

AMERICAN ARCHITECT

FOUNDED 1876

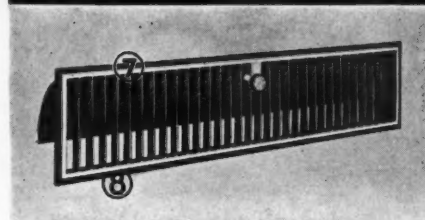
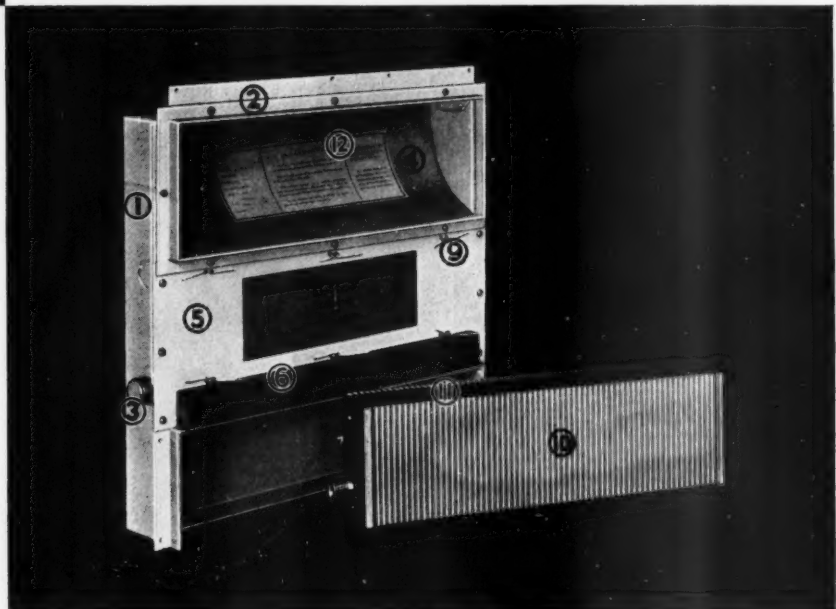
January 1932

COMPLETE and READY TO INSTALL WITHIN THE WALL



*...scientifically engineered
for proper heating results*

1. Sheet steel cabinet scientifically designed to maintain proper ratings and capacities.
2. Cabinet flanged at edges to provide means for securely fastening cabinet to building construction.
3. Temporary cap to protect radiator opening and threads from damage before installation.
4. Shield to protect heating element during construction—prevents dirt and plaster from dropping into heating element and impairing heating efficiency.
5. Sturdy front panel construction prevents damage of plaster due to pressure.
6. Wood strip above inlet opening provides for nailing.
7. Grille and damper unit fastened to frame itself and not screwed to a wood brick or plaster.
8. Felt strips to prevent leakage around grille.
9. Wire ties on front of cabinet for direct fastening of metal lath.
10. Patented Wedge Core Heating Element—light, strong, compact, free from joints to fail and leak or parts that can rust or get out of order.
11. Free air passage through radiator assures quick, uniform heating of air.
12. Instructions on correct installation.



Competent architects are avoiding "built on the job" and makeshift methods of concealed radiation. They know that only a scientifically designed, properly installed unit can produce the heating results their clients have a right to expect.

One unit, the Herman Nelson Invisible Radiator, is giving such results in thousands of installations throughout

the country. Many architects recognize it as by far the most practical concealed unit ever built.

The Herman Nelson Invisible Radiator is carefully designed according to proved principles of heating. It is sturdily built and furnished as a complete unit—ready for installation.

Note, above, some of the many features that set the Herman Nelson Invisible Radiator apart from all other heating units. For further information, get in touch with our nearest sales office or write us. The Herman Nelson Corporation, Moline, Illinois.

HERMAN NELSON *Invisible* RADIATOR

Factory at Moline, Ill. Sales and service offices in principal cities

Manufactured by the originators and pioneers of Univent Ventilation, the Her-Nel-Co System of Ventilation, the Invisible Radiator, and other heating and ventilating innovations that have received world-wide recognition.

Belfast
Portland, Me.
Boston
Springfield,
Mass.
Providence
New York City
Albany
Syracuse

Rochester
Buffalo
Scranton
Philadelphia
Allentown
Harrisburg
Erie
Johnstown
Pittsburgh

Wheeling
Washington
Charlotte
Cleveland
Cincinnati
Toledo
Akron
Louisville
Memphis
Chattanooga

Knoxville
Nashville
Miami
Birmingham
Indianapolis
Detroit
Milwaukee
Appleton
Chicago
Peoria

Evansville
St. Louis
Kansas City
Des Moines
Seattle
Minneapolis
Duluth
Omaha
Emporia
Denver
Dallas

Salt Lake City
Butte
Spokane
Portland
San Francisco
Calgary
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Toronto
London
Osaka
Tokyo
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Melbourne
Athens
Buenos Aires
Shanghai



R-W "Slidetite" doors can be operated easily in any weather by man, woman or child . . . no hazardous center posts in wide openings. (Electrically operated for commercial or private garages, if desired.)

R-W Garage door equipment for every doorway and . . .

Slidetite

PERMITS UNOBSTRUCTED OPENINGS UP TO 30 FEET IN WIDTH!

—that's one of many reasons why Slidetite equipment is preferred. Whatever type of door you consider, R-W can supply you—but you'll find that the R-W engineer can usually show you why Slidetite folding-sliding doors are more desirable than other types, even though R-W offers them all.

Smooth, quiet, safe, trouble-free operation is positively assured by the many fine features which belong exclusively to Slidetite equipment. The doors fold and slide inside the garage, leaving a wholly unobstructed opening. They may be operated electrically or by hand. Ice or drifted snow makes no difference; you never have to dig yourself out; wind cannot blow doors shut; nothing can in-

terfere with unfailing performance.

Extra speed, extra quiet and extra smoothness of operation are results of the "Ideal" ball bearing principle which is part of the hanger construction. The gentlest pressure opens and closes Slidetite "Ideal" doors.

The first cost of Slidetite doors is small and the upkeep negligible, whether you have them on your private garage or in the doorway of the largest public garage in town. Summed up in eight short words . . . "they work . . . they work *better* . . . they *always* work." That's not just our own statement; ask any one who owns them.

Call on an R-W Doorway engineer for advice and help.

Send for Catalog No. 55.



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

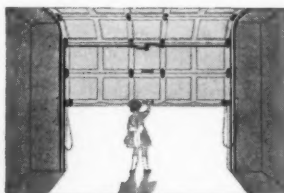
52
1887 1932



R-W parallel sliding doors.



R-W "Swingtite" doorway equipment (hinge doors).



R-W Over-Way doors, with unique features not possessed by other equipment of this type.



R-W "Slidaside" (around the corner) garage doors.

It's the SPECIAL FEATURES . . .

for convenience, beauty, novelty . . . that usually speed the sale, clinch the lease or gain the owner's final approval

SPECULATIVE building can carry no surer sales or renting aids; contract building no better assurances of owner satisfaction . . . than those which are derived from some novel and practical construction feature.

An architectural motif may be sound, floor plan difficult to improve upon, materials unquestionably high grade . . . yet a detail so unique and modern in utility and beauty as rolling screens will often be the first to capture the approval of prospective purchaser, lessee or owner-builder.

Put ROLSCREENS into your plans and they'll amply justify their cost. But be sure they're the genuine, *Pella-made* Rolcreens possessing fifteen patented features essential to practical rolling screens.

Rolcreens of Pella are made of lead-coated terneplate metal — a perfect bond for paint. Screen cloth

is specially processed "invisible"-gray, rust-proofed, triple-selvedged "AluminA" . . . a super-wire obtainable only in Rolcreens of Pella . . . so strong that it can be regarded as a practical safety device (in upper apartment windows, for instance); so durable that ten years' rolling and unrolling will not appreciably weaken the strands; so staunch that even a heavy blow will not leave it sagging or bagging.

Rolcreens of Pella are now designed for both inside and outside installation — the latter, in either half or full lengths at a considerable reduction in cost to fit present-day purses. Write for our latest catalog and literature giving extended mechanical, construction and installation details and specifications for all types of windows and building constructions. Rolcreen Company, 1612 Main Street, Pella, Iowa.



Seven years of amazing and rapidly growing success! Giant apartment, hotel, hospital, office, club, school and public buildings, palatial and modest homes in all sections of the country, bear testimony to the satisfaction and ready salability of Rolcreens of Pella — the modern method of screening windows without blemish to their architecture.

ROLSCREENS
• O F P E L L A •



Arriving at Philadelphia

TRAINS will soon be thundering into the new Pennsylvania Railroad Terminal now under construction at Philadelphia. The classic beauty of this magnificent structure will be the first of many pleasant changes to greet visitors to Pennsylvania's largest city.

Other new construction to claim attention include Strawbridge & Clothier's massive new Department Store, the imposing Lincoln-Liberty Building, the new Market Street National Bank and the distinctly modern Philadelphia Saving Fund Society Building.

The fact that CB Sections form the structural framework of all of these buildings indicates their remarkable adaptability to the present-day needs of architects and builders. CB Sections merit the investigation of anyone interested in modern steel construction.

Graham, Anderson, Probst & White are the architects for the Pennsylvania Railroad Station. . . United Engineers & Constructors, Inc., the builders . . . and American Bridge Company, fabricators.

**CARNEGIE
STEEL
COMPANY**
PITTSBURGH, PA.



Subsidiary of
**UNITED STATES
STEEL
CORPORATION**

166

CB

SECTIONS

A handsome Desco Store
Front installation for
Seton's, Inc., Buffalo,
N. Y.

Eli W. Goldstein, Archt.



Desco
METAL
REG. U.S. PAT. OFFICE

STORE FRONTS

Increase the Sales Value of the Display Windows

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

When designing an attractive, modernistic facade that will invite shoppers to look at the window displays, choose Desco Store Fronts. Manufactured in a wide variety of metals, including solid copper, solid bronze in all standard finishes and aluminum alloy (white metal), Desco Store Fronts will help you combine architectural beauty with a "sales punch" that will please your clients. These fronts have the additional quality of flexibility, which protects the glass against abnormal wind pressure. Make your next store front a Desco installation.

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

New York City Office and Warehouse: 344-346 East 32nd St.
Philadelphia Office: 316 Commonwealth Building
Pacific Coast Office: 450 Skinner Building, Seattle, Wash.

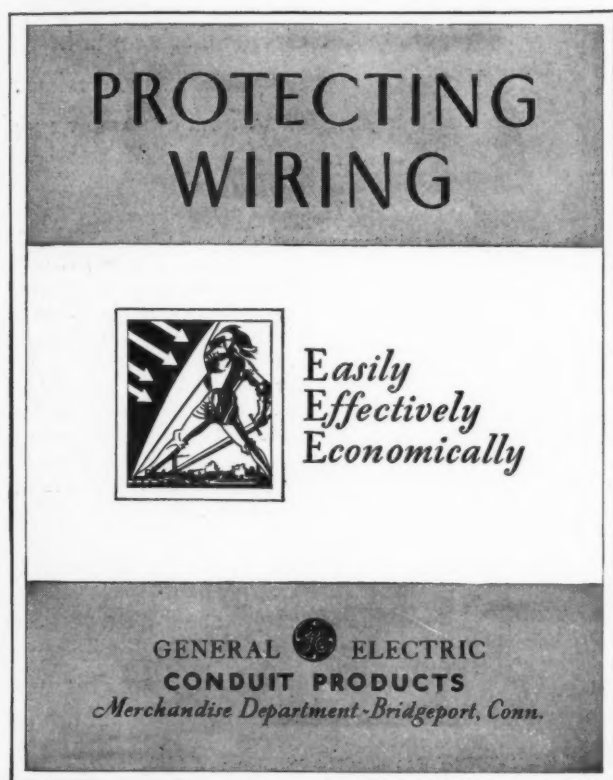
A New BOOKLET

on

RIGID CONDUIT

for

ARCHITECTS AND ENGINEERS



RIGID conduit is no longer just "pipe." Even this prosaic wiring material has undergone some remarkable changes in the past year. Chief among these changes have been the two major improvements made in G-E White rigid conduit by General Electric.

First came the development of a flexible alloy steel, which makes G-E rigid conduit bend easily and therefore makes it easier to install. Users have found it a better conduit, retaining all of the old superiorities of G-E White and offering new economies in installation because of its greater workability.

The second development in conduit during 1931 was the addition of a Glyptal coating to G-E White right over the galvanizing, both inside and out. Glyptal is a synthetic resin developed by the G-E Research Laboratory. It forms a flex-

ible coating that fills all the pores of the metal, bends without cracking, resists water, oil, acids, and alkalies, and gives a glass-like surface that makes wire-pulling easier. Baked on at a high temperature, it remains glassy-hard even under the frictional heat developed in pulling wires.

All of the important facts about rigid conduit have been put into a booklet, "Protecting Wiring Easily - Effectively - Economically." It is tabbed, to be filed in your A.I.A. file for future reference. Marginal notations assist rapid reading.

Just sign your name to the coupon below and pin it to your letterhead to give us your address. We'll be glad to send you a copy. We hope it will be both interesting and helpful.

Section C-1001
Merchandise Dept.
General Electric Company
Bridgeport, Conn.

Gentlemen:

Please send a copy of "Protecting Wiring Easily-Effectively-Economically" to the address on the enclosed letterhead.

Name.....

GENERAL ELECTRIC

RIGID CONDUIT

MERCHANDISE DEPARTMENT, GENERAL ELECTRIC COMPANY, BRIDGEPORT, CONNECTICUT

JOHNSON

Periodic Flush Systems



Johnson Pneumatic Time Flush Clock, Warren Telechron Driven.



Johnson Flush Clock, for alternate flushing.



Johnson Pneumatic Multiple Time Flush Clock, Warren Telechron Driven: 6 Point Flushing Clock Illustrated above, 2 Point Flush Clock Illustrated below.



A Sloan Royal Flush Valve With Johnson Air Motor.



Watrous Flush Valve With Johnson Air Motor.



A Standard Johnson Siphon Reverse Valve.

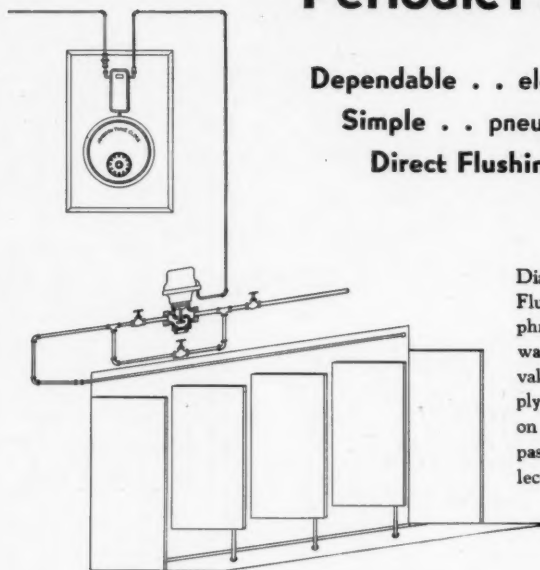


Diagram shows a Johnson Single Time Flush System. Normally closed diaphragm valve insures against waste of water in case of trouble. Time flush valve by-passed so that continuous supply may be had. Lock-shield gate valves on each side of flush valve and in bypass. A switch may be arranged to select manual or clock operation at will.

Johnson Multiple Time Flush Systems are described in Bulletin C-301.

Dependable . . . electric clock control.

Simple . . . pneumatic valves and relays.

Direct Flushing . . . from city water supply.

NOW it is possible to have an efficient and reliable periodic flush system.

An electric clock, actuating pneumatic relays, positively opens and closes diaphragm valves and causes flushing to take place automatically for any desired length of time. The full force of the city water supply is utilized for cleansing purposes. The valves may be arranged so that sections are flushed at intervals or there may be one valve to flush in all parts of the building simultaneously.

The multiple arrangement is desirable in large buildings, reducing the load on the water supply and waste pipes. Johnson Flush Systems require no troublesome float control mechanism. They are positive and direct in their action.

SEND for Bulletin C-301 which illustrates and describes in every detail the various interesting features of

Johnson Periodic Flush Systems . . . both single and multiple. Become posted at once on this important new advancement. A card will bring Bulletin C-301.

JOHNSON SERVICE COMPANY MILWAUKEE, WIS.

507 E. Michigan Street

Established 1885

BRANCHES IN ALL PRINCIPAL CITIES

MANUFACTURERS
OF
JOHNSON HEAT
AND
HUMIDITY CONTROL



BUFFALO'S NEW CITY HALL

ARCHITECTS
Deitel & Wade

BUILDER
John W. Cowper Co., Inc.

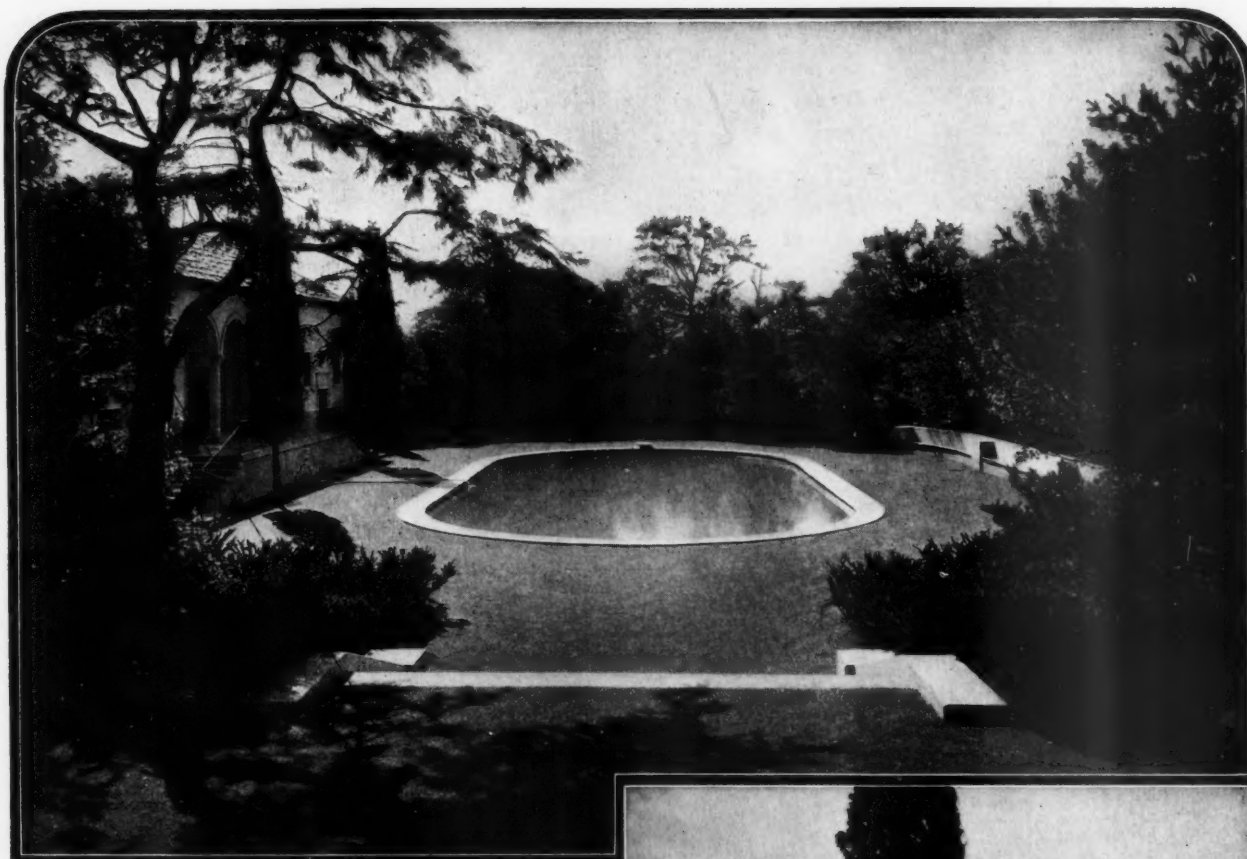
Buffalo may well be proud of its imposing new City Hall and we are proud of the fact that the 40,000 square yards of 3-16 inch Brown Battleship Linoleum covering its floors were made by one of the units of the Sloane-Blabon Corporation.

This portfolio will prove very helpful when specifying linoleum floors. We shall gladly send you a copy on request. W. & J. Sloane, 577 Fifth Avenue, New York.

SLOANE-BLABON LINOLEUM

.....





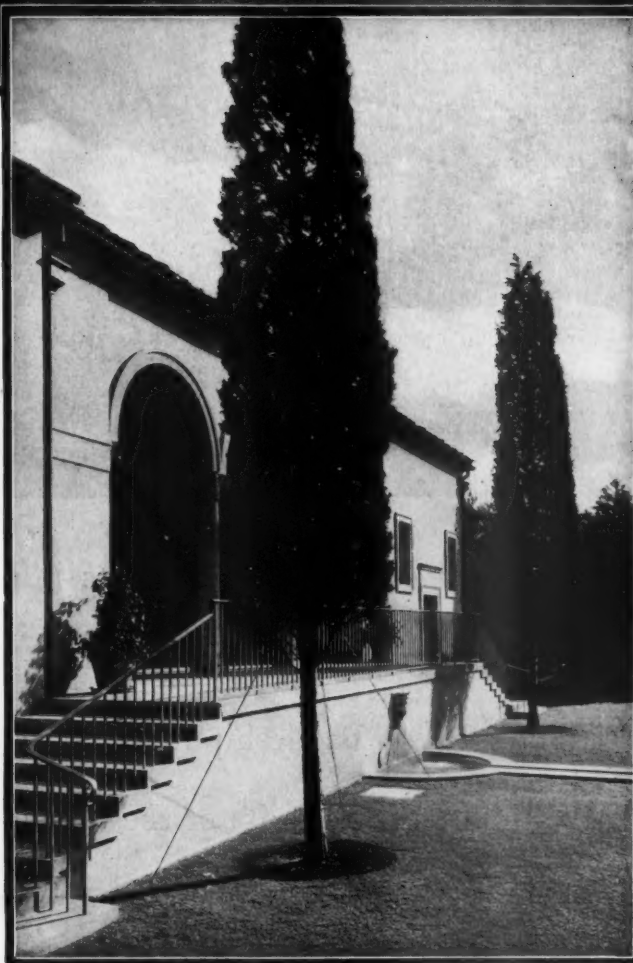
Arthur V. Davis Swimming Pool and Pavilion at Mill Neck, Long Island . . . Vitale and Geiffert, Landscape Architects

The Everlasting Beauty of Ornamental Metal ... by FISKE

The Arthur V. Davis swimming pool pavilion at Mill Neck, L. I., views of which are adjacent, is another example of the excellence of FISKE "craftsmanship in metal."

Architects who have worked with FISKE realize that FISKE experience of over 72 years is largely responsible for the complete owner satisfaction which always identifies FISKE installations.

J.W. Fiske IRON WORKS
80 Park Place—New York
ESTABLISHED 1858

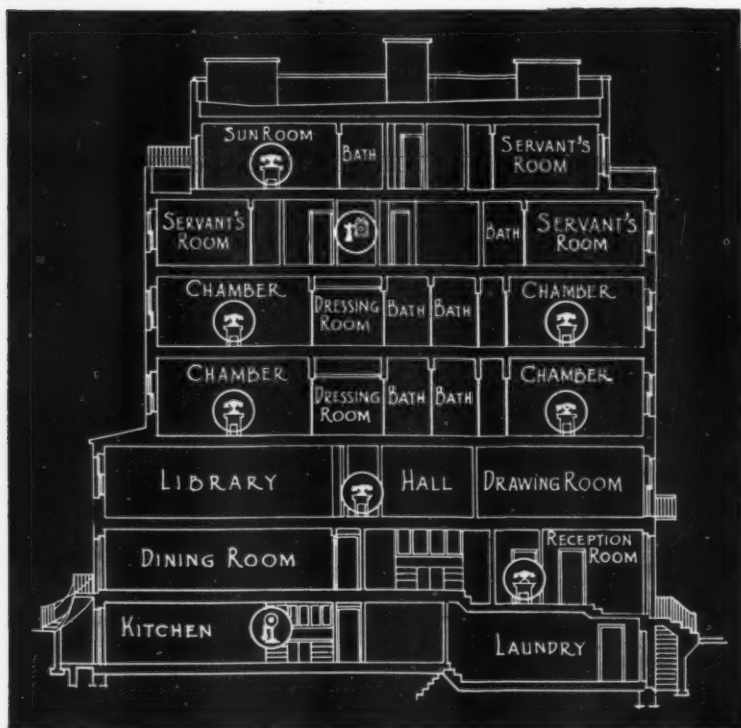


SPECIALISTS IN ORNAMENTAL METAL WORK

TELEPHONE COMFORT AND CONVENIENCE FOR YOUR CLIENT

EFFICIENT management of home or business today demands that ample provision be made for complete telephone communication. All built-in conduits and outlets should be included in the original specifications for a structure of any size or character, whether the recommendation is for a single extension telephone or for a private branch exchange.

Pre-planned arrangements of this kind will assure full convenience, allow for future expansion, conceal all wiring and protect against most types of service interruptions. This thoughtful planning on your part returns generous dividends in client satisfaction.



When provision has been made for adequate telephone facilities, the instruments can be conveniently located throughout the house as shown in the diagram above.



Provision for telephone convenience was built into this well-planned New York residence. EDWARD S. HEWITT, Architect; ROBERT JOHNSON, JR., Builder. The diagram shows the arrangement of the telephones connected to a dial intercommunicating system, with 2 trunk lines and 9 stations, each one equipped to pick up or initiate central office or interior calls.

A representative of your local telephone company will be glad to consult with you in regard to the telephone arrangements suited to the particular needs of any type of building. The service of these trained telephone engineers is offered you free of charge. Call the Business Office of your local telephone company.



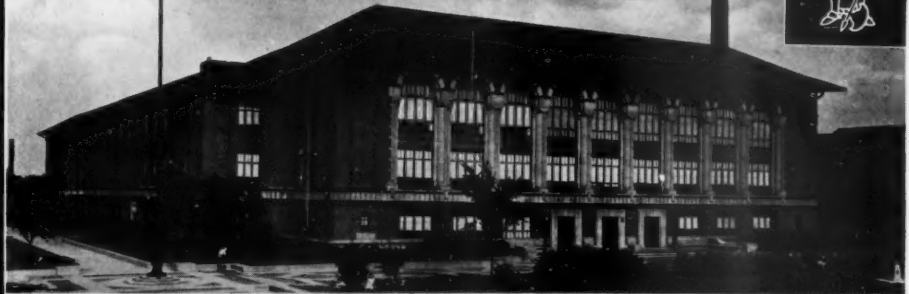
PARTIAL LIST OF
ARCHITECTS WHO
HAVE SPECIFIED
AND USED

STEELTEX

for SCHOOL BUILDINGS

ALABAMA
P. W. Hofferbert L. H. McKibben
ARIZONA
Fitzhugh & Byron
ARKANSAS
Hunter & Boyd J. Odell Baker
Hassham & Wheeler A. P. Coolidge
Wittenberg & DeLoney
Witt, Siebert & Halsey
CALIFORNIA
Cole & Brouchoud
Ralph Wyckoff E. Chas. Parke
Theo. Kistner & Co.
H. A. Nelson DeWitt Mitcham
Floyd E. Brewster Wm. H. Weeks
Geo. M. Lindsey Peter Ficker
Davis & Pearce Symmes & Cullamore
CONNECTICUT
Haynes & Mason
Shreve & Lamb & Harmon
R. W. Foote F. J. Dixon
FLORIDA
Carey & Dowling W. D. Willis
GEORGIA
Federal Government
IDAHO
Scott & Welch
ILLINOIS
Wainwright & Wilkins
Robert M. Hyde Mr. Skadden
Zimmerman, Saxe & Zimmerman
INDIANA
Thole & Legeman
Wainwright & Wilkins
Edwin Berendes Weaking & Son
Buckley, Skidmore & Wainwright
IOWA
C. R. Zalesky Benj. F. Sadler
KANSAS
Smith & English
Brinkman & Hagan Chas. W. Shaver
Rutledge & Hertz Ralph Scamell
KENTUCKY
C. Tandy Smith
Elzner & Anderson Brinton Davis
C. E. Kimberlin Lester Daily
LOUISIANA
Hunter & Boyd
MAINE
Price & Walton
MARYLAND
Clyde & Nelson Fria
Arthur B. Heaton R. Holt Hitchens
A. J. Klinkhart W. H. Harris
MASSACHUSETTS
Haynes & Mass
Diamond & Lord J. P. Heffernan
Harold Field Kellogg
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Walter Wyeth Stratton & Hyde
Malcolmson, Higginbotham & Trout
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NEBRASKA
Davis & Wilson
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Alexander Merchant
Arthur Kamhurst F. H. Radey
Vivian B. Smith Thomas Dunn
NEW YORK
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Louis H. Weeks Edward Hahn
Joe. E. Fronczak G. F. Lorenz
Fred P. Wiedersum A. L. Brockway
C. Storrs Barrows Walker S. Lee, Jr.
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Howard Chamberlin
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S. H. Shiveley & Son Geo. Rheinfrank
Britsch & Munger DeVoss & Donaldson
Langdon, Hohly & Gram
OKLAHOMA
A. J. Love
L. R. Carr Federal Government
Albert Ross W. E. Midill
OREGON
Howard R. Perrin
PENNSYLVANIA
Press Dowler W. W. Williams
Scholl & Richardson C. C. Compton
Tillman Scheeren A. A. Weidner
H. M. Rogers & Van Engr. Ser.
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Rube & Lange Simon & Simou
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Thos. Pringle R. V. Patterson
Emil K. Johnson Ed. Phillips
W. Holmes Crosby Brenor & Hicks
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Van Ryn & De Gelleke G. A. Wiley
Schmitt, Gardner & Erikson
VANCOUVER, B. C.
H. W. Postle

STEELTEX FOR SCHOOLS



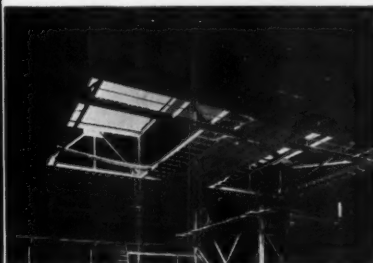
BUILD WALLS, CEILINGS, FLOORS AND ROOFS WITH
STEELTEX



As the plaster is applied against the fibrous backing of Ribbed STEELTEX Lath, the copper-bearing steel wire network becomes automatically embedded in the plaster.



Ribbed STEELTEX Lath for plaster and STEELTEX Channels form a practical and modern method of constructing school partitions.



Ribbed STEELTEX Lath for plaster is used for school ceilings, either nailed to wood joists or wire-tied to steel joists or suspended ceilings.



STEELTEX Floor Lath is unrolled over the joists. The illustration above shows STEELTEX Floor Lath in an unbroken stretch of 212'.

HUNDREDS of school buildings throughout the country have used **STEELTEX**. For walls, ceilings, suspended ceilings, and partitions, Ribbed **STEELTEX** Lath is widely used as a plaster base and reinforcement . . . is rapidly applied and plastered . . . material and labor application costs are lowered. The result is a first-class plastering job which is effectively insulated against heat and cold flow . . . is fire resistive (carries the Underwriters' 1 hour fire rating) . . . has acoustical properties, high sound resistance . . . eliminates lath, joint or stud marks from showing on the finished plaster . . . prevents falling plaster, and minimizes the tendency of any occurrence of plaster cracks.

Light-weight, reinforced concrete floors and roofs for schools provide permanence, fire-safety and rigidity of construction. **STEELTEX** Floor Lath, a combined reinforcement and form, is an engineered product designed for this class of construction.

By virtue of its component units, **STEELTEX** Floor Lath provides a water-resisting backing plus a complete network of electrically-welded steel wire mesh for reinforcement.

Write for literature about Ribbed **STEELTEX** Lath for interior plaster, and for the book "**STEELTEX** Floor Lath for Concrete and Gypsum Floors and Roof Slabs." All construction details are fully explained.

NATIONAL STEEL FABRIC COMPANY

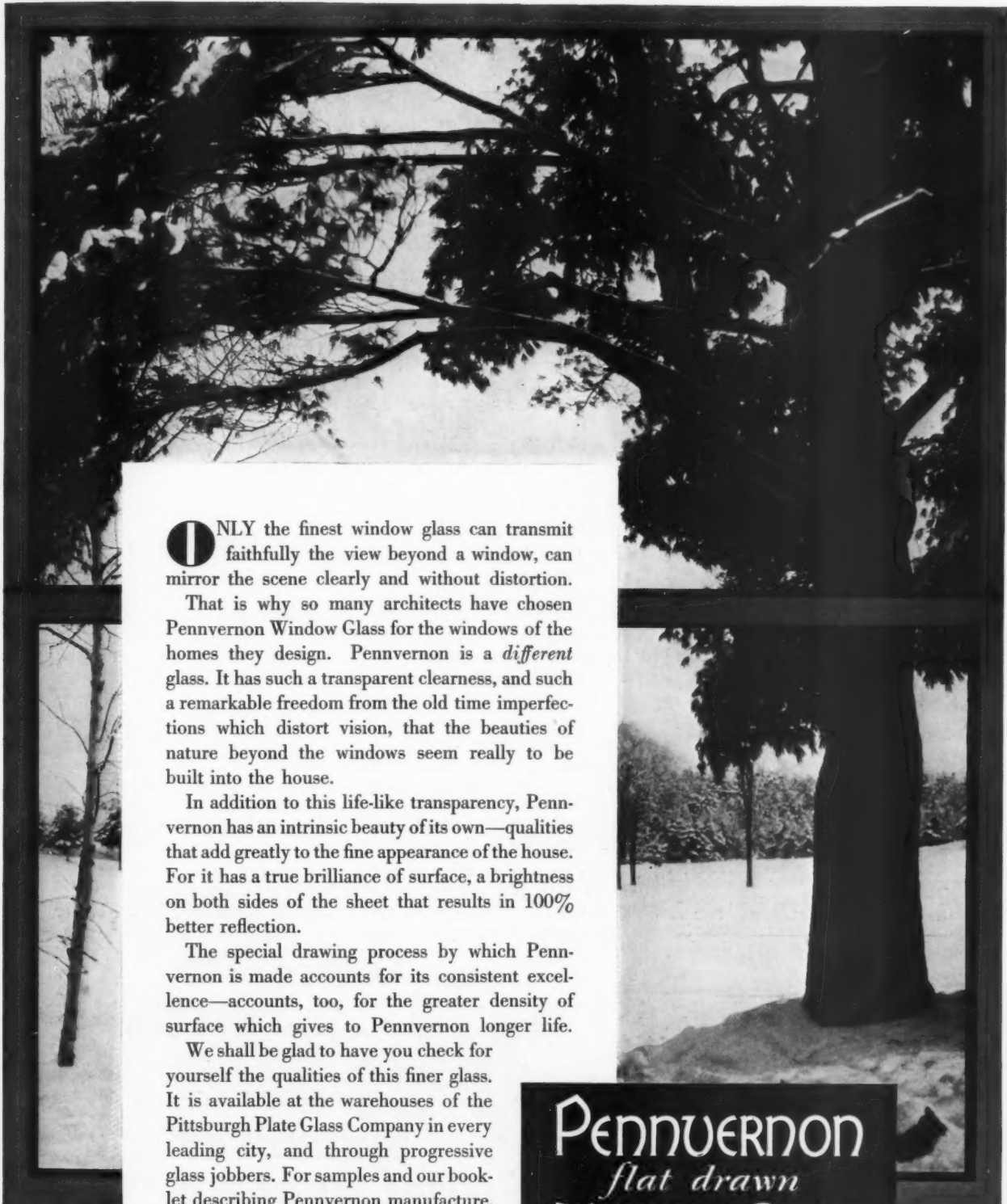
Union Trust Building (Pittsburgh Steel Co.) Pittsburgh, Pa., U.S.A.

