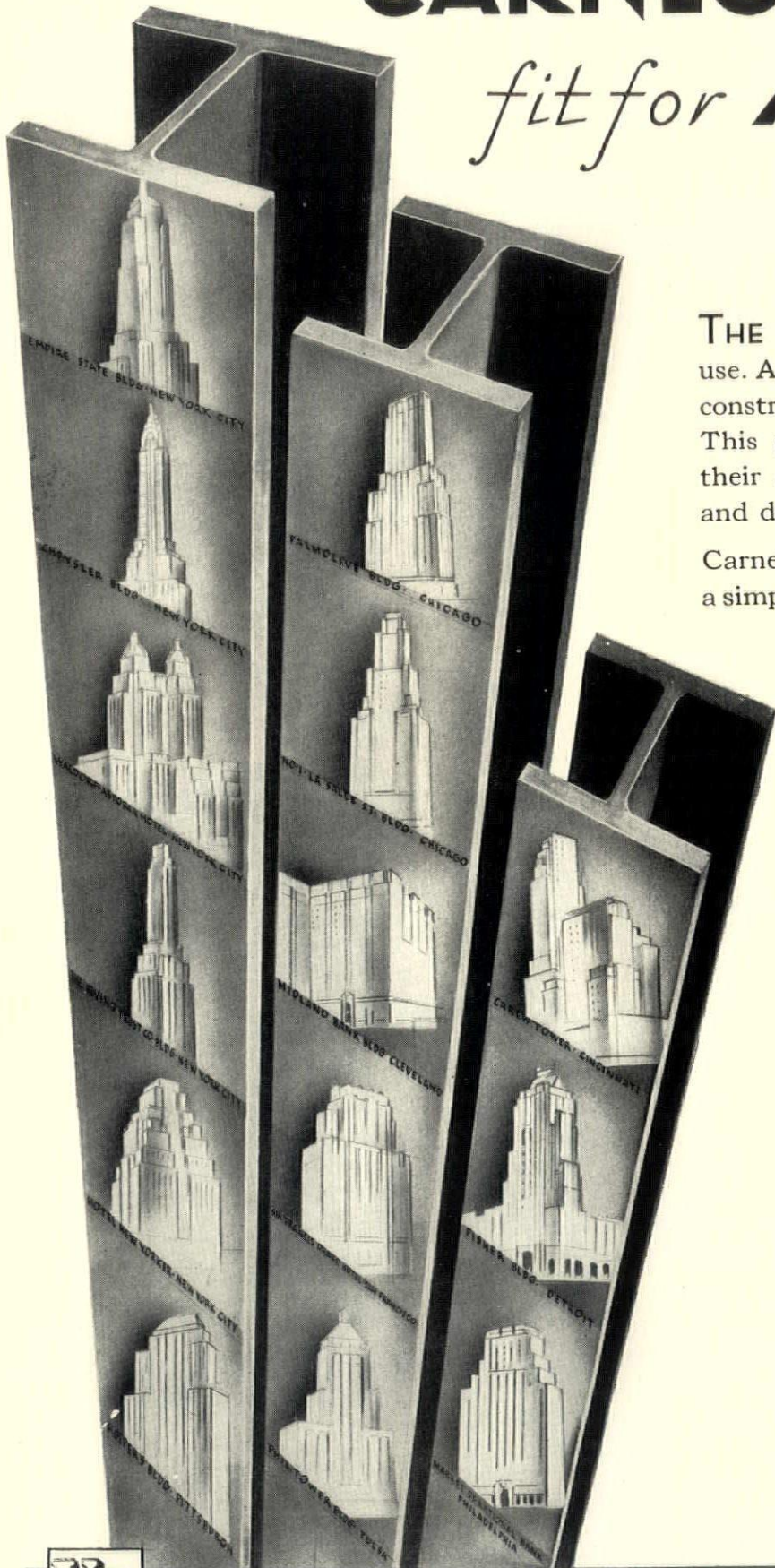
fit for ANY job

THE merit of a material is proved in its use. A conspicuous feature in recent, notable construction is the use of Carnegie Beams. This popularity is the best indication of their adequacy to the needs of architects and designers—their fitness for the job.

Carnegie Beams bring to steel construction a simplicity of detail, a facility of fabrication and erection, and a flexibility of design never before possible. Wide parallel flanges, obtainable in Carnegie Beams only, simplify very markedly the great variety of connections necessary in fabrication. Constant-depth columns afford opportunities for duplication, both in design and erection. Due to the wide variety of sections and weights you will always find a Carnegie Beam which closely approximates the theoretical strength required.

Carnegie Beams merit the investigation of any one interested in efficient and economical construction. The advantages of these sections apply to any type of construction involving the use of structural steel, regardless of size or type of architecture. Carnegie engineers are always at your service.

90



CARNEGIE STEEL COMPANY » » PITTSBURGH

Subsidiary of United States Steel Corporation

What Architects Are Talking About

(Continued from page 57)

IF the plans which Dr. Francisco Mujica has submitted to Mayor Walker for the development of the lower part of New York City are adapted, a new era of city planning will be ushered in. Dr. Mujica is a former professor at the National University of Mexico and, when questioned as to his idea, stated:

"The new city would be on two levels, offices on the first twenty floors and residences on the eighty floors above.

"The periphery of the twenty lower floors would be reserved for offices, while the inside of the blocks would include elevators, theatres, gymnasiums, swimming pools, etc., that is to say, all necessary room for activities which do not require daylight.

"The eighty upper floors would be reserved for family life. Shops would be located on large avenues, situated on the level of the twentieth floor, to meet the necessities of household trade and industry. Women and children would attend to their shopping without going down to the floors reserved for business purposes."

