

RECEIVED
NOV 30 1931
MIAMI UNIVERSITY
LIBRARY



AMERICAN ARCHITECT

FOUNDED 1876

December 1931

Specify **THORP DOORS**



THE approach to a building focuses attention and interest on the entrance. In the Spokane and Eastern Trust Company Building, Thorp once again has faithfully expressed in metal the designs envisioned by the architect. The entrances are a part of the building—adding to its quality and richness. The entrance doors here are of nickel silver, satin finish, 12 gauge, with extruded mouldings; nickel silver grilles in doors; nickel silver transom sash. Frames and cast grilles were under separate contract working in conjunction with Thorp. "By Thorp" also were three other sets of entrance doors and sash—and all elevator enclosure work.

SPOKANE AND EASTERN TRUST
COMPANY BUILDING

Spokane, Washington

A. MOORMAN & Co., Architects

THORP FIREPROOF DOOR CO. Minneapolis, Minnesota

*Volunteer State Life Building,
Atlanta, Ga.
A. Ten Eyck Brown, Arch.
Griffin Construction Co., Genl.
Contractors*

*An entirely remodeled building.
All store fronts are Desco. Store
front work was largely an ex-
truded metal job and included
special aluminum shapes and
special aluminum castings.*



Desco METAL **STORE FRONTS**

REG. U.S. PAT. OFFICE

Make a Remodeled Store Look New

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

Install Desco Modernistic Store Fronts on the shops you are remodeling and—presto—the stores appear brand new. 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 match perfectly your own decorative ideas. Then, too, they have the additional quality of flexibility which protects the glass against abnormal wind pressure. Consider all these advantages when your next store job comes up.

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.

WHO THINKS ABOUT ELEVATORS?

MIRACULOUS developments in recent years in elevator construction by OTIS Elevator Company have brought the elevator to the attention of many people. Today, good elevator service is one of the foremost considerations in the eyes of the prospective tenant. He appreciates well-appointed elevator cars and entrances, elevators that are free from jolts and jars, and he doesn't like to wait long for the elevator and wants to reach his destination quickly. The building owner or manager who can give him good elevator service has a distinct advantage when it comes to renting floor space.

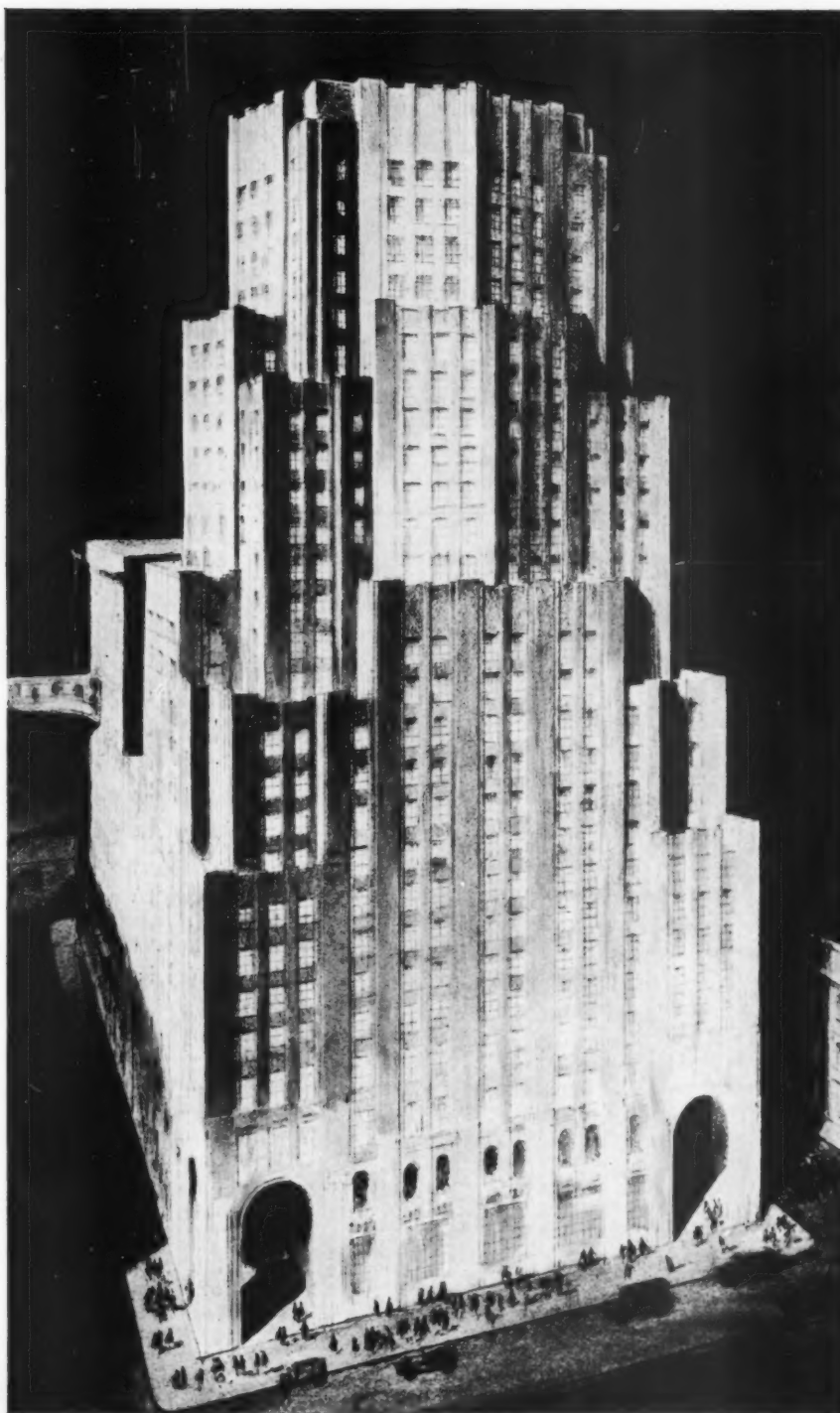
It is because of these recent engineering feats by OTIS that the architect confidently specifies OTIS in his plans for a new building or a modernization project. He feels sure that an OTIS installation will not only meet with the approval of the building owner, but of the public as well.

OTIS

ELEVATOR COMPANY

339 OFFICES THROUGH-
OUT THE WORLD

The Metropolitan
Life Insurance
Building
New York City



*Architects: Waid and Corbett; Structural Engineers: Purdy and Henderson;
Contractors: Starrett Brothers and Eken.*

BETHLEHEM STEEL COMPANY
General Offices: Bethlehem, Pa.

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

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

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

FRAMEWORK of

BETHLEHEM
SECTIONS

FOR DECEMBER 1931

A NEW KERNERATOR MODEL

(Slip-In Type) For New and Existing Buildings

Kernerator Research Laboratory and Engineering Department have collaborated in producing

MODEL A-1

for moderately priced homes, and dwellings where space is limited



A COMPLETE UNIT

As shipped Model A-1 is a complete unit with DUAL GAS DRYER-IGNITOR, a pilot for lighting either Dryer or Ignitor without opening fire or ash doors; a completely enclosed top adjustable for the usual flue positions, made up for either 12" x 12" or 8" x 8" flue tile. It requires no assembly after leaving the factory except for gas connection by the gas fitter.

When the brick niche is completed to the required height, the Unit slips into place, proper sized flue tile is set, and flue construction started. Steel members are provided for carrying weight of the flue on the brick sidewalls.

LOW INSTALLATION COST

Material and labor installation costs are cut to a minimum. The A-1 Kernerator comes to the job completely assembled and requires no brick chamber construction. The unit can be bricked into place; no dimensions have to be followed. NO FIRE BRICK IS REQUIRED. The Unit occupies a space less than 19" square, only slightly more than that required for supporting the breast of a 12" x 12" flue.

DUAL GAS DRYER-IGNITOR

Kernerator Model A-1 is the only incinerator with this dual type of dryer and primary ignitor.

Experience has shown that with small capacity incinerators a fairly large flame is required to start the material burning; also that if the material is unusually wet, far greater efficiency is obtained by drying out before burning. Both results are accomplished by the Dual Dryer-Ignitor. Kernerator engineers have combined both types of flame in one unit, increasing the efficiency and satisfactory operation of the incinerator.

Specification Sheet giving full details (A. I. A. File) mailed on request.

KERNER INCINERATOR COMPANY

3548 N. Richards St.

Milwaukee, Wis.

Offices in over 150 cities

KERNERATOR

REG. U.S. PAT. OFF.

INCINERATION

© K. I. Co., 1931



Residence at Middletown, New Jersey

Charles H Higgins, Architect

Tudor Stone Roofs **and Flagging**

Tudor Stone roofing slate is endowed by nature with every quality essential to the ideal roofing material. Beautiful—enduring—fireproof, this product, with its rugged texture and wide variety of colors, offers countless possibilities with stone, stucco, or shingle construction.

Rising and Nelson Slate Company

WEST PAWLET, VERMONT

Architects' Service Department: 101 Park Avenue, New York City

CHICAGO

DETROIT

BALTIMORE

PHILADELPHIA

BOSTON

THE HERMAN NELSON CORPORATION



HERMAN NELSON

HER-NEL-Co

SYSTEM OF VENTILATION

The Herman Nelson Corporation are makers of the *Univent System of Ventilation*, the *Her-Nel-Co System of Ventilation*, the *Herman Nelson Invisible Radiator*, the *Herman Nelson hi Jet Heater*, and other heating and ventilating equipment.

Engineers, architects and school authorities see in the Her-Nel-Co System of Ventilation the practical solution of a most harassing problem.

In this system an invigorating, healthful atmosphere is created and maintained in the school room—without the expensive expedient of preheating a continuous supply of outdoor air.

It is estimated that the Her-Nel-Co operates at 50% of the fuel costs of systems based on supplying the school room with a fixed quantity of outdoor air—irrespective of outside weather conditions. Naturally this modern system also effects decided savings in boiler costs, radiator costs, and building costs.

School authorities, engineers, and architects interested in securing better ventilation, at a saving in fuel, maintenance and building costs, should write for the book, "The Herman Nelson Her-Nel-Co System of Ventilation".

A HERMAN NELSON PRODUCT

Factory at Moline, Illinois

BELFAST, ME.
BOSTON
SPRINGFIELD, MASS.
PROVIDENCE, R. I.
HARTFORD, CONN.
NEW YORK CITY
SYRACUSE
ALBANY
ROCHESTER
BUFFALO
PHILADELPHIA

SCRANTON
KINGSTON, PA.
HARRISBURG
PITTSBURGH
JOHNSTOWN, PA.
ALLENTOWN, PA.
ERIE, PA.
WHEELING, W. VA.
WASHINGTON, D. C.
BALTIMORE, MD.
CHARLOTTE, N. C.

GRAND RAPIDS
SAGINAW, MICH.
DETROIT
CLEVELAND
COLUMBUS
CINCINNATI
TOLEDO
INDIANAPOLIS
EVANSVILLE, IND.
CHICAGO
PEORIA, ILL.

DES MOINES
MILWAUKEE
APPLETON, WIS.
MINNEAPOLIS
DULUTH
ST. LOUIS
BIRMINGHAM
NASHVILLE
CHATTANOOGA
MEMPHIS
NEW ORLEANS

MIAMI
DALLAS
OMAHA
EMPORIA, KAN.
KANSAS CITY
DENVER
SALT LAKE CITY
BUTTE, MONT.
SPOKANE
PORTLAND, ORE.
SEATTLE

SAN FRANCISCO
LOS ANGELES
VANCOUVER, B. C.
TORONTO, ONT.
WINNIPEG, MAN.
CALGARY, ALTA.
LONDON
OSLO
MELBOURNE
TOKIO, OSAKA
BUENOS AIRES

Sales and Service Offices in All Principal Cities

TODAY'S HOME OWNERS PLACE A PREMIUM ON CONVENIENCE



ONCE, Americans were content with homes made pleasant to *look at*. Now they ask also for homes that are easy to *live in*. Every added convenience, every contribution to living comfort, increases their valuation of a house and raises their estimate of its architect.

One of the modern and most welcome of these conveniences is the provision for *enough* telephones. Architects everywhere have found that adequate facilities for telephones pay handsome dividends in owner-satisfaction—in time and energy saved for entire households.

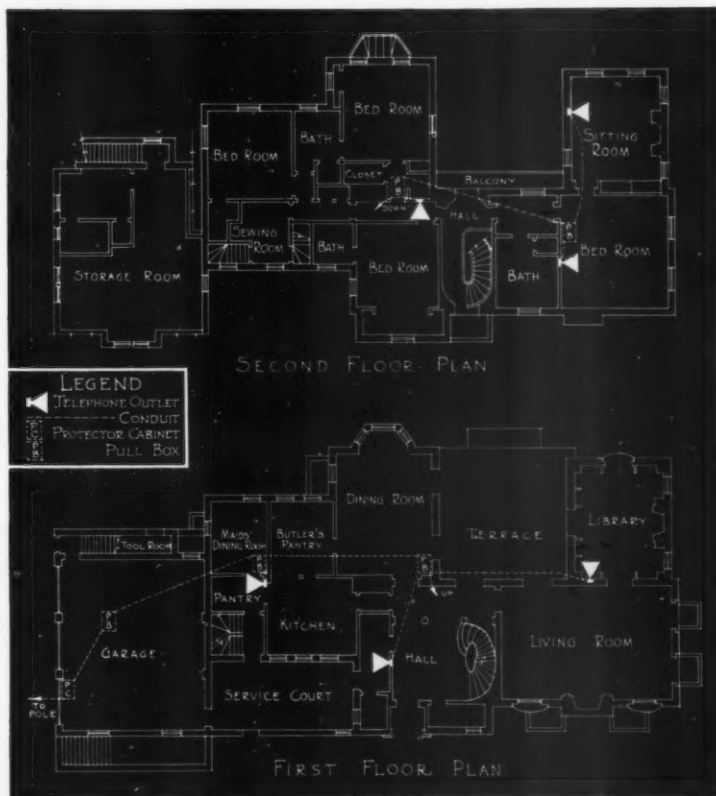
By planning for telephone conduit in walls and floors, it is easy to provide telephone outlets at the most desirable locations in all the important rooms. With an abundance of outlets, telephones can be moved from place to place as occasion demands . . . all wiring is concealed . . . and there is much greater freedom from service interruptions.