WORLD'S LARGEST MANUFACTURERS OF WELDED STEEL FABRIC



Concrete is poured directly onto **STEELTEX** Floor Lath. The galvanized wire reinforcing mesh is automatically embedded in the slab as the concrete is poured.

No Window View is clearer than its GLASS



ONLY the finest window glass can transmit faithfully the view beyond a window, can mirror the scene clearly and without distortion.

That is why so many architects have chosen Pennvernon Window Glass for the windows of the homes they design. Pennvernon is a *different* glass. It has such a transparent clearness, and such a remarkable freedom from the old time imperfections which distort vision, that the beauties of nature beyond the windows seem really to be built into the house.

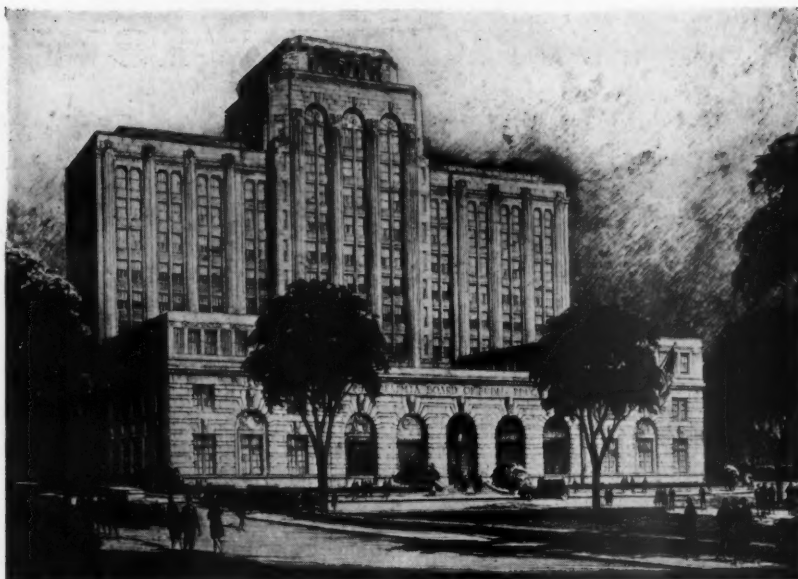
In addition to this life-like transparency, Pennvernon has an intrinsic beauty of its own—qualities that add greatly to the fine appearance of the house. For it has a true brilliance of surface, a brightness on both sides of the sheet that results in 100% better reflection.

The special drawing process by which Pennvernon is made accounts for its consistent excellence—accounts, too, for the greater density of surface which gives to Pennvernon longer life.

We shall be glad to have you check for yourself the qualities of this finer glass. It is available at the warehouses of the Pittsburgh Plate Glass Company in every leading city, and through progressive glass jobbers. For samples and our booklet describing Pennvernon manufacture, address the Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Penna.

Pennvernon
flat drawn
WINDOW GLASS

ADMINISTRATION BUILDING OF THE PHILADELPHIA BOARD OF PUBLIC EDUCATION . . . ARCHITECT — Irwin T. Catharine, A. I. A., Philadelphia . . . HEATING CONTRACTORS — McClintock & Co., Philadelphia, Bower Brothers & Company, Philadelphia. Equipped with Webster Moderator System of Steam Heating.



From the District School House to the Great University

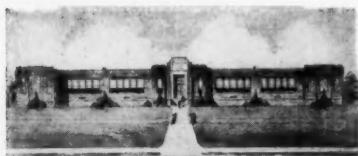
A Few Outstanding Pennsylvania Schools heated by Webster Systems



COLESTOCK HIGH SCHOOL, TITUSVILLE, PENNA. . . ARCHITECT—W. Holmes Crosby, Oil City . . . HEATING CONTRACTOR—Wm. M. Clark & Company, Inc., New Castle Webster Vacuum System



BEAVER FALLS HIGH SCHOOL, BEAVER FALLS, PENNA. . . ARCHITECT—Carlisle & Sharrer, Pittsburgh . . . HEATING CONTRACTOR—Wm. M. Clark & Company, Inc., New Castle Webster Vacuum System



PERRY TOWNSHIP HIGH SCHOOL, BERKS CO., PA. . . ARCHITECT—W. Marshall Hughes, Reading . . . HEATING CONTRACTOR—Warren F. Smith, Boyertown. Webster Type "R" System

The heating requirements of our American "educational plants" are too varied to be met by any one "system" or product. Here, as in other fields, the widespread use of Webster equipment is due to the well established Webster policy to provide "A heating system for every need".

The new Administration Building of the Philadelphia Board of Education is essentially an Office Building with an Improved Webster Vacuum System and a single, central, Webster Moderator Control. At the Seminary of St. Charles Borromeo, Overbrook, Pa., chapel, dormitory and class room buildings are equipped with an Improved Webster system (open returns), and Moderator Control with supplementary manual zone control to each building.

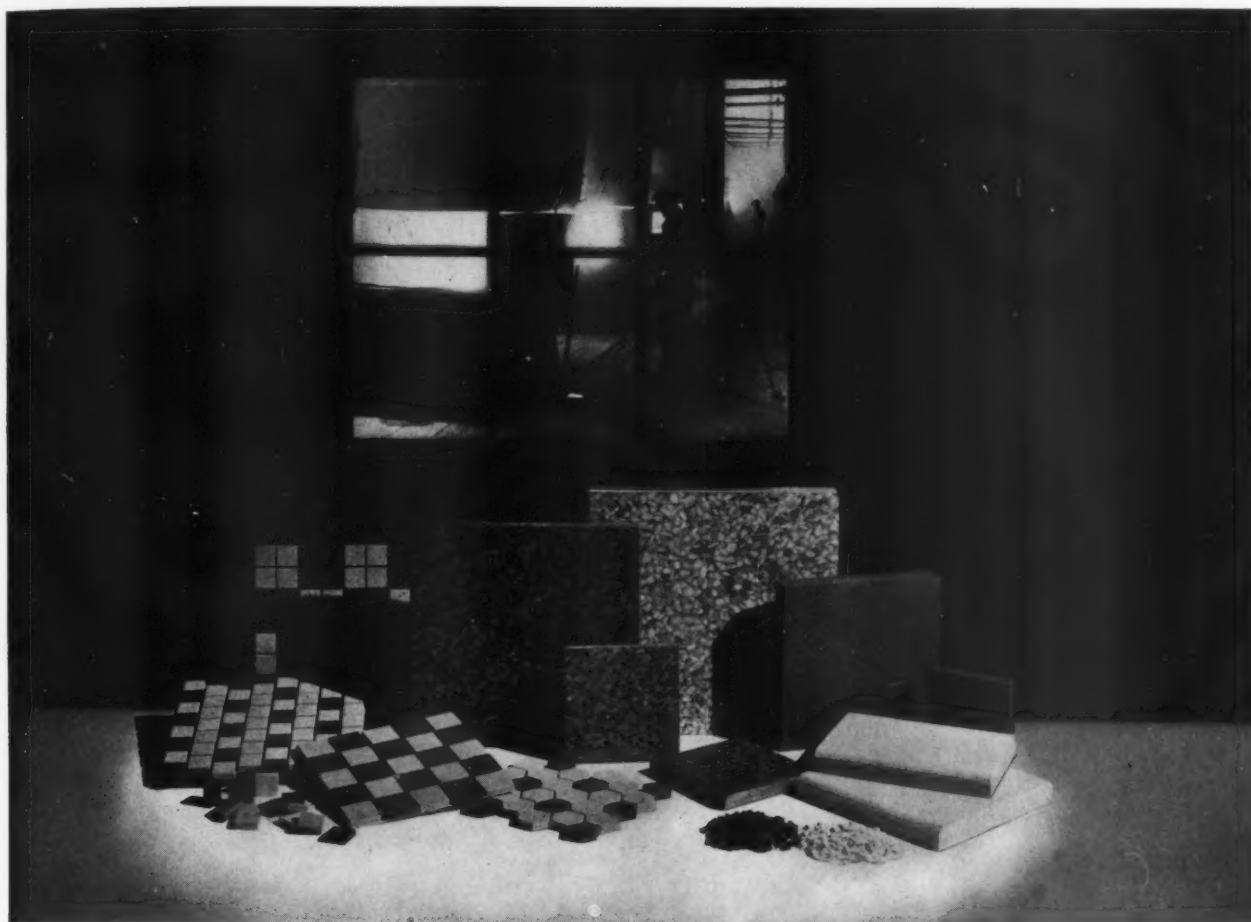
The modern Colestock and Beaver Falls Schools illustrated at the left are heated by standard Webster Vacuum Systems. This type of Webster system meets best the requirement where there is a large portion of mechanical ventilation. For smaller school buildings, heated by direct radiation and depending on window ventilation, the choice is an Improved Webster Type "R" System with Webster Hylor Variator control.

You can use to advantage our experience gained in heating more than 10,000 modern educational buildings to assure selection of the proper type of system for each building. The Webster representative is at your service.

al 68

—since 1888
Webster
Systems of
Steam Heating

Warren Webster and Company, Camden, N. J., Pioneers of the Vacuum System of Steam Heating



It's the Percentage of Abrasive that Counts

—If a Tile Is to Be Permanently Non-Slip

*View above: Norton electric
furnaces producing Alundum
abrasive*



NORTON COMPANY
WORCESTER, MASS.

THERE are two mighty important points to consider when selecting a non-slip tile if permanent safety is to be assured. One is the *amount* of abrasive and the other is the *kind*.

The abrasive content of Norton Alundum tiles and aggregates varies with the color, ranging from about 35% in the white granite to 80% in the brown tile. This high percentage of abrasive is an exclusive Norton feature.

In all Norton tiles the abrasive is fused alumina (trademarked Alundum), an electric furnace material that is both extremely hard and extremely tough. It is made in the Norton electric furnace plant at Niagara Falls and in two forms—one dark colored and the other pure white. It is this white fused alumina (Alundum) that makes possible the high percentage of abrasive in the light colored Alundum Tiles—assuring the permanent safety exclusive to Norton Floors.

T-305

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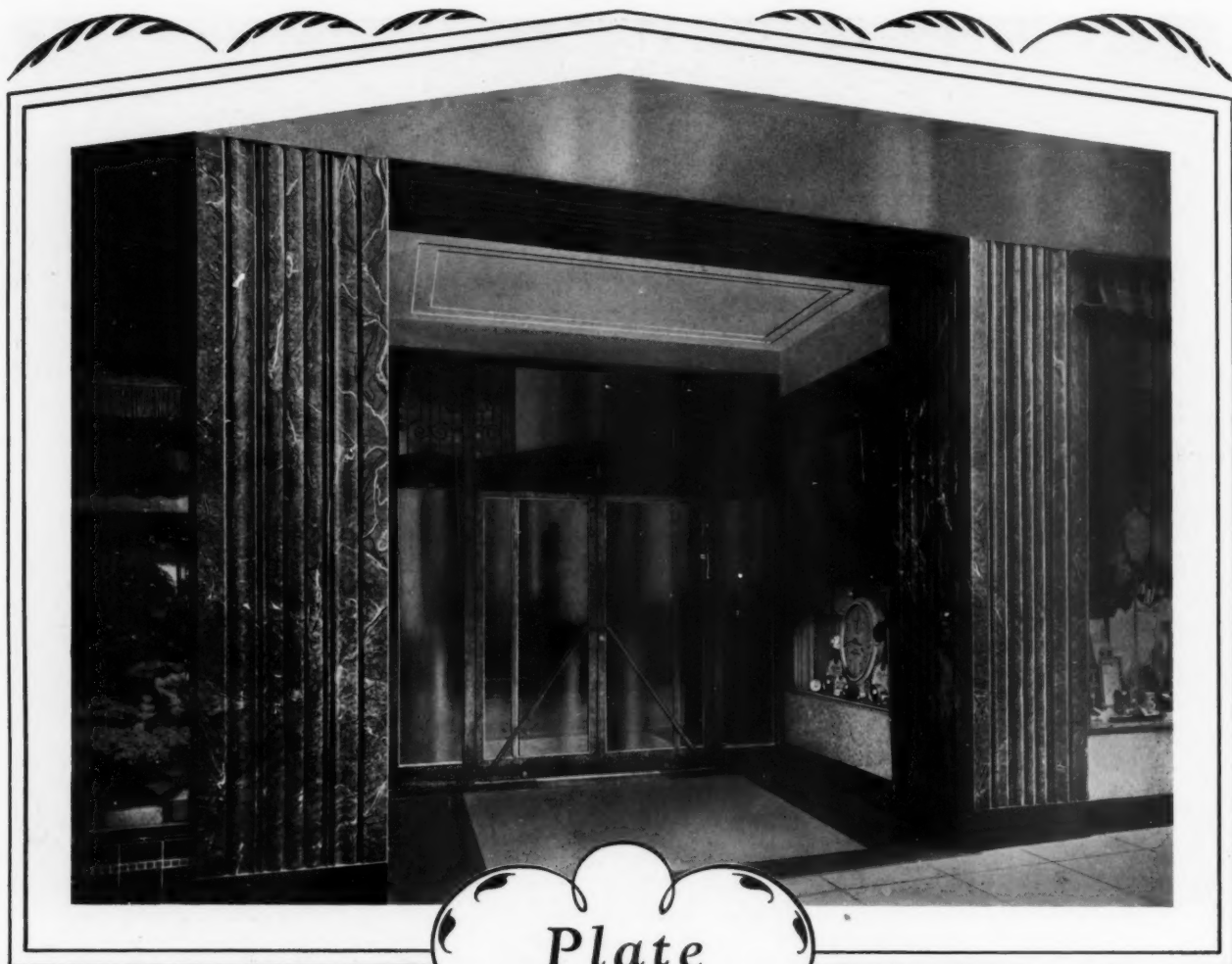


Plate
Number
Ten

The Modernistic Series

IN no field has the modern trend been more in evidence than in the building of store fronts and entrances. This is particularly true in European cities. Most radical of all, perhaps, are the newer shops in Paris. Except in rare cases, the designers of this country have been far more conservative.

Already in this series we have shown

several store fronts of the conservatively modernistic type. Of similar kind is this Crary Building Entrance in Seattle, Wash. Here the color effects were secured through the use of Vermont Verde Antique and Belgian marbles. The work was finished and installed by The Robinson Tile & Marble Co., of Seattle. The architect was R. C. Reamer.

VERMONT MARBLE COMPANY—PROCTOR, VERMONT

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VERMONT MARBLE



Closet 10 inches high—Lavatory 24 inches high.



Harkness Memorial, New Haven, Conn.
James Gamble Rogers, Architect

Plate 4611-T Te-Pe-Co Vitreous
China Wall Closet on Concealed Carrier



PLUMBING FIXTURES... *for kindergarten or college...*

ABOVE is a Juvenile closet and lavatory... for small children... of true Te-Pe-Co quality, design and durability. Both are ideally suited to their environments... both will give the daily satisfactory service... the years of usefulness... for which all Te-Pe-Co all-clay plumbing fixtures are justly famous.

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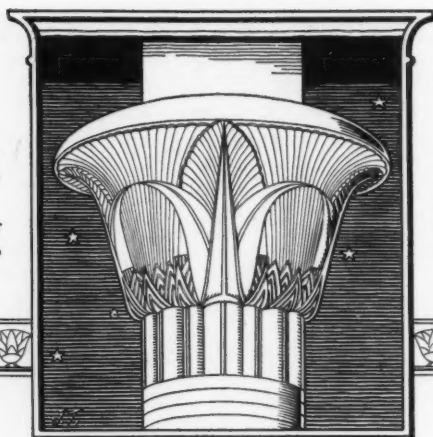
NATIONAL SHOWROOMS Philadelphia Architects Building
New York City—101 Park Ave. 17th & Sansom Sts.
Entrance on 41st St. Boston and Chicago
EXPORT OFFICE—115 Broad Street, New York City

TE-PE-CO

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This Month's Cover

MCGRAW-HILL BUILDING

POSSIBLY the most widely discussed building in New York City at the present time is the McGraw-Hill Building. Many architects are quite frank in their dislike of its color and general treatment. Others, particularly those who have studied it closely, are equally frank in expressing their liking for it. But then Raymond Hood, its architect, seems to have a penchant for stirring up discussion, as witness his Daily News Building.

The McGraw-Hill Building has been such a storm center that the editors departed from their usual custom of presenting a water color on the cover, and had a photograph made in color to use as the cover subject.

Thus the reproduction of the building on this month's cover is as lifelike as the photographer's art can make it today.

The story of the McGraw-Hill Building will be found starting on page 28 of this issue.

BENJAMIN FRANKLIN BETTS, A.I.A., *Editor*

ERNEST EBERHARD, *Managing Editor* WALTER E. DEXTER, *Advertising Manager*
RAY W. SHERMAN, *Editorial Director* R. F. GARDNER, *Business Manager*

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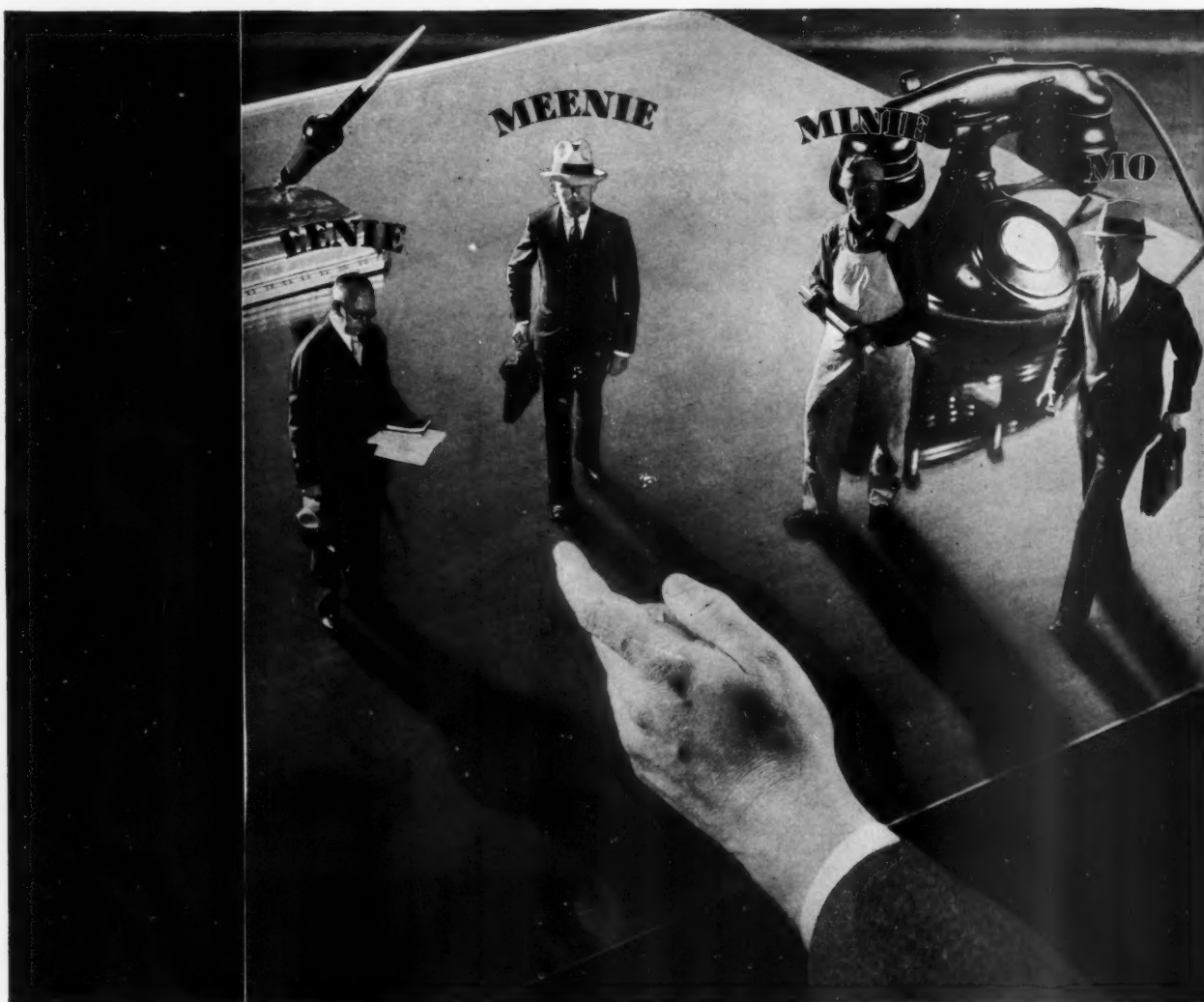
BRICKWORK—Facts about reinforced brickwork

WELDING—How to cut costs with arc welding

LEGAL—What to do to retain ownership of plans

AMERICAN ARCHITECT, *Published monthly by* INTERNATIONAL PUBLICATIONS, INC.
Fifty-seventh Street at Eighth Avenue, New York, N. Y.

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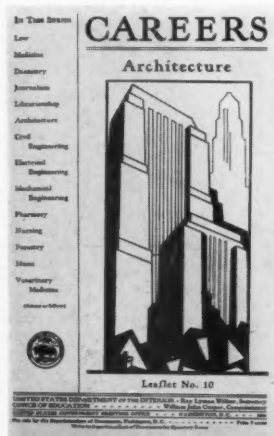
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Better Had It Never Been Printed

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

THE Office of Education, United States Department of the Interior, has issued a series of bulletins on careers. Architecture is the subject of Leaflet No. 10—its author, Walter J. Greenleaf, Specialist in Higher Education, Office of Education. The series is stated to be “designed for use of high school and college students . . . counselors, teachers, and parents.”

- The third paragraph in *Architecture as a Career* reads as follows:

The architect and the architectural engineer work in allied fields which are distinguished mainly on a basis of esthetic values. The architect, on one hand, finds inspiration in the historical monuments of the master builders and craftsmen, such as the Parthenon, the Colosseum, the Taj Mahal, and other masterpieces of design: his trade is truly a fine art. The architectural engineer, on the other hand, is a product of the machine age in America; his steel and concrete structures have no counterpart in history; his first considerations are the utilitarian purpose of a building and the efficiency with which it may be managed when completed.

THE above paragraph draws a rather complete picture of the architect as the artist and the engineer as the practical man. While this may be a view held by many laymen, one may reasonably expect to find a specialist in higher education to have a broader and more accurate knowledge of the functions of the two professions. Leaflet No. 10 will no doubt have wide circulation and it is unfortunate that so erroneous a description of the architect should be broadcast to a large number of people, some of whom may elect to follow the profession and others who may some day become architects' clients.

- Evidence of the practical solution by architects of building problems of every nature is too readily obtainable to accept ignorance of an architect's function as an excuse for so grossly misinforming the public. It would have been so easy to have had the leaflet read by some one who *knew* before it was printed.
- According to Mr. Greenleaf, architects are artists and traditionalists who live in the past; engineers, the practical creators and modernists of today.

It would be a good idea to discourage the distribution of *Careers, Architecture, Leaflet No. 10*, for sale by the Superintendent of Documents, price 5 cents, special rates if sold in quantity



Photographs by Samuel Gottscho

FIGURE 3

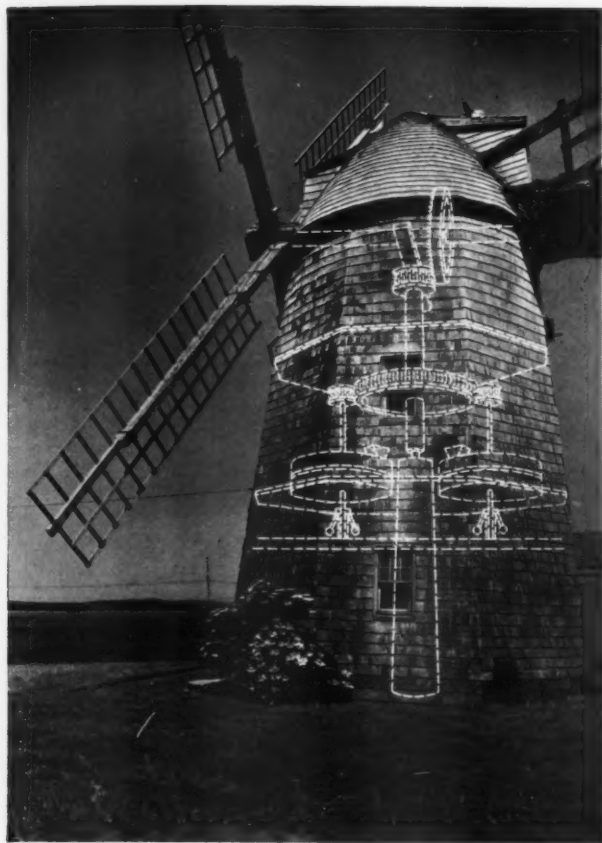


FIGURE 1

How It Works

THE sail shaft, which in Fig. 1 is the largest timber in the upper part of the picture, is fastened to the toothed gear which operates the smaller gear on top of the vertical shaft. This shaft is connected to the toothed gear in Fig. 3 and set in a forged iron socket. In this socket was placed a copper English coin to serve as a bearing. The smaller gear at the right of Fig. 3 turns the upper millstone; its lower end carries a governor, shown in Fig. 2. The lower end of this governor shaft is socketed in a horizontal supporting timber. The governor served to keep sudden gusts of wind from seriously affecting the speed of the upper millstone. The lower millstone, shown in Fig. 2, was leveled up with wooden wedges. Grain was placed in hopper above the upper millstone, allowed to trickle down between the broad surfaces of the two grooved millstones, and when ground distributed to containers below. ● This mill was built in 1801 at Hay Ground, Long Island, and is owned by Mrs. Caroline Stooks



FIGURE 2

» » HOW TO MAKE THE GREENHOUSE Part

of the Ensemble

SPORTORIUM—A swimming pool under a greenhouse roof, with lockers, recreation room and squash court in adjoining wing

By
Francis
Keally, A.I.A.

IT IS my impression that making the greenhouse part of an architectural ensemble is as a general rule perplexing to most of us. In fact, I have known of several cases where architects have actually discouraged the owner from building a greenhouse, arguing that the glass structure would clash esthetically with the main building. This attitude, it seems to me, is one of evasion on the part of the architect. Why should he not accept the greenhouse factor, as part of his architectural commission and meet the problem skillfully and artistically?

When motor cars first came on the market, 'way back in 1902—and I remember those days very vividly, having had the experience of paying 10¢ for a ride around the block in a small Cadillac at a Church Festival—the housing of these horseless vehicles, as they were called at that time, presented a new problem to the designer. For years garages were built as far away from the house as practicable, and very little thought from an architectural angle was given to this part of the residential layout. In fact, at the beginning, many architects hesitated to give serious thought to the garage structure.

But as motor cars increased and the demands for

housing them correspondingly increased, the architects who at first were reluctant to meet this problem in a straightforward manner were eventually required to give the garage the same architectural study that was given to any other part of the problem.

So with the greenhouse. As the demand for these interesting glass houses increases, the wise architect today, instead of throwing up his hands, will, on the contrary, accept this problem in the same spirit as any other part of his job, and use it to create a superior ensemble. This applies not only to greenhouses for the growing of plants and flowers, but equally to glass structures of similar character for the enclosing of solariums, play-



GARDEN WALLS AND LANDSCAPING bring this palm house with wings into a harmonious relationship with the main house even though the greenhouse unit is entirely detached from the main building

rooms, hotel dining rooms, patios, loggias, and notably swimming pools.

THE character and equipment of greenhouses vary according to the purposes for which they are to be used. Stock sizes and designs have been developed by the leading manufacturers which are practical, of good appearance and which will solve the average problem. When standard construction is not adaptable, manufacturers will furnish the architect with special designs to meet unusual conditions, or to incorporate some distinctive architectural treatment which he may have in mind. Many interesting examples have been developed by thus introducing the architectural theme of the surrounding buildings into the greenhouse design. One in particular, I recall, on Long Island, in which a Georgian motif was carried around the greenhouse, resulting in a remarkably harmonious architectural composition. Architectural elaboration must be used with great restraint, however, except in structures such as orangeries, palm houses and conservatories in which a limited amount of shadow is not detrimental.

Even the simplest of greenhouses may reflect the character of the adjoining buildings if the same materials

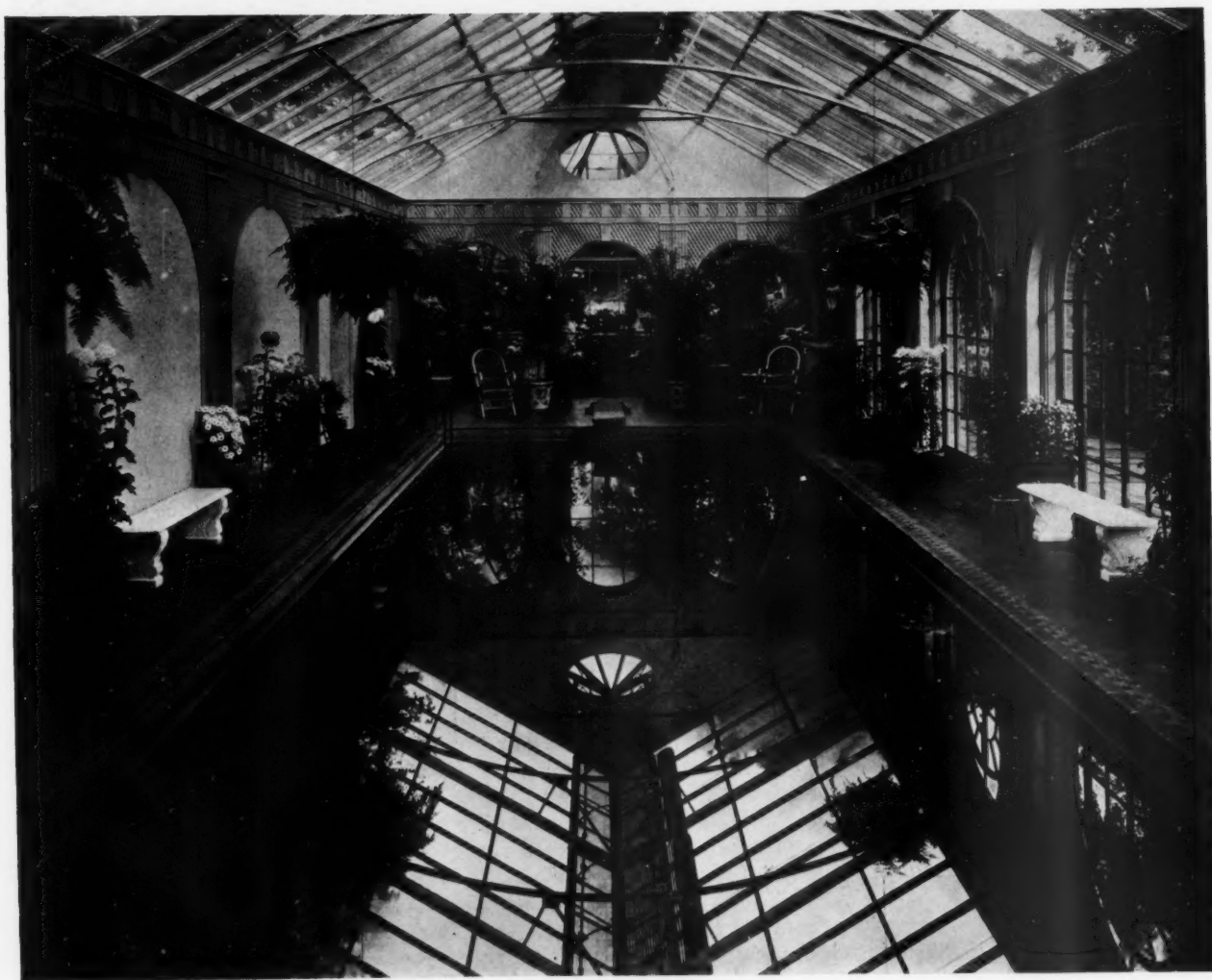
used for them are repeated in the greenhouse walls and in the service building which is usually required. In Philadelphia, I have seen this continuity of texture very successfully carried out by the use of Germantown field stone.

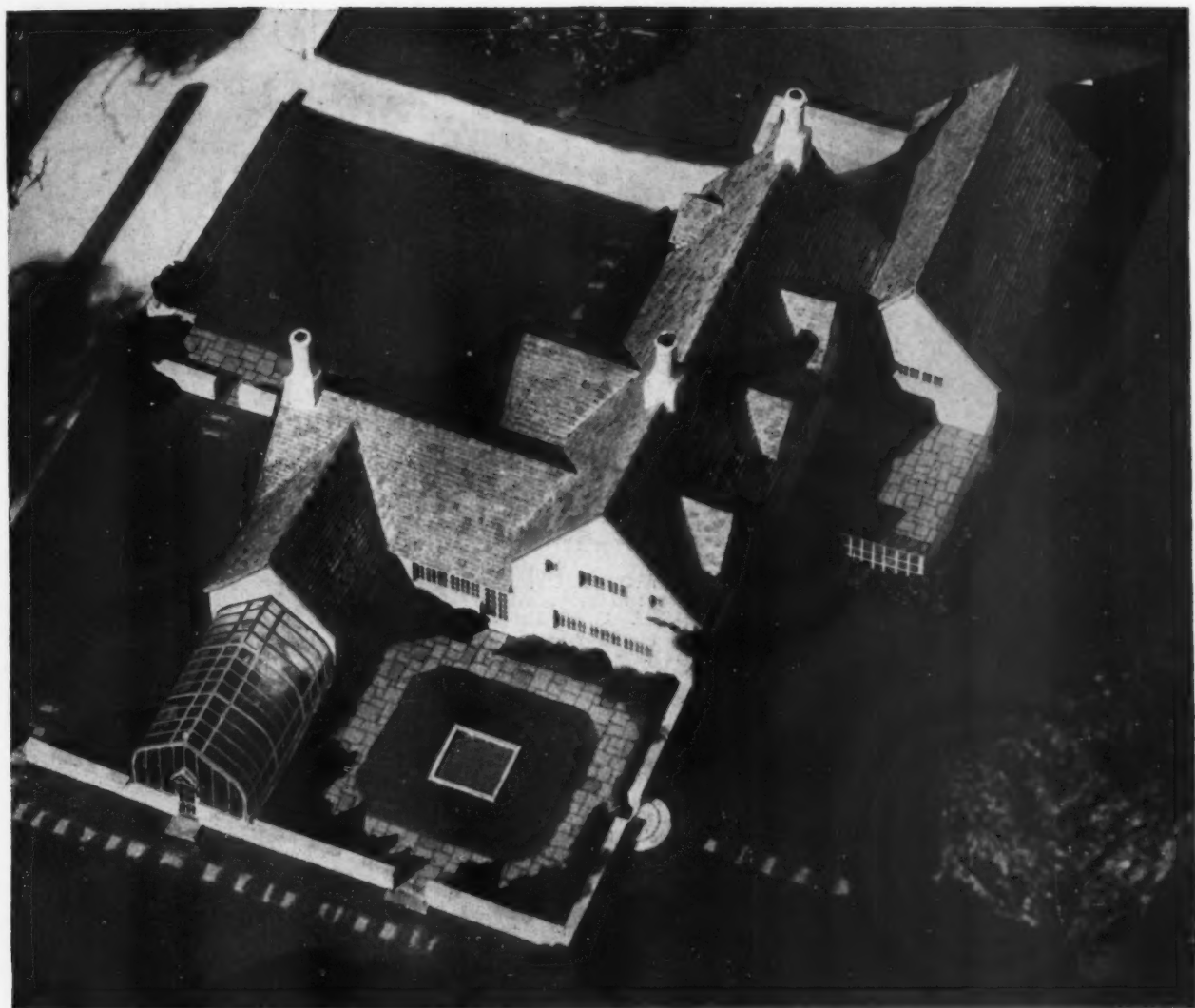
The character of a greenhouse is also determined to a great extent by its relation to the house. It may be an intimate unit of the residence group, readily accessible to owner and guests, and thus require the special consideration of the architect. Of the utmost importance, then, is its relation not only to the house itself but to the terrace or garden where the family foregathers. The greenhouse should never be obtrusively located, but rather placed intriguingly behind a high wall or hedge.