THE National Industrial Conference Board has recently completed a study of "Wages in the United States, 1914-1929." Among workers in the building trades, bricklayers and plasterers received the highest of wage rates per hour in 1929; bricklayers averaged \$1.65 per hour and plasterers \$1.635. The average wage rate for seventeen trades in twenty-three cities in 1929 was \$1.185. The study indicates that there was considerable variation in wage rates in various cities. These differences were most pronounced among the lower wage scales. The wages of common lab-

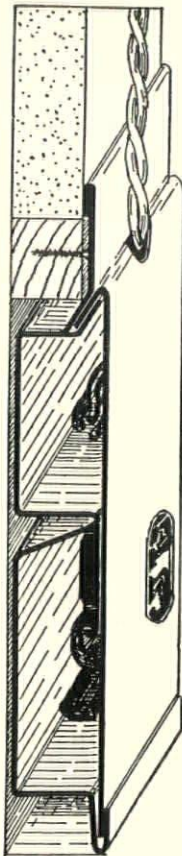
ors varied 275 per cent. The composite wage rate ranged from 77½ cents in Atlanta to \$1.60 in New York.

REVISIONS in the Standard Specifications and Tests for Portland Cement have been adopted by the American Society for Testing Materials. Eleven items are included in the revision. The average tensile strength requirement at seven days for three standard mortar briquets has been increased from 225 lb. per sq. in. to 275 lb. per sq. in.; that for twenty-eight days has been increased from 325 lb. per sq. in. to 350 lb. per sq. in. Copies of the revised specifications may be purchased from American Society for Testing Materials, 1315 Spruce Street, Philadelphia, Pa.

THE Department of Architecture, New York University, announces that George A. Licht has been appointed as additional critic in design. DeWitt C. Pond has been added to the staff in charge of construction and will assist in developing the new option in architectural engineering. A special course for women leading to the degree in architecture is also announced, emphasis being placed on residential work and interior decoration.

OLD timbers removed from the roof of the White House in Washington have been secured by the A. I. A. and will be made into gavels and blocks, designed by Ralph Adams Cram and sold to the Chapters of the Institute at cost.

THE Structural Service Department of the A. I. A. expects to effect a contact with the General Contractors similar to that now existing with building material manufacturers through the Producers' Council.



CONDUO - BASE FULFILLING THE ELECTRICAL NEEDS OF TODAY AND TOMORROW

Specified by
LEADING ARCHITECTS
And Favored by
Building Owners and Tenants

Licensed Manufacturers

Dahlstrom Metallic Door Co. The United Metal Products Co.
Jamestown, New York Canton, Ohio

Knapp Bros. Mfg. Co.
Chicago, Ill.



Conduo-Base Equipped
Home Savings Bank Bldg.
Toledo, Ohio

WATERPROOFING AND PORTLAND CEMENT DELIVERED IN ONE BAG

GOOD waterproofed concrete is made with a Portland cement that has the waterproofing material ground with cement clinker during manufacture. Such waterproofing is correct in amount and is uniformly distributed. Delivered in one bag, it saves time, labor and supervision on the job. It removes human hazards associated with job-mixing waterproofing and Portland cement. Anyone who can make good concrete can make good waterproofed concrete with Medusa *Waterproofed* Cements (white or gray). Best of all, it will be permanent. This is proved by 20 years of successful use.



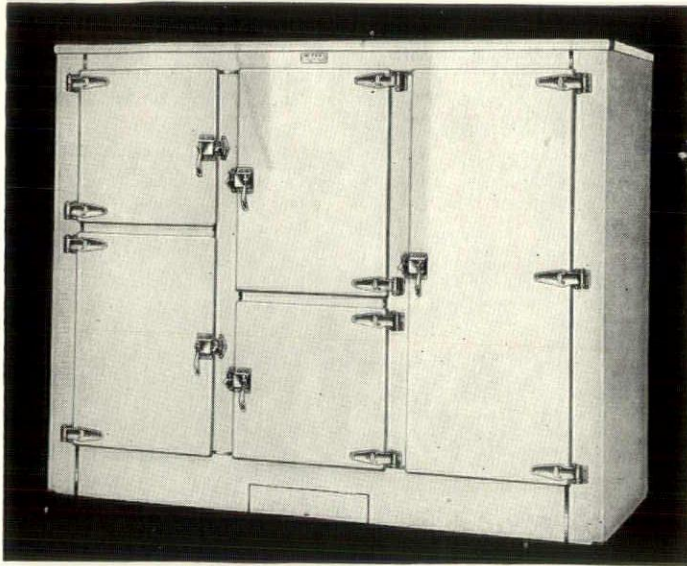
Only Medusa Portland Cements — *Waterproofed* — have these qualifications. If you have a waterproofing problem at the present time, please remember that our technical department is ready to co-operate without obligation. You can also secure latest data on the subject of waterproofing concrete and mortar in our book "How to Make Good Waterproofed Concrete." Send for this book today.

MEDUSA PORTLAND CEMENT COMPANY
1002 ENGINEERS BUILDING / CLEVELAND, OHIO

MEDUSA WATERPROOFED CEMENTS



Medusa Products — Medusa Gray Portland Cement (Plain and Waterproofed); Medusa White Portland Cement (Plain and Waterproofed); Medusa Waterproofing (Powder or Paste); Medusa Portland Cement Paint and Medusa-Mix, The Masonry Cement



The New Model P332 is typical of a whole series of porcelain refrigerators with pure corkboard insulation developed by McCray out of 40 years' experience . . . especially for use in hotels and institutions. Architects, write for our new catalogs of refrigerators for all purposes.

McCray Refrigerator Sales Corporation, 61 Lake Street, Kendallville, Indiana. Salesrooms in All Principal Cities.



McCRAY
Refrigerators

MEYER Steelforms THE STANDARD



Inquiries will establish the fact that Meyer Steelforms are the standard for concrete joist floor construction.