You can assure full and flexible telephone convenience to your clients by consulting the local telephone company. Their advice and assistance is given gladly, without charge. Just call the Business Office.

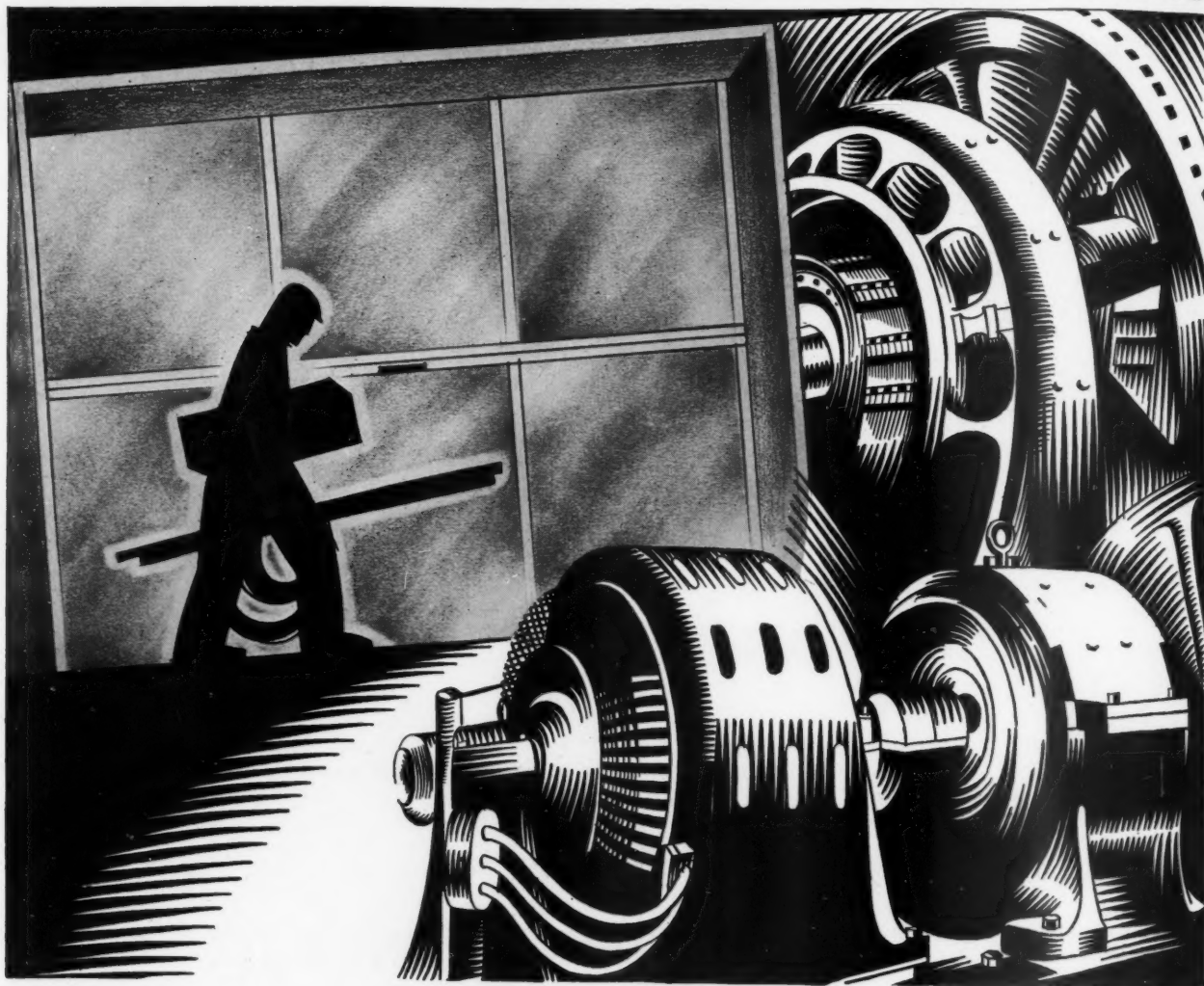


Built-in telephone conduit and six outlets provide for telephone convenience in the residence of Mr. Herbert I. Lord, 107 Touraine Road, Village of Grosse Pointe Farms, Detroit, Michigan.

ROBERT O. DERRICK, Architect, Detroit



THE DOORWAY OF AMERICA'S FREIGHT ELEVATOR TRAFFIC



Motorize horizontal sliding, vertical sliding and bi-fold doors with Pelle operators.



PEELLE MOTORIZED FREIGHT ELEVATOR DOORS

dynamo... modern descendant of primitive tread mills... impetus that animates into being the products of industry. But these products must move—from machine to machine—floor to floor—from maker to buyer. Pelle Doors accelerate the flow of products that power produces, help quicken their vertical voyage throughout the plant. Motorized... they afford automatic entrance and exit at the touch of an electric button... level vertical shaftways into horizontal highways... clear the right-of-way for interior traffic. Pelle Doors guard men and freight against accident, save time and labor—function with speed so that production energy may not waste itself in slow motion. In these things Pelle Doors justify a slightly higher first-cost, which low-upkeep and trouble-free service makes negligible through the years. A Pelle catalog will be gladly sent upon request, or consult our engineers.

THE PELLE COMPANY, BROOKLYN, NEW YORK
Boston, Chicago, Cleveland, Philadelphia, Atlanta, San Francisco,
Dallas and 30 other cities

1932



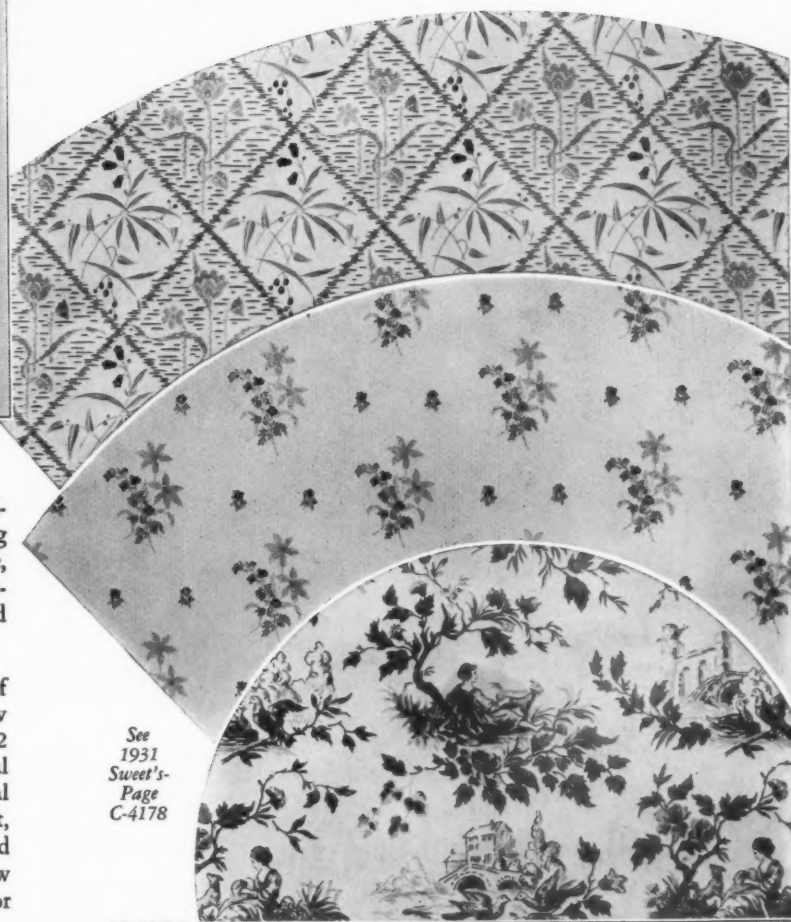
fabric
wall
coverings

NEW AND GREATER
decorative beauty
for WALLS

A CASUAL look through the 1932 Wall-Tex book reveals a host of refreshing patterns — intriguing in their charm of line, color, texture and finish — and intensely interesting from the standpoint of variety and completeness.

From European countries, the supervisor of our designing staff brought back many new decorative ideas and incorporated them in 1932 Wall-Tex patterns. Beautiful new Colonial scenics have been added to the line. Several of our 1932 numbers are shown in the soft, mellow Antique finish, the first time offered in fabric wall coverings. Included also are new Egg-shell Dull Prints in attractive patterns for kitchen and bathroom.

Here is beauty unsurpassed — in *washable fabric* wall coverings! Mail the coupon for newest sample patterns for your files.



See
1931
Sweet's-
Page
C-4178

WALL-TEX

COLUMBUS COATED FABRICS CORPORATION
Dept. B-12. Columbus, Ohio

Please send me special A. I. A. Wall-Tex folder containing samples and complete information.

Name _____

City and State _____

Attention of _____



- The linoleum used in the main office and branches
- of the Ohio Bell Telephone Company, Dayton, Ohio,
- was made by a unit of Sloane-Blabon Corporation.



SLOANE-BLABON LINOLEUM

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



NEW ASTORIA HOTEL, NEW YORK CITY.

Architects

SCHULTZE & WEAVER,
18 E. 48th St., N. Y. C.

Mechanical Engineer

CLYDE R. PLACE,
Graybar Bldg., N. Y. C.

Gen. & Elec. Contractors

THOMPSON-STARRETT CO., INC.,
Long Island City, N. Y.



The beauty and impressive dignity of the new Waldorf-Astoria Hotel is in keeping with the taste, refinement and perfection of appointments for which the old Waldorf was famous.

Here, where the architects specified only the highest quality equipment, it is but natural that Holtzer-Cabot Signaling Apparatus was used.

THE NEW
WALDORF-ASTORIA
AMERICA'S
MOST DISTINGUISHED
HOTEL

HOLTZER-CABOT
EQUIPPED

THE HOLTZER-CABOT ELECTRIC COMPANY

BOSTON

CHICAGO

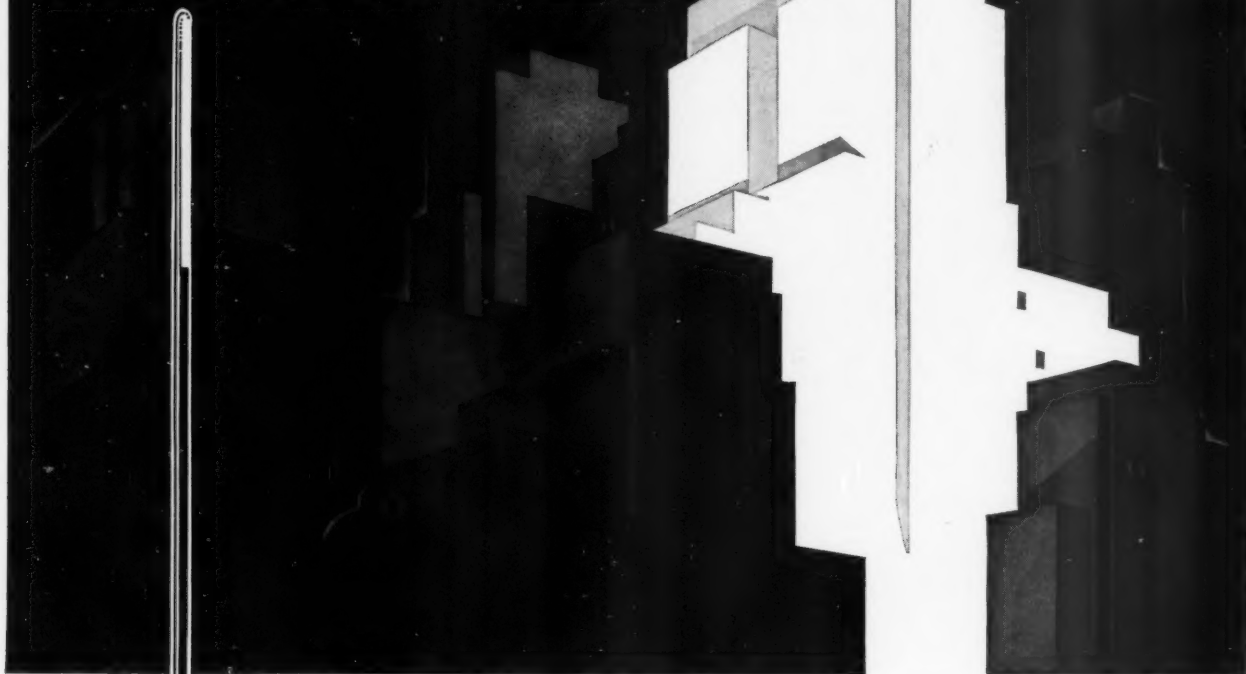
OFFICES IN ALL

PRINCIPAL CITIES



PIONEERS IN HOSPITAL SIGNALING SYSTEMS

Take the SPOTLIGHT



with Automatic Room Temperature Control

The most talked of development in building heating. Prime interest of every Architect and Engineer. New, uniform temperature comfort, leveling heating peaks and valleys, bringing worth-while fuel economies.