Often the greenhouse is more remotely situated, perhaps an adjunct to the farm or service group, where it becomes essentially a utilitarian problem. Ideally combined with such greenhouse may be a conservatory attached directly to the house. In this, blossoming plants from the greenhouse can be enjoyed in their perfection by the entire family not by a mere cursory inspection, but lived with as companions to the morning paper, a siesta or a table of bridge.

Contrary to popular notion, the orientation of the

SWIMMING POOL
with conservatory at
one end and lounge
at the other. This illus-
trates the possibilities
in using standard
greenhouse sections for
purposes other than
greenhouses. It is in
keeping with the mod-
ern trend of bringing
sports under the home
roof. Parsons House,
Llewellyn Park, New
Jersey. Delano and
Aldrich, architects





SMALL GREENHOUSE of stock size made part of the main structure. Low garden walls tie the composition together. Obviously the architect gave as much consideration to the greenhouse as to the rest of the structure

greenhouse is of negligible importance. Nowadays, with their wide lights of glass and skillfully designed framework, there is almost as much sun inside the greenhouse as outside, and it matters not whether they run east and west, or north and south. The vital factor to be considered is the proper relation of the greenhouse to adjoining buildings, trees or other shade-casting objects.

In the brief space of this article, I can refer to but several of the numerous problems which arise in the designing of a greenhouse, and which are solved most successfully, I believe, by the architect who gives ear to, and cleverly combines, the wishes of the owner, the requirements of the superintendent or gardener, the sug-

gestions of the landscape architect and the recommendations of the manufacturer's representative. As the result of this broad point of view, the architect should achieve a practical as well as a beautiful result.

The landscaping against and around the greenhouse presents a real problem. We must strive for a planting which will present interest and yet not cast shade upon the interior of the greenhouse.

The interior architectural treatment of the typical greenhouse is negligible. The flowers and plants are the decoration, the glass structure merely a skeleton. But in the case of the glass enclosed swimming pool with its solarium at one end, the

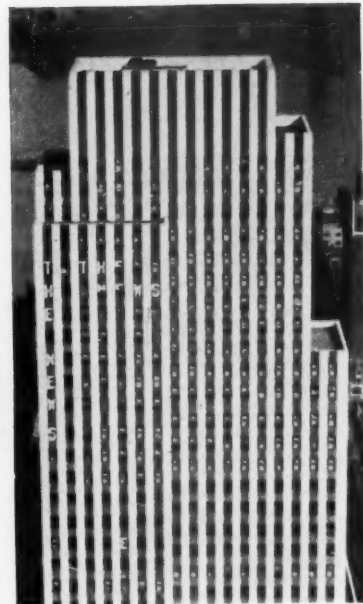
(Continued on page 76)

» » » Greenhouse Sections Used To Promote Healthful Living As Well As To Grow Flowers

THEY REMIND ME

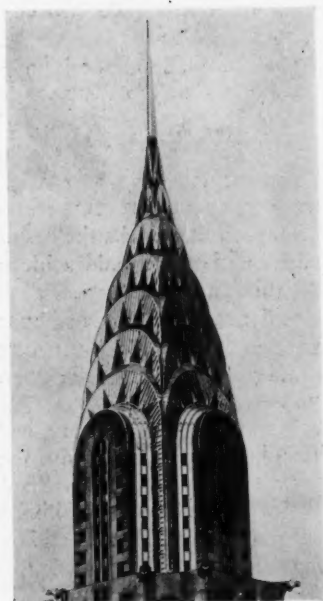


PYRAMID FROM YUCATAN is our Jazz Age challenge to the Pre-War Era's Bankers' Trust pyramid. The Equitable Trust's top seems to me to be Mayan. But possibly I'm wrong: "it may an' it mayn't be Mayan!"

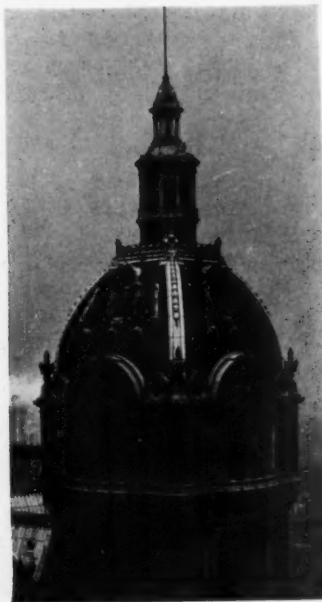


STACK OF TABLOID NEWSPAPERS thirty-six stories high is the Daily News Building. Paul Bunyan, the North Woods hero who fells trees for pulp mills, stacked up these newspapers in his spare time.

A CANDLESTICK the like of which the world has never seen before is the Empire State Building by night. The tip of it reaches 1250 feet, the equivalent of 102 stories. The trimmings are sterling silver in vertical bands. What a job that will be for silver polishers!



GIANT ASPARAGUS STALK done in the modernist fashion is the dizzy spire of the new Chrysler. This sets a precedent which soon may enliven our skyline with all kinds of interesting and colorful fauna and flora.



HARD COAL STOVE, a sixteen-jeweled "base burner," is the Singer Building's top. I never can look at it without thinking of long winter evenings in the sitting room of a cottage way back home in Missouri.



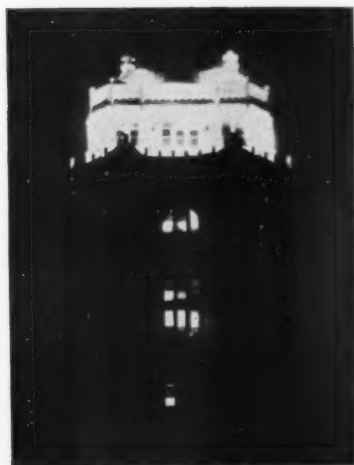
"A PILE OF COAL, GLOWING AT THE TOP," is the architect's own account of the symbolism of the American Radiator tower. But to my eye it isn't a coal pile. It's a mammoth black and gold steam radiator.

O F

A Layman's Fantasy of the TOWERS OF NEW YORK

Photographs and Text by

CHARLES PHELPS CUSHING



CASKET OF THE SLEEPING BEAUTY rests on the mountain top, serene above the White Way's racketeers. May the princess never cough up that bite of apple! Bush Building in West 42nd Street.



PYRAMID FROM EGYPT, the highest in the world, became the cap of the Bankers' Trust Building in 1912. This gave another spur to decorating New York's skyline with startling designs.

TOP OF A GILDED BIRDCAGE seems to me quite appropriate for the New York Central Building, apex of Park Avenue's luxury lane. Sight of it always sets me humming, "She Was Only a Bird in a Gilded Cage."



CATHEDRAL OF COMMERCE is the Lincoln Building in East Forty-second Street. So why should anyone be surprised to find at its top the loftiest of all church windows except those on the Woolworth?



INVERTED ICE CREAM CONE, of golden brown pastry, stamped in the Nabisco pattern, is the peak of the New York Life Insurance Building. (Where Diana once stood on Madison Square Garden tower.)

MAN-MADE "GIANT'S CAUSEWAY" with seven giant stepbacks for seven league boots, tops the new building at 120 Wall Street. The pride of Ould Ireland in a great natural wonder is bound to suffer from this.



GOTTSCHO

But... Is It Architecture?

A CRITICISM OF THE MCGRAW-HILL BUILDING

Hood & Fouilhoux, Architects

By ARTHUR T. NORTH, A.I.A.

WE have definitely passed the days of statical architecture, often called eclectic, when new buildings designed by master draughtsmen masquerading as architects were critically analyzed by architectural sharps to identify, if possible, the sources from which the designs were plagiarized—a gentle art that still survives—and, if authentic, they at once attained the peculiar sanctity of masterpieces. Such was architectural criticism.

Today, it is necessary to establish new bases for appraising architectural excellence because the contemporary concept of architecture is new, as exemplified, for instance, in the recently constructed McGraw-Hill Building. Lacking all of the earmarks of historical architecture, this building is running the gauntlet of criticism. We hear the young disciple of academic pronouncement, *architecture is the art of building beautifully*, make this building the object of flippant and facetious remarks, and, also, the old senators wax wroth over the degradation of the art tinctured, perhaps, by professional considerations.

The McGraw-Hill Building, or any other building

of unconventional design, is entitled to a serious appraisal of its architectural qualities because it represents both energy expended in its designing and the investment of a large sum of capital funds by the owner, which evidences a faith in the architect's works. Any reasonable criticism must take its point of departure from the architect's conception of his work. Mr. Hood undoubtedly has given an expression of his idea that *architecture is the business of manufacturing shelter*—certainly a reasonable definition based on the actuating motive for constructing buildings. These are two concepts of a human necessity that apparently are entirely foreign to each other. One or the other must become ineffective and obsolete.

First, let us understand what the McGraw-Hill Building is intended to shelter. It is to house a technical and scientific publishing business and an office building tenantry. It does adequately house every element of the publishing business—composition, photo-engraving, printing, binding, mailing and shipping, business and editing. It also provides light and airy offices. Shelter has been manufactured by the business of architecture.



GOTTSCHO

ALL METAL ENTRANCE. Olive green bands bisected by strips of lacquered brass alternating with broad bands of dark blue. The bands are separated by white metal strips tubular in section. Vermilion is used as an accent

EVER CHANGING COLOR is reflected from the green glazed terra cotta surface, varying with distance, time of day and weather

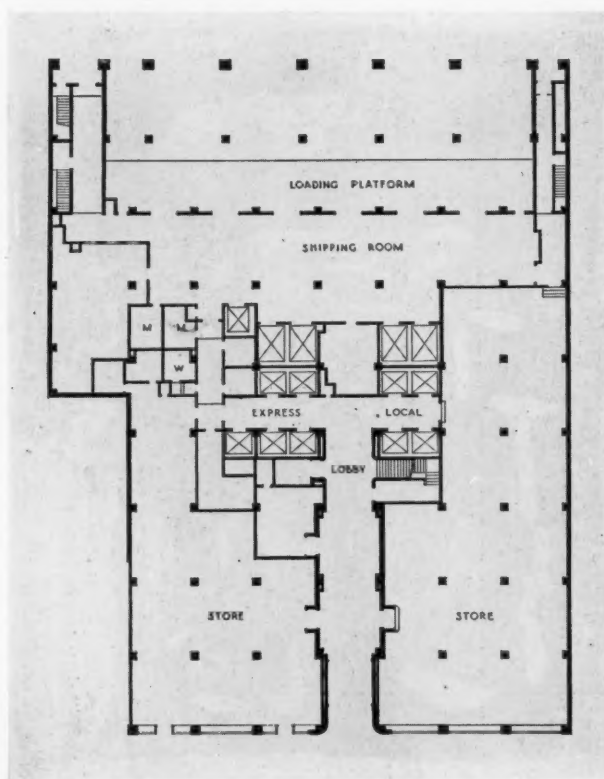
Compared with the stark verticality of the Daily News Building, *faire volte-face*, the McGraw-Hill Building is nothing but horizontality, and more. The facades are merely superimposed layers of straight, perfectly plain spandrel walls and straight, continuous rows of metal windows—just one above the other clear up to the top. Instead of the usual spandrel panels recessed between piers, one continuous spandrel panel or wall runs clear around the building, effecting an economy in cost of designing the many different patterns of metal spandrel panels which are now so fashionable. Hood, with one detail, took care of several miles of spandrels. Same with the windows, double-hung metal ones in which horizontality was made 100 per cent by the use of horizontal muntins. Everything is on the level.

This building is the converse of the American Telephone and Telegraph Building on lower Broadway, where we have superimposed layers of two-story "orders" separated by projecting cornices. We have in these two buildings the



GOTTSCHO

DESIGNED TO PLEASE THE PEOPLE

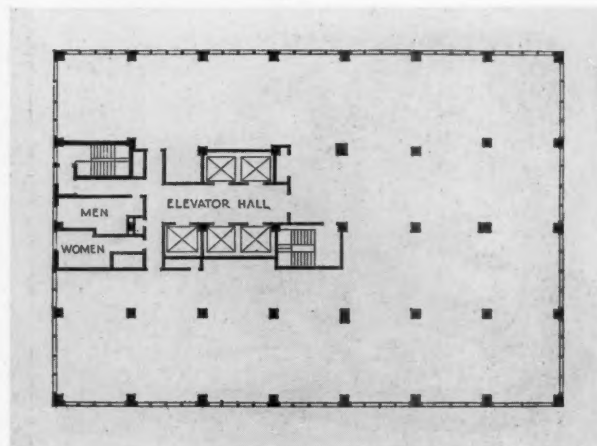


PLENTY OF FREIGHT ELEVATORS and shipping space is a feature of the main floor plan.

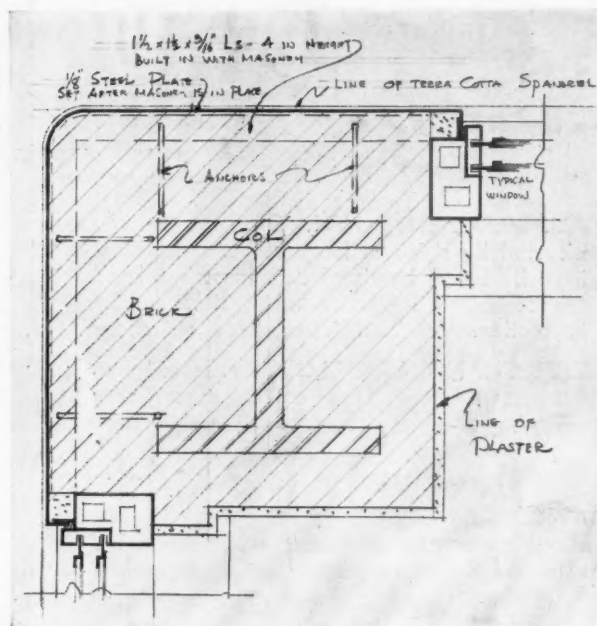
opportunity to compare entirely different schools of architecture; one in which the attempt is made to apply the classical orders to a skyscraper, and the other in which the wall is intended merely to be a shelter. Both types do provide shelter. A multiplicity of parts spread over a large area as in the American Telephone and Telegraph Building tends to detract from the effect that should be produced by the magnitude and bulk of such a large structure. One can comprehend at a glance the shape, form and bulk of the McGraw-Hill Building.

WE have said *horizontal* and *more*, of which there is considerable *and more* that consists of color. Obviously, without color, a building of this design would be as intolerable as the regulation concrete pier and spandrel metal window factory or warehouse. Evidently, Hood relied largely upon color.

The color of the terra cotta spandrel walls is blue-green, its texture a glazed surface. There is a slight variation in the shades of the color of the terra cotta blocks. The metal windows and the metal casing of the exterior columns are painted a similar color. A stripe of vermillion is painted on the top rails of the window sash, across face and sides of the mullions and exterior columns. The underside of the large projecting courses on the ends and returns of the pent house and the metal railings on the top of the setbacks also are painted vermillion. The signs on the long sides of the pent house are made of white and vermillion colored terra cotta. The window shades are buff colored with a broad,



ELEVATORS AND TOILETS at the left of the typical tower floor plan make it possible to subdivide into either large or small units



CORNER PIER DETAIL. Metal painted dark blue covers exterior of piers between windows

blue-green vertical stripe running down the center.

Color is of two kinds—the quick and the dead, depending largely on texture. In this case, the blue-green glazed surface of the terra cotta responds readily to the changing sky colors. Under a bright blue sky the color is correspondingly bright and blue. In the early dawn, it picks up opalescent tints that change rapidly with the rising of the sun until the rays, for a moment, produce a brilliant sun-spot surrounded with its corona—gradually the sunrise is gone and the building is all bright. Equally interesting, perhaps, are its changing colors at sunset, passing into crepuscular shades until it becomes but a dimly outlined mass. In moonlight and fog and on gray days its changed aspect never dispels

INSIDE, NOT THOSE OUTSIDE . . .



UNITY BETWEEN EXTERIOR AND LOBBY is secured by repeating the decorative scheme and colors of the entrance shown on page 29—bands of dark blue, olive green, lacquered brass and white metal

DURVEA

the realization of a great bulk, massive and dignified, impressing one with a feeling of solidity and security. The many aspects of color and texture contribute a living quality to the structure, rarely found in buildings. There seems to be some relationship between the blue-green color and the many sky colors, resulting in its color always being a harmonious complement.

This building presents a peculiar optical illusion in that the walls appear to curve outward towards the top. This evidently results from the non-continuity of the exterior columns, which are visible only in the window layers. It was unintentional but if it had been common for several generations it would be accepted as a matter of course. Architects, especially the ancients, do and did resort to producing optical illusions to make buildings appear to be larger, bigger and better, as evidenced in many old cathedrals. We accept that as skillful architecture because it has attained the sanctity of age and because it is precedent so dear to architects.

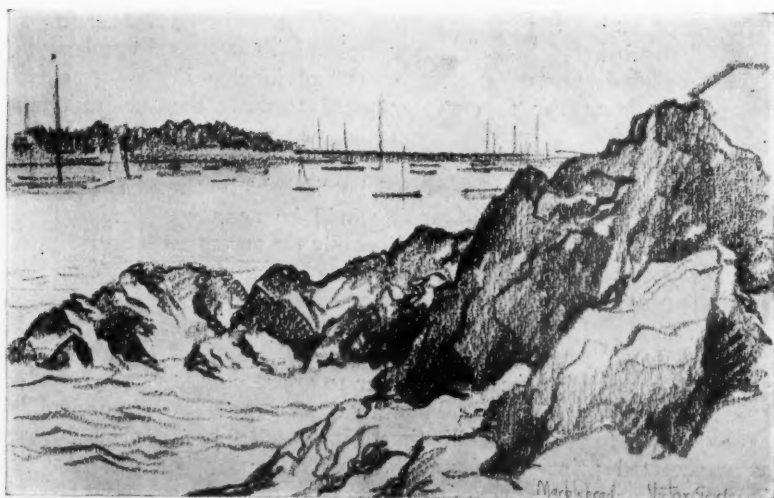
But is the McGraw-Hill Building architecture? That is the question for debate at this time. It does disregard every accepted principle of architectural designing in the most flagrant manner. To those who take their

architecture seriously it is unthinkable. Everything that constitutes "design" is left off, and—in color it is blue-green!

THE modern counters with the question—can architecture be delimited by any set rules, criteria and standards? To acknowledge this would be to prevent all progress, which again is susceptible of several opposing definitions. According to Hood's definition, the McGraw-Hill Building is architecture and according to the academic definition it is not. The only way to settle the dispute is to declare that architecture is indefinable. Perhaps the most logical thing to do is to consider architecture purely as a physical and economic necessity, be blasé and conserve our emotional energy.

The arguments that I have heard so far are not convincing and a well-digested statement might clarify the matter. Personally, I do find this building very interesting, not unattractive, and worthy of careful analysis. It is undoubtedly a decided step in a direction which we cannot clearly distinguish at this time—and probably it cannot be worse architecturally than many buildings we have endured in the past.

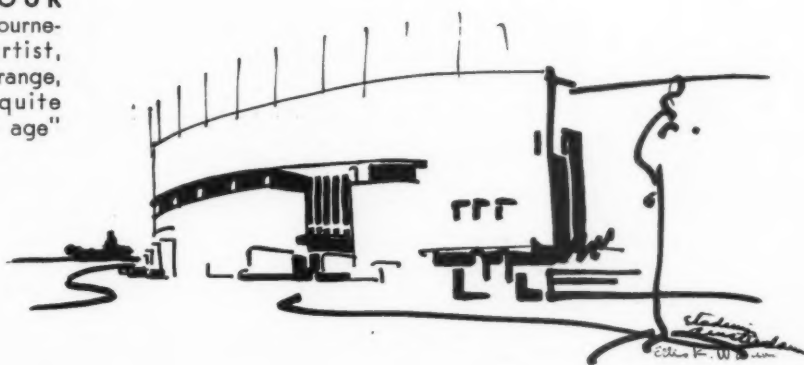
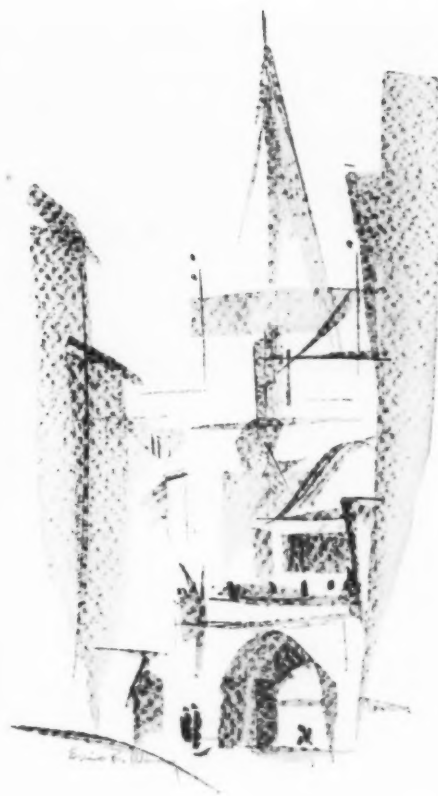
SIX SKETCHES



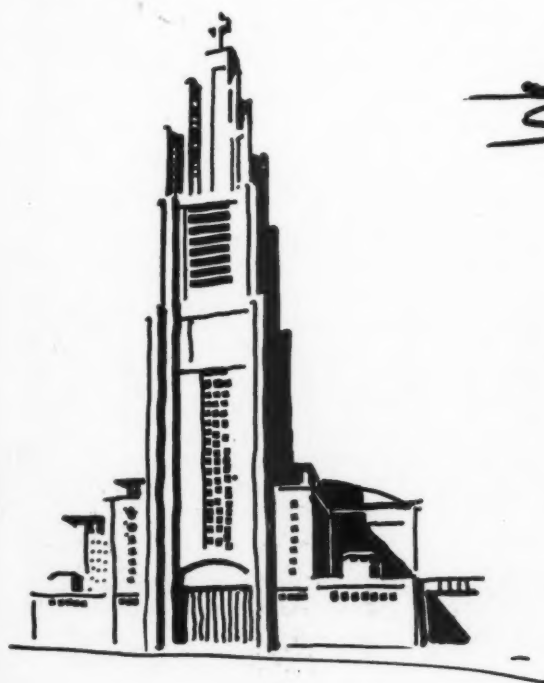
TWO CRAYON SKETCHES
by Victor Gerdes. At right above
is a street scene in Blois, made by
Mr. Gerdes while travelling in
Europe as a holder of the Fontaine-
bleau Scholarship given by the Mas-
sachusetts Institute of Technology. The
sketch at the right, by Mr. Gerdes,
is a scene at Marblehead, Mass.



DRAWN AT 30 MILES AN HOUR
while travelling in a char-a-banc from Bournemouth to Salisbury, England. The artist, Hobart A. Walker, A.I.A., of East Orange, N. J., states: "The wavy lines are quite accidental, not the weakness of old age"

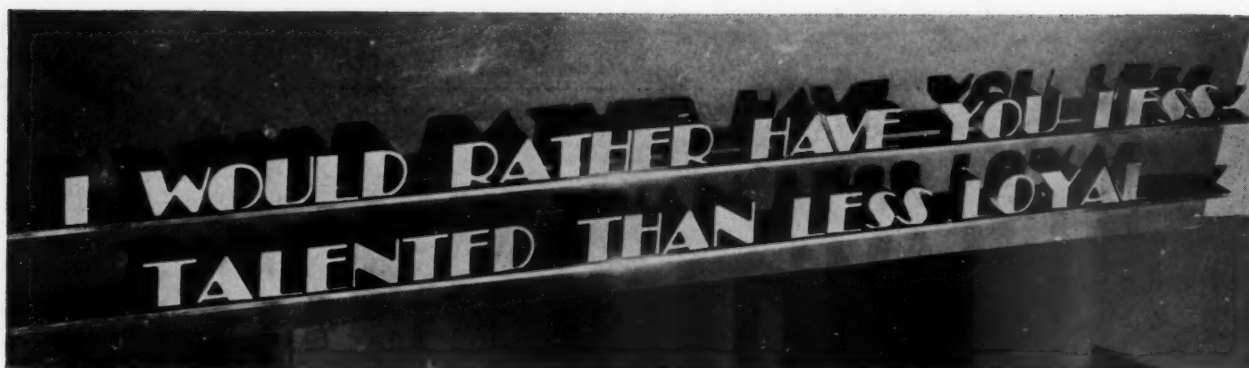


FIVE MINUTE SKETCH of the Olympic stadium, Amsterdam, Holland, drawn by Ellis R. Waring with two grades of lettering pen



L'EGLISE NOTRE DAME DU RAINCY, FRANCE
Blocked out in pencil in the field and then rendered in black ink on white note paper with a lettering pen having the largest obtainable nib

AT TOP OF PAGE
a medieval tower in Bristol, England. Drawn by Mr. Waring on cameo paper with a 6B pencil. A rough surfaced pad was placed underneath the cameo to give the texture shown



\$5,000 a week less to operate

The Story of the Economics in the Planning
of the Earl Carroll Theatre, New York

George Keister, Architect

Joseph J. Babolnay, Designer

Photos by Lazarnick

By ERNEST EBERHARD

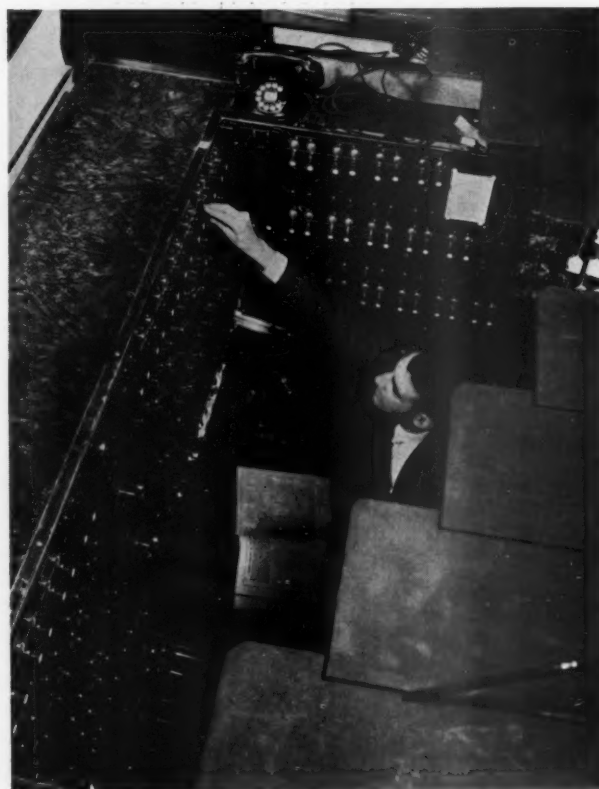
TWO important factors that go to make up a financially successful theatrical production are players who can give a happy, spontaneous performance, and a theatre that makes it possible to operate the production at low cost. These two factors were constantly kept in mind when planning and designing the Earl Carroll Theatre, factors which are particularly important considering the lavishness of the type of production for which Earl Carroll is well known.

In order to operate the stage mechanics of the present Carroll show with equipment installed in the average theatre, it is estimated that from eighty-five to ninety stage hands would be necessary. Only thirty-five are employed in this theatre.

One thing that has made it easier to handle scenery is that the counter-weight system has been designed for loads up to 1,250 lbs. on each of the 80 ropes instead of the usual 300 to 500 lbs. Any rope can be operated by one man. To handle this great weight a double gridiron is necessary, which is 88 feet above the stage floor and one of the highest in the country. The stage is divided into five



Black velvet and cove lighting in changeable colors form striking notes in the decorative scheme



All lighting, except hand spots, is controlled from this console, placed at front of the stage



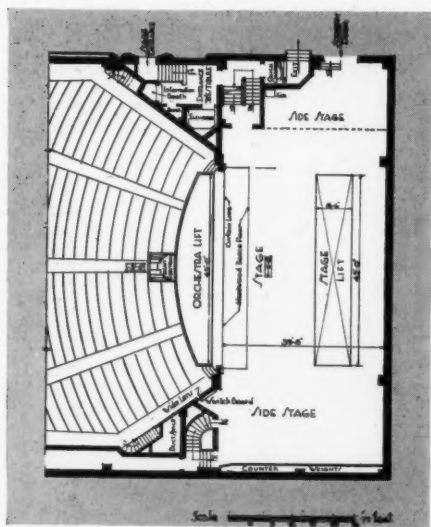
WAITING FOR CUES

Assembly room for chorus girls, decorated with as much care as the public part of the theatre in order to make them contented and happy. A loudspeaker broadcasts the performance so that cues may be readily picked up

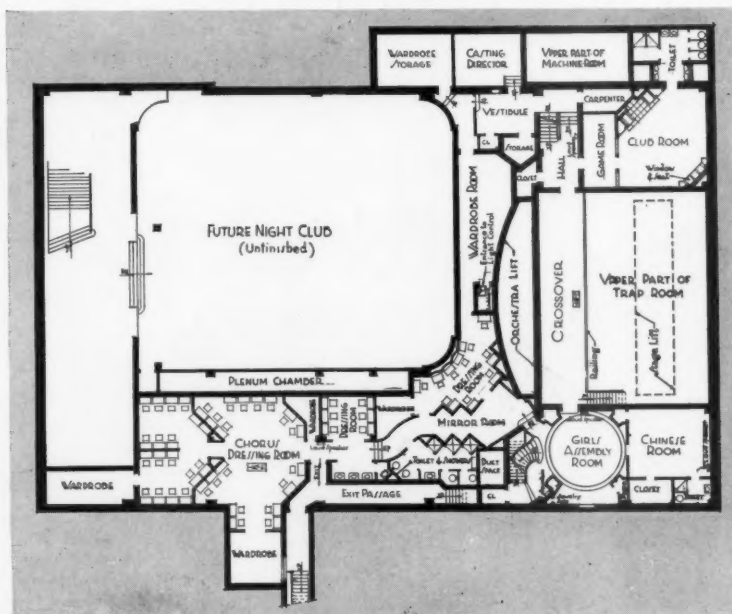
For the men . . . Club room in which stage hands and musicians can while away spare time. Through the opening may be seen a game room for cards and similar amusements



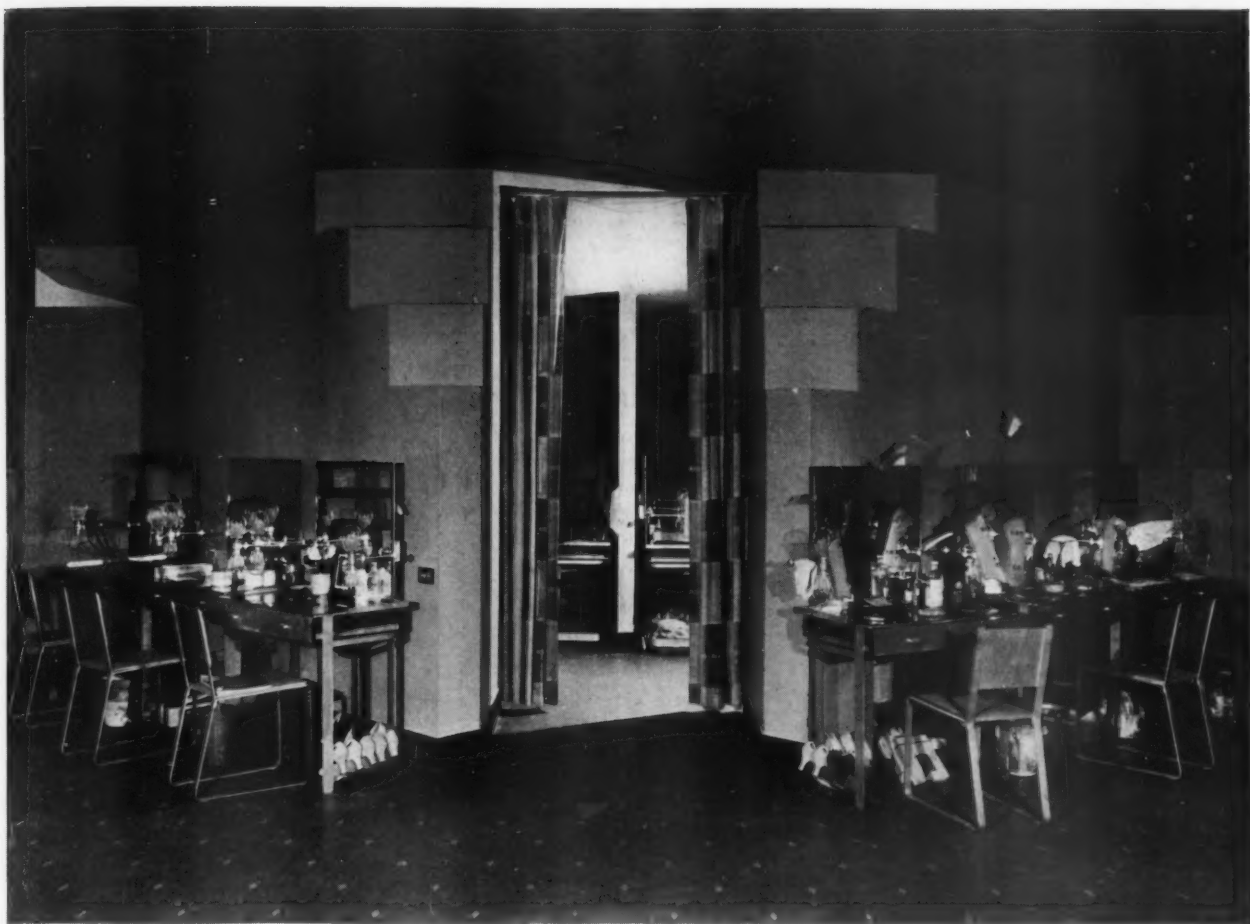
COSTUMES ARE CHECKED in the mirror room, where at a glance the girls can see themselves from every angle. They pass through this room on the way from dressing rooms to assembly room and stage. There is thus no excuse for poorly adjusted costumes



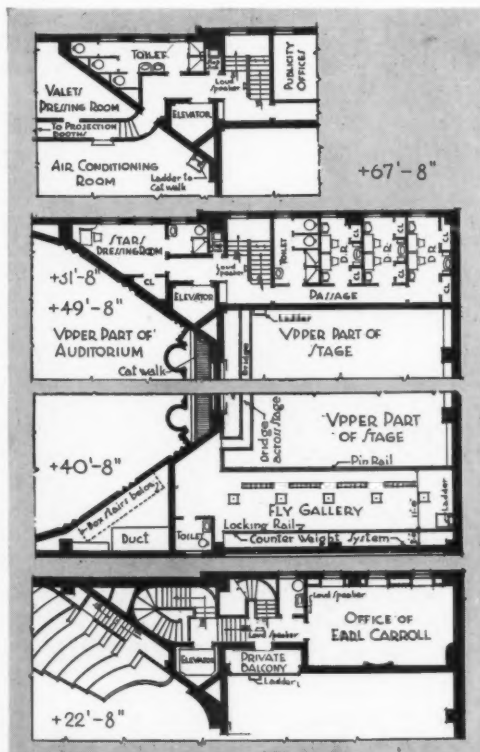
Stage level . . . The stage has an orchestra and a back stage lift which makes it easy for few men to handle heavy props



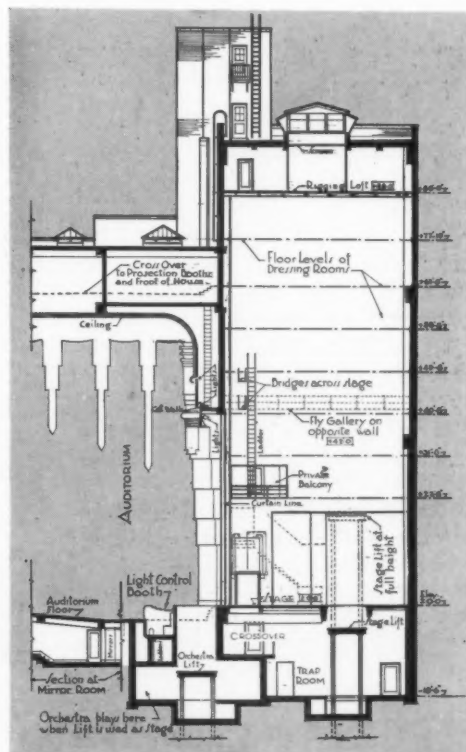
Chorus accommodations in basement plan. Note circulation from dressing rooms to assembly rooms, also crossover under stage which makes it easy to get from one side to the other



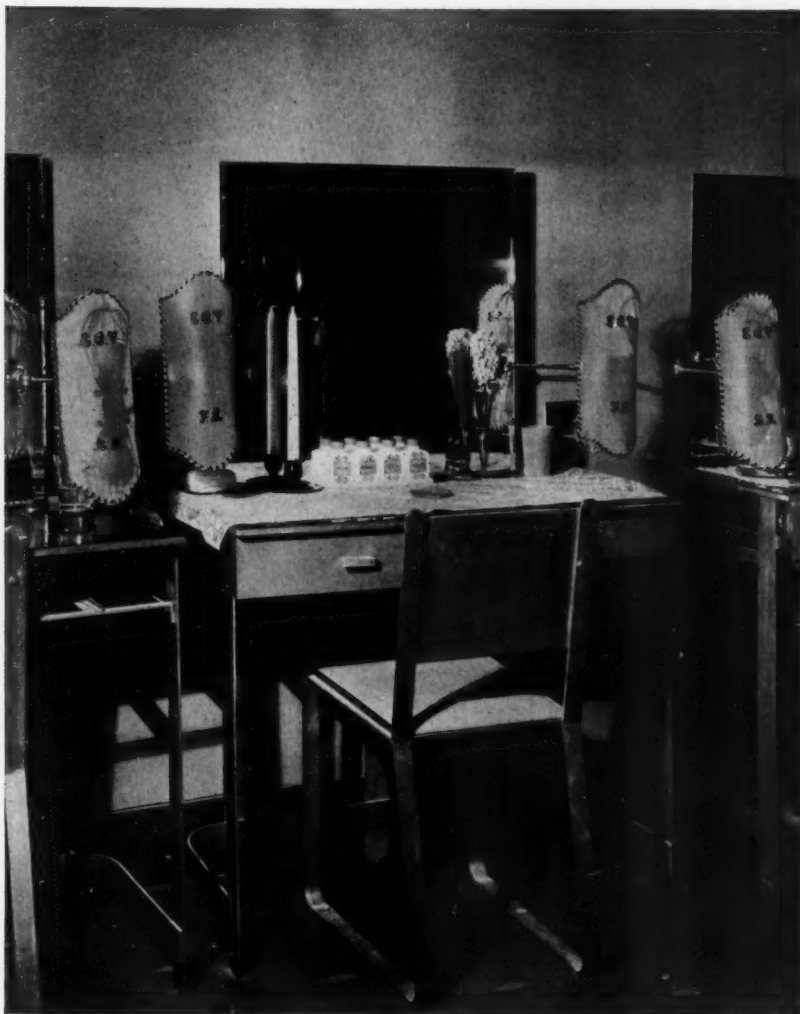
CHORUS GIRLS' DRESSING ROOMS—quite a contrast to the usual make-up counter and one mirror to several girls. Costumes are kept in wardrobe rooms adjoining each dressing room



Typical accommodations at left which take care of 130 principals. All rooms are reached by an elevator—there is no need to climb stairs



Section . . . Note space under stage adjoining lifts, available for storing heavy scenery. Also extra high gridiron and crossover top of light bridge for fly men



DRESSING TABLE in chorus quarters. Samples of three different types were made to test mirror angle, lights and convenience. The best features of each were combined in this table

BELOW, one of the four star dressing rooms. One is in different shades of orchid, another of blue, another of pink and one of jade green

of the lift, the music is carried into the auditorium without change in volume or quality of tone. When the orchestra lift is being used for theatrical effects, the orchestra plays in a special room under the front of the stage. Heavy props are on rollers to facilitate moving on or off the lifts. For instance, a dinosaur 46 feet long, 18 feet high and weighing over five tons is easily handled by three men. Both lifts are electric screw drive and function at the speed of thirty-five feet per minute. They are equipped with microphones so that when raised or lowered, the audience does not notice any variation in sound originating from the lifts.