CONCRETE ENGINEERING COMPANY
General Offices: Omaha, Nebraska
Branches in all principal cities

THE memorial to George Westinghouse will be dedicated October 6 in Schenley Park, Pittsburgh. Henry Hornbostel, architect, designed the setting, while Daniel Chester French, sculptor, did the bronze group. Paul Fjeldi designed the six panels depicting the achievements of Westinghouse. The main unit rises twenty feet from a Norwegian granite base and includes a dominating figure of Westinghouse. Flanking him are a skilled workman and an engineer. Facing this group and on a separate pedestal is a figure of an American boy studying the monument of achievement.

A TEMPORARY floor seven feet above the old trading floor of the New York Curb Exchange has been installed to permit the installation of new trading posts, pneumatic tubes and other new equipment. The temporary floor is fitted with all the equipment necessary for the Exchange's operation. Ninety men worked in two twelve-hour shifts to install the new floor, which is 150 feet square.

THE construction and operation of subterranean garages under public parks in San Francisco is advocated by the Chamber of Commerce. A charter amendment proposed provides the park commission with authority to grant fifty-year leases for the operation of the garages.

ACCORDING to State League Notes, a digest of the financial reports of New York State Savings and Loan Associations as of June 30, 1930 indicates a vast improvement during the previous three months in the matter of available finances for home buying.

THE Sixty-fourth Convention of the A. I. A. will be held in San Antonio, Texas, during April, 1931. The exact dates will be announced later by the Executive Committee after conferring with the officers of the West Texas Chapter.

PRESIDENT HOOVER appointed William Stanley Parker F. A. I. A., of Boston to represent the architectural profession on the Planning Committee of "The President's Conference on Home Building and Ownership."

THE Producers' Council will hold its semi-annual meeting in Boston about October 15. Architects are invited.

PERSONALS

PHILIP NICHOLS SUNDERLAND, architect, Danbury, Conn., has dissolved his partnership with Edmund Wilson. He will continue his offices at 248 Main Street.

MURPHY AND LEHMAN, architects, Brooklyn, New York, have dissolved partnership. Henry V. Murphy will continue the practice of architecture at 208 Livingston Street, Brooklyn, while Edward A. Lehman has opened a new office at 101 Park Avenue, New York.

THE firm of Turner & Slater, architects, Birmingham, Ala., has been dissolved and the practice will be continued under the name of Turner & VanArman.

HENRY W. ROWE ASSOCIATES announce that the firm will be conducted under the name of its members, Blodgett & Cramer, at 14 West 45th Street, New York.

DEATHS

JOSEPH EVANS SPERRY, F. A. I. A., senior member of the firm of Joseph Evans Sperry, died August 6th. The business will be continued under the same firm name by the surviving partners, Herbert G. Crisp and James R. Edmunds, Jr., at 409 Calvert Building, Baltimore, Md.

GEORGE BURDETT FORD, New York City, general director of the Regional Plan Association, died on August 13th. Mr. Ford had an international reputation and acted as U. S. delegate to International Housing Congress.

Home & Field has so much that's NEW!

You'll surely want to see it each month



One of the seven views of the house Henry Corse, architect, redesigned for himself, as shown in September HOME & FIELD.

HOME & FIELD is entirely different from its predecessors and contemporaries in the home-building field!

More than any magazine of its type, it reflects the spirit of changing times.

It is artistic yet intensely practical. Whether it discusses homes costing \$15,000 or \$100,000, it inspires its readers with delightfully *new ideas* on building, remodelling, decorating, furnishing, landscaping. Brilliantly edited to show the outstanding examples of the best design and construction both here and abroad, HOME & FIELD already merits distinctive and authoritative leadership.

HOME & FIELD Material from Original Sources

You will like HOME & FIELD's originality; its surprisingly effective use of picture and text; its vigorous policy of excluding the theoretical and impractical; its genius for uncovering hitherto untouched phases of vitally important subjects. Here

is a real opportunity to check up on one's plans and progress in a genuinely stimulating way—through HOME & FIELD. The one new home-building magazine you want; to look at, to read, to refer to, to grace your library or reception room table.

Subscribe to HOME & FIELD or send for free sample copy

If you have already seen HOME & FIELD, you will want to take advantage of our limited special subscription offer (see coupon) **or we will gladly send you a sample copy of a recent issue without charge if you will write us.**

Special subscription offer

2 years \$5.00 . . (a saving of \$3.00)
1 year . \$4.00 (single copy price 35c)

HOME & FIELD,
572 Madison Avenue, New York City.

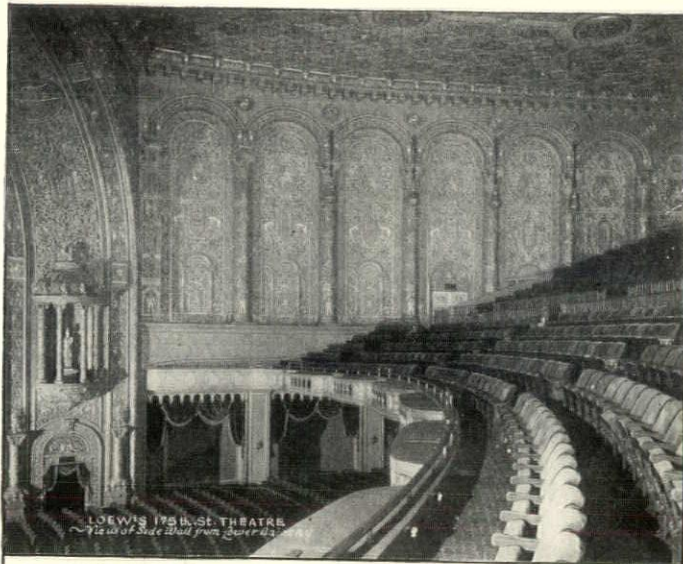
Please send me—2 years of HOME & FIELD for \$5 or—1 year for \$4. I enclose check or charge this to me.

Name

Address

Foreign postage \$1 extra a year; regular subscription price \$4 a year.