Buildings providing Individual Room Temperature Control hold the spotlight today. The world's finest new ones offer it. Progressive older ones are also adopting it to meet the keen competition for tenants, to help reduce excessive heating costs.

Fulton Sylphon, pioneers in room temperature control, now offer further exclusive designs of automatic radiator valves that, in keeping with their reputation for leadership, mark real forward strides in control of both concealed and exposed radiation. For concealed radiators and convector heaters a two-bulb balanced heat control that utilizes the temperature of both in-coming and out-going heated air for regulation, offers accuracy of tem-

perature maintenance with concealed radiator never before possible.

For exposed radiators—a model embodying new beauty, new compactness, new durability, extreme reliability—all the qualities that the architect seeks when considering room temperature control.

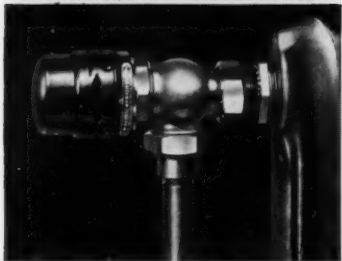
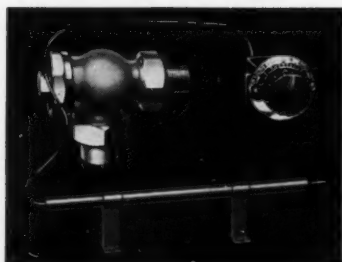
Buildings that incorporate these valves this winter will be at least one year ahead of the procession, for plans were purposely announced too late for attempts approaching duplication by competitors.

Write or wire for further information today. Ask for the new advance Bulletin No. XJ-255. Or ask for a representative to call with samples—Do it today.

FULTON SYLPHON Co.
KNOXVILLE TENN., U.S.A.

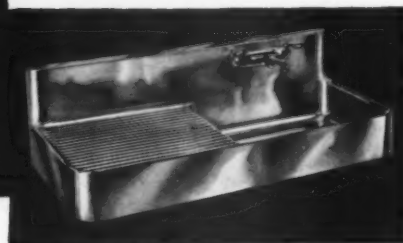
European Representatives, Crosby Valve and Eng. Co., Ltd., 41-2 Foley St., London, W. 1., Eng.; Canadian Representatives, Darling Bros., Ltd., 140 Prince St., Montreal, Quebec, Canada.

Representatives in All Principal Cities in U. S. A.





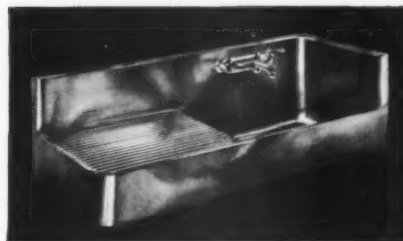
AT LEFT: Double drain board Monel Metal kitchen sink. Made in nominal sizes of 72" x 21" and 60" x 21".



ABOVE: Single drain board Monel Metal kitchen sink. Available in both left- and right-hand drain board models. Made in nominal sizes of 60" x 21" and 41" x 21".

• • •

BELOW: Monel Metal corner kitchen sink. Splasher at bowl end, drain board either right- or left-hand. Supplied in nominal sizes of 61" x 21" and 42" x 21".



Monel Metal Sinks offer these 8 points of Superiority:

- 1 Rich, lustrous beauty with a satiny, glass-smooth surface.
- 2 Rust-proof... highly resistant to corrosion... easy to clean and keep clean.
- 3 Solid metal clear through, with no coating to chip, crack or wear off. Steel-like strength gives lifetime durability.
- 4 Neutral, silver tone that blends with any kitchen color scheme. Gives new freedom to kitchen decoration.
- 5 10 standardized models and 6 standardized sizes. A model and size for any type of kitchen.
- 6 31% more working space than an ordinary sink of same nominal size.
- 7 One-piece construction of heavy gauge Monel Metal. No joints or seams. Reinforced and sound-deadened.
- 8 Standardized construction and quantity production bring prices within reach of the average purse.

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.

A kitchen is only as Modern as its Sink...

EVEN an attractive kitchen loses some of its cheerfulness through the presence of a drab, lifeless-looking sink—or a sink that clashes with the general color scheme. And nothing contributes more to real kitchen charm than a sink of silvery, satin-smooth Monel Metal!

Monel Metal's beauty is soft and restful to the eye—never harsh or glary. Its neutral, platinum-like tone blends pleasantly with every kitchen color, permitting full freedom of color planning. No matter what wall and woodwork tints you or your clients choose, a Monel Metal Sink will always harmonize.

Modern, yet thoroughly practical in design and construction, Monel Metal Sinks embody advantages of convenience and utility never before available in any standardized sink. Yet these new-day sinks are priced well within reach of the average purse. They are sold by leading plumbing supply houses. See them—and write for specification details and descriptive literature.

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



A HIGH NICKEL ALLOY
MONEL METAL
NICKEL ALLOYS LOOK BETTER LONGER



THE CARLTON LAVATORY
Plate No. 2192-T

Beauty of line is but one feature of this new TE-PE-CO LAVATORY



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

ALTHOUGH measuring but 24" by 21" overall, this lavatory has an extra large bowl area—19½" by 12½"—far more spacious than is usually the case in much larger size lavatories. The elevated shelf and compact type of fitting provide a greater expanse of slab space than ordinarily found. They also prevent any possibility of back syphonage. Add to these advantages — the distinguished design — the durability — the sanitary qualities for which Te-Pe-Co products are famous. Then study the photograph and you'll agree that the recognition already accorded this newest of Te-Pe-Co Lavatories is well deserved.



THE TRENTON POTTERIES COMPANY

Trenton, New Jersey, U. S. A.

National Showrooms :

New York City :
101 Park Ave., Entrance on 41st St.

Philadelphia :
Architects' Building, 17th & Sansom Sts.

Branch Offices :
Boston and Chicago :

Export Office: 115 Broad St., New York City



Phantom View Thru The Wall

AN ANNOUNCEMENT OF TWOFOLD IMPORTANCE
PRICE — GREATLY REDUCED
 INSTALLATION SUPERVISION NOW NATION WIDE



INTERLOCKING THRU-WALL FLASHING

DRASTIC REDUCTIONS in the price of Cheney Interlocking Thru-Wall Flashing have been brought about by tremendously increased sales and greatly improved manufacturing facilities.

These reductions will permit Architects to specify Cheney Flashing to a much greater extent than heretofore on buildings of the first class—and will also allow its use in buildings of less expensive construction, where previously first cost has been of primary importance.

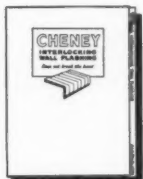
CHENEY ENGINEERING SERVICE for the supervision of Cheney installations has been so extended that the functioning of our organization is now nation wide in its scope and Cheney Flashing is standard construction throughout the United States and Canada.

You already know the merits of Cheney Flashing—how this material laid in the mortar bed, without the usual necessary soldering expense, runs completely through the masonry wall and prevents seepage, leaks, and efflorescence.

You also know how the dovetail splayed keys at intervals throughout the length of the flashing form a perfect mechanical key-bond in *every* direction within the wall, eliminating all fear of weakening the structure.

Cheney Flashing *"Solves Seepage Problems Safely."*

*A New Cheney Catalogue
 is now awaiting
 your inquiry*



*Our Catalogue is filed in
 Sweet's Architectural
 Catalogues*

THE CHENEY COMPANY

WINCHESTER, MASSACHUSETTS

NEW YORK

PHILADELPHIA

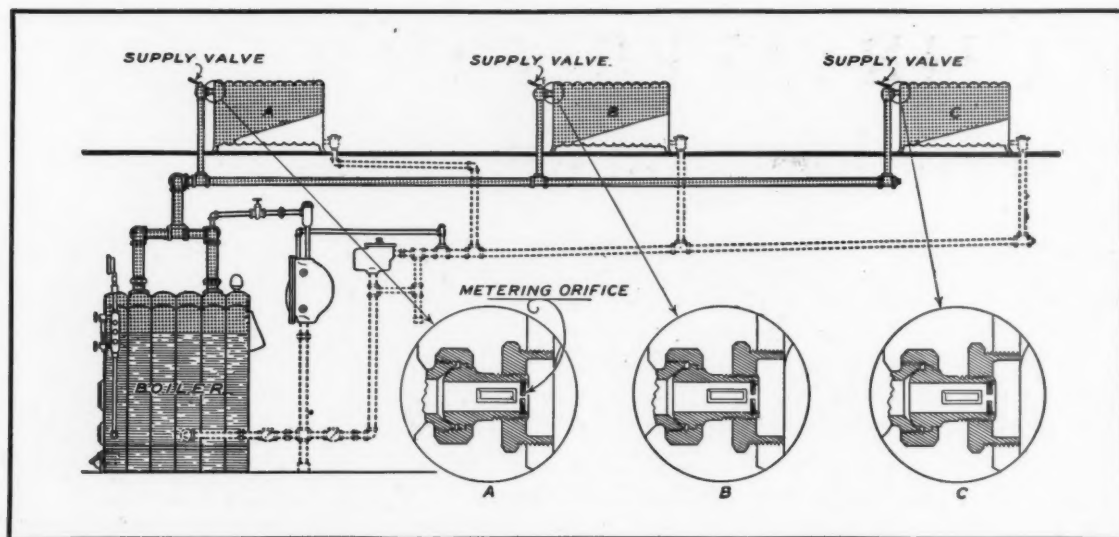
PITTSBURGH

CHICAGO

Pacific Coast Representative, Westates Products Company, San Francisco, California

In Canada: Corporate Steel Products Limited, Montreal





Get this Picture!... In the IMPROVED Webster Type "R" System the distribution of steam to each radiator is so equalized and balanced that all radiators get steam at the same time and in practically the same proportion, regardless of distance from the boiler.

This is not the theory of the IMPROVED Type "R" System but its actual performance. It is something you can promise, something you can specify, something we can guarantee.

You are probably familiar with the Webster Type "R" System—widely preferred for fine residences and other quality buildings. You will recognize the above diagram. Here is the same perfected system with the addition of a specially sized metering orifice in each radiator valve. Note that radiator A, nearest the boiler, is equipped with a very small orifice. When steam reaches it the amount that can enter is correspondingly restricted. As a result the steam soon flows on through the piping to radiator B. Here the restriction of the orifice is slightly less, because the pressure of the steam as it reaches this further point is lower. So it goes, radiator by radiator to the furthest point. The "pressure drop" to each radiator has been equalized or balanced by installation of properly sized metering orifices.

The advantages of this 1931 Webster improvement are evident... quick heating up, more even room temperatures, better

control with the newer fuels, the newer types of light weight radiation and the newer regulating devices. Better control too, with the older fuels and cast iron radiation.

For This Improved Service

All that is necessary to assure your clients of the marked advances in heating comfort and economy afforded by Improved Webster Type "R" Systems is to incorporate three short paragraphs in your present standard Webster specifications. Bulletin containing these paragraphs will be sent upon request, together with complete information. The coupon below is for your convenience.

Warren Webster & Company, Camden, N. J.
Pioneers of the Vacuum System of Steam Heating
Branches in 60 principal U. S. Cities—Darling Bros., Ltd., Montreal, Canada
a R 25

-since 1888
Webster
Systems of
Steam Heating

WARREN WEBSTER & COMPANY, Camden, New Jersey:

A.A.12-31

Please send me your Bulletin describing the IMPROVED Webster Type "R" System with suggested specifications.

Name.....Address.....City.....

CHRYSLER CHOOSES

a style background for smart cars



[Smart cars, displayed on a smart background! The International Showroom of the Chrysler Motor Company in the famed Chrysler Building, New York City. The floor shown is Armstrong's Embossed Inlaid Linoleum No. 6180.]

AND that background, of course, is Armstrong's Linoleum. In smart showrooms from coast to coast you'll find these modern floors. They do help sales—a fact proven by the actual experience of merchants, manufacturers, and dealers who have them.

If you draw up plans for stores and showrooms, be sure you have complete information about Armstrong's Floors. Do you know, for instance, that there are more than three hundred designs to choose from? That any design you may conceive can be faithfully created in Armstrong's Linoleum? That these



Another floor in the Chrysler showroom. A white Marble Inlaid background (Design No. 13131) set off by a black marbled border. Stair risers and treads, too, are linoleum.

floors can be laid quickly, without interrupting business? That they outwear ordinary wood floors, and keep their trim appearance for years?

Our file size specification book and our section in Sweet's will tell you all this and more. Our color-illustrated book "Public Floors of Enduring Beauty" shows a variety of installations. Both books are yours for the asking. Just address Service Bureau for Architects, Armstrong Cork Company, Lancaster, Pa.

Armstrong's
Product

Armstrong's Linoleum Floors

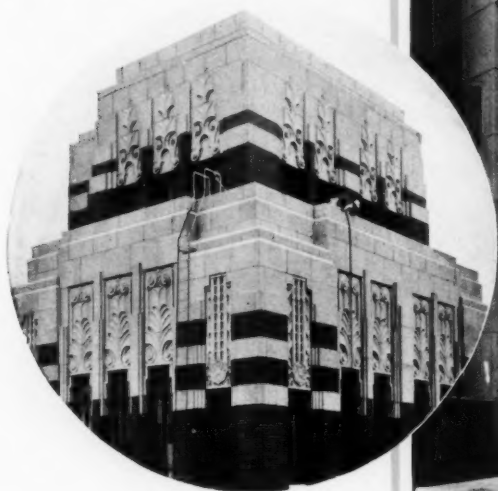
FOR EVERY ROOM IN THE HOUSE

How Armstrong's Floors Save Your Clients' Money

MODERATE FIRST COST . . . INEXPENSIVE INSTALLATION . . . LOW UPKEEP COST . . . LONG WEAR . . . COLOR AND DESIGN WITHOUT INCREASED EXPENSE . . . NO REFINISHING . . .
ECONOMICAL FOR REMODELING JOBS!