A feature of under stage is a crossover so that neither stage hands nor girls find it necessary to climb stairs to go from one side of the stage to the other, thus saving time and energy.

sections, each of which is equipped with special electric rigging which can handle pieces up to five and a half tons.

A problem of economic importance is the disposition of props and scenery which, if not readily accessible, require from one to five men for each prop. Back stage there is a lift on which props can be placed and taken down to the trap room, which is 28 feet below the stage floor. This lift is also used as a movable platform up to twelve feet above stage level. The orchestra lift is likewise used to handle scenery and heavy sets and to serve as a platform.

The orchestra itself is placed on a movable platform with rollers so that it can be moved easily on and off the lift without disturbing the musicians. This platform is provided with microphones so that, whatever the position



DECORATION IN CHORUS QUARTERS IS AS



PRIVATE OFFICE OF EARL CARROLL, finished in different shades of gray with a black baseboard. Chairs are of red leather. Desk is white metal and black composition. Adjoining is a private box at side of stage

Another time saving factor is that the light bridge behind the proscenium arch is roofed to form a cat walk so that the fly men do not have to climb ladders to go from one side of the stage to the other. It is thus easier to take care of lines which might foul heavy scenery and fewer men are necessary to guard against this danger.

Still another time and labor saving idea is the use of a light control box at the front of the stage. From this box is controlled all stage and auditorium lighting except the hand spots. This makes it possible for the operator to watch the lighting effects as he produces them on the stage as well as in the auditorium. The auditorium lighting is on four circuits, with different colors making it possible to secure unusual lighting effects in the auditorium itself.

The lighting control box makes it possible to operate the stage lighting of a show of this magnitude with one man instead of three, as ordinarily on a large board the stage electrician would require an assistant and, as he could not see the stage, would have to be told by a third person what lamps to dim or bring up to get the exact effect desired. As a check, the lighting control director is in communication by telephone with the arc room, where the hand spots are located. The control box is made possible through remote control and the invention of Thyatron tubes developed by the General Electric

Company. The principle of the idea is that Thyatron tubes are used instead of resistance coils or dimmer banks. There is considerable economy of operation by this new method. Instead of the full current being absorbed through resistance coils, only that amount is required which is necessary to operate the tubes at different intensities.

There are three microphones concealed at the front of the stage floor to pick up the performance, besides the microphones on the orchestra and stage lifts. Four loudspeakers are concealed above the proscenium and one at each side of the proscenium. Other loud speakers are placed in various parts of the auditorium.

Loudspeakers placed in dressing rooms, assembly rooms, etc., broadcast the performance throughout the theatre so that cue calls are unnecessary. These speakers are so connected that at any time the performance may be shut off and the speakers used as an announcer telephone system. The engineer, who handles the loud speakers, each of which can be controlled separately, is provided with a control room adjoining the light projection booth.

In addition to this public address system and the usual outside telephone system, there is an intercommunicating telephone system and a private telephone system for the use of heads of departments. With this last, department heads can go into (Continued on page 74)

FINE AS IN CARROLL'S PRIVATE OFFICE

» » » This Thing Called ADVERTISING

- Whether architects like it or not, they are being advertised—and mostly adversely.
- Perhaps many architects do not like advertising because they do not understand it.
- People believe what they see in print.
- There is no magic formula to make architects rich over-night.
- Advertising can not help architects unless they deserve to be helped.
- Publicizing the code of ethics would drive out the quacks.
- Laws will not make the public value the architect nor gain him recognition.
- Advertising may be as dignified as a passage from the Bible, as interesting as a letter from a friend, as full of wisdom as a Will Rogers editorial.

IF THE PROFESSION IS TO BE RESPONSIBLE FOR ARCHITECTURE, IT MUST UNDERTAKE AN OBLIGATION—TO EDUCATE THE PUBLIC TO

- 1: A better appreciation of architectural values
- 2: The practical means of getting good architecture

NOT long ago I was lunching with a friend when a well-known figure passed by our table. "There goes John Jones, the architect," I remarked.

"Oh, an architect, eh," answered my companion, glancing up with interest. "Say, by the way, did you hear what happened at our building committee meeting the other evening—" Whereupon I listened to a long tale of how an architect had apparently attempted to slip something over on his committee but was properly squelched by several of its members.

There are two points about this little incident of significant interest to the architectural profession. First, in the story I was told, I think any experienced person would have immediately recognized that the architect was right in his recommendations. He doubtless knew he was right, too, but he couldn't supply facts to prove it. His unsupported statements didn't carry against the committee's belligerent minority bloc, so he was forced to compromise—how many, many times this happens only architects know.

The second point is the fact that such garbled stories as the one I listened to are the sole contacts of the architectural profession with countless numbers of its possible future clients.

Now regardless of my personal beliefs, it is hardly within my province to here advocate that architects, as a whole or as groups, should advertise. But whether you like it or not you are being advertised. And a great part of this advertising is undeservedly negative, simply because the public doesn't know and has no way of understanding the problems and aims of the profession.

And if, within the limits of this article, I can give you some truths about advertising that will enable its proponents and opponents to meet on a more common ground, its purpose will be served.

Perhaps a lack of understanding of just what advertising is has been largely responsible for the violent differences of opinion which always seem to arise when the subject is mentioned before a group of architects. This thing called advertising is not mere commercial adventuring with the hope of profits. Its application is too broad, its significance too deep for such limitation. The modest little sign reading "Dressmaking," which announces to fellow-villagers that Mrs. Smith is anxious to make a little extra money with her needle, is advertising. The campaign appearing in newspapers over the country for relief of the unemployment situation is advertising. Between these two extremes is the whole gamut of purposes and applications which have made it



By

LAWRENCE S. RONEY

of the Charles Blum Advertising Corporation

because the management desires to sell more cars and pay the stockholders a profit. They must be offered to the public as carefully made pieces of mechanism, equipped and furnished for those discriminating few who desire to surround themselves with fine things. From this it follows that the individual or organization which can find nothing in its product or service which would appeal to the public as beneficial would do well to shun any sort of publicity as the crooked politician dodges investigations.

THERE are certain things that advertising cannot do, and because of these limitations an experienced advertising man would be forced to disagree with many of advertising's strongest champions among architects. Those architects who may have viewed it as a get-rich-quick scheme will do well to save their money. It is no magic formula destined to fill architects' boards overnight. As a matter of fact it won't fill them at all unless there are good reasons why they should be filled, for it cannot coerce or bribe any part of the public to take steps which the public sees no reason for taking. This is one of the reasons why such catch phrases as "Consult an Architect" have the same irritating effect on prospective clients as the command "Specify so-and-so" has on you.

Nor can advertising, no matter how much or how well it is used, supplant the architects' personal efforts—but it can supplement them to a degree impossible by any other method.

It cannot eliminate the constant study and effort of the profession toward advancement from within. The world moves ahead and architects cannot stand still. As to what constitutes advancement, there may be a division of opinion, but there is no question of the fact that to advertise mediocrity is to select one of the quickest ways to oblivion.

What, then, can advertising accomplish for the architectural profession? The most constructive and most permanent advantages it has to offer to any endeavor.

You have certain aims which are conducive to public benefit. Because people don't understand your aims, they are often suspicious of your recommendations. Advertising can show the reasons, and at the same time give the public a better conception of architectural services by showing the architect's contribution to the building project.

You know that your services constitute an investment in sound building values, but a large part of the public—even among those who have utilized architectural service—looks upon the architect as a more or less necessary expense. Example after example—through paid advertising placed where the most interested people would see it—of the way in which architects have saved their clients' money would effectively combat the public's misconception.

(Continued on page 72)

impossible to produce a definition of advertising satisfactory to those most interested in its almost endless uses.

The fact that advertising is not in itself a fundamental is too often overlooked, even by those who use it steadily. It is in reality but an organized form of the great force of publicity. Being under control its force can be directed to produce certain desirable ends. There is a certain honesty of purpose about an advertisement which contrasts directly with exploitation sought under the guise of news, description, or any of the dozen other excuses which publicity bureaus offer.

It has one fundamental advantage which no architect should overlook. The printed word carries with it a distinct advantage over the spoken word. There is a fixity about print which the human mind tends to credit with almost a full measure of belief. And when such printed message bears a signature it gives to the signer an identity. Where advertising is being used the public has less reason for question of the spoken word because it is able to measure these vocal assertions against the written message. Is there an architect striving to give his clients the best that is in him who would not welcome this support?

ADVERTISING also has one fundamental rule of application and rarely, if ever, has there been a successful advertising campaign in which this rule was overlooked. The advertising message must be written from the reader's viewpoint. Human beings are fundamentally self-centered and only the things which affect them, or those nearest and dearest to them, can hold their interest. It matters not that Packard automobiles are advertised



IN RURAL ENGLAND

The quaint little
villages of Stanstead
Mountfichet and
Much Hadham

By
TRENT ELWOOD SANFORD
Architect, Evanston, Ill.



ON RECTORY LANE, top of page, in Much Hadham, are fine dormers and this aged detail above.

ON FACING PAGE is a house near the Stanstead Mountfichet station with a detail of one window



IN THE VALLEY below a winding road, a road originally built by the Romans and now the King's Highway from London to Cambridge, and about midway between those cities, lies the village of Stanstead Mountfichet, a village of no great historical fame, but lovely in its setting and possessor of charming architectural "bits."

- As in all proper English villages, there is a parish church which, in part at least, dates back to Norman times. In this particular instance, much of it has been rebuilt, but the doorways with their zig-zag designs in stone, and the arch of the choir, the followers of William the Conqueror could call their own.

- To the south and west, some half hour's ride away, across the Essex county line in Hertfordshire, Much Hadham straggles along its one street which, except for a cross-road or two, is the only thoroughfare. Lined on either side with fine old houses with huge chimneys, bay windows, and doorways with carved lintels, it extends for about a mile. At the edge of the village the little Gothic Church, set well back from the street, is bounded on either side by extensive gardens. Life there is sedate and dignified as of old, though less ceremonious than it must have been when the bishop drove through the long village street with all of his retinue.

- The name Much or Great Hadham (to distinguish it from Little Hadham nearby) was probably derived from Hadda and Ham, meaning the home of Hadda, a landlord of Saxon days. Some of the Washingtons, relatives of the ancestors of George Washington, lived there at one time and are mentioned in the parish records.

CONGRESS RECEIVES

"To Get the Government Out of



In December, 1930, American Architect inaugurated a campaign to get the government out of the architectural business. This campaign has been widely and favorably quoted in newspapers all over the United States

A BILL directing the Secretary of the Treasury to contract for architectural and engineering services to design and plan public buildings over which the Department has jurisdiction has been prepared by the Committee on Public Works of the American Institute of Architects. The bill was introduced in the House of Representatives December 17 by the Hon. Robert A. Green and was referred to the Committee on Public Buildings and Grounds, and ordered to be printed.

The bill in its present form does not anticipate the reorganization of the Supervising Architect's office, or remove from this office the direction of supervision of the construction of public buildings. It does, however, make mandatory the employment of architects and engineers in private practice, instead of leaving this to the discretion of the Supervising Architect as provided by the Keyes-Elliott bill passed in 1930. The new bill, however, would permit the Supervising Architect to use his discretion in the employment of outside services on projects where the building and site do not cost more

than \$50,000, and would not apply to the maintenance, alteration or repair of buildings.

It is stated that the bill has received the sympathetic and cordial endorsement of many congressmen who agree with the profession that our federal architecture can be made to reflect more truly the spirit and ideals of this country if able architects resident in various sections where federal buildings will be built are employed to design them. It is believed that the fruits of a centralized bureau, no matter how efficient, can never truly express the character and individuality inherent in various sections of a country so large as ours. Only by the employment of architects thoroughly familiar with the customs, climate and materials in the regions where federal buildings are to be built, can these buildings be most expressive of the communities in which they are erected, completely satisfactory, and vivified.

The architectural profession in past generations has shown its response to the march of progress and events. The work of American architects (Continued on page 88)

A. I. A. BILL

By Benjamin F. Betts
A.I.A.

the Architectural Business"

H. R. 6187

Introduced by Hon. Robert A. Green, Florida

TO DIRECT the Secretary of the Treasury to contract for architectural and engineering services in the designing and planning of public buildings.

Be it enacted by the Senate and House of Representatives in Congress assembled:

• That the Secretary of the Treasury is hereby authorized and directed to employ by contract, and at the established rates of compensation, outside professional or technical service of competent persons, firms or corporations, for the architectural and engineering designing and planning of such Federal buildings as are now or may, in the future, be placed under the jurisdiction of his Department, without reference to the Classification Act of 1923, as amended, or to Section 3709 of the Revised Statutes of the United States.

SECTION 2. That such employment shall be based at all times on the highest grounds of proven professional ability in order that our Federal architecture may truly represent our national genius and keep pace with the rapid development of the arts of architecture and engineering. Architects or engineers shall not be employed without prior submission to the Secretary of the Treasury of satisfactory evidence of their qualifications and experience.

SECTION 3. That wherever circumstances warrant, such services shall be contracted for by the employment of the ablest architects and engineers resident in the general sections of the country wherein such Federal buildings are to be erected.

SECTION 4. At the discretion of the Secretary of the Treasury, the employment of outside architects or engineers may be omitted in connection with public buildings of a total cost for building and site of not more than Fifty Thousand Dollars (\$50,000).

SECTION 5. That all such individuals, firms or corporations shall render their services subject to the approval and under the direction of the Supervising Architect of the Treasury, whose duty it shall be to act for the Government in all matters regarding sites, the allotment and sub-division of space, the control of technical detail, the letting of contracts, and the supervision of the erection of said Federal buildings.

SECTION 6. Nothing in this act shall be construed to affect the duties of the Supervising Architect of the Treasury in regard to maintenance, alterations, repair, or supervision of either existing or proposed public buildings.

SECTION 7. That the cost of compensation for outside professional or technical services shall be charged to the appropriation for the construction of the building for which such services are rendered.

SECTION 8. All acts or parts of acts inconsistent with the terms of this act are hereby repealed.

WHAT Modernizing 400 Buildings HAS TAUGHT US

An Interview by James G. Donley with

FREDERICK PUTNAM PLATT, A.I.A.

of F. P. Platt & Bro., New York, an
architectural firm which has maintained an
alteration department for the past 25 years

OWNERS of older office buildings, found in every typical American city, are learning that something must be done to prevent new buildings with a large percentage of available space from drawing tenants out of older structures and that a modernized old building can undersell competing newer buildings on desirable space.

New buildings, hungry for tenants, have not only made owners more receptive to altering and improving existing structures, but they have also—particularly if they are the notable structures in the community—added to the value of existing property in the district. With new life added to the district, the owner of an older building can more readily visualize the good results that modernization can produce for him.

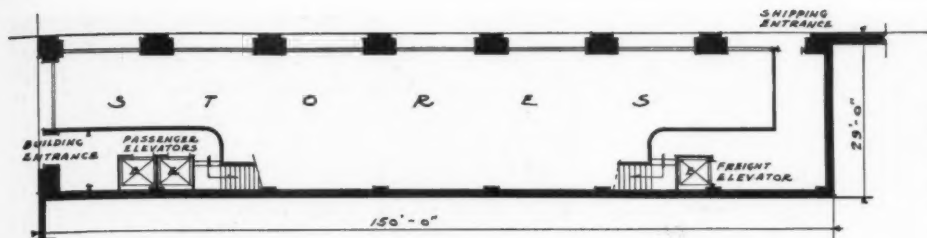
When the owner reaches this point he will want to make sure that, even after the money he spends has been covered by rents, he will still be able to undersell competition. On this point, drawing from experience, these observations may be made:

If, when 10 per cent of the cost of modernization is added to existing rentals, and the resulting rental is from 15 to 20 per cent lower than newer competitive buildings in the district, then the architect is giving the owner good advice.

High-speed elevator service in modern buildings, more than any other one factor, has made it imperative for older buildings to modernize. A building may affront a man's taste in architecture, but if the elevator service wastes his valuable time he will begin to look around for more desirable quarters. Costly to tenants in the time-wasting service and in the conveniences that must be done without, old buildings may often be even costlier

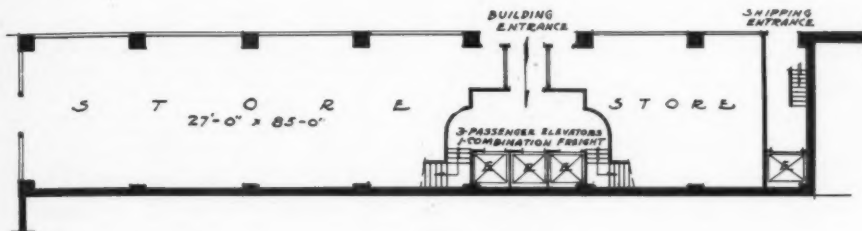
DISSIMILAR BUILDINGS modernized and
made into one by unifying lower floors





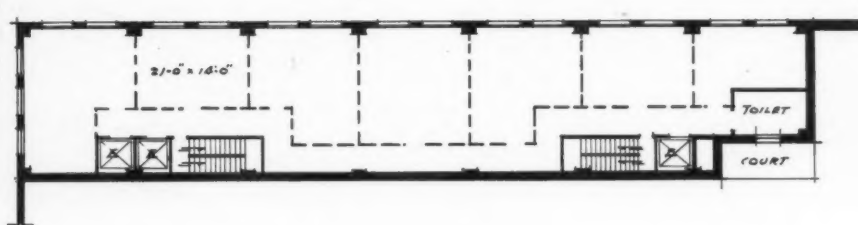
BEFORE . . .

Entrance cramped and unattractive. Corner store frontage restricted. Large masonry piers occupy valuable space. Show windows set back with loss of floor area. Shipping entrance wastes space



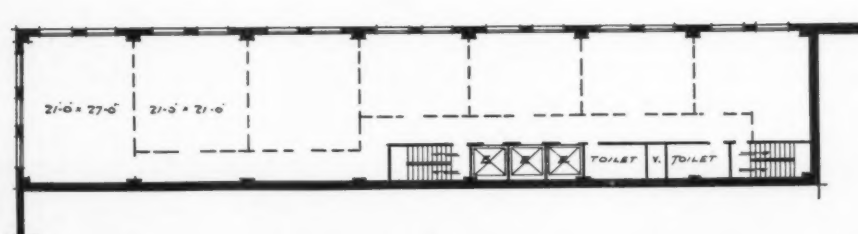
AFTER . . .

Size of piers reduced. Entrance moved to side street. More elevators. Show windows moved to building line, gaining rentable space. Shipping area reduced



BEFORE . . .

Corner office too small and cut up. Stairs too narrow, old law. Floor area wasted. Toilet facilities limited



AFTER . . .

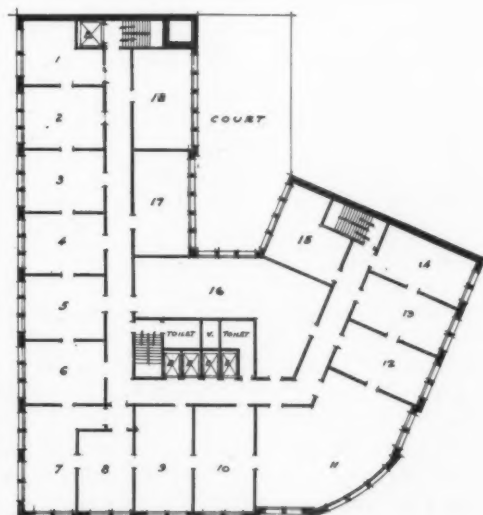
Corner office larger and better combined with other offices if desired. Larger and legal stairs. Rentable area increased. Toilets improved and enlarged. Court eliminated

GROUND AND TYPICAL FLOOR PLANS of a modernized office building. Additional capital written off in 10 to 15 years; old rents \$1.50, new rents \$2.00; rent of newer competitive buildings \$2.50 to \$3.00; building 2/3 occupied during alterations; total increase in rent \$15,000 annually



BEFORE (LEFT)

Inadequate elevator service. Old law stairs. Fire escapes. Shallow front office space. Unrentable interior area



AFTER (RIGHT)

Five modern elevators. Three legal enclosed stairs. Front offices increased in depth. Undesirable space reduced. Modern toilet facilities

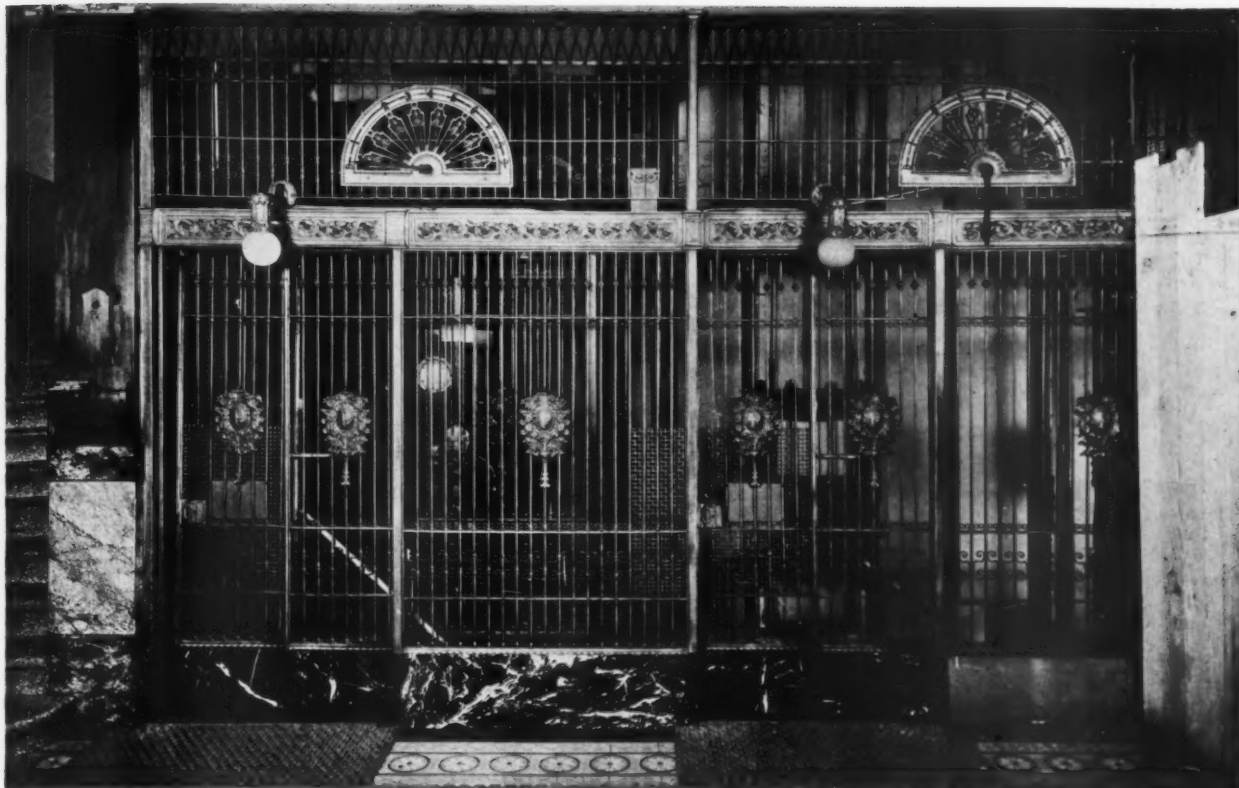
OLD RENT \$1.25, NEW RENT \$1.75, competing with \$2.00 space in newer buildings. Four months required to complete alterations, with two-thirds of building occupied meanwhile



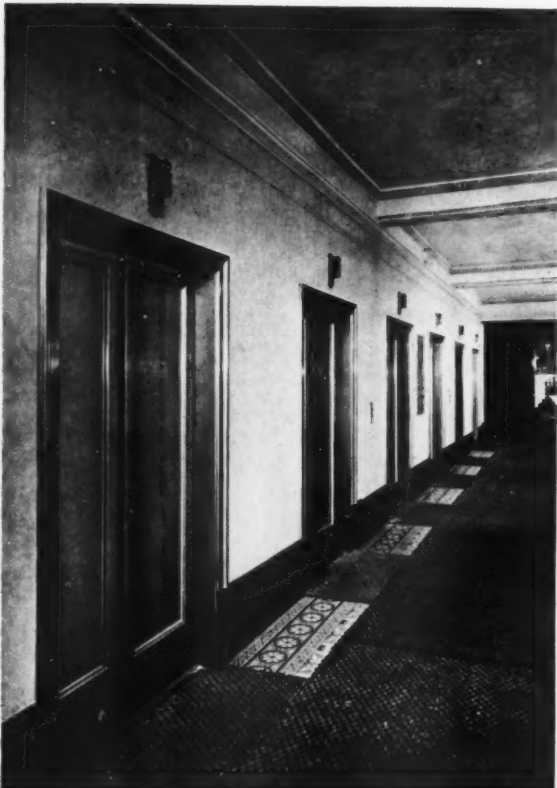
BEFORE A useless basement in the Hotel Lorraine, New York, offered but little apparent possibilities as a revenue producer. But when

the hotel was remodeled into an office building, the basement was air-conditioned, decorated and rented to a chain of cafeterias. **AFTER**





BEFORE The Pacific Building, San Francisco, was stamped by its elevator cages as belonging to a bygone era



AFTER The elevator installations mark the building as one thoroughly up-to-date in its appointments

to owners because of flagrant wastage of desirable space and an inexcusably low ratio of good rentable area to total building area.

How should an architect go about putting an old building back on its economic feet, reestablishing it in appearance and usefulness?

First, there must be a diagnosis to determine faults in the design of the exterior, main entrance and lobby. Then the architect must make a survey of the mechanical equipment, after which comes the determination of physical and mechanical treatments. The diagnosis of defects along with the recommended improvements should form a detailed report to the owner, with whatever plans are needed to visualize suggested changes.

The broad steps of modernization would come in this order:

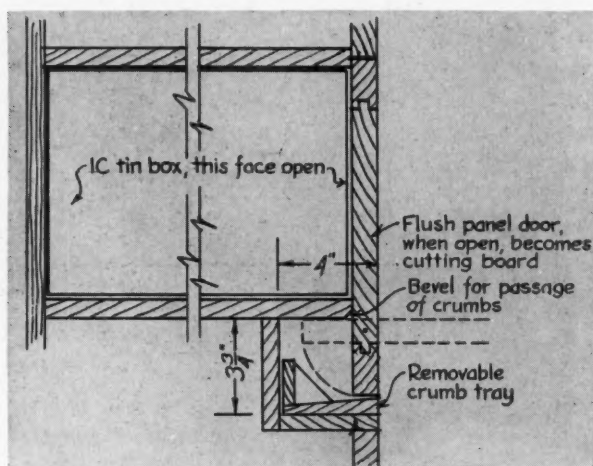
1. Modernized exterior, store fronts, main entrance and elevator lobby.
2. New or improved elevator service or relocation to gain space.

(Continued on page 70)

Wasted Space and Outmoded Buildings Are Made Money Makers

\$10 ... Things You Didn't

Good ideas are wanted for this department. They may be glad to know. Sketches should be sent if illustrations



• BREAD CUPBOARD SUCCESSFUL IN STANDARD PRACTICE

By Stanley T. Shaw
Tacoma, Washington

THE accompanying drawing of a bread cupboard has been used successfully as standard practice in this office for years. It remedies the fault of most bread boxes, which have no place to place the bread in order to cut it conveniently. The front of the box swings down and becomes a cutting board. When it swings back into position, closing the box, the bread crumbs drop down into a removable crumb tray. The front of the bottom board of the box is beveled to let the crumbs slide easily into the tray.

• CLAUSE IN "GENERAL CONDITIONS" THAT SAVES TROUBLE

By Harry Conway Griffith, A.I.A.
Dayton, Ohio

USE a clause in my "General Conditions" that on private work eliminates mentioning more than one product of equal value. On public work, such as school houses, it eliminates the two most troublesome words in any specification—"or equal."

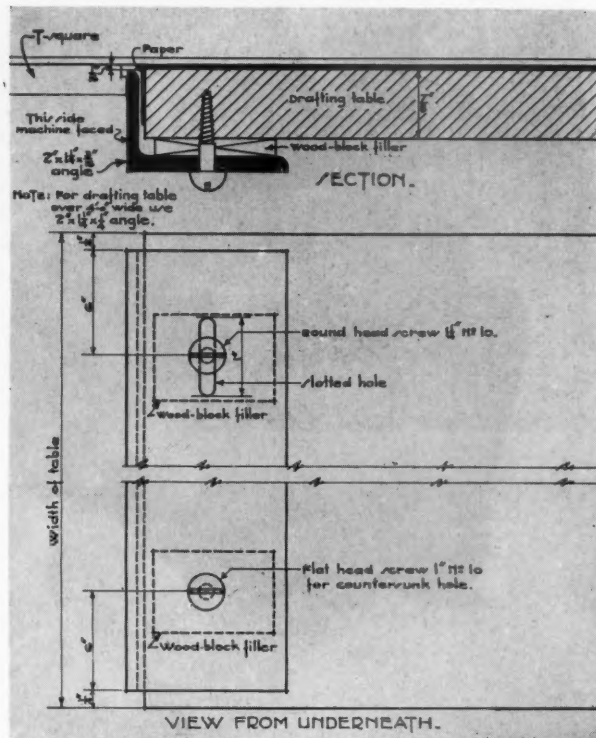
"The Contractor must submit a bid covering every item that is specified and should he wish to suggest any substitute that he considers equal in value and efficiency with one specified, he shall state what the item suggested is and what the difference in cost is, if any.

"If substitutions of materials (equally good) are offered at the time the bids are submitted, they will be considered, and in the event of the owner wishing to accept the substitute, arrangements will be made for the change before a contract is entered into.

"If no items are suggested as substitutes at the time the bids are submitted, then no deviations will be allowed.

• STRAIT EDGE FOR DRAFTING TABLE

By Willford A. Gagnon,
Montreal



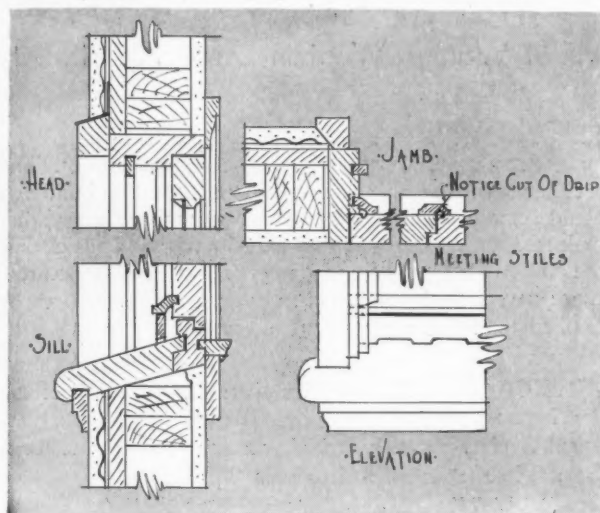
• TO KEEP A CLEAN, STRAIGHT BORDER WHEN RENDERING

By Joseph V. Phelan
Allentown, Pa.

THE difficulty of keeping a clean, straight border when rendering may be eliminated by the following method. When the drawing is complete and ready to render cut a sheet of tracing paper that will more than completely cover the entire drawing. Spread rubber cement, with a palette knife, over all border lines of the drawing. While cement is wet, lay the sheet of tracing paper over the drawing and smooth out with the hand where cement has been applied. With a sharp knife, held against a straight edge, cut out center of tracing paper, making the cut on the border line. Use just sufficient pressure to cut only the tracing paper. After center is removed squeeze out excess cement from under tracing paper mask, making sure the edges are tight. After the excess cement thus squeezed out has become dry it may be rubbed off with the fingers. When rendering is finished and the mask removed, a clean, straight border is the result. The cement is rubbed off with the fingers.