AA-10-30



Loew's 175th Street Theatre, New York City Thomas W. Lamb, Architect

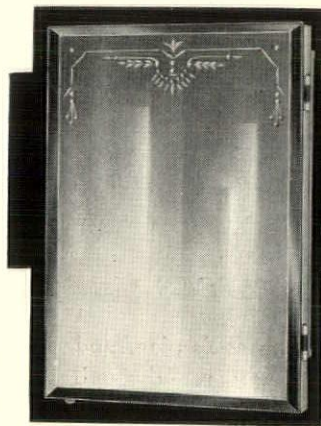
RAMBUSCH is pleased to express its appreciation for the continued confidence shown in its craftsmanship by the architect, Thomas W. Lamb, under whose direction Rambusch decorated Loew's 175th Street Theatre.

BANKS
CHURCHES
CLUBS
SYNAGOGUES

RAMBUSCH
Painting, Decorating & Murals
2 West 45th St., New York City

HOTELS
RESTAURANTS
THEATRES
PUBLIC BUILDINGS

Established Forty Years



THE BELLECLAIRE

**ENHANCE
HOME
VALUES**

WITH

Welco

**MIRRORED
CABINETS**

Welco Recessed Cabinets, without electrical features, for bathrooms already wired—or for new construction Electro-Kabinets, wired, ready for use, with four electrical outlets—are made in designs to fit any bathroom . . . all beautiful, practical too. The mirror conceals a large useful cabinet, with heavy plate glass shelves.

Pictured here is the Belleclaire, with square top Venetian etched mirror, and there are a number of other designs from which to choose. They are described fully in an illustrated folder which, together with any information you desire, is yours for the asking. Just mail the coupon.

WELDED PRODUCTS CORPORATION
16th to 17th & CLEVELAND AVE. KANSAS CITY, MO.

Manufacturers of Welco Radiator Enclosures and Shields, Recessed Wall Hampers and Mirrored Cabinets, Seco Incinerators, Steel Furniture and Welders.

MAIL THIS COUPON!

Please send complete information on Welco cabinets and Electro-Kabinets. Include special price list and list of dealers.

Name _____

Address _____

Dealer Contractor Architect Prospective Owner

He acted as consulting engineer to more than one hundred city planning commissions in thirty American cities.

FREDERICK W. WINTERBURN, New York City, died September 2nd at his former home at Pocantico Hills. He was eighty-one years old and had retired from active practice some years ago. Mr. Winterburn designed the Astor Hotel, the Mutual Life Insurance Company Building, the Hudson Terminal and many apartment houses. He was associated with the firm of Clinton and Russell.

Kitchen Efficiency

(Continued from page 27)

should be provided adjacent to the kitchen for the storage of cleaning implements.

A serving pantry has been indicated in kitchen C and may or may not be built according to the individual taste and pocketbook. Needless to say, if it is not made a part of the scheme of things, shelf area for china must be provided in the kitchen. These china storage shelves should begin not more than 52" from the floor and should be spaced 12" on centers. They should be 13" deep in the clear. Solid panel doors should enclose these shelves, as the glass panelled door adds greatly to the work of keeping a kitchen neat and clean.

Bases of dressers in the kitchen should be not less than 21" deep; this allows the storage of the largest pot or pan and also allows the use of 20" deep drawers for table linen. The most satisfactory working height of the counters on these bases has been found to be 36". This height also applies to the sink.

When plan requirements force a square type kitchen it should be limited in size to 12 ft x 12 ft. A floor plan of this size is seen in kitchen A. As pointed out before, this shape kitchen, though of greater floor area, does not lend itself to the placement of additional equipment and requires many more steps than the rectangular kitchen C. Placement of the major pieces of equipment is not the end of the job, for the electrical layout must of necessity coincide with the balance of the kitchen. An outlet must be provided for the much-mooted built-in ironing board which, by the way, must be carefully placed or it will be worse than useless. Outlets must also be provided for the floor polisher, refrigerator and future electric dishwasher, if one is not contemplated at the start. A two-way outlet should be provided at the work center for the heater, percolator and other devices.

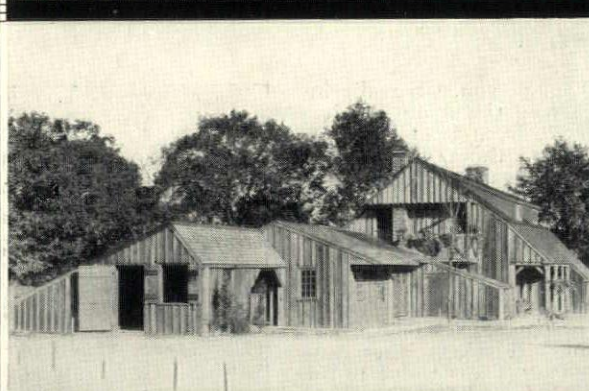
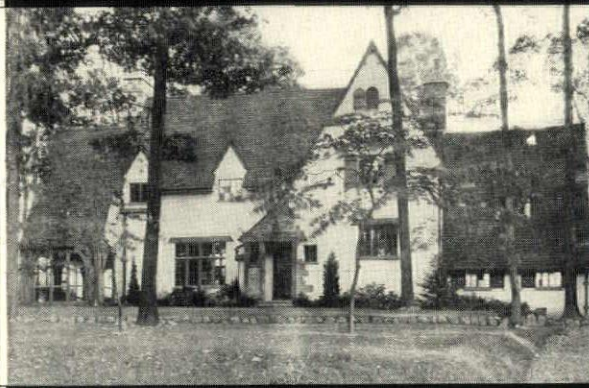
Lighting in the kitchens shown is accomplished with a single centrally located ceiling fixture of the modern light diffusing type. Side wall brackets should be used advisedly; if demanded by some special condition, they should be placed high enough to prevent light striking the worker directly in the eyes. Usually one overhead ceiling fixture of proper size and type is sufficient.