PLAIN • INLAID • EMBOSSED • JASPÉ • LINOFLOR • LINOTILE • CORK TILE • ASPHALT TILE

Pacific National Bank Building, San Francisco, faced and ornamented with cast stone made with Atlas White. O'Brien Bros. & W. D. Peugh, architects; Cahill Bros., general contractors, both of San Francisco. Cast stone furnished by P. Grassi & Co., Traverite Works, Inc., San Francisco.



Cast stone is adaptable to *your* ideas

CAST stone permits the designer to adapt building stone to his ideas—it does not compel him to fit his ideas to the stone available. It offers the owner a wide choice of distinctive, colorful, durable facings for the exteriors of new or remodeled buildings.

Cast stone in almost any desired shape, texture and color is available. Manufacturers will furnish on request samples of fine cast stone made with either non-staining Atlas White or Atlas *Waterproofed* White portland cement.



CONCRETE FOR PERMANENCE

Universal Atlas Cement Co.

Subsidiary of United  States Steel Corporation

CHICAGO • NEW YORK • PITTSBURGH • MINNEAPOLIS • KANSAS CITY





This Month's Cover

FEZ THE MYSTERIOUS

ON a rapid journey through Morocco, Mr. Williams found that four cities stood out—Rabat, Meknes, Taza and Fez. He says, "In a way, Fez sums up the qualities of the other three, combining all that you desire in picturesque Mohammedan quality with the poetry of natural settings of olive orchards, hills and almost anything you wish for in color."

Mr. Williams is vice-president of the Architectural League of New York and is well known for his mural paintings, particularly those in the Park Central Hotel, New York, and the main American office of Thomas Cook & Son. He designs in stained glass, is an excellent etcher, and votes water color as his favorite play medium.

The story of the sketching trip on which the subject for this month's cover was made will be found on page 50 under the title, "A Sketching Trip to North Africa."

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*

IN THIS ISSUE

Cover—A water color by J. Scott Williams

Is This Our Next New Big Business.....	Benjamin F. Betts	21
Hundreds Have Signed This Petition.....		22
Two Sales Buildings for Rex Cole.....		24
How One Young Architect Got 15 Jobs.....	Alfred E. Fountain, Jr.	28
For the Boy Scouts of Phoenix, Arizona.....		30
How to Prevent Plaster Cracks.....	V. T. H. Bien	32
Canadian Ornament Goes Native.....	John M. Lyle	34
15% Profit, 90% Rented When Done.....	Charles H. Lench	40
How Voorhees, Gmelin & Walker Handle Interior Decoration	Eugene Clute	44
The Classicists Are Taken for a Ride.....	Zuleika Hutchins	47
What Architects Are Talking About.....		48
A Sketching Trip to North Africa.....	J. Scott Williams	50
As It Looks to the Editors.....		54
And Abroad		56
If Explosion Damages Work, Who Pays?.....	George F. Kaiser	58
The Readers Have a Word to Say.....		60
New Books		64
New Materials & Equipment.....		70
New Catalogs		83

Next Month

MODERNIZING—What was learned from modernizing 400 buildings
RAYMOND HOOD—The McGraw-Hill Building, his latest venture
ECONOMICS—Overhead cut \$5,000 a week in Earl Carroll Theatre

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

William Randolph Hearst, President; Thomas J. White, Vice President; John Randolph Hearst, Vice President; Arthur S. Moore, Secretary; Austin W. Clark, Treasurer. Copyright, 1931, by International Publications, Inc. Single copies, 50 cents. Subscription price, United States and Possessions, \$5.00 per year; \$7.00 for two years; Canada, \$1.00 extra; foreign countries, \$2.00 extra. Entered as second-class matter, April 5, 1926, at the Post Office at New York, N. Y., under the act of March 3, 1879. AMERICAN ARCHITECT is fully protected by copyright and nothing that appears in it may be reproduced either wholly or in part without permission.

AMERICAN SHEETS

OUTSTANDING

Among All Others

THE NEW First National Bank Building St. Paul, Minn.

Architects—
Graham, Anderson, Probst & White, Chicago
General Contractors—
Paul Steenberg Construction Co., St. Paul
Heating and Ventilating Contractors—
Capital City Roofing & Cornice Works, St. Paul

Distinctive among all of the surrounding structures both in appearance and usefulness to the community, this imposing structure is representative of the westward trend in modern building and is characterized by every detail of its construction being of the finest materials available.



In accordance with established quality standards, all steel sheets used in the ventilating system are

Apollo Best Bloom Galvanized Sheets

Write for full information on AMERICAN Black and Galvanized Sheets, Special Sheets, Tin and Terne Plates, Keystone Rust Resisting Copper Steel Products, and USS Stainless Steel Sheets.



AMERICAN SHEET AND TIN PLATE COMPANY, Frick Bldg., Pittsburgh, Pa.

SUBSIDIARY OF UNITED STATES STEEL CORPORATION

Is this Our Next New Big Business?

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

AS civilization has progressed, businesses have grown; some have fallen by the wayside. In our own time we have seen the business of horseshoeing become a curiosity of the back roads and its general replacement by public garages and automobile service stations; we have seen refrigeration and air conditioning enter the realms of big business.

With the world's demand for speed we have gone from the stagecoach to express train and airplane; from the dispatch rider to telephone, telegraph and radio; and from the horse to the automobile—all at the cost of quiet. With speed comes noise. The village becomes a town—a large city; and again progress has sacrificed quiet. Automobiles, street cars, police whistles, radio loud speakers, the drone of airplane and airship motors add to the city's din. It is a problem to feed the multitude quickly and the clatter of dishes and trays in the restaurant seems to leave no one with a place of quiet retreat.

BUT with it all there comes a new business with great potential possibilities—the business of sound control. Through its power outside noises can be shut out of offices and apartments. The transference of noise from one room to another can be stopped. The acoustics of great auditoriums can be made so efficient that all normal human beings who listen can hear. The clatter of dishes and loud conversation can be absorbed to the point that an hour in a restaurant will be looked forward to with pleasure instead of dread. The noise of the railroad train, airplane or automobile can be absorbed to the benefit of those who use them.

World progress will continue and with it will grow the business of sound control until it becomes one of the world's foremost industries whose mission is to bring quiet to the human race as it works or plays. The day is not far distant when prospective buyers and tenants of buildings will ask, "Is it soundproof?"

[illegible]

■ Many chapters of the American Institute of Architects, associations and societies have not yet completed the cir-

[illegible]

ulation of the petition, although they have informed the editors that such petitions are under way. Some chapters have been uncertain of the attitude of the national body. The Institute has made it clear that the action of individual chapters is a matter to be decided by each chapter. . .

FOR THE NEW ARCHITECTS

Architects are now in a position to make a new start. The new building code is now in effect. The new building code is now in effect. The new building code is now in effect.

THE TIME HAS COME FOR CONGRESS TO Reorganize the

By BENJAMIN

The time has come for Congress to reorganize the Office of the Supervising Architect. The time has come for Congress to reorganize the Office of the Supervising Architect. The time has come for Congress to reorganize the Office of the Supervising Architect.

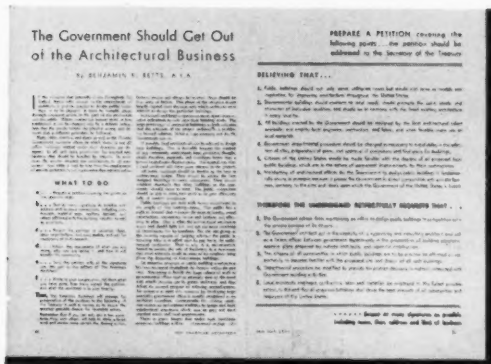
Office of the Supervising Architect

T. W. H. A. A.

The time has come for Congress to reorganize the Office of the Supervising Architect. The time has come for Congress to reorganize the Office of the Supervising Architect. The time has come for Congress to reorganize the Office of the Supervising Architect.

[illegible]

» » » HUNDREDS HAVE



PETITIONS urging that the Supervising Architect's office be reorganized on a supervising basis have been received from societies and A.I.A. Chapters in Detroit, Louisville, Salt Lake City, Memphis, Knoxville, Chattanooga, Westchester County, N. Y., Philadelphia, Tacoma, and Portland, Maine. The petitions have been signed by bankers, real estate men, lawyers, business executives, manufacturers, contractors, architects, landscape architects, engineers and sculptors.

■ Many chapters of the American Institute of Architects, associations and societies have not yet completed the cir-

TO GET THE GOVERNMENT OUT

No.	Name	Address	Kind of business
1	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
2	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
3	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
4	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
5	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
6	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
7	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
8	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
9	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
10	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
11	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
12	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
13	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
14	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
15	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
16	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
17	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
18	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
19	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
20	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
21	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
22	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
23	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
24	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
25	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
26	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
27	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
28	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
29	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
30	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
31	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
32	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
33	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
34	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
35	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
36	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
37	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
38	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
39	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
40	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
41	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
42	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
43	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
44	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
45	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
46	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
47	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
48	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
49	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
50	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
51	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
52	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
53	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
54	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
55	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
56	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
57	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
58	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
59	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
60	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
61	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
62	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
63	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
64	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
65	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
66	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
67	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
68	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
69	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
70	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
71	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
72	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
73	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
74	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
75	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
76	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
77	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
78	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
79	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
80	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
81	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
82	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
83	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
84	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
85	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
86	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
87	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
88	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
89	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
90	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
91	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
92	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
93	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
94	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
95	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
96	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
97	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
98	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
99	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect
100	John A. Schaefer	1000 N. 1st St. St. Paul, Minn.	Architect

23



A Refrigerator Man Wanted a Sales Building so he asked RAYMOND HOOD

REX COLE BUILDING
Flushing, Long Island, N. Y.