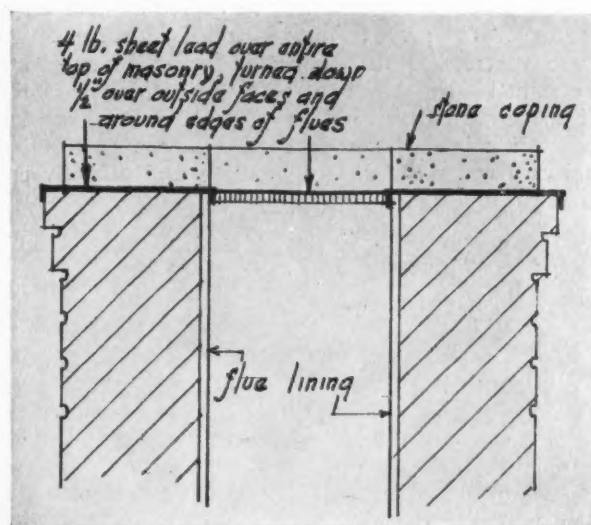
LEARN in School...\$10

big or little—the sort of thing most architects would be
are necessary. \$10 will be paid for each idea accepted



• NON-LEAKING IN-SWINGING CASEMENT

By Harry Conway Griffith, A.I.A.
Dayton, Ohio

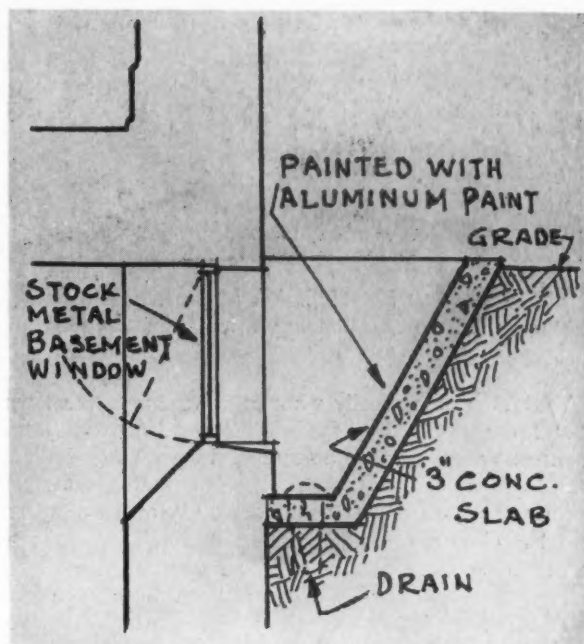


• EFFLORESCENCE OF CHIMNEYS PREVENTED

By Herbert Meredith McCullough
Pittsburgh, Pennsylvania

ALL of us have had the disillusioning experience of being confronted with chimneys covered with disfiguring efflorescence just when good pictures are desired.

For some years I have had no difficulty whatever in preventing this annoying blemish, by constructing chimney tops as shown on the accompanying detail.



• TO GET MORE LIGHT IN THE BASEMENT

By Harold H. Ehlert
Detroit, Michigan

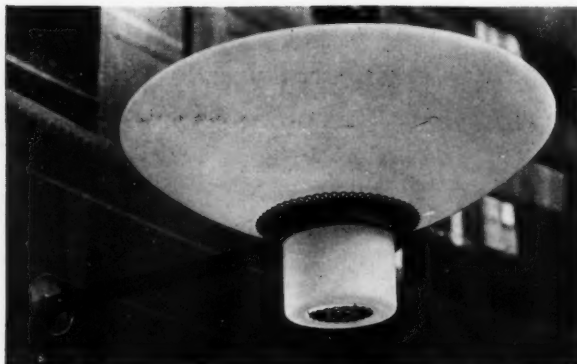
THERE is not always sufficient space to make it possible to provide areaways deep enough and large enough to permit sufficient light to get into the basement. In such cases, we have found the method detailed above a good solution to the problem. The areaway is constructed with sloping walls. This wall is painted with aluminum paint. The sloping wall admits as much direct light as the straight wall type and the aluminum paint reflects even more light into the basement. A white paint or enamel might be used instead of the aluminum paint.

• WHY NOT WEATHERSTRIP BEDROOM DOORS?

By Harold H. Ehlert, Detroit

MOST people keep their bedroom windows open almost all the time. During the winter months the rooms are quite cold. A great deal of this cold air is blown under the door where there is always a large clearance, making the adjoining rooms and floors quite drafty and cold. This can be overcome by weatherstripping the bedroom doors or at least by using one of the felt type weatherstrip arrangements that raises when the door is opened and lowers when the door is closed, fitting snugly against the floor and preventing drafts.

WHAT ARCHITECTS



GLASS AND BRONZE. Wall light in reference room of library building, Stockholm, Sweden

WHAT women really want in a large apartment was found in a survey made by Pease & Elliman, management agents for an apartment house to be built at 895 Park Avenue, New York, Sloan and Robertson, architects. Besides the usual demand for large rooms and big closets, cross ventilation was requested, statements being made that in many apartments there is but one good corner room. Low ceilings in large rooms were condemned, as were ceiling beams, which latter objection was solved in the major rooms by locating columns to bring the beams in dividing partitions. Dressing rooms were stressed, as was a small dressing room off the foyer for guests. Some women complained that most pantries were too small and without windows.

RADIO CITY when completed will weigh about 660,000 tons. Over 1,000,000 tons will have been excavated which, added to the 90,000 ton weight of the old buildings, will cut Manhattan's weight by 430,000 tons. These figures were compiled for the benefit of timid souls who feared that erection of big buildings might cause the island to become overloaded.

IF an inspection device could be perfected for testing welded joints, riveting hammers would be silenced in five years, according to Ray C. Brumfield, professor of civil engineering at Cooper Union, New York. He says that the welding process is not only more durable but would probably prove cheaper in building construction.

FROM THE BALKANS. Alexander Nevski Church at Folia, Bulgaria, one of the most monumental structures in that country. Note how the domes rise in a series

Boston Defines Supervision

Why Don't People Own Homes?

What Women Want in Large Apartments

EXPOSITION buildings for the Chicago World's Fair are costing from ten to twelve cents a cubic foot. The architects of the fair are confident that the buildings could remain in service for twenty years without undue maintenance cost or serious deterioration. Considering the short economic life of many present day structures, there may here be a lesson in cutting costs that can be applied to the more permanent types.

CHICAGO is 18% noisier than New York, according to a demonstration made at the New York Electrical Society recently, which compared noises at State Street, in the Loop, with Times Square.

PUBLIC works are not expected to furnish a substantial volume of new construction within the next three years and any marked revival of building must come from other sources such as quasi-public works, home modernizing and home building, etc., according to a survey made by the American Construction Council among leaders of finance, manufacture, construction and labor. It states, "The great building boom of a few years ago scarcely scratched the surface in so far as supplying the right kind of homes at a fair price for the family of moderate means, and undoubtedly a great market exists in this field now if confidence can be restored and cash and credit can be promptly and properly put to work."



ACME
AMERICAN ARCHITECT

ARE TALKING ABOUT

Not Much Public Work Expected

Law Advocated to Regulate Bidding

Radio City Cuts Manhattan's Weight

SENSIBLE SELLING COMPARISONS THAT HELP YOU REAP THE UTMOST IN HOME SALES IN THIS PRESENT MARKET



1929 An Airedale, Airedale's Design with the mistakes of the English **\$8500.00**
Demonstrating Forcibly the Extraordinary Values You Can Offer the Home Buyer Today

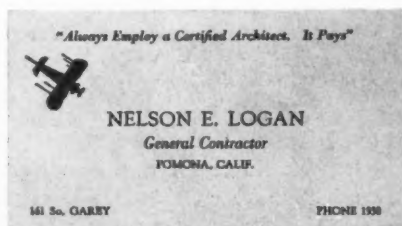


1932 Absolutely Authentic Design of Genuine Architectural Merit **\$7800.00**
Demonstrating Forcibly the Extraordinary Values You Can Offer the Home Buyer Today

OPPORTUNITIES in home ownership at present low costs, and comparison of poor architecture with good architecture, are made the subject of direct mail literature furnished to lumber dealers by the Morgan Woodwork Organization for distribution to interest the prospective customers in building now

RESTRICTION of admission to office buildings for persons authorized to enter has been solved in an unusual way by the real estate department of the First National Bank, Chicago. The night watchman is supplied with duplicate signatures of every occupant who may visit the building after the authorized hours. If the visitor is unknown to the watchman, he asks for the signature to be written and compares it with his book.

BUSINESS CARD of a California contractor who believes that the best interests of the client are served if an architect is always employed



"FREQUENTLY bidders on public work are winning contracts by slashing prices and taking chances on 'getting by' via devious methods," said William C. Amos, managing director of the Contracting Plasterers Association of Greater New York, who asserts that members of this organization maintaining wage scales as per agreement with labor unions are unable to compete with prices at which contracts are being let for public work. He said that these low awards are due entirely to the secret slashing of wages, stating, "I would like to see a plan adopted by legislative means compelling a general contractor bidding on public work to submit with his bid the name of every subcontractor who furnished him with an estimate, together with the amount of the

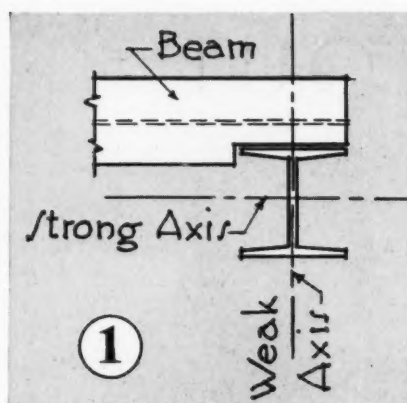


FROM HOLLAND. A striking combination of materials used to make an effective façade

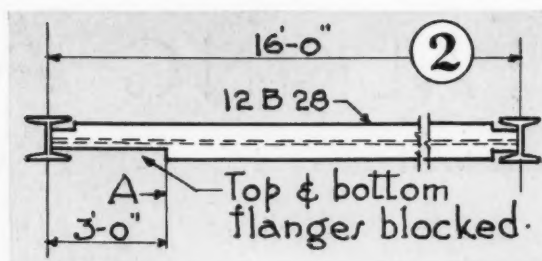
estimate. I would like to see, too, that the successful bidder be required by law to use these contractors and pay them the amount of their bids."

DEFFECTIVE design is typical of the average small house and better constructed houses could be constructed for less money, according to a report prepared by twenty-five leading architects for the members of the President's Committee on Home Building and Home Ownership. Proper planning would go far toward putting into five and six room houses features which are now found only in high-priced construction.

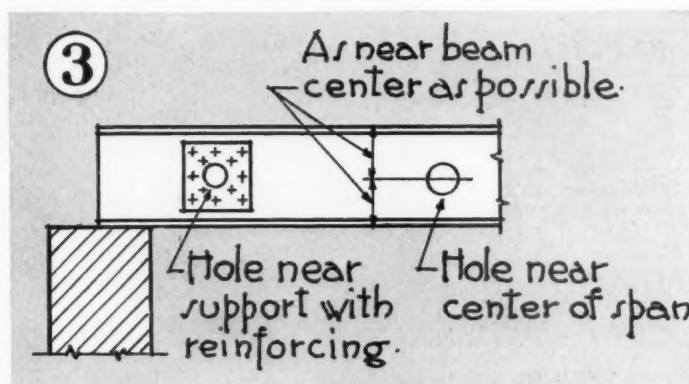
WHY don't more people own their own homes? This is answered by a questionnaire sent out by the Railroad Cooperative Building and Loan Association, New York, to its 76,000 members. High taxes and assessments, mortgage, interest or maintenance costs, or the general explanation, "cheaper to rent," were the reasons given by 45% of those answering this question. Belief that a home was a frozen (Continued on page 86)



DON'T MOVE a beam framing into a column center away from the column unless it is made certain that the column is strong enough to resist the stresses caused by eccentricity



REMEMBER that flanges take the bending, which is maximum at center of span. So do not cut flanges beyond point "A" unless the flanges are properly reinforced



PLACE HOLES for pipes as near the center of the span as possible, as the minimum shear is at this point. Holes near supports require special reinforcing. Holes should be located as near the center of the beam as is possible

FACTS ABOUT STEEL
THAT MAKE WORK

QUICKER, CHEAPER, SAFER

By HAROLD S. WOODWARD

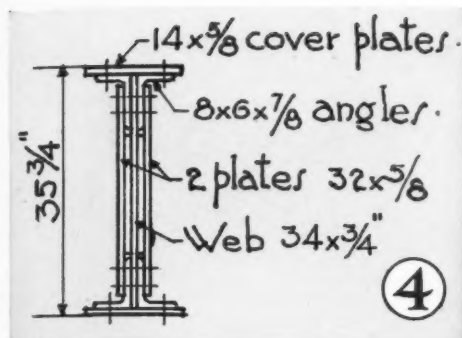
Structural engineer with Elwyn E. Seelye & Co., consulting engineers, New York

WHILE every architect has at some time studied structural engineering, and understands the fundamentals of engineering, many important details are often overlooked in practice. It often happens that it is the simplest of these details that most easily escape one's notice. The following cases have come to the author's attention many times and are worth remembering in connection with buildings framed with steel.

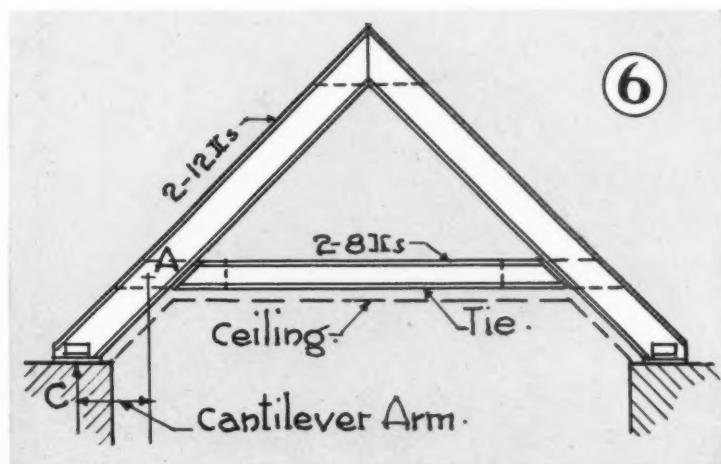
Many architects fail to realize the work involved for the engineer when a simple thing like a column center is shifted after the steel work for a multi-story building has been designed. For the architect, it means the mere change of a square on his drawings. But it often causes plenty of redesign for the engineer. It means that some or perhaps all of the beams and girders framing into the column have to be refigured. It might even mean the entire reframing of the adjacent panels to the column. It will probably involve not only the change in load on the column shifted, but also the change in load of some, if not all, of the adjacent columns. This

naturally necessitates the redesign of columns and foundations. The matter is further complicated if the column moved is one that is carried at a lower floor. Of course the change of a few inches is not important but a few feet might make considerable difference. So whenever possible, fix the column centers at the start of the job and do not change them unless conditions make a change imperative.

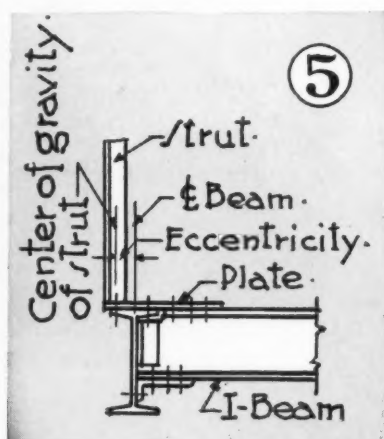
Another point in regard to columns should be borne in mind. Steel columns should be placed so that the greatest bending is taken on the strong axis of the column. In Fig. 1 are shown the strong and weak axes. If a heavy beam frames into a column at a considerable distance from its center the column should be placed with the strong axis as shown. In a multi-story building the typical condition of framing, or that occurring the greatest number of times, will determine the column axis. When a beam frames into a column on the weak axis the column size may be determined by this eccentricity. Consequently the location of a beam framing into a column should not be moved farther away from the



IF THIS GIRDER had been made 6 inches deeper, its weight could have been reduced 22%. Economy often determines depth



IN SLOPING ROOFS frames like this are sometimes necessary. The governing condition is projection of the sloping member from "A" to "C," which must be figured as a cantilever beam about "A" as a fulcrum. Low ties are the most effective



IN SPANDRELS of typical buildings, beams are not under center of wall. If an offset column or strut is on a beam not under the center of gravity of the member carried, special framing is necessary to offset the "twist" on beam

column center than that shown in the steel drawings, unless it is made certain that the column is strong enough to stand it. This condition is often a critical one and should be kept in mind at all times.

It is often necessary to block off the flanges of a steel beam for clearances of pipes, ducts, or some architectural requirement. The point to remember in this case is that the flanges of the beam take the bending, which is a maximum at the center of the span. Consequently if the flanges must be cut off near the center, the beam will be seriously weakened and reinforcement will probably be necessary. In Fig. 2 is shown a case where the two flanges on one side of a beam are blocked off. This can be safely done up to the point "A," beyond which the beam would need reinforcement to take care of bending stresses.

It is often necessary to provide a hole through the web of a beam for a pipe. The web of the beam takes the shear and transmits the loads to the supports. The maximum shear occurs at the support so that a hole of any size through the web close to the support may require special reinforcing at this point. If possible locate such holes near the center of the span. Fig. 3 illustrates a case of this kind. Also locate the hole vertically as near the center of the beam as possible.

In multi-story buildings inadequate allowances are often made for depth of girders where offset columns occur. Eight or ten stories of a building are not likely to be carried on a 24-inch beam on a 30-foot span. While it

would probably be possible to fabricate a girder that would fit the space, it would be expensive to build. A few inches sometimes make a world of difference. For example, Fig. 4 shows an actual case of a girder of this kind. This happened to be the absolute minimum depth that could be used, the governing condition being the pitch of rivets between the web and the flange angles. The weight of this girder per foot is 439 lbs. If a depth of six inches more had been possible it would not only have relieved the tight rivet condition but the weight of the girder could have been reduced 97 lbs. per foot or 22 per cent. Had an engineer's opinion been secured before the plans had progressed too far this situation would have been prevented.

While not a serious matter in the majority of cases, the torsion induced in a beam due to off center loads may prove to be an important consideration. For instance, the spandrel beams of a typical building cannot come under the center of the wall as the beam must be kept clear of the outside course of masonry.

Beams framing into this spandrel, and also the floor arch, help this condition to a certain extent. While it is not a serious factor for walls of ordinary story height, it is serious where an offset column or strut is carried on a beam which is not under the center of gravity of the member carried. Fig. 5 shows a case of this kind. If the load is heavy a special detail is often necessary to remove this torsion. In the example shown the beam framing in from the right is capable of taking the "twist" out of the other beam due to its special connection. Wherever possible place loads of this kind on the center of the supporting member.

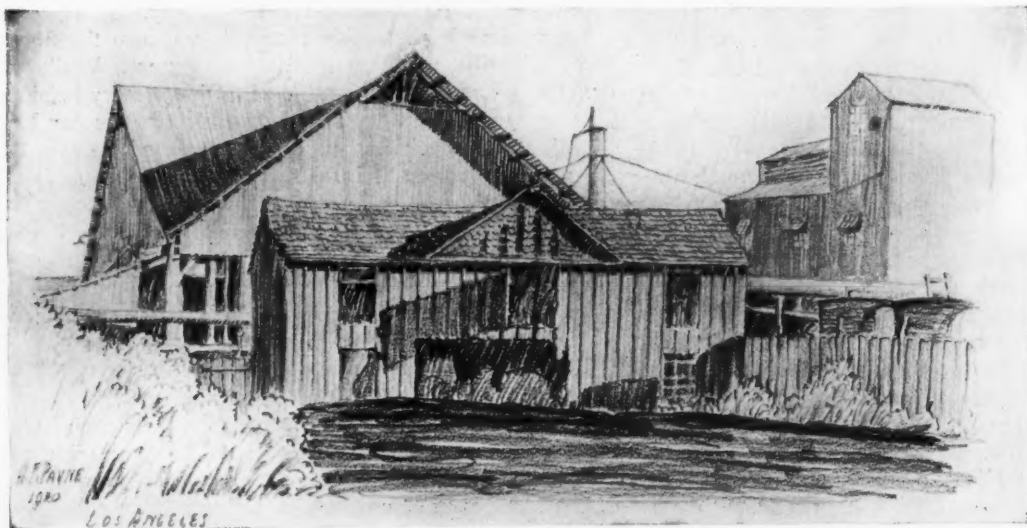
It is often necessary for a beam, such as a spandrel beam, for example, to be placed with its top flange considerably above its normal level in the floor arch. Or a beam may occur between openings in a floor with no floor arch on either side. In either case the top flange of the beam is unbraced by (Continued on page 94)



From COAST to COAST

SEATTLE, Washington . . . Shack on the waterfront. Made with lithographic pencil on kid finish Strathmore board. By Harry Lockland, an architectural designer and renderer, Seattle

WHIDBEY ISLAND
near Seattle. . . A
battle-scarred
block-house erected
in pioneer days.
Made with an Eagle
drafting pencil. By
Harry Lockland



LOS ANGELES
Deserted stable
on Lyon Street,
in the midst of
the slaughter
houses. Made
with 3B and
5B pencils. By
Arthur Florian
Payne, St. Louis



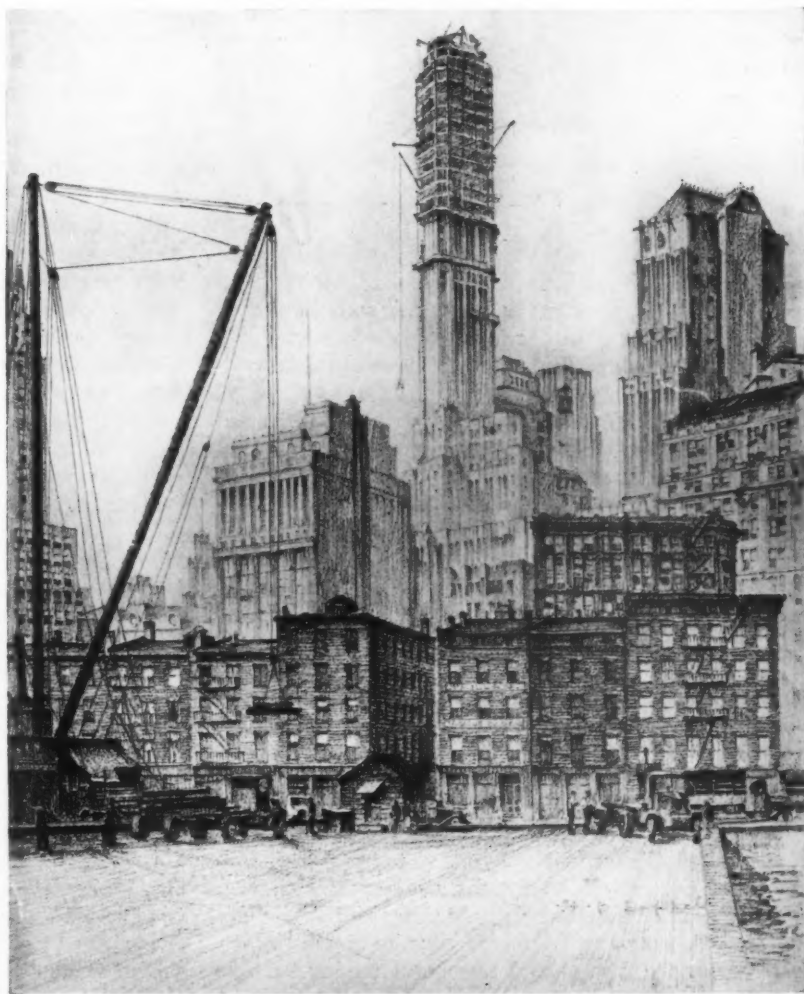
SEATTLE . . . A Chinese laundry in an old section of town. Made with an Eagle drafting pencil on fairly rough drawing paper. By Harry Lockland



BOOTHBAY, MAINE

Once a fine home; now a general store. Drawn by Henry Adams Grant while a student at Columbia University

NEW YORK . . . View from a pier at the foot of Jones Lane and South Street. In the background is the City Bank Farmers' Trust Building, under construction. Made with litho crayon pencils on smooth surfaced paper. By Harry B. Doppel of Doppel & Wittekind, architects, Forest Hills, N. Y.



As It Looks

Our Fifty-sixth Birthday

FIFTY-SIX years ago, the first issue of *AMERICAN ARCHITECT* was published. Many of our first subscribers are still numbered among those of today. In 1876, architectural practice was in everything except fundamentals far different from what it is today. The *AMERICAN ARCHITECT* at that time was also far different. Ever changing in form, spirit and context, it has kept abreast of changes affecting the profession, and has helped to keep architects abreast of changing modes and customs. Perhaps that is why we still feel young and chipper in spite of our advancing years.

New Jobs in Modernizing

THREE years ago few owners wanted to modernize. There were plenty of tenants to be had. But now, with an oversupply of space, new structures are taking tenants from old structures. The latter must be modernized if the owner is not to have a "white elephant" on his hands. Many of these alterations run close to or over the six figure mark—they furnish jobs highly profitable to both architect and owner. But somebody must have an eye to the possibilities in those old structures. Who is better fitted than the architect to see those possibilities and to analyze the profit in them for the owner?

Oil Burners and Government

REFUSAL of government officials to permit oil burners for heating equipment to be installed in public buildings is charged by the American Oil Burner Association. The association, claiming unjust discrimination, states that protests to the Supervising Architect have failed to modify the ban. It says, "What this association wants to know is why the oil burner industry is not permitted to bid on government jobs, especially in view of the fact that in most instances the oil burner manufacturer can supply heat and power at a much lower figure than contracts recently awarded by the government called for."

Protest State Competition

UNSATISFACTORY, to say the least, is the result of the competition for the Massachusetts War Memorial. And this unsatisfactory result seems largely due to the mixing of art and politics. William D. Austin, F.A.I.A., who supervised the competition, and Ralph Adams Cram, F.A.I.A., a member of the commission, both favored a design by Maginnis and Walsh which could be built for \$200,000 less than the allowance. The politicians on the commission voted solidly for a design which Mr. Cram declares is the least desirable of the 103 designs submitted, making the final vote four to three. When the result of the competition was made public, the im-

pression was given that the vote was unanimous, whereat Mr. Cram waxed wroth and published a minority report. The legislature still has to act. Boston is thoroughly aroused and it is to be hoped this apparent mixing of politics and art will come to the end it deserves.

Dentists Will Advertise

OFFICIAL edicts against publicity were shattered at the recent national convention of the American Dental Association, which has decided to favor paid advertising. This advertising will be devoted to dental education. Newspapers, magazines, radio and other forms of advertising media will be used. Such campaigns have already been run in Wilkes-Barre and Scranton, Pa., and in Little Rock, Ark. How much longer will architects be able to say, "Professional men don't advertise"?

What Price Cheapness?

GOSSIP is stating that many a fine new structure has been so stinted on its mechanical equipment as to make certain an unusually high up-keep within five years—in some cases probably requiring an entirely new installation. Nobody can blame an architect or owner for trying to keep initial costs down, but when low costs are going to seriously affect the future value of the building, too great an eye to economy will do nobody any good—least of all the architect. What man who wants to stay in business can afford to be confronted with concrete evidence of his failure to do a good job? Just imagine going after a big job and having a competing architect say to the owner, "Go over to the Blank Building and ask the building manager what he thinks of *that* job."

Educating the Unemployed

"UNEMPLOYED engineers," states an editorial in the *Engineering News-Record*, "have two problems on their hands—to find a job and to find use for their idle time." Both are important—as important to architects and draftsmen as to engineers. Agencies are at work trying to solve the first. Columbia University has made an announcement that helps solve the second, at least so far as unemployed engineers in New York City are concerned. The University's lecture courses are to be thrown open to bona fide engineers who are out of work. It would be a good idea if lecture courses could also be made available to architects and draftsmen in New York and elsewhere. The importance of the idea lies in the fact that the improvement of the mind in otherwise unemployed time can be made a stepping stone to furthering one's future position and also aids in maintaining one's morale during idle periods.

to the Editors . .

Money Value of Ethics

ETHICS in the practice of architecture has a dollars and cents value, according to the report of the Committee on Practice of the Detroit Chapter, A. I. A. The report cites one case in which an architect spent \$750, not including his own time, in the preparation of free sketches in a "scramble" competition. This architect's chances of securing the commission were about one in 375. "By the law of probability this means that to be reasonably sure of securing one such commission he would have to enter 375 such scrambles." If he spent \$100 on each set of sketches it would cost him \$37,500 to secure one job. As the report says, this is a rather high sales cost and not even good gambling.

Professional Advertising

DENTISTS who believe in advertising are for the first time represented on the State Board of Dental Examiners, California, through the appointment of Dr. A. Zimmerman of Los Angeles. All professions are becoming more and more cognizant of advertising's value.

Are Services Ever Free?

I AM unutterably opposed to the manufacturer's representative who offers free service such as heating layouts, reinforced concrete designs by bar manufacturers, structural steel designs, etc. Those who do are prejudicing themselves with architects." So writes a prominent Southern architect. One manufacturer of heating apparatus remarked that every time free engineering services were used the price went up, as the manufacturer would feel that he had the job cinched. He said, too, that the manufacturer considered that architects using such free services did so through lack of knowledge—and so were not competent to check up in the client's interest, therefore placing the client at the manufacturer's mercy. Certainly the architect weakens his professional position in the building world when he uses free engineering services offered by a manufacturer. If he doesn't know the proper solution himself, he should hire somebody who does know. If this is not done, the client's interests are likely to suffer.

Kohn Criticizes Government

ROBERT D. KOHN, president of the American Institute of Architects, has been more than fair in his attitude towards the Office of the Supervising Architect. His remarks at a recent meeting of the Spokane Chamber of Commerce therefore carry unusual weight, since they indicate a change in opinion based on practical experience with the Office. He said that the Office was not organized to handle projects of the number and magnitude contemplated under recent appropriations and that he did not know of any architect who, under civil

service regulations, could make a success of the office. He gave numerous examples of the unwieldy and cumbersome methods of the government, of the unsuitable types of buildings erected, and the unsatisfactory methods of dealing with private architects. He also pointed out that large corporations doing considerable building have not found it desirable to establish a central architectural office and so use outside architects to do the work. The meeting which the Spokane Chamber of Commerce held September 12 to help get the government out of the architectural business, and reported on page 22 of the November issue of AMERICAN ARCHITECT, received his entire approval.

Why Not a Retainer Fee?

HOW many architects give individuals building advice, work on projected buildings, or otherwise give away their services without other thought than expecting to obtain a contract "if the job goes ahead"? In what other profession or business does this condition exist to the extent that it does in the practice of architecture? It is extremely rare for a lawyer of any standing to accept a case where his opinion is evidently of value without requiring a retainer fee, which may or may not apply to his final fee if any considerable amount of work is involved. Why not a retainer fee for architects? Their knowledge and opinions must be of value or they would not be called upon so often to "cooperate," which is just another way of asking them for a favor. Time to the architect, like the dentist, is one of his assets. There can be no sound reason advanced for his giving away his time, ideas, or knowledge. A retainer fee would appear to be the answer.

Consult Your Architect

UPON the care and intelligence shown in the installation of any building product depends the reputation of the maker, for the best product may be no better than the worst if inappropriately used or inexpertly installed. It is interesting to note that the Carrier-Lyle Corporation is well aware of the sound merchandising value of that principle, for in a new catalog of this company is prominently displayed a page headed, "Consult Your Architect." Part of this page reads, "Your architect will be as valuable to us from the standpoint of reflecting your ideas as he will be to you in carrying them out.

"He is an expert on home building . . . a professional man who can bring to your house-designing and construction problems the knowledge and experience gained from wide study and his own practical work. He is trained to do for you what only an architect can do—translate your desires and tastes and needs into a home—practical, livable and beautiful.

"Build that new home by all means. But first see an architect to make sure your home will be all you want it to be."



SOUTHERN ARCHITECTURE ILLUSTRATED

Published by the Harman Publishing Company, Atlanta, Ga. Illustrated; indexed; 272 pages; size 9 x 12; price \$5.

THIS book has a purpose of genuine value to the architectural profession entirely outside of its presentation of excellent material. That purpose is to interest the general public in better architecture and to induce more owners to make use of the services of an architect. To accomplish this objective, there is a foreword by Lewis E. Crook, Jr., A. I. A., of Atlanta, which tells something of the function of an architect. The book will be sold to the lay public as well as to the profession.

The illustrations, most of which are full page size, offer exceptionally well-chosen views of southern domestic work, interiors as well as exteriors. Plans are also given. Both large and small houses are illustrated, giving this book a place among the interesting books available to the specialist in domestic work.

There is an introduction by Dwight James Baum giving a brief history of southern architecture.

SCHOOL VENTILATION: PRINCIPLES AND PRACTICES

By the New York Commission on Ventilation. Published by Teachers College, Columbia University, New York. 73 pages, size 5 x 7 1/2; price \$1.00.

TWENTY states in this country retain statutes or other regulations concerning ventilating devices which are based on disproved or antiquated theories, according to the New York Commission on Ventilation, which pre-

sents this book as a final report of its work. It comprises a review of the history of the subject and a brief summary of the Commission's investigations as well as those of other contributors in this field.

The chairman of the Commission was Dr. C. E. A. Winslow, professor of public health at the Yale School of Medicine; members of the Commission include Rufus Cole, Dwight D. Kimball, Frederic S. Lee, George T. Palmer, Earle B. Phelps, and Edward Lee Thorndike.

Some of the subjects covered in the book are: studies of window-gravity ventilation in New Haven, Cleveland and Chicago; studies on body radiation and drafts; rural school ventilation; general relation of atmosphere temperature to health and efficiency; hygienic values of various systems of school ventilation, etc.

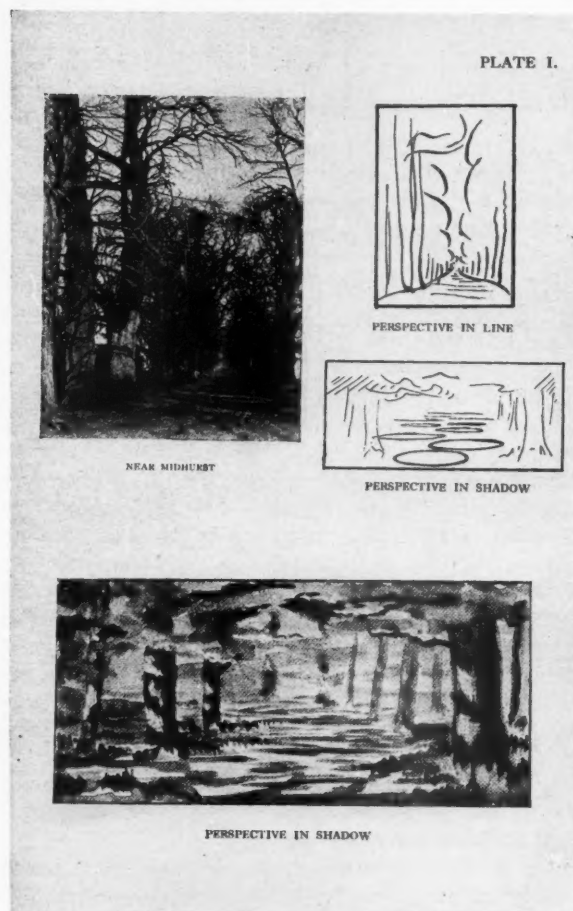


Plate I illustrating perspective.
From "Perspective in Drawing"

PERSPECTIVE IN DRAWING

By D. D. Sawyer. Published by Charles Scribner's Sons, New York. Illustrated; 60 pages; size 5 x 7 1/2; indexed; price \$1.75.