Flooring should be chosen that is readily kept clean and sanitary. Some housekeepers show a definite preference for the resilient cork types while others lean toward the ceramic or tile flooring. Either type, properly handled, makes an excellent kitchen flooring.

Walls need not necessarily be tiled all around, but it is certain that tiling behind and alongside the range aids greatly in the maintenance of clean walls. If not tiled cover with a high grade enamel paint.



UNUSUAL HOMES THAT ARE AS COMFORTABLE AS THEY ARE ATTRACTIVE

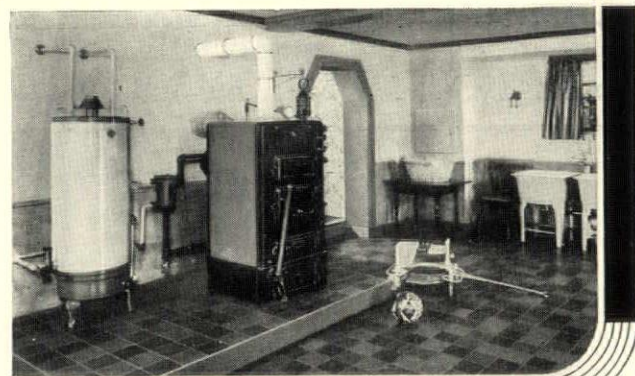


● Four unusual homes by Duncanbunter, New York, Architect

▼ Here are four homes that are unusual in design, unusual in construction, both outside and inside. But without comfortable, even warmth, they would be dreary.

▼ The architect who designed these beautiful homes describes them as "four All American jobs of all satisfaction."

▼ And the owners, who occupy them, all feel that the architect deserves their enthusiastic praise for giving them 100% American Radiator warmth. This is the same experience that architects all over the country are having—evidence that efficient heating has much to do with the final satisfaction of every owner.



AMERICAN RADIATOR COMPANY

DIVISION OF
AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

40 West 40th Street, New York City



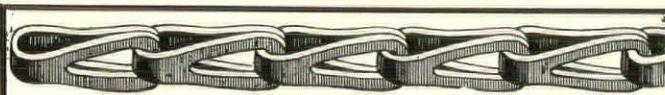
For Your Library

Be sure you have the Gold Bond Guide Books to better insulation, better plastering and greater wallboard utility in modernizing work. These books are authentic as well as comprehensive—books you really will use. And they are yours for the asking—just tell us to "send the Gold Bond Guide Books."

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Camden, N. J. Chicago, Ill. Clarence Center, N. Y.
National City, Mich. Luckey, Ohio



"RED METAL" (Solid Bronze)
"GIANT METAL" (Phosphor Bronze)
AND STEEL (Cold Rolled)

SASH CHAINS

For Economy
and
Satisfaction Use
SASH CHAINS

Manufactured by

THE SMITH & EGGE MFG. CO.
Bridgeport, Conn.

ORIGINATORS OF SASH CHAIN

See page C-2928 Sweet's Catalog and Page No. 147
American Architect Specification Manual



IN 1931 SWEET'S

For your convenience, complete specifications of Ruberoid Built-up Roofs—ASBESTOS—TAR and GRAVEL—ASPHALT—will be found in 1931 Sweet's.

In addition, our Engineering Department is always at the architects' service to help solve problems raised by unusual conditions.

Write or 'phone any office listed below.

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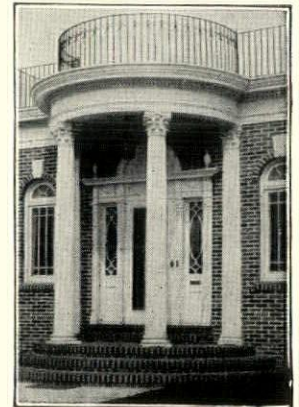
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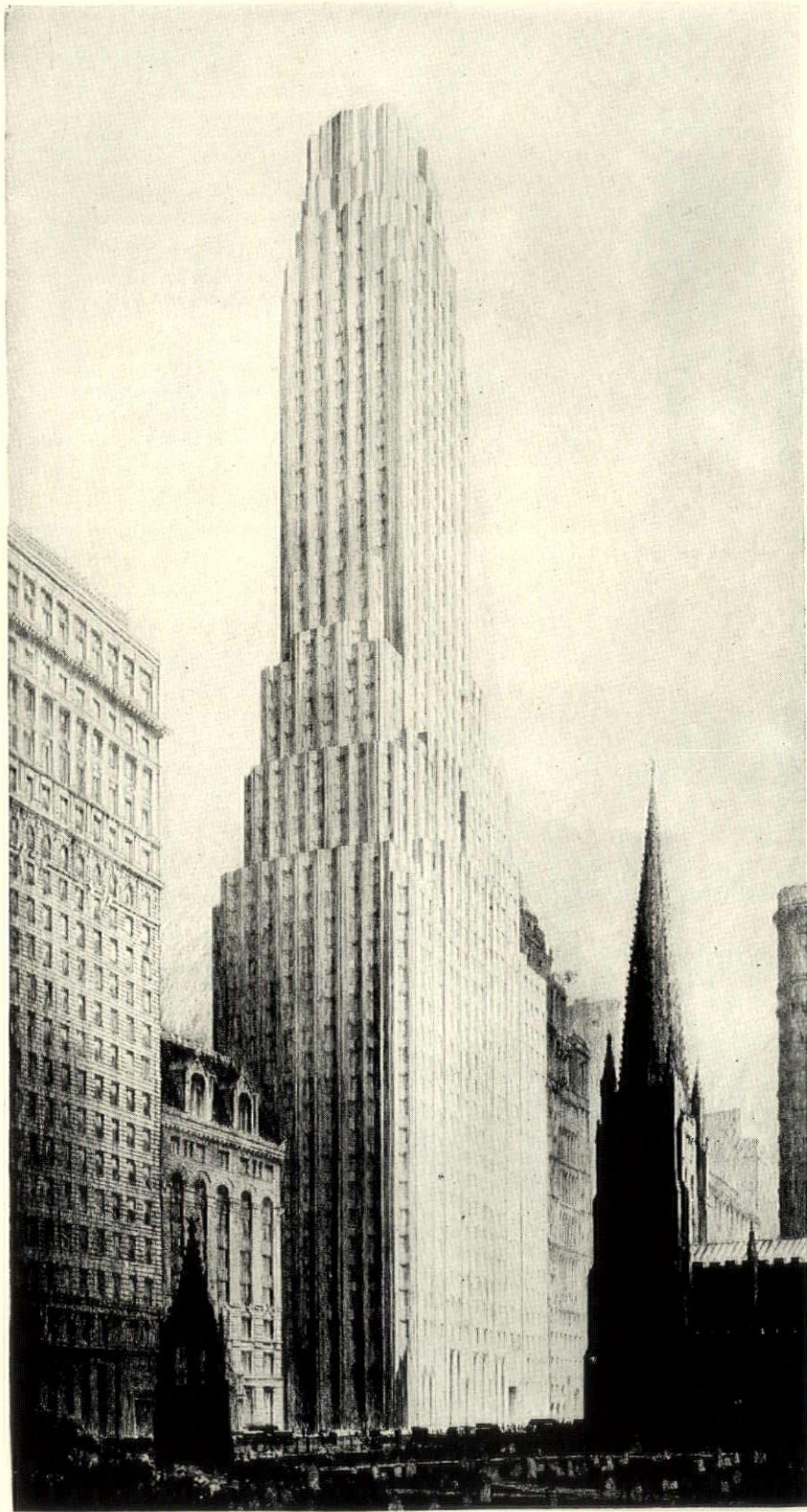