Hood and Fouilhoux,
architects

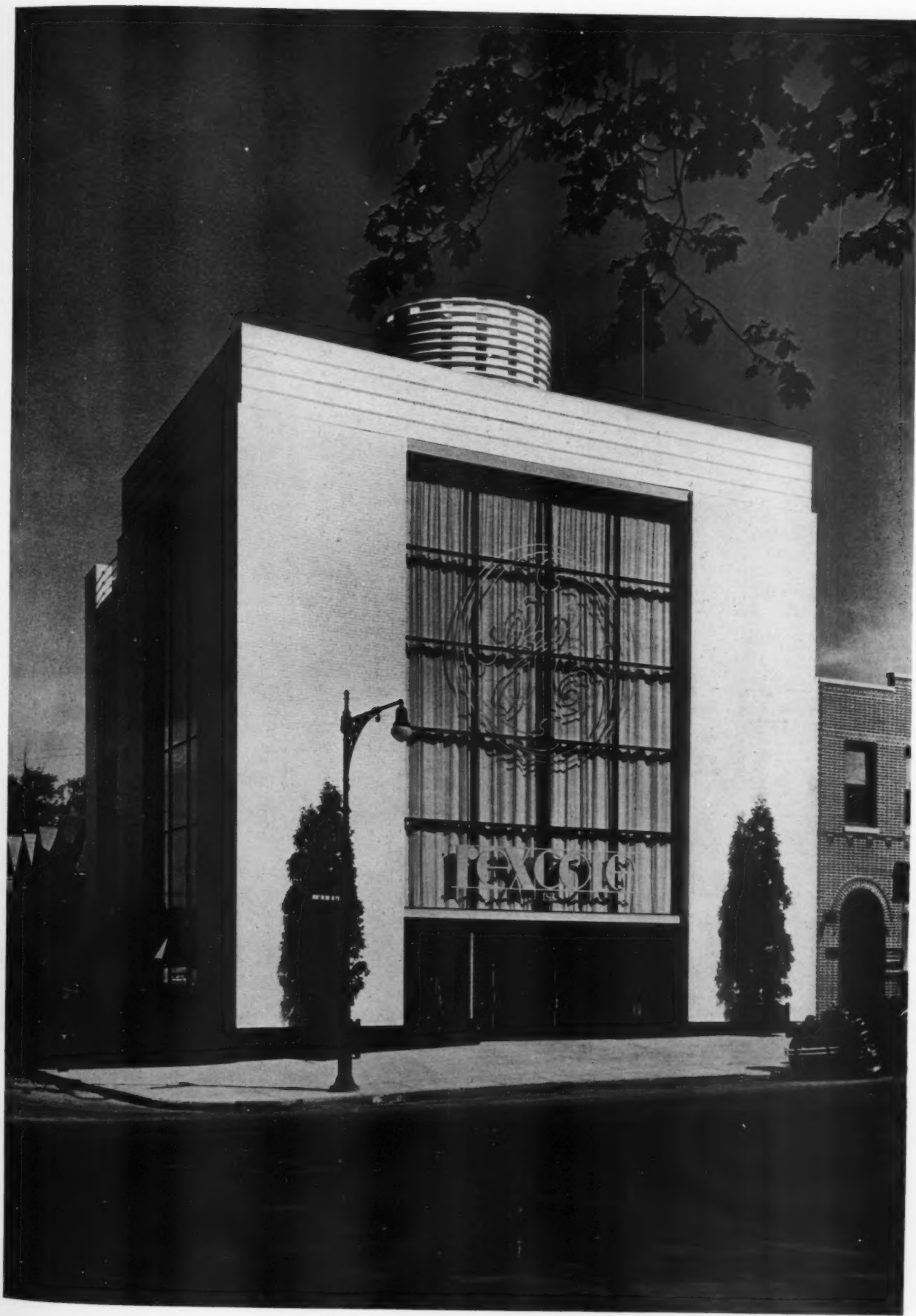
Photographs by Samuel Gottscho

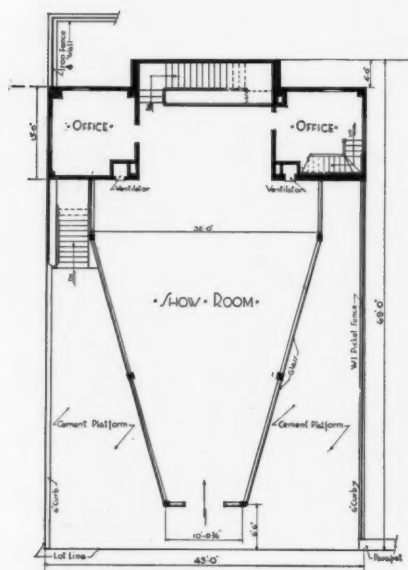
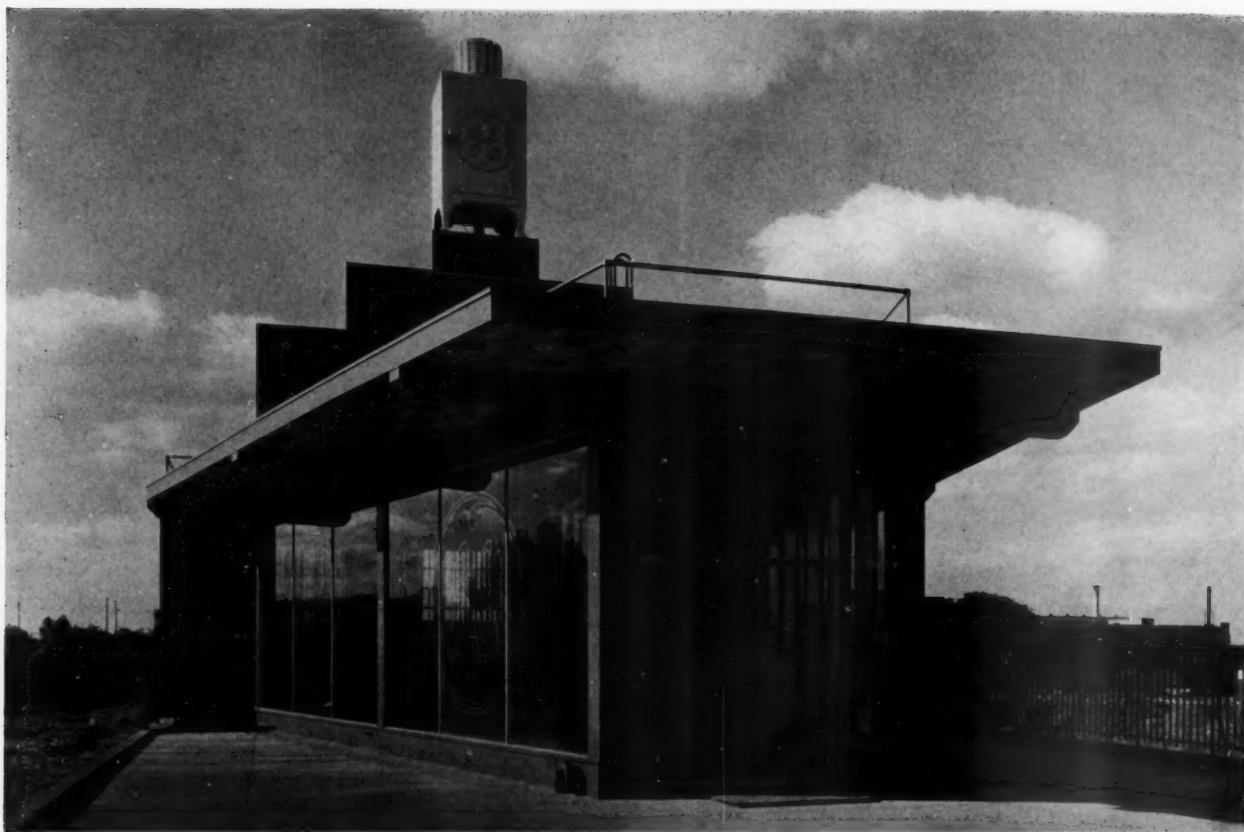


AT LEFT, interior at rear of show room. Above the rear section is an office, coat room and toilet

Another Rex Cole sales building is shown on the next two pages

AMERICAN ARCHITECT





STREET LEVEL. On the floor below
is a display room, office, etc.

•
REX COLE BUILDING
Brooklyn, New York

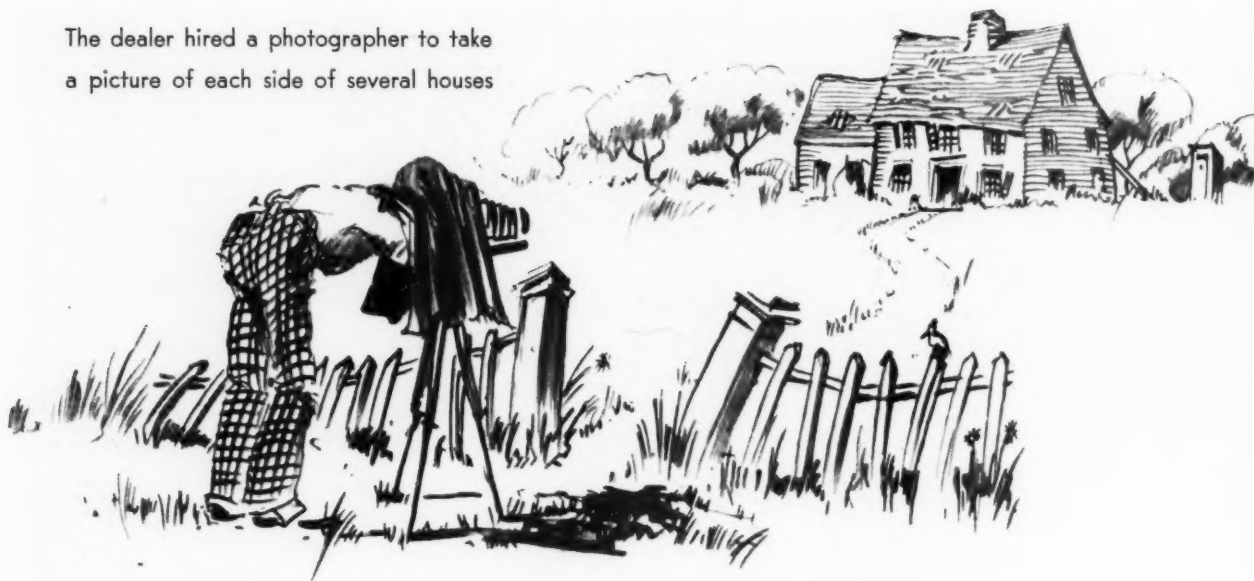
•
Hood and Foulhoux,
architects

Another REFRIGERATOR SALES BUILDING

• The First One is Shown on the Two Preceding Pages



The dealer hired a photographer to take
a picture of each side of several houses



» » » HOW ONE YOUNG ARCHITECT

Got 15 Jobs

By ALFRED E. FOUNTAIN, JR.

Vice-President Blaker Advertising Agency, New York

IF a man knows how to get work and can handle it, he can generally find plenty to do. The editors of *The American Architect* would like to receive articles from architects who have learned how to get business regardless of what general business conditions might be. Articles should be about 1,500 words long; \$75 will be paid for each accepted

LAST Spring I sat through several sessions of a State Convention of building supply dealers. I came away with an idea that I presented to a friend of mine, a young architect, to help him start his architectural practice. I had, of course, known for a long time that the building supply dealers, motivated by the increasing activity of the mail order houses, were beginning to realize that if they wanted to stay in business, they had to do something besides sit in their offices and wait for business to come to them.

One dealer, from a small town, told how he had sold several orders for building materials amounting to several thousand dollars each by the following method. Being fairly familiar with the financial position of most of the families in his locality he had gone through the entire county, street by street, house by house, to locate the most likely houses that would be subject to alteration or an addition. He chose about six or eight that even to his untrained eye appeared to be good prospects. He then hired a photographer to photograph all four sides of each house, called in an architect and had him make a sketch showing the house altered in some way—perhaps a new roof and dormers to replace an old mansard, or a new living room wing and garage, or some such obvious change. He then prepared an intelligent estimate of the cost of the alteration, and armed with photographs of the present house and the architect's sketch of how it would look when altered, called on the lady—not the man—of the house and showed what could be accomplished by spending a few thousand dollars. In enough cases to make the speculation worth while he got the owners to agree to have the work done. He recommended the architect, the builder, and sold the material for the job.

Here then, seemed to me to be an idea for a young architect, and the idea is working out. It can be used in



Illustrations by
Lansing C. Holden, Jr.
A. I. A.

Then the dealer called in an architect to make sketches of the houses as they could be altered

FIVE alterations for a chain store
averaging \$20,000 each

SIX house alterations, one \$10,000

ONE store alteration \$8,000

ONE new specialty shop \$15,000

ONE new \$28,000 residence

ONE alteration for apartment house
including furnishings \$40,000

any country or suburban community, and is particularly valuable where there are several towns fairly close together. Right now is a good time to work it.

For the most part, building supply dealers are men of substance. By that I mean they have considerable financial standing, have usually lived in their community for a long time and are well known. Today they are more sales minded than they have ever been—are more progressive and anxious to *create* business for themselves. Therefore any architect who has a practical knowledge of design and construction and is anxious to start a practice has just what these dealers need.

My young friend with whom I talked this matter over saw the opportunity and started to capitalize on it at once. First he went to the best dealer in his town and

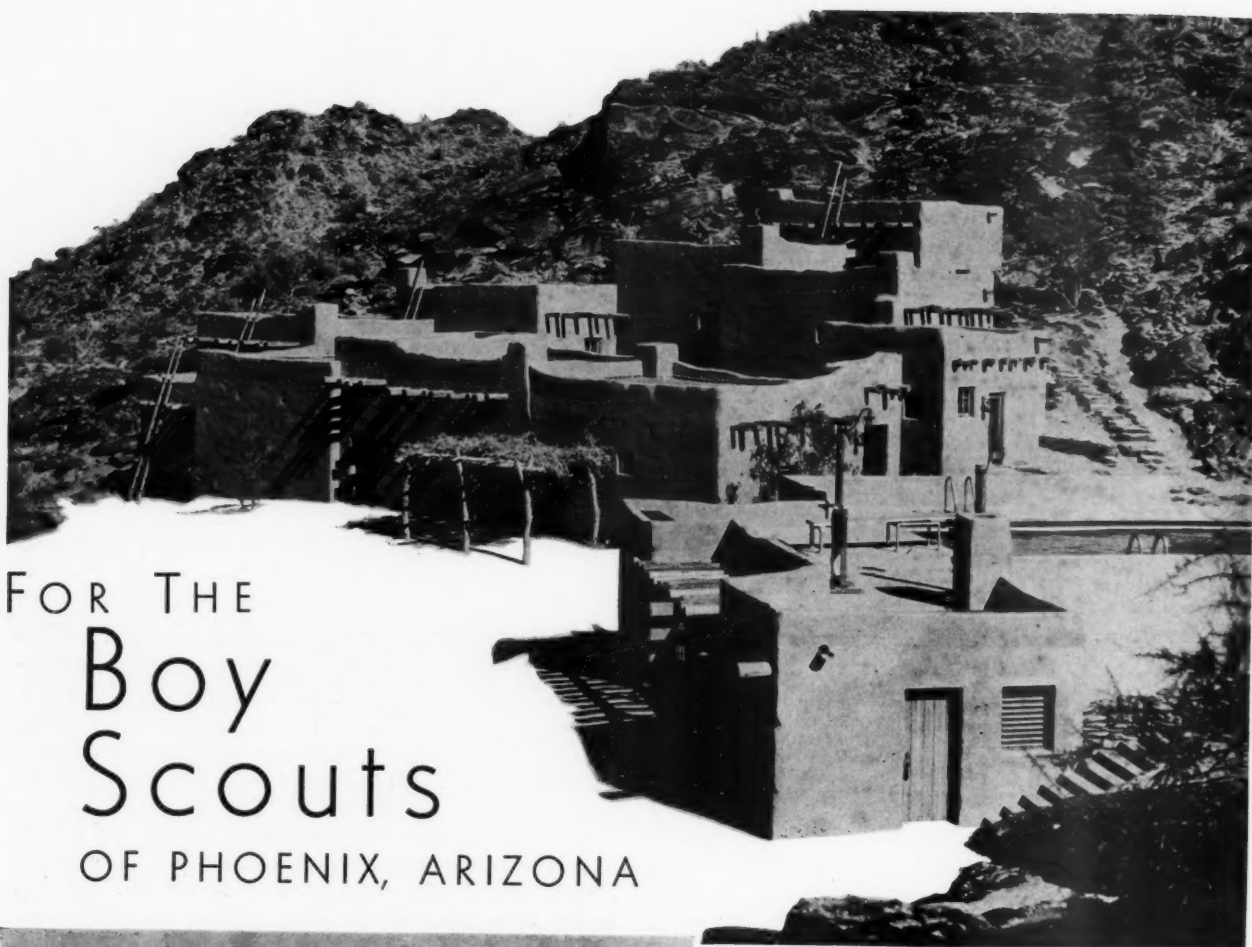
told him of the idea, and together they got the first job—a new entrance, some interior partition changes, repainting, and some outside changes to the garden. But it was a beginning, and through the same dealer several other jobs have been started. Then the same idea, because of its success, was taken up by the other two dealers of the town.