PERSPECTIVE as a theory is briefly outlined in this book, but most of its content is devoted to helping the beginner to put down on paper a representation of

the object visualized. It explains by means of diagrams the difficulties in drawing the cylinder and other forms, and what to note in drawing shadows and reflections.

It covers basic principles, the cube, the cylinder, shadows, reflections, aerial perspective, color, and drawing in perspective. Illustrations are clear and easily understood.

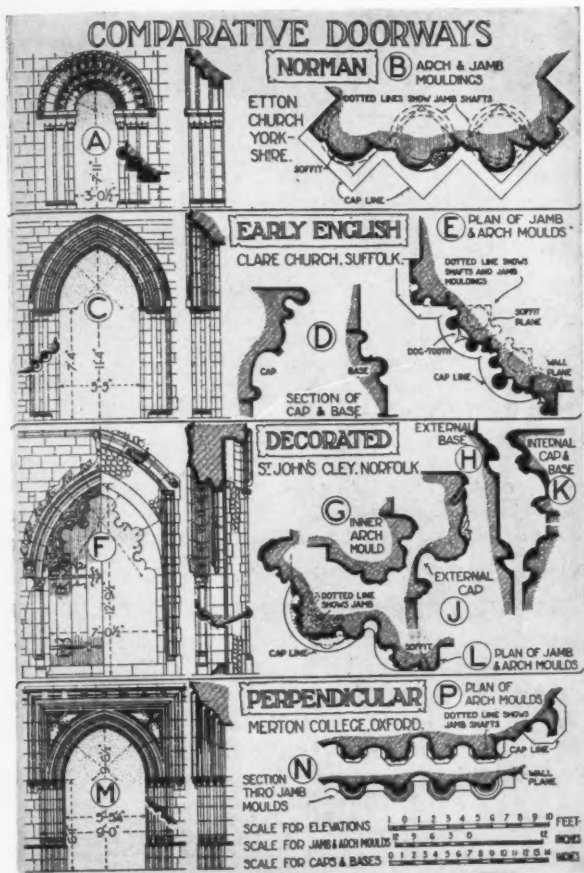


Plate illustrating English mediaeval architecture.
From "A History of Architecture"

A HISTORY OF ARCHITECTURE ON THE COMPARATIVE METHOD

By Sir Banister Fletcher, F.S.A., F.R.S.L., F.S. I. Published by Charles Scribner's Sons, 597 Fifth Ave., New York. Ninth edition. Size $6\frac{1}{4} \times 9\frac{3}{4}$; 1033 pages; 400 illustrations; indexed; price \$12.

THIS book aims to display clearly the characteristic features of the architecture of each country by comparing one style with another, and by giving prominence to the special influences—geographical, geological, climatic, religious, social and historical—which have contributed to the formation of each style. The analytical and comparative method adopted brings out the results of these influences, shows the special qualities of each style, and contrasts them so that differences may be easily grasped and individual styles better understood. Thus the character of gothic architecture is emphasized by comparison with the classic and renaissance styles, while differences in national or local phases can be the more easily appreciated.

Each style is considered under five sections: influ-

ences, mentioned above; architectural character; examples; comparative analysis; reference books. The book is excellently indexed. Illustrations include drawings and photographs, about 500 being new to this edition. There is a good glossary.

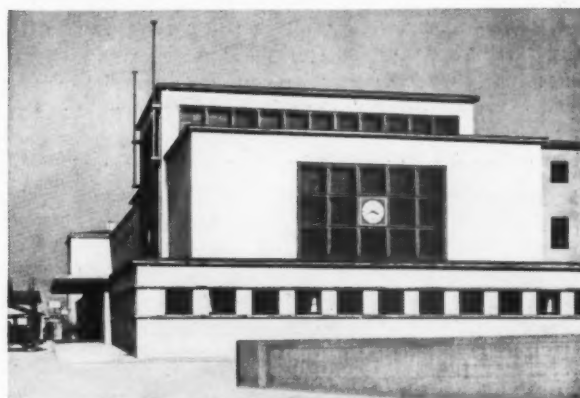
Those interested in the history of architecture will find this book well worth reading and deserving of a permanent place in the library.

SUCCESSFUL HOUSES AND HOW TO BUILD THEM

By Charles E. White, Jr., A.I.A. Published by the Macmillan Company, New York. Illustrated; indexed; 520 pages; size $5\frac{1}{4} \times 7\frac{3}{4}$; price \$2.50.

THIS is a new edition of a book first published in 1912. Although primarily intended for the layman, it presents a number of interesting points that will prove of value to the professional architect.

The book's content covers choosing the site, planning the rooms, legal documents, houses of various materials, carpentry and cabinet work, sewage disposal in the country, plastering, hardware, remodeling, etc. Of particular interest are references to the services of the architect, presented in such a manner as to aid the layman to understand what the architect can do for him and how best to work with the architect.



Railroad station, Dresden.
Wilhelm Kreis, architect

NEUZEITLICHER VERKEHRSBAU

Compiled by H. Gescheit and K. Wittmann. Published by Muller & J. Kiepenheuer, Viktoriastrasse 56, Potsdam, Germany. Illustrated; 334 pages; size $9\frac{1}{4} \times 11\frac{3}{4}$; price RM 50.

A COLLECTION of pictures and plans of modern commercial buildings, with some text, covering Germany and a bit of the United States and England—railway stations, stores, factories, house boats, air ports and so on.

The pictures are well chosen and adequately printed, all of the subjects apparently being new.

Contributors of text material include Dr. Alfred Gellhorn, H. Gescheit, and K. Wittmann, all architects of Berlin; Thomas M. Hartland and H. Donald McMorran, English architects; and Francis Keally, American architect. A feature of the book is a number of drawings of air ports by Mr. Keally.

» » » but what can I do? . . . The Client D I E D!



By George F. Kaiser, LL.B.

WHAT HE DID: An architect contracted to prepare plans and specifications for a theatre which an investor desired to build. Plans were to be submitted for approval and the architect was to make scale details, plans and specifications, and advertise for bids and submit them to the investor. After the contract was awarded, the architect was to supervise construction. The contract further provided that the architect was to be paid one per cent of cost on completion of plans and two per cent when contract was awarded and construction was begun.

The investor died suddenly before actually accepting and approving the bids. He had approved the plans, the architect had advertised for bids, determined the lowest and actually submitted it to the investor. But the latter was too sick to examine it. The architect demanded the entire three per cent from the investor's executrix.

WHY HE DID IT: The architect claimed that the contract was a so-called "entire contract" under which he would either be entitled to nothing at all or his full commission, and further that the contract was not "per-

sonal," on the investor's part, as his executrix could do everything the deceased was supposed to do under it, and that he was entitled to a recovery on the theory of "implied contract" if not under the express contract.

WHY HE SHOULDN'T HAVE DONE IT: The court denied the architect's contention and held that "where work is done by an architect under an express contract, the rights of the parties are measured by the contract and neither can rely on an implied contract. The death of an owner before the acceptance of bids terminates his contract and the architect is not entitled to anything over one per cent, nor can he recover on a quantum meruit from the owner's executrix since she received no benefit, for although it is a well-settled rule that death is in general no revocation of a contract, unless it be a personal engagement to be performed by the testator himself, where the owner dies before he has done those things, personally to be done by him (examine bids and estimates and approve and accept same or reject them and award contract to someone else), it is revoked."

IS ARCHITECT'S INTERPRETATION OF SPECIFICATIONS FINAL?

WHAT HE DID: When Baron & Bellmore, architects, were asked for a ruling by the heating and ventilating contractor as to whether or not certain insulation work was satisfactory, the architects answered: "The insulation work in connection with the heating and ventilating system, as installed, is entirely satisfactory to us and conforms to the requirements of the plans and specifications." However, the owners still refused to pay the balance due to the contractor, who brought suit.

WHY HE DID IT: The owners contended that the contractor had failed to complete the work in that 25,000 feet of radiator connection had not been covered and claimed an allowance for the work omitted, stating that not only heating risers but radiator connections should be covered whether concealed or exposed. This raised

a question involving interpretation of the contract.

WHY HE SHOULDN'T HAVE DONE IT: But the court refused to adopt the owners' view of the matter and sustained the ruling of the architects, holding that an architect's interpretation of specifications in a contract is controlling where there is no fraud and where the parties have agreed to accept the architect's decision, saying: "There is nothing which attacks the decisions of the architects or indicates any fraud or lack of good faith on their part in reaching the decision made by them. The defendant merely disagrees with the conclusion reached by the architects. Such a disagreement presents no issues because the defendant submitted the determination of this very question to the architects whose conclusions are final. Summary judgment should be awarded."



10,000 GALLON EVERDUR TANKS

Made by

WHITLOCK COIL PIPE CO.,
HARTFORD, CONN.

The two largest Everdur tanks in service, recently installed in the Wyomissing (Pa.) plant of the Berkshire Knitting Mills, were fabricated by the Whitlock Coil Pipe Co., Hartford, Connecticut.

Used as accumulators in the "Unatherm" system for process hot water, these tanks store water at 210°F. under 85 pounds pressure. The requirements are met . . . with a wide margin of safety . . . by $\frac{1}{2}$ " shells with .65" and .75" heads, the thicker heads being designed to embody 12" x 16" manholes. Every seam was electrically welded in three layers with Everdur Rod; each layer being peened and annealed to assure uniform grain structure and maximum strength.

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We will be glad to furnish a list of concerns who are experienced in the fabrication of Everdur tanks, and prepared to quote on tanks made to order for your requirements. The American Brass Company, General Offices, Waterbury, Connecticut.



EVERDUR

(Strengthened Copper)

AN ANACONDA METAL

THE READERS Have a Word to Say

• TWO UNUSUAL PHOTOGRAPHS FROM MEXICO

Editor, AMERICAN ARCHITECT:

I HAVE just returned from Mexico where I spent several days in a little mountain village about eighty miles from Mexico City, called Taxco, which is by far the most charming and interesting in the republic. The houses differ from those in other sections of Mexico inasmuch as they all have red tile roofs and are of white stucco. You feel that you are really in Spain instead of Mexico. The house I stayed in was one of the most attractive there and had a rather unusual fountain in the patio. I am enclosing a photograph of it.

When the Borda Palace was being built in the seventeenth century, a man fell off the roof and an outline of his body was shown on the rear wall of the building where the accident took place. It is made with little chips of stone pressed into the mortar. A friend of mine showed it to me and, as it was up on the wall about 30', it was necessary for me to climb up on an adjoining building quite a little way off to take a telescopic photograph, which I am enclosing. The mortar joints between the stone work are all rather large and they pressed small fragments of stone into this mortar in order to keep it from shrinking and falling out.—Atlee B. Ayres, F. A. I. A., San Antonio, Texas.



• FACTS ABOUT ATTACHING MARBLE

NOTE: A California architect asked the editors of AMERICAN ARCHITECT for information concerning the use of marble for a mausoleum. The inquiry was referred to Romer Shawhan, architect.

QUESTION 1. Cella of mausoleum, concrete; marble ashlar facing figured 2½" from rough concrete; height of courses, 2'-0". All concrete walls built dry before applying marble 2" thick slabs. What kind of anchoring, if any, should be set in 10" reinforced concrete cella walls?

(a) Anchors should be used by all means, if for no other reason than your earthquake hazard.

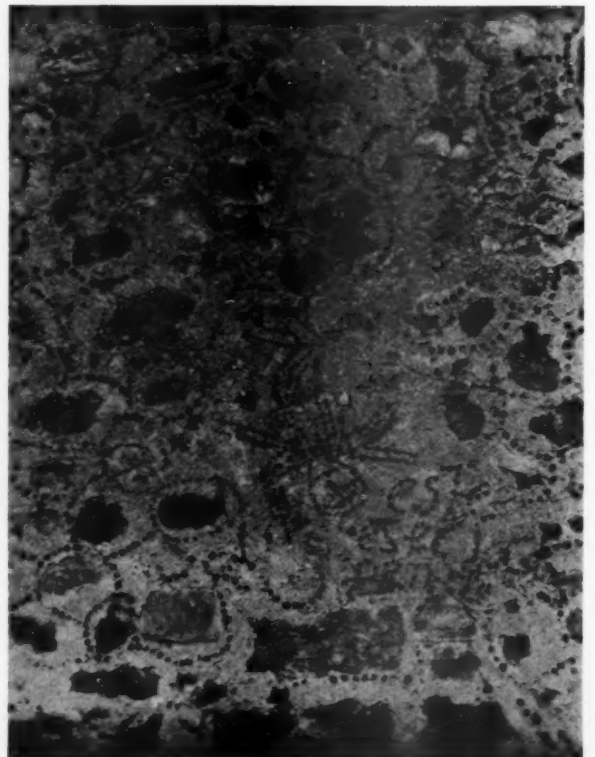
(b) Anchors should be of hard copper, brass or aluminum and not less than 9 or 10 gauge wire.

(c) All dowels should be of brass, threaded and not less than 1½" long by ¼" in diameter, set with equal penetration into each section.

(d) State number of anchors to each piece of marble (not less than 2) and more as required.

(e) Anchors to be securely wedged in an approved manner into holes drilled in the slabs. The other end of the anchors shall be looped and extended into holes cut into the structural backing which shall be filled with plaster of Paris. The marble contractor to do all this cutting of holes, etc.

(f) All dowels shall be set in non-staining cement.





*Department of Commerce
Building, Washington, D. C.,
York and Sawyer, Architects.*

6 acres OF LUDOWICI TILE on *one* roof

The new Department of Commerce Building is the largest unit in the group of Government buildings planned for "The Triangle" in Washington. • The roof is covered with Ludowici Tile. • On the pitched surfaces 1700 squares—about 4 acres—340,000 pieces of Tapered Mission pattern in reds, browns and tans. • On the flat surfaces 900 squares—about 2 acres—225,000 6" x 9" x 1" Tile Slabs. • For buildings of every type and style of architecture—whether large or small—Ludowici Roofing Tile and Ludowici Tile Slabs may be had in suitable patterns, textures and colors. • See our catalog in Sweet's.

LUDOWICI TILE Made by LUDOWICI-CELADON COMPANY
NEW YORK: 565 FIFTH AVE. • CHICAGO: 104 S. MICHIGAN AVE. • WASHINGTON: 738 FIFTEENTH ST., N. W.

(g) All backs of marble (where there is a possibility of stain from seepage) should be given a uniform coat of shellac.

Question 2. On pitched roof, Greek Doric, re-inforced concrete slab $4\frac{1}{2}$ ", I have $2'' \times 2'-6'' \times 48-6''$ marble tiles to be laid on after concrete is set and dry. Should copper wire or what be imbedded in the concrete slab for anchorage or should mason setter drill holes?

(a) By all means anchor this marble roof securely. Whether tile is laid flat on roof slab or overlapped, stop anchors of a lug type should be imbedded in the concrete slab when the slab is poured. This means an accurate anchor layout (based on marble contractor's shop drawings) showing joints or overlapping shingle positions.

(b) Anchors should be galvanized iron, heavily coated. These to be bent up later at the time marble tiles are laid and locked into holes drilled into the sides, top or lower edge, depending whether you lay the tile edge to edge or shingle them. Ridge and rib pieces can then be inserted in bed of mortar and likewise anchored.

(c) If tiles are to overlap, they should none the less be fully bedded in mortar.

Question 3. Should ridges, cut from solid, be laid between "B" roof tiles (for effect, not weatherproofing, since tarred slab keeps out the rain) tilted of course, parallel to each tile course, or as at "A" and how anchored when lower end is free?

(a) This is answered under question 2.

Question 4. It now occurs to me that since our marble roof is for show only, why not cut the slabs diagonally out of $4'' \times 4'$ blocks and then set them flat on the pitched concrete slab? If set in wet bed of mortar would not frictional adhesion do, in lieu of anchors or wires?

(a) The cost of cutting tile diagonally out of a $4''$ piece of marble would probably be out of all proportion and tile would have to be anchored anyway. If the tile were on a mortar bed with no anchoring, the whole roof might shear off from the under slab in case of an earthquake or a nearby explosion.

* * *

Incidentally, or rather not so incidentally, the marble you select is of great importance. Perhaps you might care to let me know what you have in mind regarding interior and exterior marble and I will be glad to send suggestions for alternates. There is much to be said on the adaptability, soundness, availability, porosity, etc. and I shall be glad to send on my recommendations.

There is no cost or obligation to the architect or his client.

Romer Shawhan, R.A.

• A COMPLAINT ABOUT PORCELAIN FAUCET KNOBS

Editor, AMERICAN ARCHITECT:

ARCHITECTS should not specify porcelain faucet knobs as they sometimes break in the hand and cause serious wounds. Mrs. Onderdonk's hand was hurt in such a manner, a tendon and a nerve being severed; at the first operation a piece of porcelain one inch long was found in the wound. Since this occurred I have heard from different plumbers reports of similar accidents. A colleague told me of a lady in California whose hand was

cut so badly by a breaking porcelain faucet while in the bathtub that she almost bled to death, nobody being in the house whom she could call for help.—*Francis S. Onderdonk, Professor, College of Architecture, University of Michigan, Ann Arbor, Michigan.*

• LANDSCAPE ARCHITECTS WANT GOVERNMENT OUT OF ARCHITECTURAL BUSINESS

Editor, AMERICAN ARCHITECT:

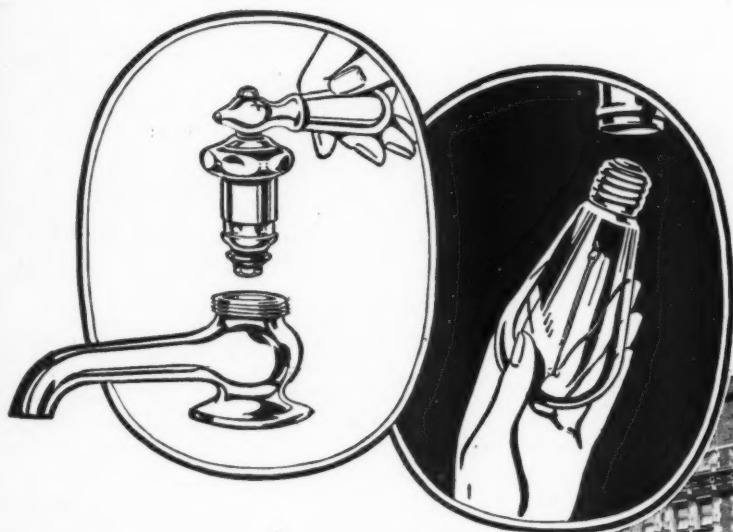
THE landscape architects want to join in our public works campaign, and do not feel that they are included among "architects and engineers." I'm personally strong for getting them involved in Washington public work and the settings of public buildings generally, just as we are trying to get public buildings for the architects. Such work is now handled by government bureaus. Public work should be produced by the ablest men in the professions.—*Horace W. Peaslee, A. I. A., Washington, D. C.*

Mr. Peaslee enclosed the following extract from a letter written to him by Bremer W. Pond, Secretary of American Society of Landscape Architects:

"In regard to the attitude of the architects, generally, towards the building activity of the government, under the Treasury Department, I received the other day a copy of a petition gotten up by the "T Square Club of Philadelphia" along just these lines. I noticed, with regret, that the term "landscape architects" is left out of the petition and the matter was called to the attention of Mr. Albert R. Ware, Secretary of the club, by one of their members who was also a member of the American Society of Landscape Architects. Mr. Ware assured him that there was no malice in the omission, and that the club has merely followed the lead of the *AMERICAN ARCHITECT* magazine and prepared the petition in accordance with the form suggested by them.

"I am not sure whether you would be interested or would care to be involved in a matter of this sort, but I believe that every sort of cooperation is desirable in a matter of this character and scope, and if there is anything that you could do to suggest to the *AMERICAN ARCHITECT* that the names of other professional organizations be included in this petition, I believe that the other societies would be most appreciative of the gesture as I know the American Society of Landscape Architects would be."

EDITOR'S NOTE: Omission of the term "landscape architects" from the suggested form of petition printed in our May 1931 issue was entirely unintentional. The intention of the editors was to suggest a practical means of getting the government out of the architectural business, believing that there is altogether too much government competition with private businesses. Certainly the government has no more reason to compete with landscape architects than they have for competing with architects or engineers, and landscape architects should be employed on public work to the fullest extent possible. This would naturally result if the Office of the Supervising Architect and other government construction bureaus were reorganized along sound, logical lines that would increase the beauty of our cities and the prosperity of our citizens.



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"For a number of years we have been gradually replacing the brass in our building with Chicago Faucets. Consequently, our faucet maintenance has been cut to less than half, and when one of your faucets is installed we have that grand feeling of all-time security.

"We heartily recommend a trial of Chicago Faucets in the kitchen of the average hotel or club, and if the engineer is not satisfied with this test, then no other faucet could prove satisfactory. Such a test would prove, beyond a doubt, that Chicago Faucets cannot be equalled."

(Signed) C. H. ADAMS,
Chief Engineer,
Kansas City Athletic Club,
Kansas City, Mo.

In any building, new or old, costly repairs and replacements can be avoided by using Chicago Faucets. They are made with a standardized, removable unit that is renewed as easily as changing a light bulb, at the cost of a few cents. For further information, write

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Two modest families, a few pigs
and a calf or two live at the

...Manoir de CANAPVILLE in Normandy



By SAMUEL CHAMBERLAIN, Sketches by the Author

ONE learns, after a while, to be astonished at nothing in Normandy. So inexhaustibly rich it is in treasures of domestic architecture, so dotted are its remote reaches with mossy manors, hidden chateaux and village streets of timbered cottages, that the impressionable traveler becomes pleasantly dazed, and not at all surprised by some new revelation of its architectural richness.

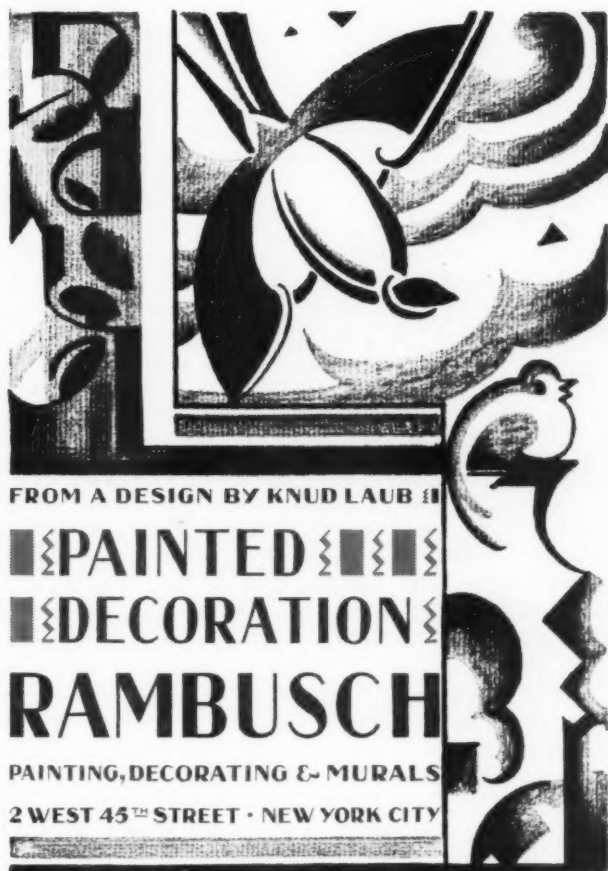
However, a gasp of incredulity can be guaranteed to even the most blasé visitor, if he will walk, motor or bicycle up the ten kilometer stretch of road which leads between Pont-l'Évêque and the sporty Deauville's shoddy step-sister, Trouville. Half way along the road is a one street hamlet called Canapville, distinguished by one of the most flawless and violently picturesque manor houses in France. The musing etcher Griggs could conceive of nothing more soul-satisfying, more varied in texture and tone, more serenely grown into the earth, and out of it, than this time-softened relic of the 14th Century.

By the merest chance it has escaped the meddlesome hand of the restorer. Despite its proximity to the fashionable seashore, it has not been converted into a

button king's villa. Hundreds of long-hooded motors pass by it daily in the summer season, yet it has not suffered transformation into a wayside "auberge," with checkered table cloths and supercilious head waiters. Instead it is inhabited by two modest families, a few pigs and a calf or two. Its baronial halls have been partitioned into shabby living quarters. Its floors sag and creak. Five centuries of Normandy drizzle and sunshine have bestowed an ancient patine upon its multi-gabled exterior. Its roof ripples with mossy red tiles; its timbers are bleached a silvery grey. The few fragments of stonework are seasoned a rich orange, and the bricks on the chimney have attained a deep, wind-bitten tomato color. A few remnants of carved ornament remain on the timbers. There is a crude head of a wistful ecclesiastic, which attests to the fact that the manor was once the property of the ancient Bishop of Lisieux.

I asked a red-faced woman, who was standing in the doorway of the manoir, for permission to come inside the enclosure and make a sketch.

"Entrez donc, Monsieur," she grinned at me. "You are not the first one."
(Continued on page 70)



FROM A DESIGN BY KNUD LAUB II

PAINTED

DECORATION

RAMBUSCH

PAINTING, DECORATING & MURALS

2 WEST 45TH STREET • NEW YORK CITY

I realized that as soon as I found a shady corner in the yard. The walls about me had been used as paint rags by many a wandering artist, and were liberally spotted with daubs from brushes and palette knives. The Manoir de Canapville is, in fact, one of the best known in Normandy, and the present duo of sketches cannot be called pioneering bits of exploration.

I bartered with the good housewife for a bite of lunch, consisting of the classic slab of bread, a quarter of Camembert, a few slices of garlic sausage and a jug of hard cider. She became conversational and told me that many would-be purchasers had angled for the manoir. The great obstacle to consummating a sale, it

appears, is the proximity of the railroad tracks, which pass on infrequent trips almost through the back yard.

"And it is *such* a shame, Monsieur," said the talkative custodian, "For once some Parisians were going to make it all over into a beautiful night club, with champagne and jazz bands. And I would have had a grand place as concierge!"

Thus, by a fortunate miracle, one phase of today's rash and ruthless civilization nullifies another, and leaves proud and unblemished the Manoir de Canapville, a noble reminder of the fact that people knew a great deal about living well, centuries before the advent of electric egg beaters and chromium-plated can openers.

What Modernizing 400 Buildings Taught

(Continued from page 49)

3. Modernized corridors and toilets of upper stories.
4. New or improved plumbing, heating and ventilation and electrical equipment.

Often it is only necessary to simplify the exterior of the first two stories, removing old-fashioned ornamentation. Pedestrians seldom look above the second story.

There is an interesting example on a large scale of what can be done with two lower stories in the Worth Building, on Thirty-fourth street in New York City, Emery Roth, architect. Probably only a small number out of the many thousands who pass this building ever notice that what to all casual appearances is a single, modern merchandising structure, actually is two old buildings of dissimilar type above the second story.

New use of materials of building ornamentation, such as varicolored modern glass, marble, granite, bronze and the new white metals may emphasize the transformation of the building exterior. Modern doors, either revolving or swinging type, should be installed, and the vestibule attractively illuminated.

Elevator lobbies may be brightened up with new elevator doors and enclosures, a modern type of plaster ceiling, new wall decoration, and new marble or terrazzo floors. The first run of stairs may often be treated in a more modern way, perhaps with wrought iron railings.

Upper corridors often require quite as much attention as the lobby. Heavy cornices, unsightly transoms, corridor sash with heavy trim, heavy doors and unwieldy outworn hardware, and old, unattractive floors badly cracked are very likely to be encountered. These relics of a past age must be torn out and replaced by new materials of simple design.

In the mechanical treatment there are four things to consider: elevators, plumbing, heating, electric service.

Elevators must be studied as to service and location. The flow of traffic and speed of cars will determine whether or not existing facilities are sufficient to handle peak-hour loads without undue delay. To increase rentable space, it may be necessary to relocate the shafts, and may require additional shafts or new blank of elevators.

To modernize the plumbing, it may be necessary to begin at the basement and put in additional water lines. If old piping is clogged it may be advisable to install new pipe. Lavatories should be modernized. Tile and glass and a bit of color treatment, with modern installations of wash basins, urinals and toilets, will tone up a

building's internals and remove that middleaged look.

Heating plants in moribund buildings will be found an unfailing source of amazement, particularly in the kind and variety of old-fashioned radiators. Some are circular dust-traps, others are wide and rangy, occupying valuable floors space, and the variety of antiquated design is endless. Modern, efficient radiators will undoubtedly be applauded by tenants, especially where they bring quick, Monday morning heat to offices which have previously known nothing but "blue-finger" Mondays.

Coming to electrical equipment, the visible signs of a well-lighted building should be taken care of first. Some old buildings are still struggling along with wall fixtures in offices where work requires more adequate lighting. If wiring is not heavy enough to take care of the load of modern business machines and many fans, it may be necessary to go back to the meter and install heavier wiring. Old buildings will almost certainly be found deficient in convenience outlets.

The building shown at the bottom of page 47 is capable of carrying four additional stories. With an improved plant and higher occupancy, the owner may decide to increase a paying investment when general business conditions are favorable. The architect should always have such possibilities in mind.

In modernizing buildings, it will be noted, there is practically no loss of time such as would result with demolition and complete re-building. The architect and contractors should plan to have everything ready before beginning work, so that there may be no unnecessary delays or vacancies. Old elevators can usually service a building while new equipment is being installed. And in many cases it will be found that alterations can proceed with at least a two-thirds occupancy.

The value of the space often gained by stripping the old piers and moving show windows out to the building line may be judged by the following figures compiled from a recent survey by the National Association of Building Owners and Managers: In buildings of eight stories, store rents produce 35% of the income; twelve stories, 24%; fifteen stories, 18%. Store rents are from two and one-half to four times higher per square foot than office space in the same buildings. Such returns amply justify liberal outlays for attractive, attention-compelling, modern store fronts.

And here is another point that is worth considering.



Toronto Union Station,
Toronto, Ontario,
Canada

●
Ross & Macdonald,
Hugh G. Jones and
John M. Lyle,
Associate Architects

TIMBREL ARCH
CONSTRUCTION

●
AKOUSTOLITH TILE

●
RUMFORD ACOUSTIC
TILE

MAIN waiting room of the Toronto Union Station indicating possibilities in using Guastavino Timbrel Tile ceiling (all masonry) for design and permanency. ¶ If finished in AKOUSTOLITH SOUND ABSORBING STONE, this construction offers possibilities of color and texture in addition to unusual sound absorption and freedom from reverberation.

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40 Court Street, Boston

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Because "eating out" has become an American habit, there is a growing demand for restaurant space. Where new structures have brought a large additional office population to a district, the architect may well consider the rentability of an old building's basement for restaurant purposes. Branch banks may also desire basement space, under ground floor offices, for clerical work and record keeping. In basement alterations there is

usually found inadequate provision for ventilation.

Often it will be found worth while, therefore, to give an old building the most modern facilities for ample air change in basement and in portions of the upper floors as well. For the modern building trend is towards comfort, through plenty of fresh air, as well as improved appearance and greater productive usefulness. All of which makes for all-around efficiency.

This Thing Called Advertising

(Continued from page 41)

You have given a great deal of time and study to the economic problems of location and use of the modern building, but to many people you are still the pencil constructors of shapes that the public must accept on faith as interesting or beautiful. This is especially true among numerous committees who control building funds; so true that engineering construction companies with less to offer in this respect are actually securing building commissions with this argument. Here is a condition which can readily be remedied by advertising.

Despite what many architects may think, the support of such interested bodies as Building and Loan Associations, Real Estate Boards and Building Organizations is no more than passive at best. Advertising to these bodies to convince them that their own best interests lay in the furthering of the aims of the architectural profession could produce some active cooperation where it will do most good.

You have a code of ethics formulated as a protection to both the client and the architect. The publicizing of this code could do more to drive the quacks and shysters from your midst than years of internal effort.

These are but an important few of many suggestions, but note that all of them propose to make architectural services more desirable by placing the profession before the public in its true light—and not as disgruntled ex-clients, suspicious committee members and interested possible competitors have been picturing it. To those who might object to such advertising as unprofitable, it is pointed out that any possible profit from advertising could come only after this primary object has been accomplished. And if there were any other way of effectively accomplishing this aim advertising would not be needed. Forcing the public to accept your services by law can not do it. "A man convinced against his will is of the same opinion still," and you must convince the public of the value of your profession if you expect to gain the general recognition which is your due.

But what about the ethics of advertising? Somehow, I have more respect for the man who offers this objection than the one who fears it might prove unprofitable. He at least has the vision to look beyond the prospect of immediate return. If he objects to any form of publicity as unethical, then his objections are at least consistent. But ethics are inseparably bound with duty. If the profession is to make itself responsible for the architecture of our country, it also undertakes an obligation—that of educating the public to a better appreciation of architectural values and to the practical means of obtaining them. Unpaid and uncontrolled publicity has done little

or nothing to educate the public in this direction.

Every architect knows of the many poor buildings erected by parasites of the profession—plans by contractors, by poorly equipped construction companies whose sole objective is a profit to themselves. Such buildings may be eyesores, destroying the value of surrounding property. They may be faultily constructed, poorly planned to meet economic conditions, or embody many of the inherent faults that the architect is trained from his professional infancy to prevent. In each of these cases there is an owner who pays for the mistake—and who is to blame for his ignorance? Who is at fault when a home builder, who thought he wanted certain things, erects a residence that he regrets the moment it is finished?

At the present moment every architect knows of much building work in prospect, or has on his boards such work in suspense, which is not materializing because of the wave of unreasoning caution that holds the country in its grip. Architects also know that material prices are at the bottom, that construction labor is not only cheaper but of higher calibre than in busy times. The release of such held-up work would be one of the greatest factors in bringing back a normal measure of prosperity. Who would condemn the ethics of an advertising campaign that could bring about the release of much of this work? True, architects would benefit. But it is an axiom of advertising that the public must benefit before the advertiser can prosper, and such advertising would be a public service.

It seems to me that the whole question of advertising has been clouded by too much premature discussion among architects as to the form it might take—much like a church congregation so busily engaged in arguing whether a proposed edifice should be Gothic, Colonial or extremely modern, that it never decides whether it should have a new building at all. Advertising may be as dignified as a passage from the Bible, it may be as interesting as a letter from a close friend, as full of wisdom as a homely Will Rogers editorial. The type of its message and the form are determined by factors as definite as those which would lead an architect to determine the style of architecture for a church. And might I respectfully suggest that such a question could best be answered by those who in the advertising field correspond to the architect in the realm of building—the advertising agency or the advertising counsellor.

Advertising, under such experienced guidance, can be as beneficial to the advertiser as building construction under the guidance of the architect can be to the client.

Three types of modern elevator cars

TO FULLY MEET the needs of architects, Otis produces three distinct types of cars — all-metal, wood-metal and all-wood. Each of these can be quickly executed exactly in accordance with the architect's conceptions. For Otis maintains a staff of car designers and artists, art metal foundries, especially equipped car shops, finishing facilities of all kinds, and experienced field erectors.