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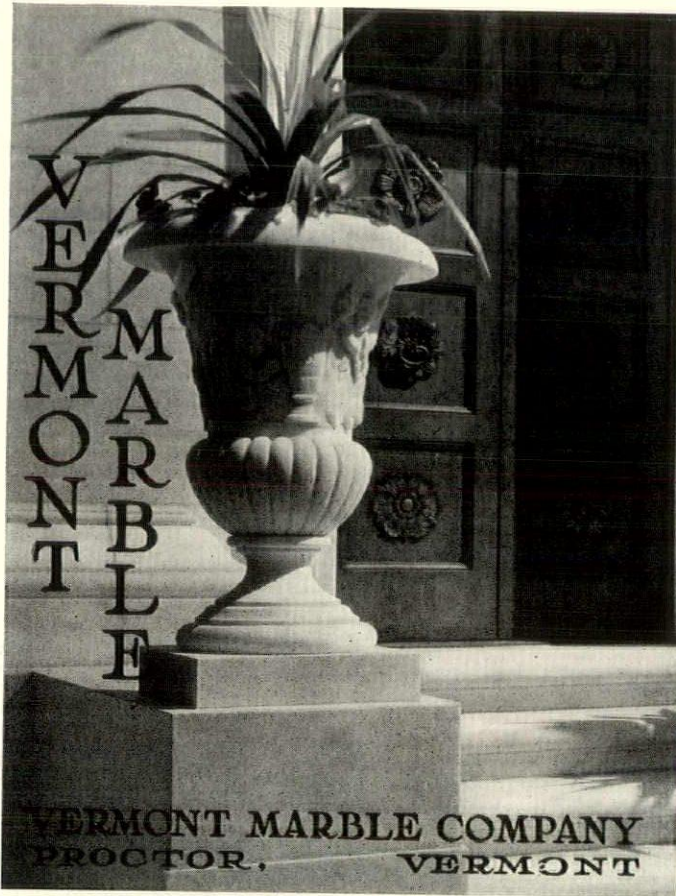
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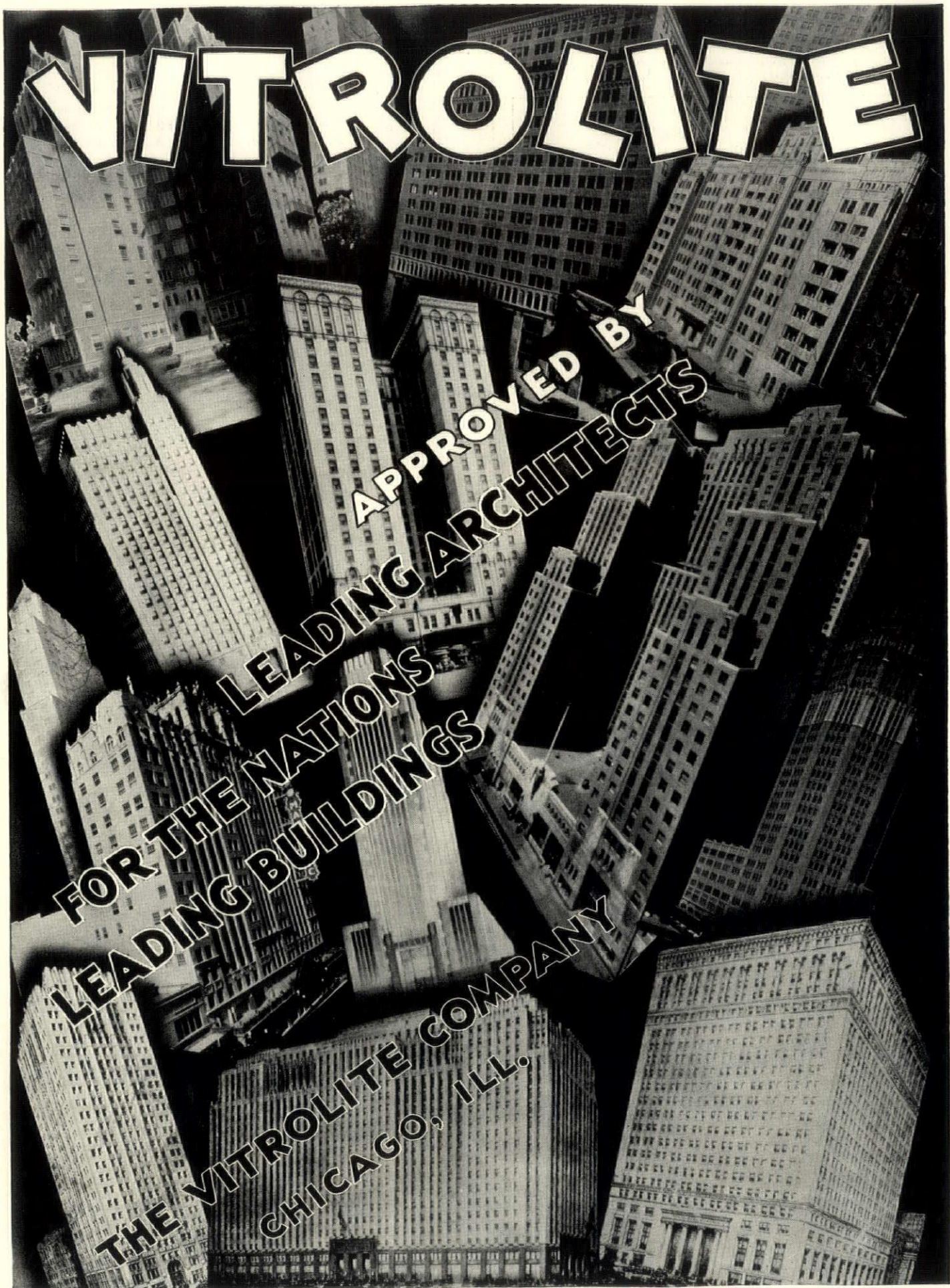
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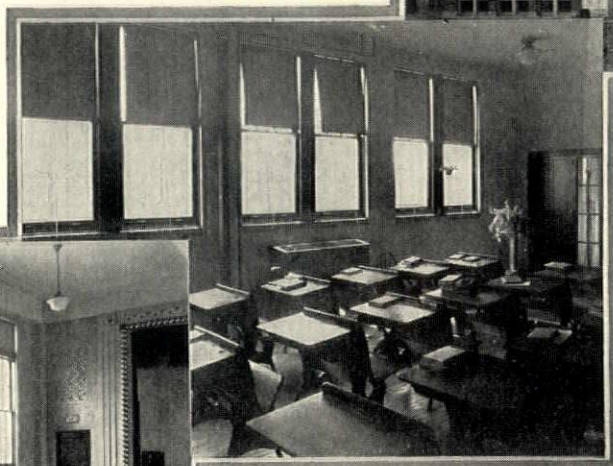
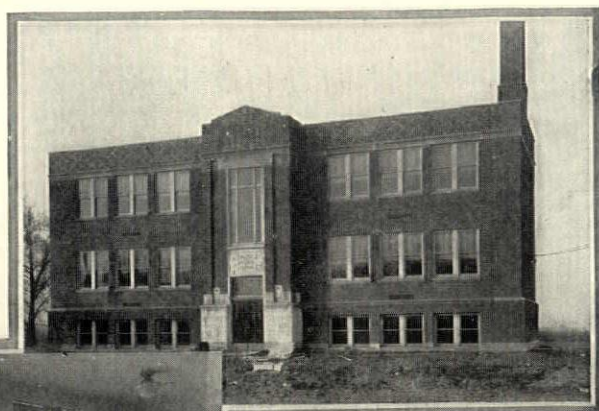