Obviously, the next step was to spread out and get the dealers in nearby communities interested. In this he has been almost one hundred per cent successful. To date he has done about fifteen jobs.

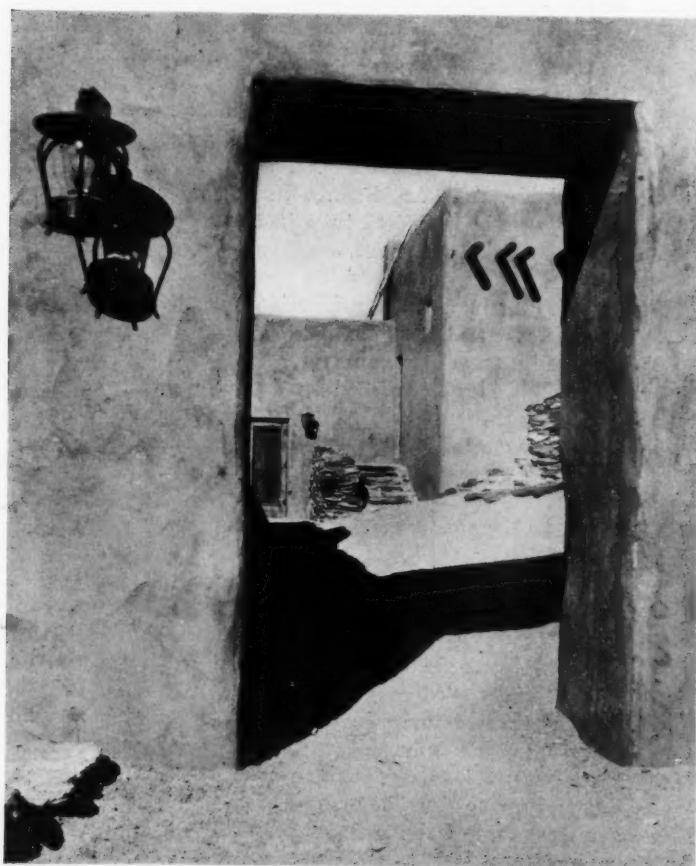
The interesting points about this are, as I see it, the fact that first, this young architect has, through his work with eight or ten dealers, succeeded in getting eight or ten prominent salesmen to work for him; and second, his clients are hand picked as being the richest or most prominent in the community. The older and more influential inhabitants usually live in the older homes, and when properly approached are just as susceptible as anyone else to improvement and beauty. Furthermore, in small towns an alteration to a prominent house is an affair of moment and considerable publicity is to be had from it. I confidently expect that my young friend will be called upon to do more important work before long.

Can this idea be worked out in a large city? I think so. I happen to live in New York City. I also happen to be acquainted with several building supply dealers whose places of business lie within fifty miles of City Hall. I know that most of them are out creating building and alteration work for which some architect will be needed.

It is true that these dealers have stock plans for sale, but it is also true that they are far more interested in creating a group development or an alteration to a house or addition to a factory than they are in selling the material for one stock house. Usually the credit is better and the customer a more influential one. Building supply dealers are not only able to sell most of the materials that go into a building, but they are ready and anxious to finance any worth while project. So they are out for bigger work, and that inevitably means the employment of architectural service.



FOR THE
 Boy
 Scouts
 OF PHOENIX, ARIZONA



S EVEN miles south of Phoenix, Arizona, on the northern slope of the South Mountains has been erected a group of buildings honoring the memory of Dwight B. Heard and dedicated to the Roosevelt Council of the Boy Scouts of America. Made possible by the generosity of Miss Florence Dibell Bartlett, of Chicago, this group forms a recreational center for the local Boy Scouts.

Consistent with the character of the country and the immediate surroundings, the type of architecture is naturally that of the old Indian pueblos such as are found at Taos, New Mexico. The type of construction used is one which has been found excellent for the hot, dry climate of the desert. Twelve-inch adobe walls plastered inside and out are used throughout. The exterior wall surfaces are plastered over chicken-wire with a cement plaster of a color harmonizing with the desert sand in the foreground and the granite rocks which rise behind the building. (Continued on page 78)

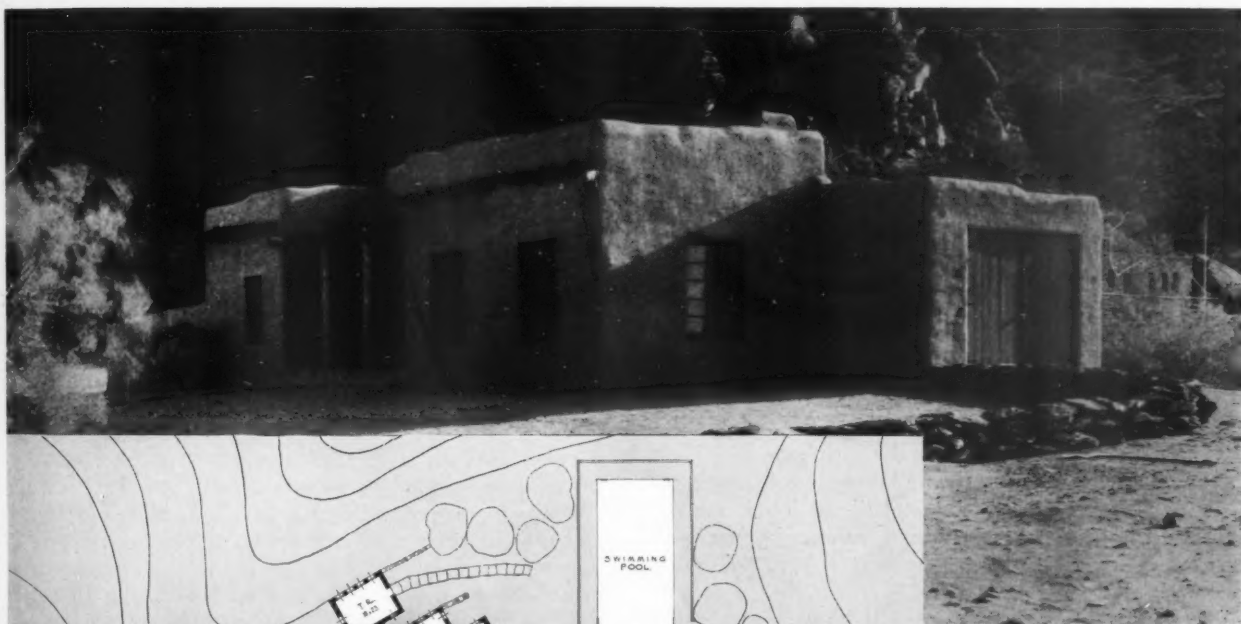
PATIO of the main building, glimpsed through an entrance door at the side



H. H. Green and
Henry W. Hall,
Architects

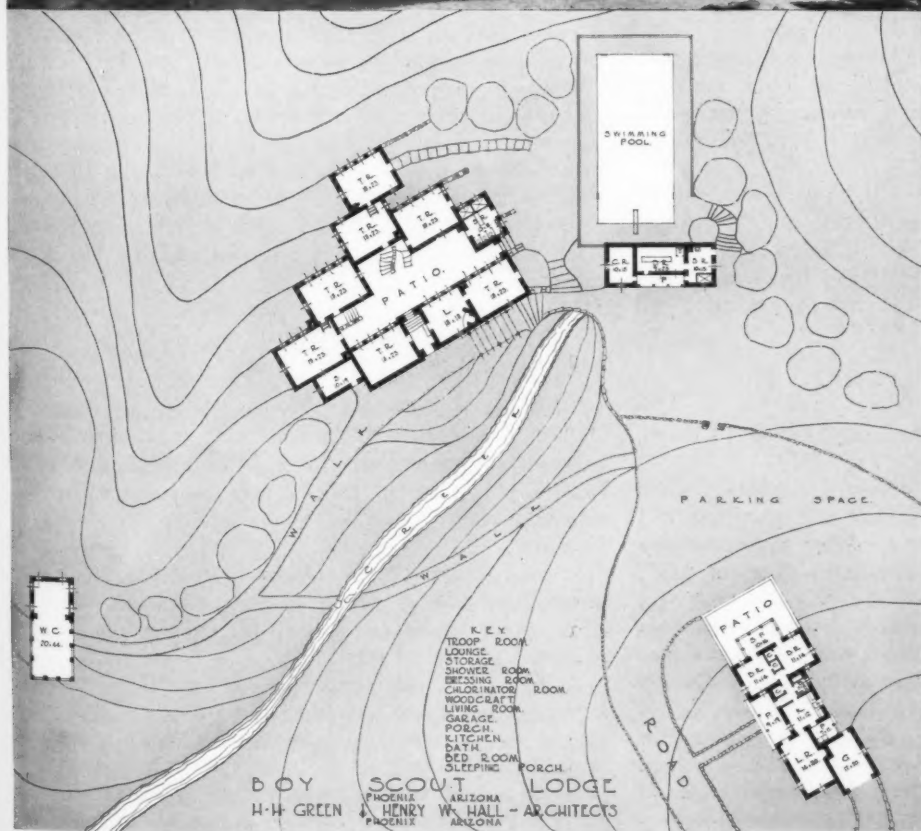
LIKE GIANT STEPS

to climb the granite hills, the main building fits naturally into the dividing line of desert and boulder-strewn mountain. The lodge provides rooms, about 18' x 23', for scout troops



DIRECTOR'S COTTAGE

with 12" adobe walls plastered inside and out, placed apart from the main group because it does not follow precedent so closely as does the main building



OLD PUEBLOS

had but few windows and these were small. So the units of the main building were grouped around a patio, with large windows in the rear that are unseen from angles of approach

Plaster Cracks

THEIR CAUSE AND PREVENTION

By V. T. H. Bien, Builder, Tacoma Park, D. C.

THE causes of plaster cracks are many and various. Most common perhaps are foundation settlement, inadequate framing, and inferior materials or improper methods of application. All of these however can be prevented by proper specification and supervision. On the other hand, there are many cracks which do occur in otherwise well-built houses. They are invariably due to wood shrinkage.

* » CHARACTERISTICS OF WOOD

WOOD while in the making is a living thing. Like other moisture laden plant life, it decreases in size in drying. However, so far as wood is concerned, this decrease is almost entirely across the grain, that along the length of the piece being negligible. Thus, a 2"x10" measuring exactly 1 $\frac{3}{4}$ "x9 $\frac{1}{2}$ "x14'-0" will, after a year or two of drying out in the building, measure about 1 $\frac{5}{8}$ "x9"x14'-0", there being no appreciable decrease in the length. The amount of this decrease in cross section will vary widely according to the wood and according to the state of dryness when placed in the building. In extreme cases, I have observed the shrinkage in a 2"x12" to be from $\frac{3}{4}$ " to 1", in the 12" direction, the first year.

This change in cross sectional dimension is the crux of the whole matter. While it cannot be prevented, proper framing will go a long way toward minimizing trouble.

Every detail of framing should be carefully studied to note what effect a reduction in cross section through shrinkage of the framing material will have on the size and shape of the walls, partitions and floors, and their relation to each other, and the consequent effect on brittle plaster surfaces.

* » 3 $\frac{5}{8}$ " STUDS SHRINK TO 3 $\frac{1}{2}$ "

THE simplest case is the ordinary frame partition, Figure 1.

The studs comprising it will measure about 3 $\frac{5}{8}$ " when put in the building. With plaster the partition will measure about 5 $\frac{1}{4}$ " in thickness. After a year or two however, the studs will have decreased to about 3 $\frac{1}{2}$ ", thus reducing the thickness of the partition to about 5 $\frac{1}{8}$ ". If the studs were green, as is all too common with the bulk of framing lumber, this decrease might well be as much as $\frac{1}{4}$ ". Consequently, cracks develop in the corners wherever such partitions join other partitions, walls and ceilings. They are most noticeable where walls are tinted or painted as wall paper often conceals them.

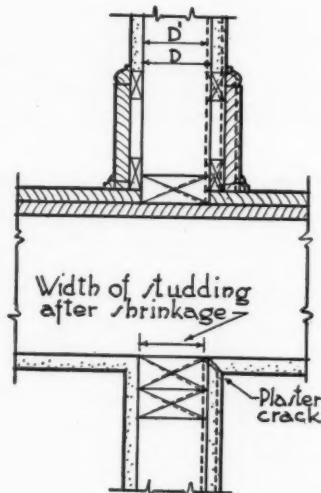


FIGURE 1

PARTITION SHRINKAGE

in western frame. D and D¹ show size of studs before and after drying out. Partitions may pull away from shoe mold unless it is nailed to the frame wall construction

There are two remedies. First: Metal lath in the corners, and not simply at junctions between frame and brick as has long been the accepted practice. Unfortunately this is not an invariable rule as there are certain cases, especially with the western or platform frame in which metal lath should be avoided in such corners, and especially where frame joins brick. Second: In better grade work it is advisable to use well-seasoned or kiln dried lumber in all partitions which are not to be papered. This will reduce shrinkage and consequently lessen the extent of the cracks.

* » CRACKS BETWEEN SHOE MOLD AND FLOOR

WHILE not a plaster trouble, the result shown in Figure 2 is similar in principle. It is common with balloon frame and part masonry construction. Careful study of the effect of shrinkage in the joists will reveal why and where cracks may be expected. The remedy is fourfold:

1. Nail the shoe to the floor construction. It is well also to let the finish floor go under the base as shown, by allowing proper clearance when placing the base. Better nail-hold is thus provided.