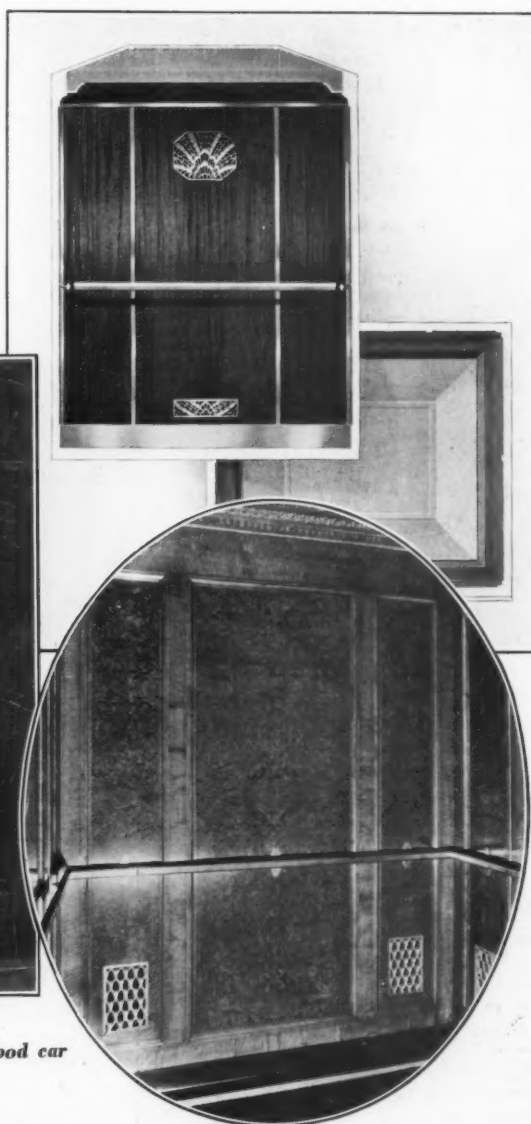
The basic structural design in each of these cars gives rigidity with minimum weight and freedom from creaking. For instance, the wood-metal car is built up of specially processed panels of veneer bonded to several laminations of wood and metal, thus combining the natural beauty of hardwoods with the mechanical advantages of steel.

Architectural details may be carried out in bronze, brass, steel, aluminum and other

metals and finishes. Car and hall operating fixtures, hand rails, kick plates, grilles, and other appliances can be readily matched in design and material.

Therefore, by assuming undivided responsibility, Otis relieves the architect of unnecessary and often annoying details and frees him from restrictions upon creative ability.

This picture shows a wood-metal car



Below is a picture of an all-metal car



And this is an inside view of an all-wood car

OTIS

ELEVATOR COMPANY

339 OFFICES THROUGHOUT THE WORLD

\$5,000 a Week Less to Operate

(Continued from page 39)

conference without leaving their stations. As head sets are provided with long cords, the wearer can walk around while talking and carry out or give directions without interruption. The close contact between production units made possible by this intercommunicating system has played no small part in making it easier and quicker to work out and improve effects, thus cutting overhead.

Decoration of the quarters of the cast and stage hands is unusual in that just as much attention was paid to the decoration of this part of the theatre as was paid to the public portion. The theory of this is that the happier the performers, the better the show. Too, the supply of beautiful girls for stage work is strictly limited and there is considerable competition among producers of the revue type of show for them. It was felt that if the cast were thoroughly happy and contented in their surroundings, they would be less likely to listen to offers from rival producers. In addition to this, training a girl costs time and money, so that it is thoroughly logical to safeguard that investment.

And so, instead of the chorus girls making up at counters or shelves where they would be crowded and in each other's way, each girl is given a separate table with plenty of space. These tables are arranged in units of six, this being the number of girls taken care of by one maid. Instead of costumes being hung on wall hooks and under sheets near where each girl works—and spoiling the appearance of the room—wardrobe closets are provided for every dressing room. The color scheme is floor and ceiling of blue-grey, walls of a lighter grey.

A feature of the chorus girls section of the theatre is the mirror room. This room consists of mirrors from floor to ceiling placed zigzag so that as the girls come from their dressing rooms, they pass through the mirror room and at a glance can check their costumes from all angles as they walk through. Adjoining the mirror room is an assembly room where they can wait for cues. In this room, the walls are orchid, the ceiling a darker orchid and the carpet a greyish purple. The decorative columns are silver, the concealed lighting being a purple fading into a light pink as it approaches the bottom of the columns.

The stage hands and musicians are treated just as

considerately. They are provided with a pleasant club room with adjoining game room and sanitary facilities as fine as those used by the audience. The floor is of linoleum in various shades of grey, walls simulate maple boards and the chairs are a light green color. Each man has a steel locker with a private key—quite a contrast to the usual method of finding a place to drive a nail to hang his coat.

There are forty dressing rooms for principals, which are equipped to take care of 130 principals. These rooms are all decorated in keeping with the rest of the theatre.

To further the morale of the cast and improve the appearance of the lobby, plaster casts of the heads of the girls are used in the lobby. Each cast is labeled with the name of the girl who posed for it. The casts are changed from time to time and replace the usual photographs used in the average theatre lobby.

The result of this care in making those parts of the theatre not in view of the audience just as attractive as the public portions shows a keen knowledge of human reactions. There has been developed a loyalty and esprit de corps which has contributed much to the success of the entertainment provided in this theatre.

THERE are two principal kinds of architect's supervision, according to the Advisory Council of the Boston Building Congress—explanatory and detective. The first means interpretation of ambiguities or misunderstandings, and settling small questions not answered by plans but which are admittedly to be inferred therefrom; reminding of things likely to be overlooked; general oversight of the work and checking of time schedule; superficial appraisal of the quality of materials and labor; approximating value of materials and labor to issue certificates of payment. Detective supervision means scrutiny of everything on the job to make sure there is no substitution of inferior qualities, which implies distrust and should not be necessary if honorable and competent general and sub-contractors and material producers are employed. The Congress therefore concludes that detective supervision or inspection "of responsible honest and competent contractors is unnecessary, and of all other kinds of contractors is practically futile."



Creosote Oil Prevents Decay and Termite Damage

TERMITES

Write for booklet telling how Termites destroy foundation timbers. For permanent prevention, use A & L Timber, Pressure Treated with Pure Creosote Oil.

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TIMBERS

LUMBER
POLES

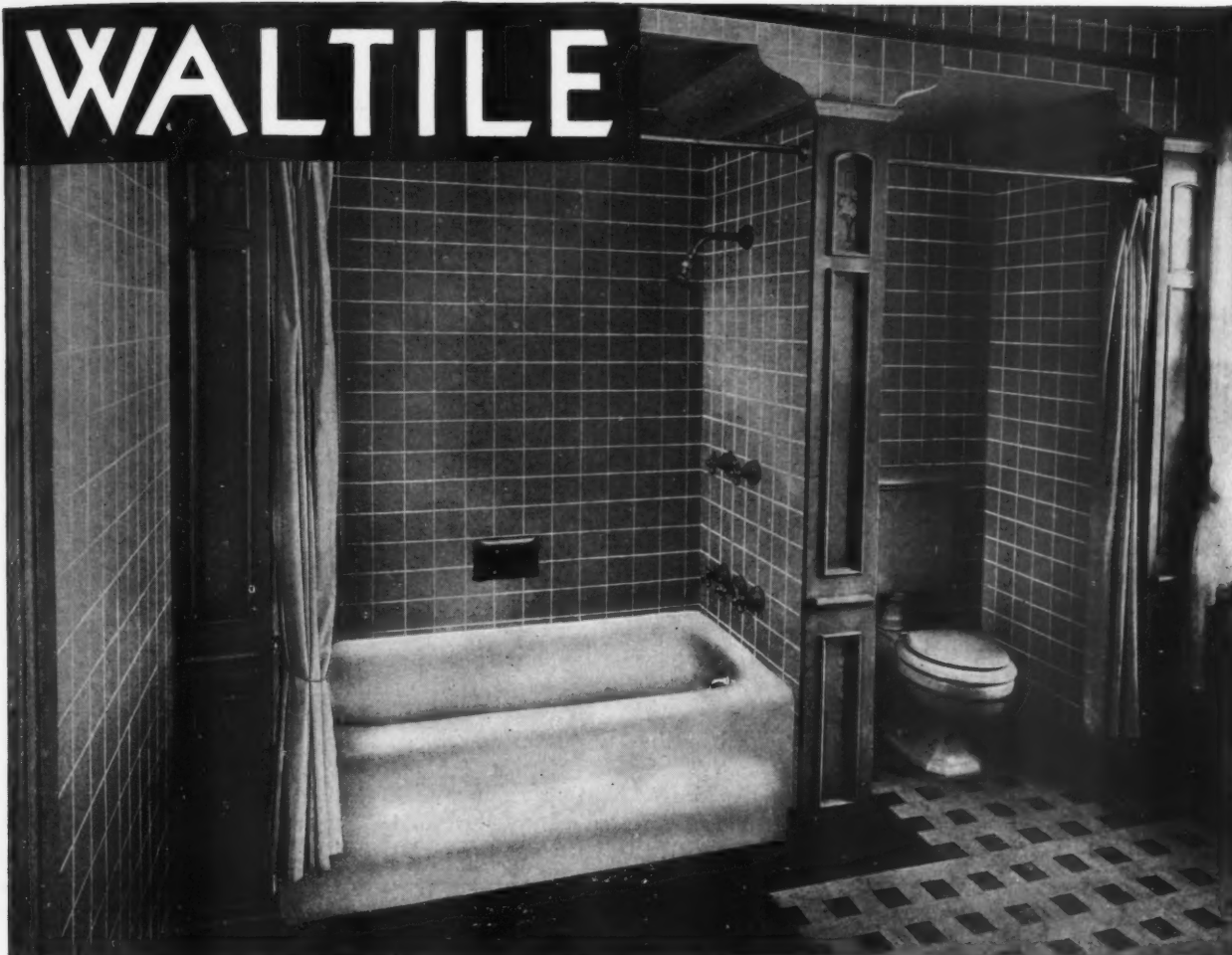
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WALTILE



For the client with 1929 Ideas and a 1932 Income

"AND of course we want tile bathrooms," said the young bride-to-be. But the architect knew that under the restrictions of the prospective groom's purse, neither colored nor white quality ceramic tiles could be considered.

So the architect suggested Ambler Asbestos Waltile and his clients lived happily ever after.

Waltile is the answer to 1932 incomes. It looks, feels and *acts* like real tile yet costs approximately half as much. Waltile is an asbestos-cement compound bonded under tremendous pressure. Its surface is smooth and hard, fadeproof, stainproof, vermin-proof and sanitary. Furnished in white, smoke, black, pink, cream, apple green, and Nankin blue . . . Send today for data sheets and samples for your files.

Keasbey & Mattison
Company
Ambler, Penna.



Waltile in 32" x 48" x 3/16" sheets can be cut to fit any wall surface. In new houses it may be invisibly nailed directly to the studding, saving lath and plaster. For application to old plaster walls, Waltile plastic compound is used. Cap and base moulding to match or contrast with sheets are also furnished.

How to Make the Greenhouse Part of the Ensemble

(Continued from page 25)

problem for the architect is somewhat different. Here is a place for the gathering of human beings as opposed to the greenhouse where the flowers are the actors. Hence it is only natural for the designer to seek some decorative scheme that has esthetic value. The end wall can be built solid, thus presenting a large area which is adaptable to a rich decoration either in tile, mosaic or fresco. The floors and walls should be beautifully designed in harmony with the feature on the end wall.

The lighting for night swimming is another interesting problem. Often, illumination is placed in water-tight compartments under the surface of the water. This gives a weird and altogether stunning effect.

The solarium as part of the swimming pool calls for something cheerful, gay and charming in its appointments. Stationary tables against the glass walls are usually installed in this section for the display of flowers.

The old-fashioned idea that only a man of means can afford a greenhouse is surely passe today. Small glass lean-tos are available for as low as \$1,250. The size of this unit is 7 feet by 13 feet and it is surprising how much plant material can be handled and developed in such a small area.

The typical section which has been developed by the greenhouse manufacturers is 8 feet, 4 inches. These sections come in three stock widths—18 feet, 25 feet and 30 feet. The 18 foot width is the most popular for the reason that its size fits the average requirement. The

25 foot width, however, works out to be the most economical.

The greenhouse can really be made part of the residence, as it were, if the owner is using it for pleasure and not seriously attempting to develop prize-winning flowers. But when one is out to produce prize-winners, then serious thought must be given to constant temperature, potting and expert care of the plants.

A greenhouse is often divided into different compartments by means of glass partitions, so that different temperatures can be maintained for the various types of flowers and plants. The tropical plants, for example, require a much warmer heat than plants that are common to northern climates.

The architect in planning a greenhouse layout, especially for a large estate, must look a little into the future and keep in mind the possibility of the future development of the layout in his original plans. When this is not taken into consideration by the designer, the chances are ten to one that if more greenhouses are added later on, the completed scheme will be a compromise. One can see many such examples along the highways.

I know of a case in Elkins Park, Pennsylvania, where a certain owner began by building a small greenhouse for cultivating orchids. The start was quite modest, but before many months had passed, this particular individual got the "hobby" and today he has under cultivation some \$500,000 worth of orchids. Of course, this

TRUSCON The Most Complete Line

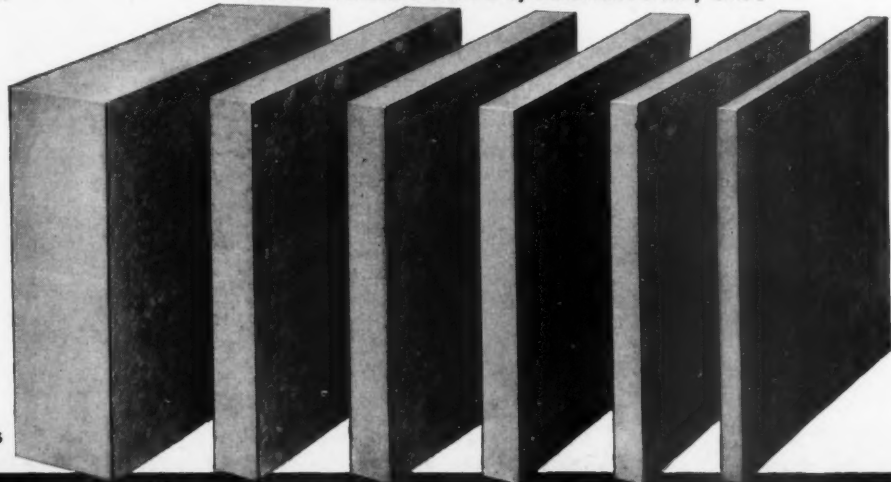
Ferroclad Structural Panels



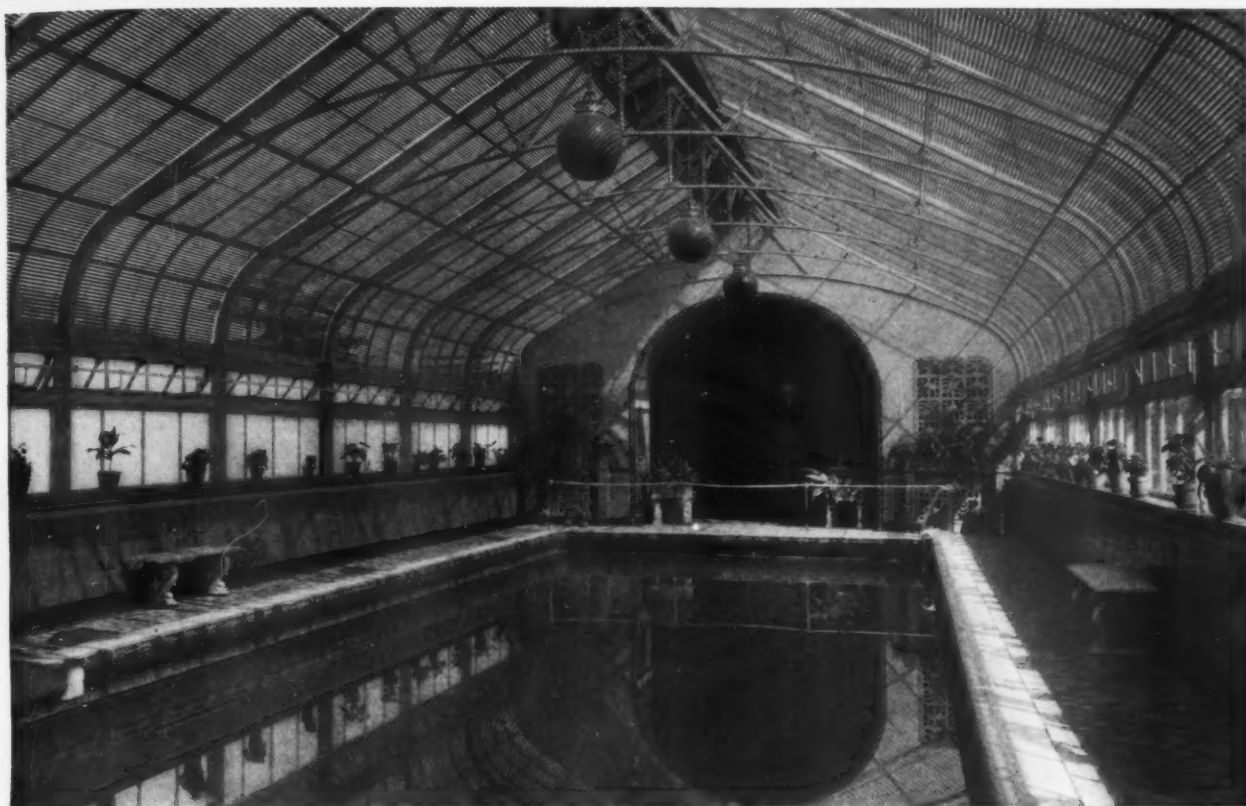
Inquiries concerning the development of Ferroclad for your individual requirements are solicited. Write for samples and data.

A product of great utility that combines the advantages of commercial insulation with the strength, firesafety, weather-proofness and permanence of steel. Ideal for suspended ceilings, sidewalls, spandrels, door panels, radiator covers, ducts, dryers, small buildings and a multitude of other uses. The manufacturing process permits the utilization of steel in any finish or non-ferrous metals as outer surfaces and insulation of any thickness or other composition as the core.

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any thickness desired



Glassed-over pool at Detroit, Michigan. Richard H. Marr, Architect

Speaking Again of Swimming Pool Glass-Overs

Wonder if you are not overlooking these all year around advantages of having pools glassed over? In summer it means an agreeable seclusion. Insures clean water, free from dust, scum or floating leaves. With the ample side and roof ventilation we provide, an abundant sweep of air is secured, keeping the temperature agreeable. The roofs can be



easily shaded against too much sun glare. In winter you have a perpetual piece of summer-time under conditions ideal. Water can be filtered and be pure as drinking water. G. B. Smith of Larchmont, N. Y., pumps filtered sea water into his.

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For Four Generations Builders of Greenhouses



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James Gamble Rogers, Architect; Marc Eidlitz & Son, Builders

ANOTHER FINE BUILDING GAINS ADDED DISTINCTION FROM

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BUILDERS' HARDWARE

THE ARCHITECTURE of today, to a greater extent than ever before, demands conformity with style and harmony in design down to the smallest details. But Builders' Hardware is no minor detail. It is a major element that can go far to make or mar the interior beauty of any building. For this reason America's leading architects are writing "Yale" into their specifications. They know that in beauty and variety of design, as well as in excellence of workmanship and finish, Yale Builders' Hardware will do full credit to themselves and to their work.

Your correspondence is invited



THE YALE & TOWNE MFG. CO.
STAMFORD, CONN., U. S. A.

gigantic increase in his flowers required a corresponding increase in greenhouse facilities. This is the sort of thing that happens right along.

Greenhouses can be tied into the house architecturally in various ways. Much depends, of course, upon the type of house, the style, the exposures and other considerations. A common method of handling the small greenhouse unit attached directly to the residence is by means of building out a small gable a few feet from the wall of the house large enough to take the end gable of the greenhouse. This usually looks very well, as it makes a pleasant transition between the solid wall of the building and the all-glass wing.

Greenhouses which are built against a wall of a house without any intermediate link usually have a detached or foreign appearance. However, it is also possible, I am sure, to treat this solution successfully from an architectural angle.

Sometimes it is desirable to have the greenhouse semi-detached, as it were, from the house and yet have direct access under cover to the residence. This problem is often solved quite successfully by the introduction of a low glass covered passageway between the greenhouse and main structure. When this connecting link and the greenhouse form an angle of 90 degrees, the resulting composition is usually quite charming.

The heating of greenhouses is a problem which must be given careful consideration by those who are experienced along these lines. It is a different type of heating problem as compared with the average residence heating job. The thing to remember is that in a residence the heat is needed mostly during the day, while in a glass house the heat is needed mostly at night.

It is usually unsatisfactory to have the heating plant in the house also take care of the greenhouse requirements. The best results are usually obtained by the installation of a special heating unit for the greenhouse. This heating plant is usually placed in the basement of the potting room and new units can be added if additional greenhouse units are built. Of course there are various other places for the location of the heating plant. Thermostatic control has been developed to such a high degree nowadays that the average owner or gardener has little to worry about from the heating angle if his heater is efficient and properly designed and laid out.

COMPETITION in soap sculpture for the Procter & Gamble prizes has been announced, closing May 1, 1932. There will be an architectural award of \$50 for a single design—such as a doorway—best suited for use in a building in the contemporary style. There will also be an award for a motor car radiator cap. These are in addition to the general awards. Full information may be secured from the National Soap Sculpture Committee, 80 East 11th Street, New York.

COMPETITION for the James Harrison Steedman Memorial Fellowship in Architecture has been announced as ending January 21, 1932. It gives a \$1,500 award to assist architectural graduates to benefit by a year of travel and study of architecture in foreign countries. Full information may be secured by addressing the head of the School of Architecture, Washington University, St. Louis, Mo.

CAUTION

In times like these when an effort is being made on every hand to lower building costs, columns are sometimes substituted which normally would never be accepted.

There may be parts of a building which can be cheapened with no apparent ill effect, but columns certainly are not one of them. Columns are always out in front where the eye sees them first, and they must be authentic in detail and free from defects in material or workmanship.

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Moreover, our costs of material and manufacture have been reduced, so Hartmann-Sanders' columns, as good as ever, are so low that there is no point in buying any other. The small saving, if any, surely isn't worth the risk.

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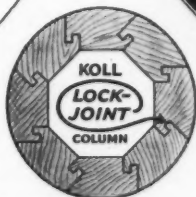
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ENTRANCES

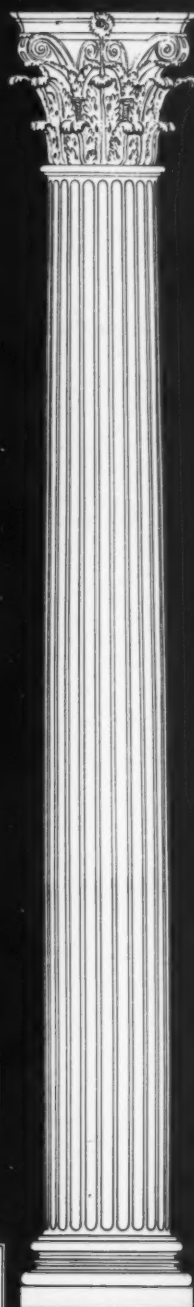
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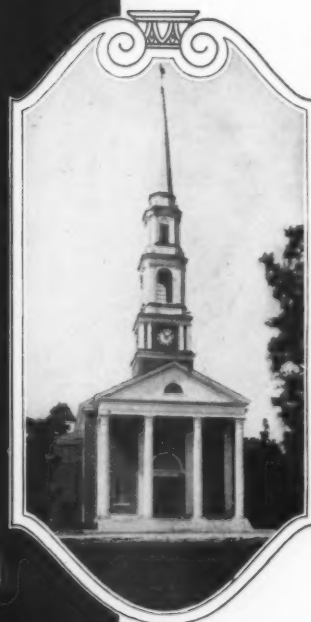


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There is practically no effect that cannot be obtained through the use of Hauserman Movable Steel Partitions and Wainscoting, regardless of the condition of the space to be modernized.

Modernization is the key-note to architectural profits in 1932. The intense competition created by the over-supply of new commercial office space has placed the older building in a position where it must take steps to hold its tenants.

This step is modernization. It is natural that they should look to the architect for the counsel and assistance which will make this modernization possible.

The E. F. Hauserman Company, for the past two years, has anticipated the inevitable decrease in new construction and has prepared for this period through the development of a modernization program for older buildings, in-so-far as its products are employed in a modernization program.

Our engineers can be of real assistance to you in working out the problems encountered in this work, and we want you to feel free to call upon this company at any time, entirely without obligation on your part.

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289 . . . A complete manual of frame erection for residences. Issued by Weyerhaeuser Sales Co., First National Bank Bldg., St. Paul, Minn. Includes in concise form accepted practices of good construction. Illustrated with detail drawings showing all parts of a wooden frame. Contains engineering data. Describes Weyerhaeuser 4 square guide line framing lumber.

RENDERING IN DRAWING INK

290 . . . Illustrated folder covering the fundamentals of rendering with drawing ink condensed into six plates prepared by Arthur L. Guptill. Starts with simple brush and pen stroke fundamentals and their application in pen and wash. Also discusses how to render with colored drawing inks. Issued by Chas. M. Higgins & Co., 271 Ninth Street, Brooklyn, N. Y.

BUILDING INSULATION

291 . . . Specifications and data for use of Temlok—an insulating board—for general application in building construction. Issued by Armstrong Cork & Insulation Co., Lancaster, Pa. Contains typical construction details showing its use. A. I. A. file 37 b 4.

GLASS ENCLOSED SWIMMING POOLS OR PLUNGES

292 . . . Contains pictures and descriptions of typical installations and suggestions as to how the architect may make use of standard greenhouse sections for the envelope.

STILL ANOTHER MAGIC CHEF

293 . . . Booklet of the American Stove Co., New York, illustrating and describing series 600, which is a large full-sized stove 43 in. high, 47¼ in. wide and 28½ in. deep. Has some pictures of this company's stoves in full colors.

GAS BURNING INCINERATOR

294 . . . Folder issued by the Butler Manufacturing Co., Kansas City, Mo., illustrating and describing this company's gas burning incinerator for quickly drying and burning wet garbage.

CHURCH LIGHTING FIXTURES

295 . . . Booklet illustrating various types of church lighting fixtures made by Rambusch, 2 West 45th Street, New York. Gives dimensions and capacity.

FOR JANUARY 1932

ACOUSTICAL CORRECTION

296 . . . How correct acoustical values can be provided for in every room in which good hearing conditions are necessary. Issued by Johns-Manville, 292 Madison Ave., New York. Explains what causes acoustical troubles. Tells how poor acoustics were corrected in several auditoriums. Gives pictures of typical installations.

TERMITES

297 . . . Illustrated booklet issued by Ayer & Lord Tie Co., Chicago, explaining what termites are, how they damage buildings, and what to do to prevent such damage.

NATCO VITRITILE

298 . . . Bulletin 230 of the National Fireproofing Corp., Pittsburgh, Pa. Tells classification and colors in which this hollow tile comes, pictures of many installations, illustrations of shapes of tile, specifications for use and record of tests made.

BENEDICT VIBRASTONE

299 . . . Booklet issued by the Benedict Stone Products Co., Chicago, describing this cast stone and containing illustrations in natural colors of the surfaces that it comes in. A. I. A. file 8 c.

SPECIFICATIONS FOR ARCHITECTURAL FINISHES APPLIED TO ALUMI- NUM ALLOY SAND CASTINGS

300 . . . Booklet issued by the Aluminum Company of America, Pittsburgh, Pa. Describes various finishes of aluminum and tells how to specify them. A. I. A. file 15 j.

CHENEY INTERLOCKING WALL FLASHING

301 . . . Illustrated booklet issued by the Cheney Company, Winchester, Mass., explaining how this flashing prevents seepage, giving progress pictures of installation and details of construction, specifications for use, and pictures of buildings where used. A. I. A. 12 h 1.

SPECIFICATIONS FOR LAYING BLOXONEND FLOORING

302 . . . Supplement No. 1 to Standard Specifications for this material used for gymnasium floors, etc., and issued by the Carter Bloxonend Flooring Co., Kansas City, Mo.

SOME HITHER AND YONS

303 . . . A very human booklet issued by the Burnham Boiler Corp., Irvington, N. Y., written as the result of an investigation among architects as to what items concerning heating they most needed sales assistance on. Illustrated in colors. Well worth putting in the hands of a client.

RESIDENTIAL GARAGE DOOR OPENER

304 . . . Illustrated booklet of the Barber-Colman Co., Rockford, Ill., explaining this company's devices for opening garage doors without driver's getting out of the car.

AMERICAN ENAMELED BRICK

305 . . . Booklet with illustrations of face brick in colors and drawings showing shapes of units made by the American Enameled Brick Corp., 420 Lexington Ave., New York.

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January, 1932

Please see that I receive the following catalogs reviewed in this issue.
Numbers

Also see that I receive further information about the new products described in this month's "New Materials and Equipment." (This department appears on pages immediately following this insert).

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These NEW Catalogs may be obtained through AMERICAN ARCHITECT

KAWNEER STORE FRONTS, WINDOWS, DOORS, ARCHITECTURAL BRONZE

306 . . . Catalog "N" of the Kawneer Co., Niles, Mich., consisting of loose leaf sheets illustrating and describing various metal work installed by this company, detail sections, etc. A. I. A. file 26 b 1.

WOOD SASH AND FRAMES: DESIGNS AND DETAILS

307 . . . A set of five portfolios pertaining to construction principles, residences and apartments, schools and hospitals, office and monumental buildings, and industrial buildings. Issued by the West Coast Lumbermen's Association, 364 Stuart Building, Seattle, Wash. Mostly detail drawings with pencil sketches. A. I. A. file 19 e 1.

BLOW YEAR 'ROUND COMFORT INTO YOUR HOME

308 . . . Illustrated booklet of Johns-Manville Co., New York, describing advantages of insulation and the use of Rock Wool, which is a fireproof insulation blown into walls and partitions and as easy to use in remodeling as in new work.

WESTERN ELECTRIC SYSTEMS FOR PUBLIC ADDRESS, MUSIC REPRODUCING, ANNOUNCING AND PROGRAM DISTRIBUTION

309 . . . Manual of data and specifications for architects, engineers and contractors with a new supplement. Illustrations of equipment diagrams of installations, and various other data. A. I. A. file 31 i 7.

DUNHAM TYPE L CONCEALED RADIATORS

310 . . . Booklet issued by C. A. Dunham Co., Chicago, which discusses the concealed radiator principle, selection

and application of radiators, details of installations of various types, and similar data. A. I. A. file 30 c 4.

MODERN DOMESTIC SERVICE EQUIPMENT

311 . . . A manual on the use of monel metal in kitchens, pantries, and laundries. Issued by the International Nickel Co., 67 Wall Street, New York. Many pictures of installations. Properties of monel metal, its forms and finishes. Specification data. A. I. A. file 35 c 1.

SEEMINGLY SEAMLESS

312 . . . Illustrations and description of a carpet which when laid appears to have no seams. Issued by Collins & Aikman Corp., 25 Madison Ave., New York.

CARE AND MAINTENANCE OF ARCHITECTURAL ALUMINUM AND OTHER DECORATIVE METALS

313 . . . Small folder issued by the Aluminum Company of America on care and maintenance of architectural aluminum and other decorative metals.

FACTS FOR ARCHITECTS ABOUT FLAIMPURF WOOD

314 . . . Questions and answers discussing this fireproof wood made by Henry Klein & Co., 40 West 23rd Street, New York, for use in partitions, bank equipment, etc. A. I. A. file 19 e 62.

SCALE MODELS

315 . . . Booklet of the H. E. Boucher Mfg. Co., 150 Lafayette St., New York, illustrating models of buildings made by this company, and also models of other things.

INSULATION

316 . . . Small folders issued by the Wool-Fibre Board Corp., Brunswick, Me.,

illustrating and describing this company's board insulation.

ARMSTRONG TRAP MAGAZINE

317 . . . First issue of a house organ issued by the Armstrong Machine Works, Three Rivers, Mich., devoted to proper application of traps to specific classes of equipment such as unit heaters, storage type hot water heaters, etc.

VAULT PROTECTION

318 . . . Booklet illustrating and describing the Bankers Electric Vault alarm system of the Bankers Electric Protective Association, 60 State Street, Boston.

ARCHITECTURAL AND ORNAMENTAL MONEL METAL

319 . . . General information for the fabricator about monel metal, published by the International Nickel Co., 67 Wall Street, New York. Explains standard forms, properties and finishes, hand forging, castings, and similar data.

BRYAN BURNERS

320 . . . Booklet illustrating and describing oil, gas, and combination oil and gas burners made by the Bryan Steam Corp., Peru, Ind. Contains many detail drawings showing construction.

TRANE MODERN HEATING

321 . . . Concealed heating, unit heaters, blast heating and drying, heating specialties and pumps made by the Trane Company, La Crosse, Wis., are described in this collection of data which has many illustrations of exteriors and interiors, some in color. A. I. A. file 30 c 41.

SASH OPERATING APPARATUS FOR VENTILATION

322 . . . Booklet illustrated by pictures and detail drawings which "indicate the way our designers secure positive results, without needless display of the apparatus where it would mar the beauty of the architect's conception." Various types of structure discussed. Issued by Lord & Burnham Co., Irvington, N. Y.

CHENEY PIPE COVERING PROTECTOR

323 . . . Illustrated folder of the Cheney Company, Winchester, Mass., showing use and giving architect's specifications for this company's pipe covering protector. A. I. A. file 37 b 6.

USEFUL INFORMATION ABOUT LEAD

324 . . . Illustrated booklet bound in cloth issued by the Lead Industries Association, 420 Lexington Ave., New York. Gives a comprehensive account of lead's characteristics, method of mining, lead alloys, lead paints, lead plumbing, etc.

AMERICAN ARCHITECT

BUSINESS REPLY POST CARD
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New York, N. Y.

FIRST CLASS
PERMIT NO. 5
(Sec. 384½ PL & R)
NEW YORK, N. Y.

NEW MATERIALS & EQUIPMENT

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



New Yale Concealed Door Closer

16M A door closer that is almost invisible when the door is closed has been placed on the market by the Yale & Towne Mfg. Co., Stamford, Conn. When open, there is only a slender arm visible. The closer is mortised into the top rail of the door like a lock, and is particularly adapted to metal doors which would be prepared at the factory to receive the closer. It can be applied to wood doors over $1\frac{3}{4}$ " thick, a side plate being required for wood doors under 2" thick. The door can be opened flat against the wall when this style closer is used.

Remote Radio Control for Residences

17M The Stromberg-Carlson Telephone Manufacturing Co., Rochester, N. Y., is marketing remote control of both radio and phonograph records for residences. By this remote control either radio or phonograph may be started or stopped, volume controlled, any one of four loud speakers switched to "on" or "off," tuned automatically to eight favorite stations, and similar features. Control boxes are $10'' \times 3\frac{3}{4}'' \times 2\frac{1}{2}''$.

Automatic Radiator Valves

18M The Fulton Sylphon Co., Knoxville, Tenn., has introduced two new types of radiator control. One of these is for concealed radiation and may be entirely enclosed within the radiator cabinet, yet permits of accurate room temperature regulation. The other type is for exposed radiation.

Portable Electric Steam Radiator

19M The Nocare Electric Radiator Corp., 1 East 42nd Street, New York, is marketing a portable electric steam radiator, thermostatically controlled. The apparatus consists of an electric unit attached to a radiator, electricity being used only part of the time to keep the water at the proper temperature.

New Type Steel Floor Construction

20M The Truscon Steel Co., Youngstown, Ohio, has placed on the market "Truscon Presto Steel Floors," a new type of flooring to be used over Truscon "O-T" open truss steel joints. It consists of a solid steel decking with extrusions for the concrete key and with one inch ribs to add stiffness. These ribs are stated to make the flooring sufficiently strong to carry the weight of any ordinary depth of concrete required for the slab as well as any ordinary construction loads to which the centering may be subjected during erection of the building. The units are laid like tongue and grooved boards and are easily cut in the field if openings are required. It is said the positive bond between unit and concrete reduces the possibility of shrinkage cracks in the top surface and practically eliminates the loss of concrete by drippage.

Heating Unit Combining Steam and Electricity

21M An electric and a steam heating element that can be operated in conjunction with each other or separately, as desired, has been announced by the Air-Way Electric Appliance Corp., Toledo, Ohio. The main purpose of the combination is to furnish heat electrically when the central heating plant is not in operation. When used together they give greater heat for emergencies. The motor fans may be operated independently of the heating elements for cooling and air circulation.