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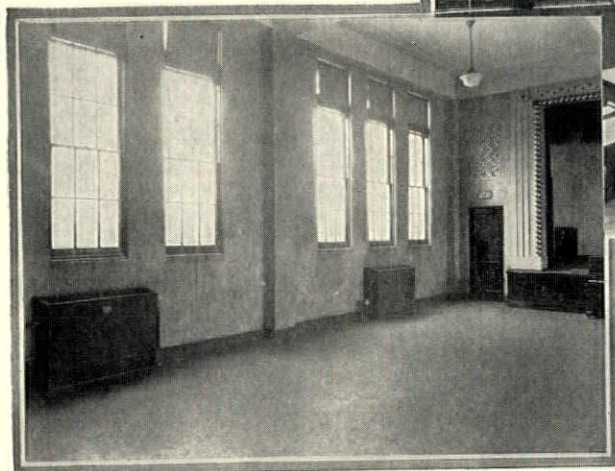
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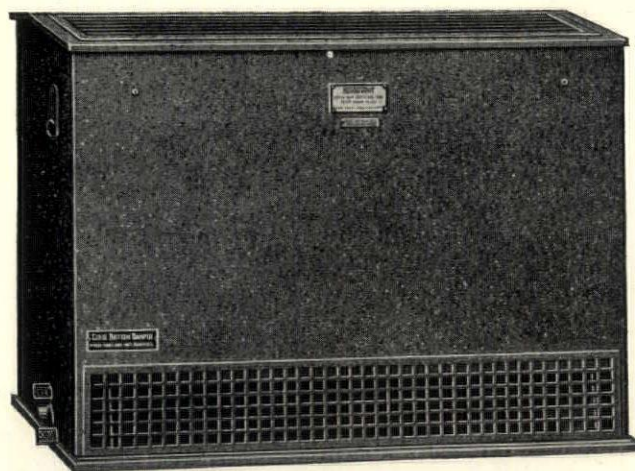
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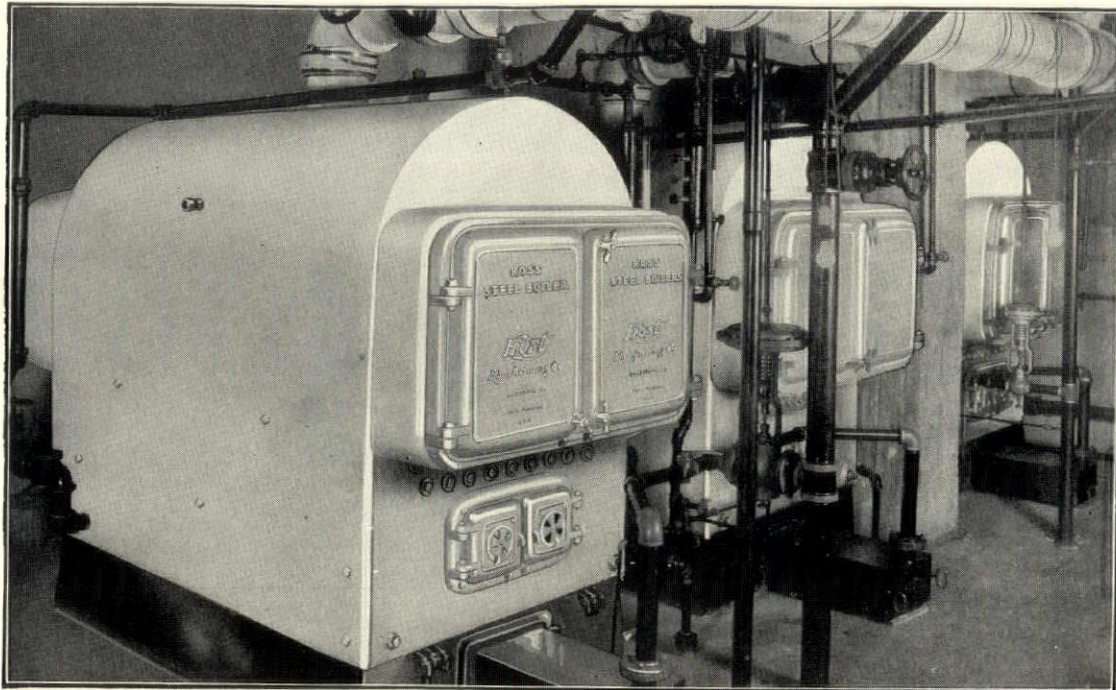
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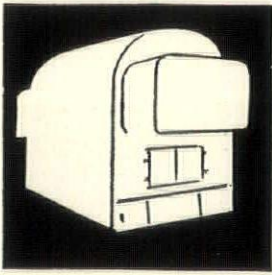