2. The base should be finished, at least in part, before applying the shoe. Otherwise when the shoe slips down on the base as the joists decrease in depth, a strip of unpainted wood will show.

3. The use of well-seasoned or kiln dried material for joists will greatly reduce the amount of shrinkage. Steel

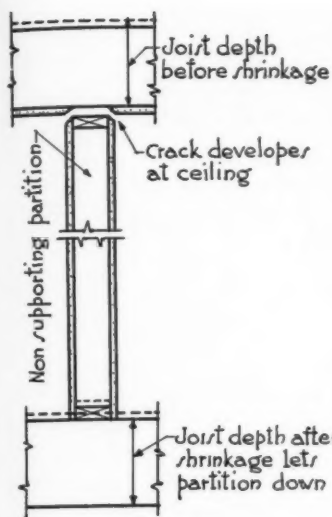


FIGURE 2

JOIST SHRINKAGE

in balloon frame. Masonry buildings behave in the same manner. Shoe should be nailed to floor. Sometimes joists spiked to studs will lift off ledger board, causing a crack to appear at the ceiling line of room below

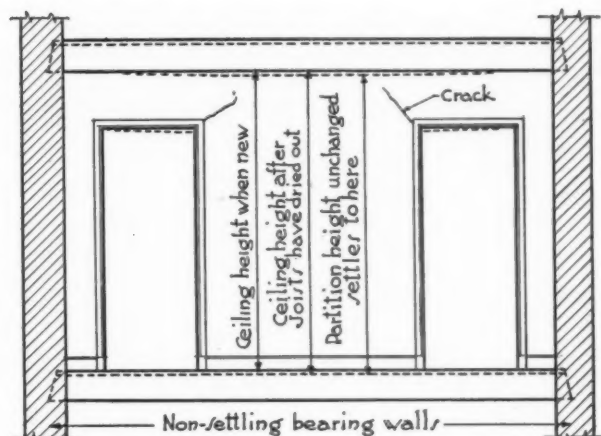


FIGURE 4

DIAGONAL CRACKS occur and doors bind if partitions carried by joists are secured to masonry or balloon framed walls. If free to slip past non-settling end walls, jagged corner cracks will occur

or bar joists will largely eliminate it.

4. The use of wood with high fiber stresses and moduli of elasticity will tend to make possible the use of joists of lesser depth, thus reducing the amount of shrinkage. It may be well even to use 3" material instead of the usual 2" for joists, and also to use 12" spacing instead of the usual 16".

» » WHEN PARTITIONS REST ON FLOOR JOISTS

FIGURES 3 and 4 show one of the most common causes of trouble and are apparently the least understood.

When cracks occur in partitions of this kind they are commonly attributed to the builder's failure to double joists under the partitions, yet in all, except the western frame, cracks will occur around such partitions whether or not the joists under them are doubled and whether the joists are parallel or at right angle to the partition.

The cracks are of three kinds: at the ceiling, at the junction with walls, and diagonal cracks in the partition itself.

DOUBLED JOISTS

do not prevent plaster cracks, as the joists shrink and, except in western frame construction, cracks are almost certain to occur

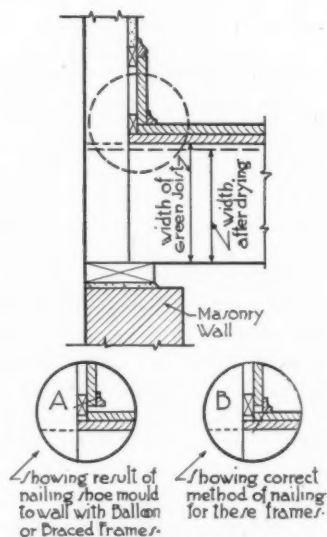


FIGURE 3

» » CRACKS AT THE CEILING

If a partition rests on floor joists—and non-bearing partitions can seldom be built any other way—it will be lowered as shrinkage decreases the depth of the floor construction on which it rests. If, when the building is new, the ceiling height is 9'-0", it will be more nearly 9'-0½" when the joists have dried out. On the other hand the partition will still be 9'-0" high. It must pull away somewhere and this is invariably at the ceiling. So we have a conspicuous crack at that point.

There are two remedies possible. First: The use of steel, or bar joists to eliminate shrinkage of the floor construction. Second: The next best thing is to insist on thoroughly seasoned or kiln dried joist material as a means of reducing the amount of shrinkage in the floor construction.

There is perhaps another remedy, which I confess I have never tried, though it may be worth mentioning.

If the construction will permit, partitions of this class may be hung from the ceiling above and the shoe nailed to the floor. Or the whole partition may be trussed or otherwise made self supporting and independent of settlement in the floor. This would prevent pulling away at the ceiling and force separation at the floor, where it can be concealed by proper nailing of the shoe. This method is of doubtful practicability as it presents many difficulties, the principal one being proper fastening at the floor against lateral movement such as would be caused by the slamming of doors.

» » CRACKS AT JUNCTION WITH WALLS

AS partitions resting on joists are lowered by shrinkage of the floor construction, they tend to slip down past masonry or balloon framed walls. This causes a rough jagged crack at the corners. The base will no longer member properly with that of the intersecting partitions. It may be half an inch or more lower than that of the wall adjoining.

The commonly recommended (Continued on page 70)



OLIPHANT

North American turkeys and corn, conventionalized and combined as decorative motifs. Bank of Nova Scotia Building, Halifax

Canadian Ornament Goes Native

By JOHN M. LYLE, F.R.I.B.A., R.C.A., F.R.A.I.C.

Toronto, Canada

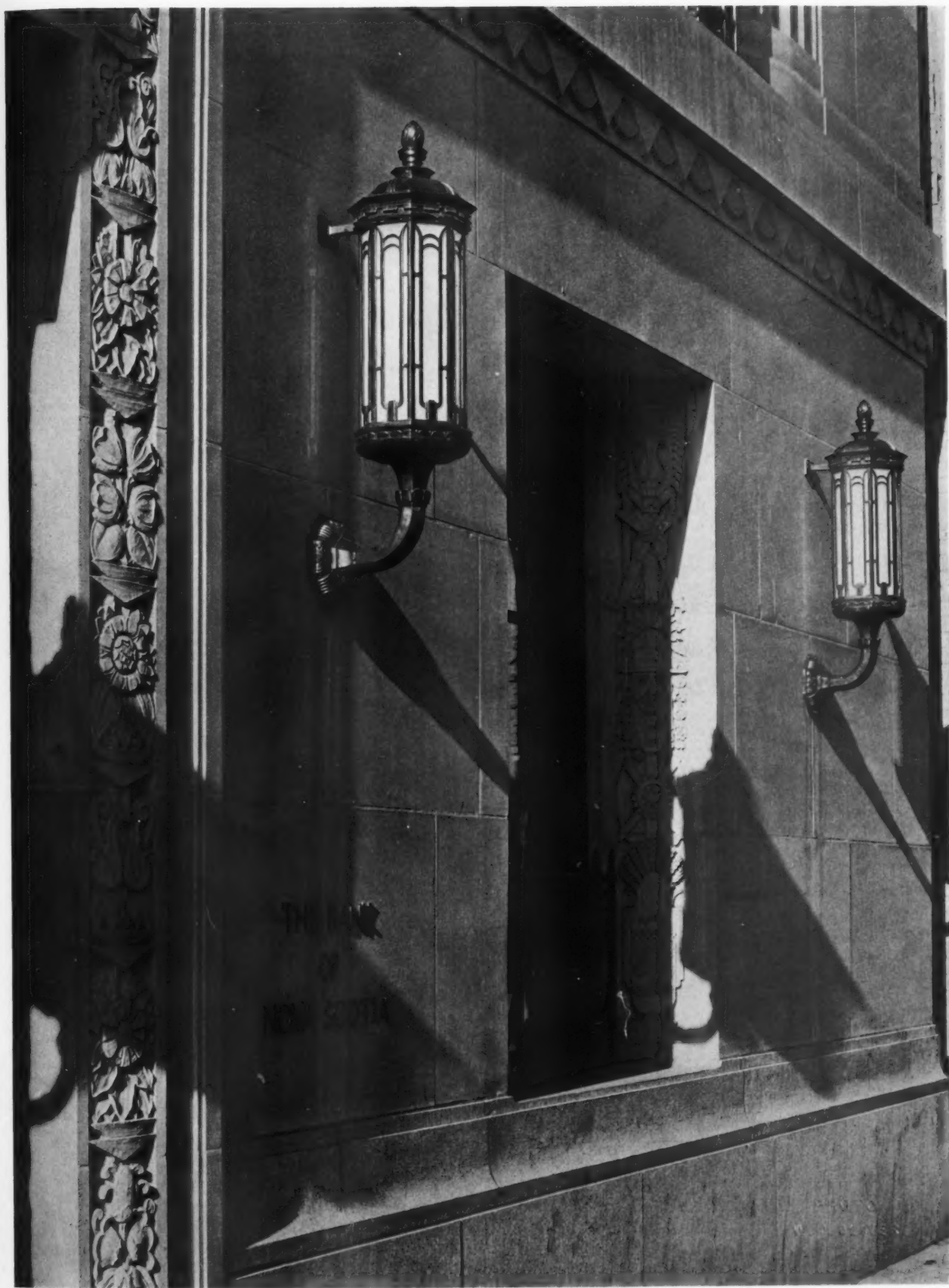
ARCHITECTURE is again alive after floundering in the ruts and bogs of nineteenth century eclecticism. To the inspired traditionalist this new architecture or modern movement is like a gift from the gods; breathing new life into his creative instinct.

The revolt against tradition is like all revolutions in that the extremists are always to the fore; shocking the public seems to be the essence of their creed and in substituting sensation for taste they think they are achieving beauty. It is the work of these extremists who have upset the public and blinded many architects as well as laymen to the real merit underlying this new movement.

Architecture should be alive in its modernity or it

ceases to be a vital force. The extreme traditionalist who copies Grecian temples, Italian palaces, French chateaux or English cathedrals, is an archeologist, not an architect. What is the sense of taking the forms, mouldings and ornament of a twelfth century gothic church, or copying a Florentine palace, or reproducing a Jacobean house. If we persist in working in styles that died five hundred years ago, I do not care how well our buildings are designed or built, I feel that they will be regarded in the future merely as interesting copies or as specimens of craftsmanship. Certainly they cannot claim consideration as creative works of art.

Let us admit that the modernist pamphleteers have written some interesting essays and perhaps some trash. What is functionalism—surely architecture begins where



OLIVER

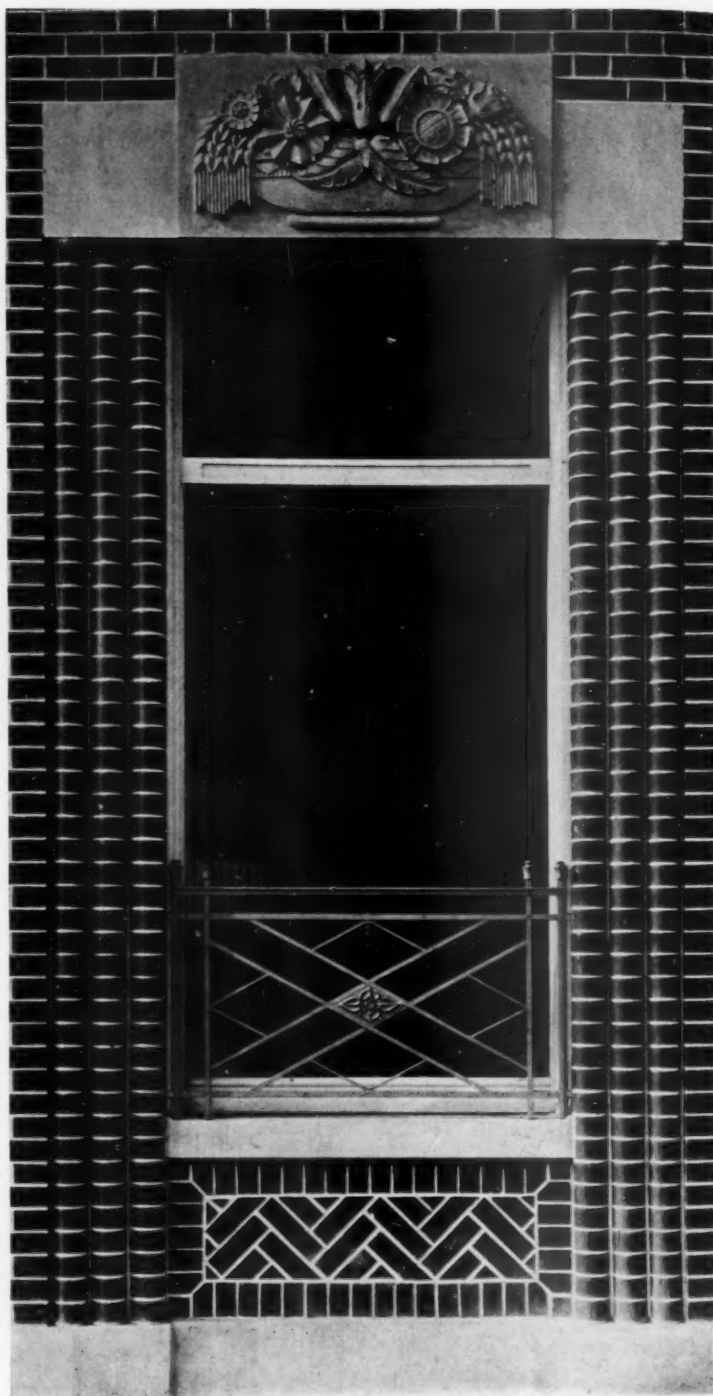
BEFORE AND AFTER THE WHITE MAN CAME was made the subject of the decoration of the splayed window jambs, Bank of Nova Scotia Building, Calgary. Canadian flora forms the decoration of the door jamb

INDIAN FORMS USED



OLIPHANT

SPANDREL PANELS, Bank of Nova Scotia Building, Halifax. The silver fox motif depicts one of the industries of the Maritime Provinces **AT RIGHT**. The keystone represents a bowl of abundance, using the wheat tassel, sunflower, jack-in-the-pulpit, poppy, etc. Lawrence Park Branch of the Dominion Bank, Toronto



OLIPHANT

functionalism ends. Because I have a skeleton and an alimentary canal, I see no reason why they should be expressed on my facade. Then there is the claim that efficiency is the principal aim of architecture. What about beauty? Is it to be the "Orphan Annie" of the architectural world? Then there is the "modernist's" theory that, because we live in a machine age, architecture should look like machinery. Again we have the modernist who thinks of architecture in terms of geometry.