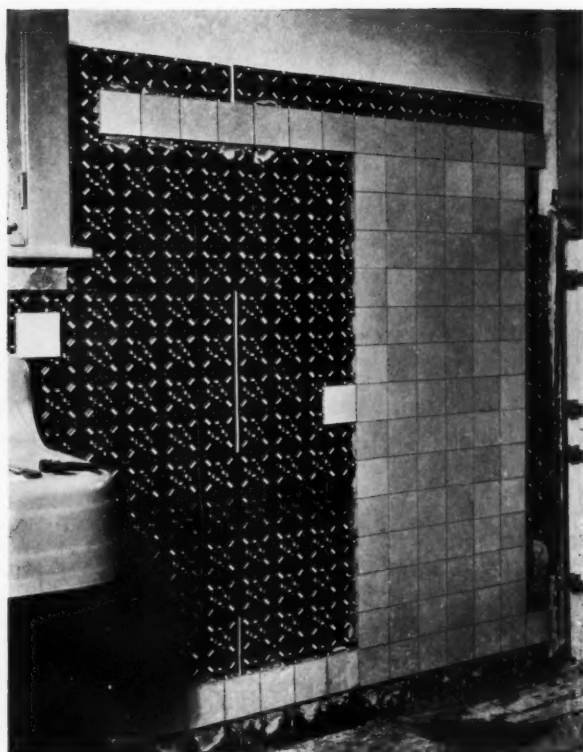
Combination Shower and Dressing Room Unit

22M The Bradley Washfountain Co., 2203 Michigan Street, Milwaukee, Wis., has announced a combination "5-in-a-group" shower with 10 individual dressing rooms, all in one self-contained circular unit. It requires only the three plumbing connections of an ordinary single stall shower—two supplies and one drain. For use in schools, clubs, gymnasiums, etc.

Acid Proof Cement

23M The United States Stoneware Co., Akron, Ohio, has placed on the market an acid proof cement called "Pre-Mixt," which is supplied in ready mixed, powder form. It is used like Portland cement and sets fast. It is claimed to withstand all acid and neutral solutions, hot or cold, with the exception of hydrofluoric acid.

To Get More Information, Use Post Card on "Catalog Insert" Preceding



New Method of Tile Setting

24M A new method of tile setting has been developed by the Mortenson Engineering Co., Builders Building, Chicago. It consists of metal lath which is nailed directly to the wall or floor. From the lath project grippers which afford a frictional grip to the clay tile. This tile is simply snapped on to the metal lath foundations. The "Snapon" method is for use in remodeling work as well as in new work, and is stated to be cheaper and faster in applying than the usual method of tile setting.

Blue Prints and Blue Line Prints Made by New Method

25M The C. F. Pease Company, 813 North Franklin Street, Chicago, has developed a new method of making blue prints and blue line prints by the "Kyano" process. It is designed to operate on Pease blue printing machines, particularly the newer type Pease "Peerless" models 30 and 25. It can also be adopted to older type "Peerless" models 20 and 10. It is claimed to prevent all running of blues into whites, making possible printing of blue prints and blue line prints at the same time, and uses a fast printing paper.

Automatic Control for Pump Equipment

26M A specially designed line of automatic controllers for a. c. and d. c. circuits and ratings of any desired horsepower has been placed on the market by the Monitor Controller Co., Baltimore, Md. The feature of these controllers is stated to be their flexibility of design. They are custom built from standard Monitor parts to meet architect's and engineer's requirements for the particular installation for which they are specified.

New Radiator Valve

27M The Commonwealth Brass Corp., Detroit, has introduced the Compak radiator valve for vapor and vacuum heating. It is designed to harmonize with modern trends in design.

New Air Conditioning Unit

28M The American Blower Corp., Detroit, Mich., has placed on the market a new air conditioning unit that supplies warm, properly humidified air in winter and cooled air in summer.

New Type Industrial Door

29M A new type of industrial door featuring electric welded construction is being manufactured by the William Bayley Company, Springfield, Ohio. The doors are all of steel construction and are made in swinging, folding and sliding types in sizes to fit practically any commercial or industrial requirements.

Addition to Magic Chef Line

30M The Doric Model is the latest addition to the Magic Chef line of gas ranges of the American Stove Company, Cleveland, Ohio. This model is the lowest price in the line. It has a width of 41", a depth of 23½", and a height of 43¾". Without the side shelf, the range will fit into a 38" space.



Portable
Device
That Heats
or Cools

31M The Hexcel air conditioner is a new electric appliance brought out by the Hexcel Radiator Co., Milwaukee, Wis. It is portable and about the size of a midget radio, weighing less than 15 lbs. In winter it circulates hot air and in summer cool air. It can be plugged into any wall socket. The electric heating element is immersed in water. Furnished in a walnut ripple with polished front face bead and handle.

New "American" Radiator

32M The American Radiator Company, 40 West 40th St., New York, announce a new cast iron radiator of small size called the "Arco" radiator. It is the smallest radiator yet made by this company, taking up the least space, and may be installed either recessed, enclosed, or semi-enclosed.

NORGE Rollator

REFRIGERATION

**Product of seven years use and
constant improvement**

Seven years ago the first Rollator was built into a Norge Electric Refrigerator. In this Rollator, the rotary compressor principle had become a simple, powerful, compact and trouble-free mechanism.

The Norge Refrigerators produced that first year are still giving unwavering performance in constant daily use. Since the first Norge, user experience and engineering skill have brought about cabinet refinements and improvements that make the Norge an advanced refrigerator, scientifically proportioned, carefully planned as to design and embodying a wealth of original and exclusive refinements.

These developments brought Norge, last year, from a place as one of many refrigerators, to a position with the leaders of the industry. The reasons for that popularity recommend Norge to the experienced user, the contractor-builder and to the architect who makes

his clients' interests of first importance in his recommendations.

The Rollator has extraordinarily high volumetric efficiency. Its simplicity (it is actually just a roller, slowly revolving in a permanent bath of protective oil) makes it trouble free...almost everlasting.

Every part of the Norge is of a quality in keeping with its mechanical superiority...its 34 features, 19 of which are original, make Rollator Refrigeration most convenient to users. Low first cost, low operating cost, and minimum service requirements make it economical on large installations.

● The advantages of Rollator Refrigeration, with technical details of manufacture, installation and servicing, are fully covered in a brochure which will be available about March 1st. A request will reserve your copy. Or, if information is desired at once, it will be supplied in bulletin form.

NORGE CORPORATION
664 East Woodbridge Street, Detroit, Mich.

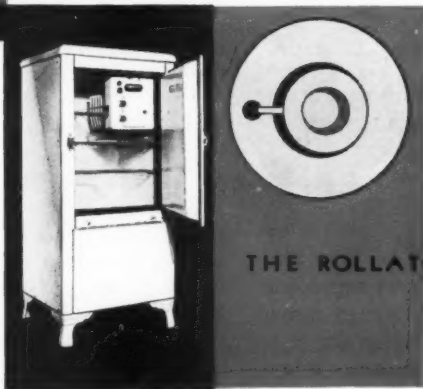
Norge Corporation is a division of Borg-Warner Corporation, one of the world's largest makers of automotive parts, including free wheeling.

NORGE

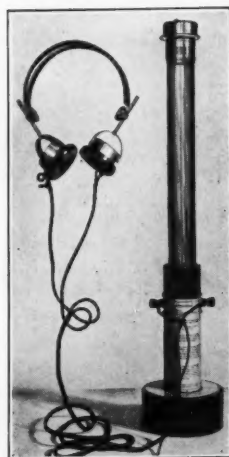
*Rollator
refrigeration*

THE ROLLATOR — simplest electric refrigeration mechanism with only three moving parts. Norge and Norge alone has the exclusive Rollator.

The handsome Norge cabinet, with maximum food storage space and occupying minimum exterior space is exceptionally well adapted to the modern compact kitchen. Standard Norge Models are available in sizes up to 10 feet net.



Device to Locate Hidden Existing Electrical Outlets



39M Ducts and outlets under the floor surface can be located by the Nepcoduct Divinator, a device made by the National Electric Products Corp., Pittsburgh, Pa. The device is employed where existing outlets are hidden by a floor covering or buried in concrete. The principle upon which the device works is that the operator uses a head set, similar to that used in radio, and when the instrument is over an outlet, a definite sound is made which is different from the usual sound of the device. He thus locates the outlets by listening for them.

Plaster Base

33M A new plaster base called Inso Lath has been announced by the Stewart Inso Board Corporation, St. Joseph, Mo. It provides for a free expanding plaster base by permanent expansion spaces and acts as a sound insulating material. The expansion spaces are so arranged that they can not be filled with plaster. Nailing slots are provided which permit slight movement without binding, thus eliminating bulges and warping.

Lifting Machines

34M An entirely new line of ball-bearing equipped lifting machines has been announced by the Economy Engineering Co., 2654 West Van Buren Street, Chicago. Friction is still further reduced in these machines by flangeless guide wheels which are used to support the platform and telescoping frames. It is said that there is a 25% increase in efficiency in the new hand power type, only 25 lbs. cranking pressure being required to lift the rated load.

Blueprint Dryer

35M A new inexpensive "Junior" sheet dryer has been brought out by the C. F. Pease Company, 813 North Franklin Street, Chicago, as a means of drying blue prints and photo-copy prints quickly and at low cost. It takes prints up to 24" wide.

New Radiator Enclosures

38M New radiator enclosures intended to permit the greatest possible heating output from the radiator have been placed on the market by the American Radiator Company, 40 West 40th Street, New York.

Canvas Window Shade

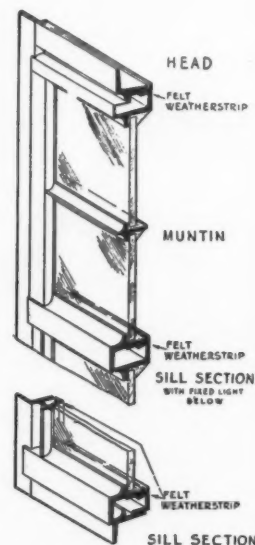
36M Applying the Kemitex Process of waterproofing window shade material to specially woven canvas has produced an exceptional heavy duty window shade, as announced by the Kemitox Products Company, Wads-

worth, Ohio. The new material is impervious to sunlight, moisture and soil, and is easily cleaned by washing with soap and water without removal from the roller.

The shade is suggested for heavy duty service in schools, hospitals, hotels, office buildings, etc., as well as for fine homes, clubs and apartments. Kemitex Kanvas Shades can be obtained in three styles—overlapping double installation, sun-strip double installation or the conventional single installation.

Weatherstripped Industrial Sash

37M An improved industrial sash has been introduced by the Campbell Industrial Window Company, Inc., 1 Pershing Square, New York. It has a felt weather strip on all four sides of the ventilator, which makes it weather-tight. The weatherstripping is built into the sash at the factory. The felt weatherstrip is held in a metal container that is spot-welded to the sash or frame as the case may be with the felt forming the inside weathering contact. The felt is placed on the inside to allow any condensation that may form to pass through the outside contact of metal to metal.



SECTIONAL VIEWS OF HORIZONTALLY PIVOTED SASH

What Architects Are Talking About

(Continued from page 53)

asset, difficult to dispose of except at a loss, was the reason given by 34%. Those who owned homes and had second mortgages reported that the cost ranged from 2½% to 30%, the highest frequency being between 18% to 20% and the average of all answers being 13.6%. As regards equity in homes built or bought, 73% had 40% or less; 42% had an equity of 20% or less; 85% had first mortgages, 21% had second mortgages. Of those who built houses, 58% employed an architect; of this 58%, 55% did not have an architect supervise construction.

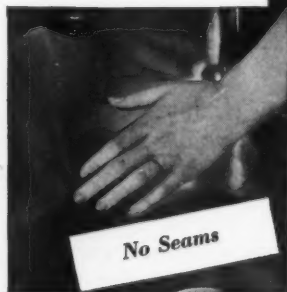
MASS production of low cost housing was forecast by W. K. Harrison, A. I. A., of Corbett, Harrison and McMurray, architects, as the next major development of the building industry. Mr. Harrison, who was speaking before the New York Producers' Council, urged the establishment by manufacturers of a general research bureau to study the subject and bring materials into better relation with each other. He said that if the building industry did not concern itself more with housing, companies like General Motors, the A. O. Smith Corp., and the United States Steel Corp., who were studying this field, would step in and get the business.

HOMES can now have
the same lifetime **SINK**

quality you specify for **HOTELS . . .**



Double drain board Monel Metal Sink. Made in nominal sizes of 72" x 21" and 60" x 21". Other models and sizes are available.



No Seams

Sound Deadened

Drain Board
Sound Deadening
Composition



● You know Monel Metal. You've probably had occasion to specify this lustrous, long-wearing Nickel alloy for hotel and restaurant food service equipment. You chose it for its steel-like durability...its corrosion-resistance...inherent cleanliness and its permanent, silvery beauty. You

know from experience that Monel Metal possesses a rare combination of properties which makes it the perfect white metal for modern kitchen equipment.

Thanks to standardized construction and quantity production, you can now specify kitchen sinks made of this lifetime metal for the homes you are planning. Sinks that offer all the advantages for which Monel Metal equipment is justly famous! Soft, harmonizing beauty that blends with *any* kitchen color scheme...a surface that is rust-proof, chip-proof and highly resistant to corrosion...a sink so strong, so staunchly constructed, that it will laugh at years of hard use and abuse!

Even the cost of a Monel Metal Sink is in tune with 1932! These modern sinks are sold for far less than anyone expects to pay for a quality metal sink. When your client spreads the cost over its long years of life, it actually becomes an economy to own a Monel Metal Sink!

Monel Metal Sinks are displayed and sold by leading plumbers and plumbing jobbers. See them...and check your data file to be sure it contains the latest Monel Metal Sink literature. We'll send it promptly on request.



Chip and Crack-Proof

A HIGH NICKEL ALLOY

MONEL METAL

NICKEL ALLOYS LOOK BETTER LONGER

Monel Metal is a registered trade mark applied to a technically controlled nickel-copper alloy of high nickel content. Monel Metal is mined, smelted, refined, rolled and marketed solely by International Nickel.

THE INTERNATIONAL NICKEL COMPANY, INC.
67 WALL STREET, NEW YORK, N. Y.



A SMYSER-ROYER CATALOGUE

showing 200 styles of
EXTERIOR LIGHTING
FIXTURES

is on file in Sweet's



A variety of two hundred stock designs for exterior lighting fixtures is shown in Volume D of Sweet's Architectural Catalogues, 1932 edition, pages 5035 to 5045. Each design displays the high standard of metal craftsmanship maintained by Smyser-Royer Company for over 90 years.

If an original design is specified, Smyser-Royer Company craftsmen will carefully interpret specifications, reproducing every detail of the design in cast iron, bronze or aluminum.

We will gladly send you our catalogue showing exterior lamps, lanterns and brackets for every period and purpose.

SMYSER-ROYER CO.

Main Office and Works, York, Pa.
Philadelphia Office 1700 Walnut Street

Congress Receives A. I. A. Bill

(Continued from page 45)

architects, today, calls forth the admiration of the world. Throughout the land one may point with pride to the achievements, varying in size and character, for which our architects have been responsible. To many of these architects has been intrusted work of such magnitude that the skylines of our principal cities have been noticeably changed, even while plans have been considered to get authorized public buildings under way. To the credit of a firm of architects in private practice lies the designing, planning, organizing and construction of the largest building in the world within a space of time that is nothing short of miraculous.

UNDER the permissive clause of the Keyes-Elliott Bill a large number of architects have been employed by the Treasury Department, a fact that emphasizes the feasibility and validates the continuation of the practice. While such action may have been born of an emergency situation, it can be accepted as the recognition of a sound fundamental principle—a principle that is in accord with the basis upon which the republican form of government is founded. This permissive authority can and probably will cease when the emergency is relegated to history. For this reason, it is desirable at this time to make employment of outside architects and engineers mandatory.

As a safeguard to the soundness and integrity of the architecture of our public buildings, the bill stresses the necessity of selecting professional and technical service upon proven ability and capability. To this end a clause in the bill requires that no architect or engineer shall be employed without having submitted to the Secretary of the Treasury satisfactory evidence of his qualifications and experience. The taxpayers of this country have as much right to insist that the designing and planning of public buildings, for which their money is spent, shall be of a high order of excellence as they have to be assured that the construction contracts are fulfilled.

As in the case of most bills there is the possibility of amendments and adjustments to the original form of the bill as drafted by the Institute's Committee on Public Works. The fundamentals of this bill should be preserved and every individual architect in the United States should lend his or her support to see that this is done. Much personal effort will be required. A large measure of unselfish public spirit will be needed. Members of the profession can come forward and do their share, individually and collectively. Here is an opportunity for the architects of this nation, backed and supported by the entire construction industry, to unite as one body to urge the passage of legislation that is of importance to and in the best interests of every citizen of the United States.

COMPETITION conducted by American Home offers \$500 for the house with not more than 30,000 cu. ft. judged best by its readers, with a second prize of \$250 and a third prize of \$150. Twelve designs will be selected from those submitted, and published and voted on by the readers. The contest closes Feb. 1, 1932. Information may be secured by addressing the American Home Architectural Contest, Garden City, N. Y.

COMBINING

Beauty

WITH

PERMANENCE



Entrance detail of the New Steel & Glass Office Building of The Worcester Pressed Steel Co., Worcester, Mass.

IN ALL-STEEL CONSTRUCTION

MODERN Architecture has here created an unusual treatment of exterior beauty with which has been combined the rugged strength and enduring utility of all-steel construction. » » » In its every detail, this all-steel office building of the Worcester Pressed Steel Company has been designed and built for lasting utility. From its impressive steel exterior to its every hidden construction detail, the finest of steel products assure permanence in its fullest meaning. » » » As in the thousands of other fine buildings throughout the country, Youngstown Steel Pipe here, too, plays an important part in this assurance of lasting utility which is typical of modern construction.

The YOUNGSTOWN SHEET & TUBE CO.

ONE OF THE OLDEST MANUFACTURERS OF COPPER-STEEL, UNDER THE WELL-KNOWN AND ESTABLISHED TRADE NAME "COPPEROID"

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GALVANIZED SHEETS PROTECT » » » SAVE WITH STEEL

FOR JANUARY 1932

89

Eliminate Columns! Build Wide Spans Economically!

Large unobstructed floor areas make any building more useful. You can provide clear spans of fifty feet at moderate cost with Truscon Clerespan Trusses and save the expense of objectionable columns. These electrically welded box girders combine ample strength with maximum economy of materials. They are light in weight and easily installed.

Write for prices, suggestions and catalog.

TRUSCON STEEL COMPANY

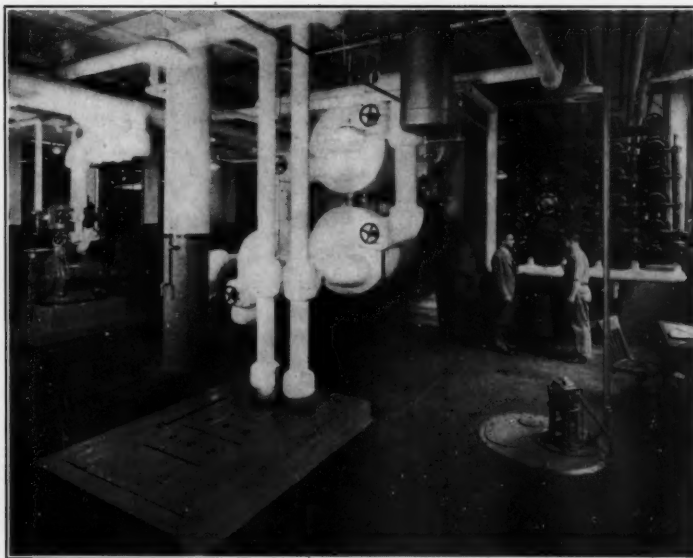
YOUNGSTOWN, OHIO

Engineering and Sales Offices in Principal Cities

TRUSCON *Clerespan* TRUSSES

TRADE MARK REG.
AND PAT. APPLIED FOR

with double web
system



One end of the Frick Refrigerating Machinery Room in the 9-story Philadelphia plant of Sharp and Dohme. A full description of this fine installation will be sent on request.



Refrigeration

It is the architect's responsibility to design buildings of beauty and permanence; we gladly accept the responsibility for the building and installation of Refrigerating Equipment to meet the same requirements.

Frick Company
WAYNESBORO, PA., U.S.A.
ICE MACHINERY SUPERIOR SINCE 1882



In Sweet's Catalogues

Carey Master Specifications

for

Built-up-Roof Construction

Carey 12 Master Built-Up Specifications include every type of roof construction—i.e.—asphalt—tar—asbestos—surfaced with slag, gravel, mineral or asphalt.

Specifications for each type include definite recommendations on service adaptability. The complete listing will be found in the 1932 edition of Sweet's Architectural Catalogues, Volume A, pages A-677 to A-701, inclusive.

THE PHILIP CAREY COMPANY

Lockland, Cincinnati, Ohio

Branches in Principal Cities

BUILT-UP ROOFS
ASPHALT PRODUCTS
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PRODUCTS
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HEAT INSULATIONS
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CAREYSTONE CORRUGATED SIDING
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BUILDING PAPERS



—and in the Empire State Building

BURLINGTON Venetian Blinds
BURLINGTON VENETIAN BLIND COMPANY
 506 PINE STREET BURLINGTON, VERMONT
 1882 — GOLDEN ANNIVERSARY — 1932

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The achievement of half a century's experience in meeting the exacting requirements of public use under Post Office Regulations.

Simple, practical and sturdy in construction. Can be opened and closed quickly by Post Office representatives and left in perfect condition, with no injury to structure or finish.

Full information, details and specifications on request.

CUTLER MAIL CHUTE CO.

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In the Stanley Theatre, Pittsburgh, it's PETER CLARK Stage Equipment

Pictured above are Orchestra and Console Lifts. In this theatre Peter Clark equipment is used exclusively.

This is another instance where the established excellence of Peter Clark Stage Equipment has led to its specification by the architects of a theatre.

May we cooperate with you in suggesting and designing stage equipment for your next theatre job.

PETER CLARK, INC.

Stage Equipment Specialists for Over 25 Years

544 West 30th Street New York City



INTER-COMM PHONE SYSTEM

The Stromberg-Carlson Inter-Comm-Phone System is satisfying the service demands of offices, factories, and large residences where simultaneous conversations are necessary, but where the volume of traffic is not large enough for a switchboard system and a paid operator.

Easy to operate, cuts down useless running around, speeds production and increases efficiency. Made by a firm with more than thirty-five years' experience.

Write for literature describing Stromberg-Carlson Telephone and Radio apparatus and trade discounts.
 Stromberg-Carlson Telephone Manufacturing Co.
 Rochester, N. Y.

Stromberg-Carlson

IN OTHER OFFICES, THEY'RE
SAYING "WHAT ARE THE
ILCO DOOR CHECKS?"



A DOOR
IS A
SERVANT
WHEN IT'S

ILCO-CONTROLLED

Conversation hum, typewriter clang, door slam, telephone br-ring,—nerve-straining noises that infest every office,—these are shut out, completely and effectively, when doors are Ilco-controlled.

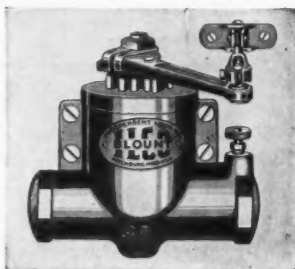
Modern construction has dealt with the passage of sound from floor to floor and through partitions. Now, science has dealt with doors—doors that are only guardians of silence when they are quietly, surely and automatically shut. The Ilco-Blount Door Check gives complete door control under all conditions. Sub-basement or fiftieth floor, 20° F. or 110° F., Nevada or Maine, it accurately, dutifully does its job.

The Ilco-Blount Door Check is a sentinel of silence. It keeps the business pulse-rate down to normal. We want you to be familiar with the structural details of this scientific door check. A request on your letterhead will bring you complete technical details on all Ilco Door Checks, as well as a handy folder, prepared especially for architects, giving the important features of Ilco Door Control in a condensed form. Let us hear from you today.

Ilco Door Check data is filed in Sweet's.

Refer to pp. C3170 and C3171.

Twelve Branch Offices
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—PITTSBURGH—BALTIMORE
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SAN FRANCISCO



Independent Lock Company
FITCHBURG . . . MASS.

FOR JANUARY 1932

INSULATE WITH U. S. MINERAL WOOL

COLD
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THE effectiveness of an insulating material is gauged by the amount of dead air it holds in suspension.

U. S. Mineral Wool is a highly porous indestructible mineral material of the fill type which holds air in confinement amounting to twelve times its bulk.

This exceptionally high percentage is not equalled by any other insulating material.

Sample and descriptive folder on request

U. S. MINERAL WOOL COMPANY
280 MADISON AVENUE, NEW YORK

*Western Connection
Columbia Mineral Wool Co., South Milwaukee, Wisc.*

U. S. MINERAL WOOL CO., DEPT. F.
280 Madison Ave., New York

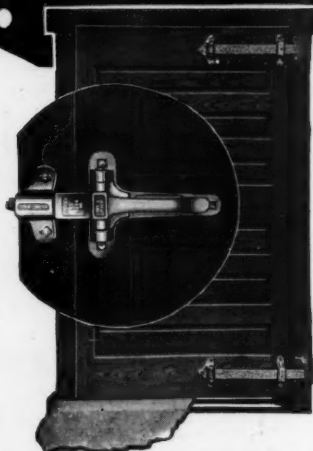
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SPEED! PLUS CERTAINTY

The Patented Jamison WEDGETIGHT FASTENER

—faster in action both opening and closing—forces the door tighter against its seals—keeps it tighter. Easier for the men—direct push and pull operation. Another exclusive advantage of



Jamison & Stevenson
Cold Storage Doors

Write for complete data

JAMISON COLD STORAGE DOOR CO.
Consolidating Jamison Cold Storage Door Co., Inc.
and Stevenson Cold Storage Door Co.
HAGERSTOWN, MD., U. S. A.

Branches: Philadelphia, New York, Chicago, St. Louis.

Agents: Southern Ice Supply Co., Marietta, Ga.; Gay Engineering Corporation, Los Angeles, Cal.; Taylor Fithen, Dallas, Tex.; D. E. Fryer & Co., Seattle and Spokane, For. eign: London, Honolulu and Japan.

SASH OPERATING DEVICES

DESIGNED TO MEET
ARCHITECTURAL
REQUIREMENTS
MECHANICALLY CORRECT

Here are a few of the many architects
with whom we have cooperated:

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(Continued from page 55)

the floor construction. This means that a beam selected in the ordinary way from its resisting moment or section modulus will in most cases be weak. Handbook tables for beam loads, or the ordinary calculation for beam size, are based on the assumption that the top flange is braced. The reason for this is that the top flange of the beam being in compression acts in the same manner as a column. Of course the longer the unbraced length of the column, the weaker it is. Consequently, the beam selected for an unbraced flange condition must be stronger than the normal beam for the load it receives. In any case the limit in length for an unbraced flange is forty times the flange width. At this extreme condition the beam should be figured with a stress of 11,100 lbs. per square inch instead of the customary 18,000. Intermediate ratios will vary between these two limits. Tables giving the allowable stresses to be used for different ratios of span to flange width are usually given in the best handbooks.

In the framing of sloping roofs it is occasionally necessary to use frames of the type shown in Fig. 6. The tie is placed as low as the ceiling location will permit as a roof of this type usually requires fairly heavy members. In most cases the governing condition is the projection of the sloping member from A to C. This projection must be figured as a cantilever beam about A as a fulcrum. Consequently, with half the load on the frame occurring at C, it doesn't take much of a cantilever to result in heavy truss members. The tie in this case takes the thrust out of the sloping members and prevents them from pushing out on the walls. To be most effective the tie should be at the eaves or at the bottom of the sloping members. The higher the tie is placed the less effective it is. If placed very high the cantilever members will have considerable deflection as soon as the load gets on the frame. This deflection causes a thrust on the wall or column into which it frames. The frame cannot fail but the wall or column may be pushed out slightly until the tie comes into action.

The points mentioned above are of common occurrence in most steel structures encountered in the average practice. If kept in mind many structural difficulties can often be eliminated, and time saved in the coordination and efficiency of the architect and the engineer

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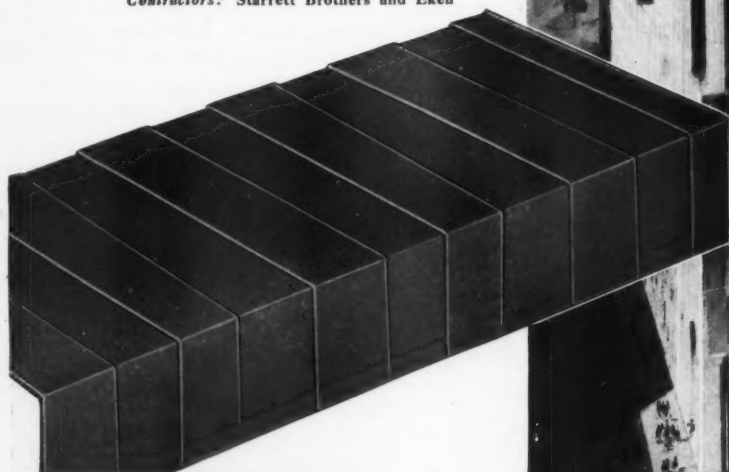
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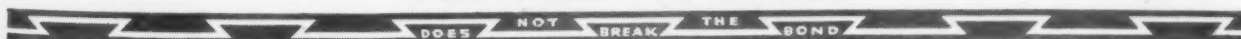
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Fine or Imprisonment for Violators of New Ontario Registration Act

THE registration act for architects, recently enacted in Ontario, Canada, not only provides fines or imprisonment for violators, but concerns itself with professional ethics that, besides being good ethics, are good business. Important parts of the act are as follows:

11.—(1) Every person who, not being registered as an Architect under this Part, or who having been so registered and whose registration has been cancelled or is under suspension who applies to himself the term Architect alone or in combination with any other term, or who holds himself out as an Architect shall be guilty of an offense, and shall incur a penalty not exceeding \$100 for a first offense and upon conviction for a subsequent offense a penalty of not less than \$300 and not more than \$500, or imprisonment for a period not exceeding three months or both.

(2) Nothing herein contained shall be deemed to prevent anyone using the term "Landscape Architect."

12. Every Architect who willfully makes any false certificate in respect of any work done, or the value or condition of any work or building, besides being liable in damages for any injury thereby suffered, shall incur a penalty not exceeding \$100.

Professional Ethics

64. Without restricting the power of the Board to reprimand or to suspend or cancel the registration of

an Architect whom it finds guilty of misconduct or incompetence in any form, the Board will have regard to the following principles of professional conduct:

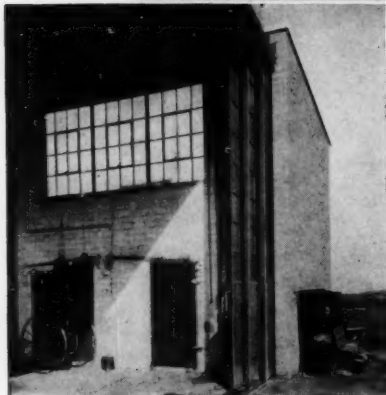
(a) An Architect must not accept remuneration in connection with the work and duties entrusted to him from any other source than the professional fees payable to him by his client. He must not accept any work which involves the giving or receiving of discounts or commissions, nor must he accept any discount, gift or commission from contractors or tradesmen, whether employed upon his works or not.

(b) If an Architect own, or have a commercial interest in any material, device, or invention used in building, he must inform his client thereof and must obtain his sanction before permitting it to be used in works executed under his direction.

(c) An Architect, on receiving instructions to proceed with certain work, which to his knowledge was previously entrusted to another Architect, must, before proceeding with such work, communicate in writing with the Architect previously employed and inquire and ensure the fact that his engagement has been properly terminated. If, within a reasonable time, no reply is received or no proof submitted that such previous retainer has not been terminated, the second Architect may proceed with the work.

(d) After a contract has been let the Architect must

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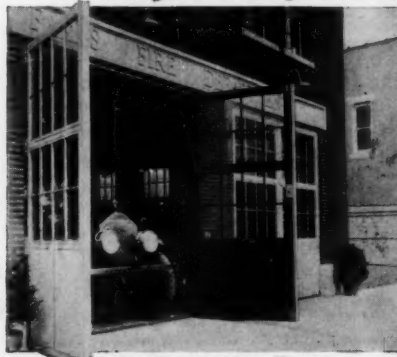
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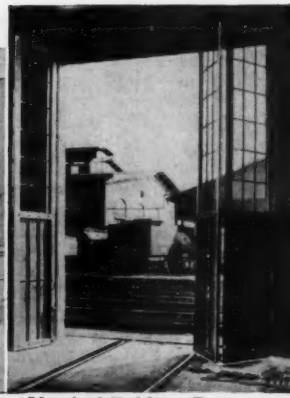
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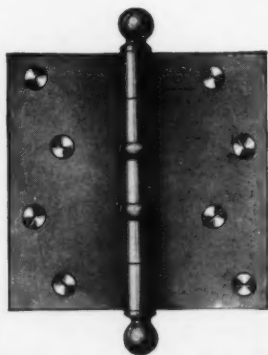


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act in an impartial manner between the owner and the contractor. He must interpret conditions of a contract with entire fairness as between the owner and the contractor.

(e) An Architect must not permit the insertion of any clause in instructions to bidders, tenderer's specifications or other contract documents which provide for payment to be made to him by the contractor (except for duplicate copies of drawings or documents) whatever might be the consideration, unless with the full knowledge and approval of his client.

(f) An Architect must not, except in the case of a competition, prepare and submit any sketch, drawing or design for a proposed work unless he has been previously retained by the client.

(g) In a competition with another Architect or Architects, an Architect must not prepare and submit any sketch, drawing or design for a proposed work without remuneration unless the party or parties inviting or holding the competition shall have previously retained an Architect or Architects to act as his or their professional advisor and/or assessor of the competition.

(h) An Architect must not act as Architect or joint Architect for a work which is or has been the subject of a competition in which he is or has been engaged as assessor or advisor.

(i) An Architect must not use unfair means to win professional advancement for himself, or to injure the prospects of another Architect to secure or hold employment.

(j) An Architect must not use any improper or questionable methods of soliciting professional work or adopt any advertising methods for himself which are not consistent with the dignity of a member of a learned profession.

Trouble for A. I. A. Forecast

"THE American Institute of Architects, like a good but near-sighted mother, has done a rattling good job of washing and scolding and spanking her kids," writes Anton Scherrer in "The Wash Tub," a regular department of the "Indiana Construction Recorder." "We cite this and give credit at the present time because we are aware of a great unification movement now going on. We are worried concerning its outcome. We are worried because in the last twenty years the Institute's interest seems to have been centered on architects and not in architecture.

"For some strange reason, the public is interested in architecture and not in architects. The State Societies have recognized this. They have given us our architectural shows. They have effected a contact between public and architecture by means of publicity and frank advertising. They have set up scholarships, educational campaigns, broadcasts. They have recognized and premiated distinguished performance in the field of architecture. And what we like best of all—they have provided for the future of architecture by recognizing the potential value of the young architect.

"We predict a glorious future for the unification movement if the Institute is willing to profit by these contributions. We predict a secession if the Institute persists in its hygienic obsessions to the exclusion of everything else. Which would be too bad—for the Institute."



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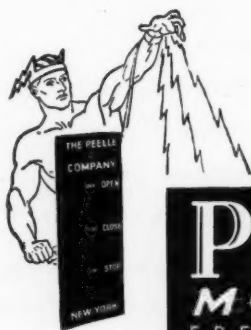
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