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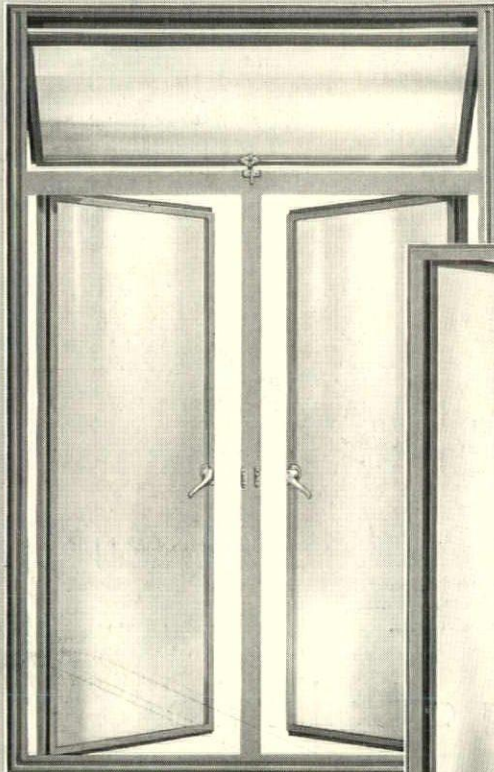
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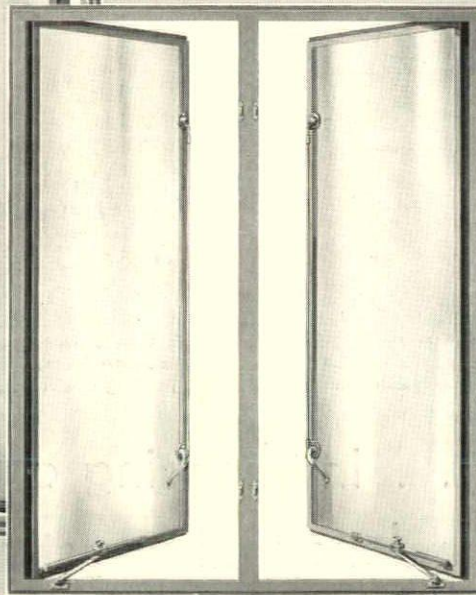
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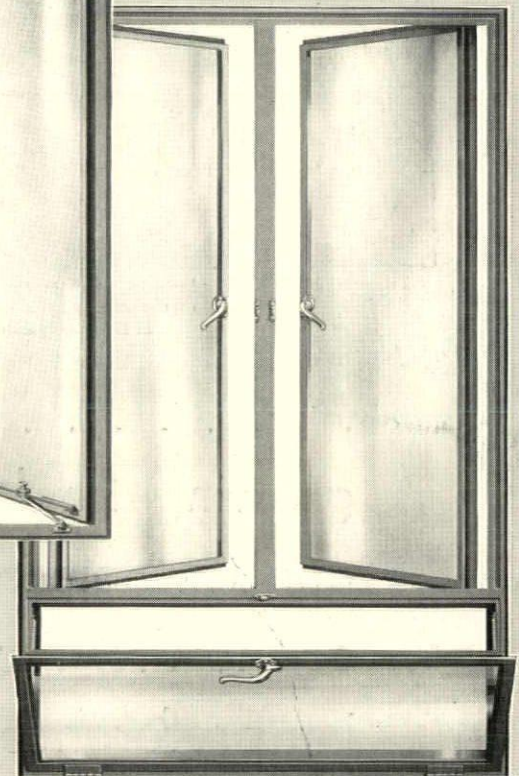
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