To tie up architecture to any set of theories, no matter whether they date from the fifteenth century or are of today, is to hamstring her at the start and handicap success.

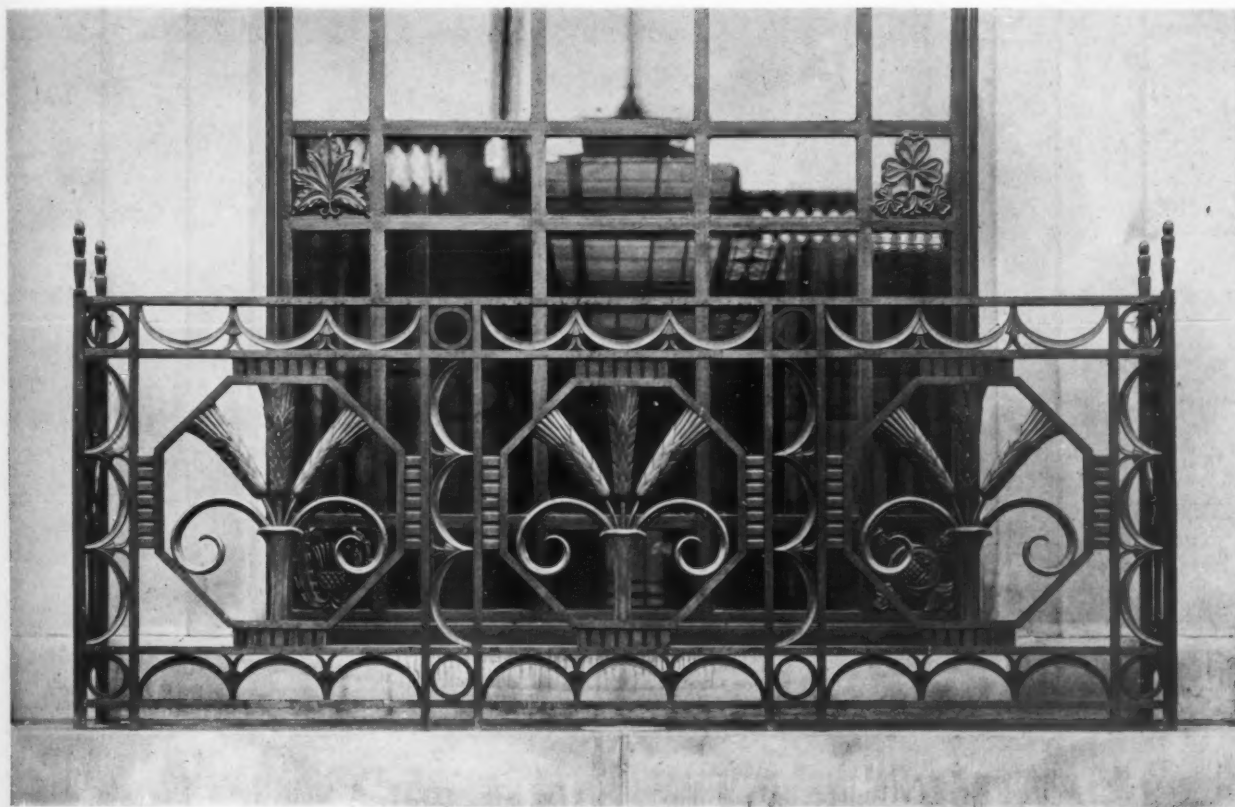
What then, you ask, has this new movement to offer the designer? It offers him a new freedom—it should be considered rather as a spirit of design, and a release from the historical styles of the past—it is probably the only movement since gothic architecture was born that possesses a germ of greatness.

How to strike a Canadian note in our architecture? Was it to be through the use of new forms, or through

a new language of ornament? It seemed to us that the field of form had been well covered in the last three thousand years, and that nothing radically new in this field was probable, but that there was a rich field of inspiration lying dormant in the fauna, flora and marine life of Canada.

We began three years ago to accumulate data in the form of Canadian flowers, fruits, trees, birds, animals,

AS MODERN ORNAMENT



OLIVER



OLIPHANT



OLIPHANT

WHEAT TASSEL MOTIF in bronze grille of the Bank of Nova Scotia Building, Calgary. Flowers on the metal sash are symbolical of the races that make up Canada today **AT LEFT.** Flying Canada geese and wheat sheaf and sickle used as motifs for spanrels in the Bank of Nova Scotia, Halifax

grain, marine life and Indian motifs. I sent a man to the Royal Ontario Museum to make color drawings of Indian decorative forms. My office staff at first was but mildly interested, and it was not without much travail that we were able to translate the natural forms into conventionalized ornament. The staff is now enthusiastic in its interest in Canadiana.

We are only beginning but I am convinced that we do not need to go to Greece, Rome, France or England for our decorative forms. In one building alone we have used for decoration eighty-six different Canadian forms, such as the sunflower, Canada lily, the marsh marigold, pitcher plant, pine cone, acorn; the loon, heron, owl, Canada goose, sea gull, turkey, beaver, squirrel, bear, silver fox, pine marten, wolf, lynx; the starfish, cod, lobster, crab; wheat, apples, grapes, totem pole motifs, Indian bead work motifs, and many other Canadian flowers, fruits, birds and animals.

We have adopted as a parti the use of new forms or old forms in new combinations, a new language of ornament based on Canadian forms, having in mind that they must all pass the test of beauty. We believe that the



OLIPHANT

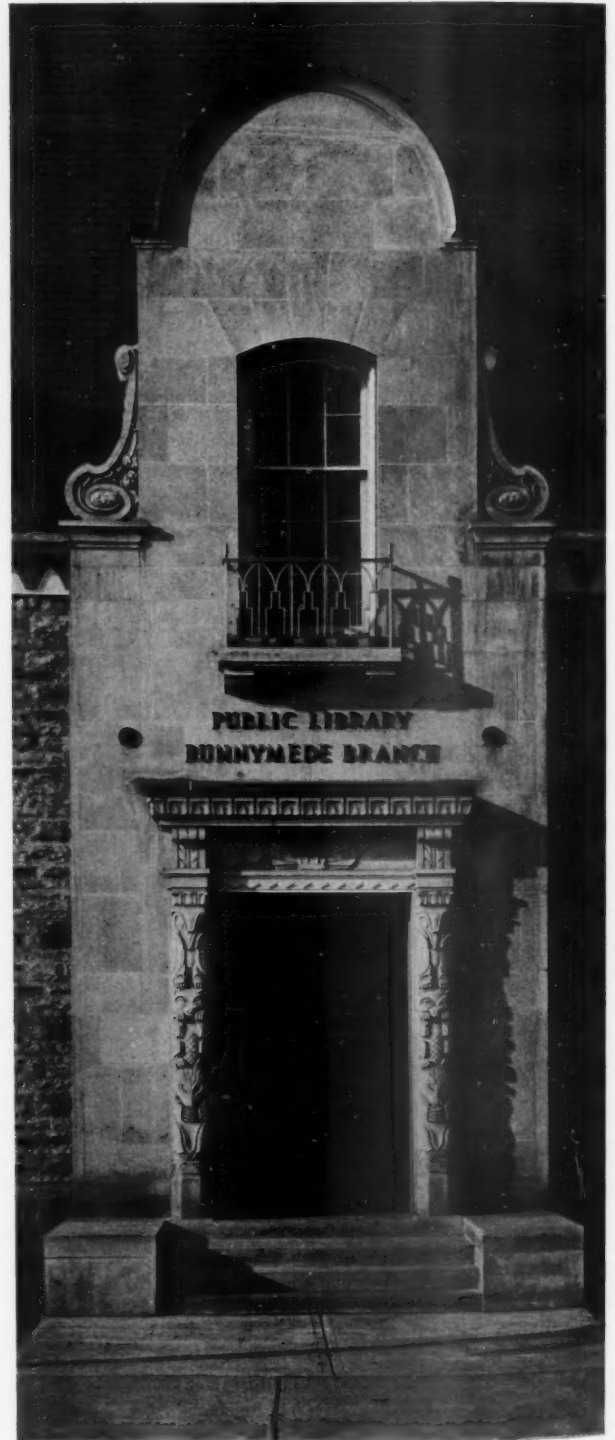


OLIPHANT

CANADA LILY and sunflower used as motifs for bronze entrance doors, Dominion Bank, Toronto

TOP OF PAGE. Canada geese and swags of Canadian flowers. Part of banking room frieze, Bank of Nova Scotia Building, Halifax

Swedish slogan—"Make beautiful the everyday things of life"—opens up a world of possibilities in collaboration between the skilled designer and the manufacturer, to beautify the world through mass production properly inspired and directed. We firmly believe that beauty is the great modern business tool, and if designers, craftsmen and industrial workers will only join in a serious effort to stamp their work with a native hall-mark then, and only then, may we rightfully claim recognition as creative artists worthy of public respect and esteem through the character of our product.



OLIPHANT

AMERICAN ARCHITECT



OLIPHANT

TOTEM POLES WERE ORIGINALLY USED AT ENTRANCES TO INDIAN LODGES

Buffalo, bear and beaver are depicted on the totem pole entrance to the Runnymede Branch of the Toronto Public Library, shown above and at the left. A primitive Indian ornament decorates the crowning member. The water lily motif is used for the center panel of the door. The Indian house motif is used for the wrought iron grilles

SMALL SUITES

The architect thought that small suites with small rooms would yield most return. 2,116,100 cu. ft.; 608 rooms; rental \$500 per room; 9.3% return on equity.

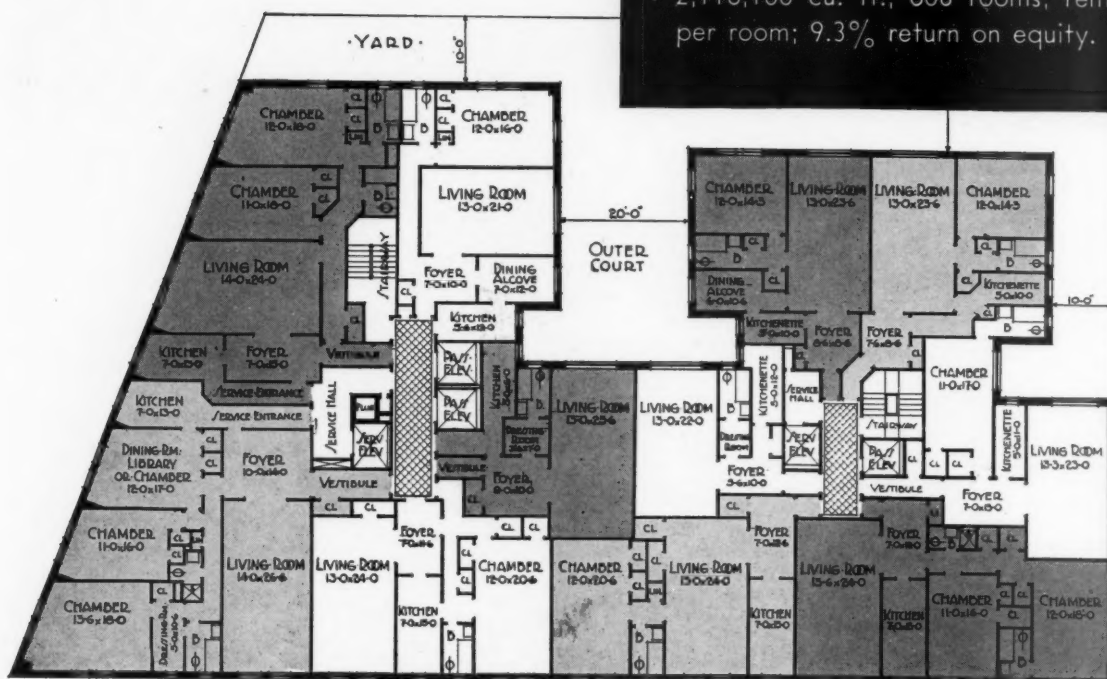


FIGURE 1

15% PROFIT, 90% RENTED

Analyses and Financial Set-up of Five

BY CHARLES H. LENCH

LESS than a year ago the plot at the northeast corner of Riverside Drive and 95th Street, New York, was encumbered with a six story, non-fireproof apartment house. The site has since been improved with the tallest apartment house on the Drive, and tenants moved into the building about October 1st, 1931. For some time the income from the old building had been barely sufficient to meet fixed charges. Furthermore, as land values in this section had been mounting rapidly for many years, there had been no income, during this period, for return on the increased land valuation. I was retained to study the possibilities of replacing the building at that time on the site with a modern structure that would produce a better return on the investment.

In undertaking this commission the fundamental problem, as in all commercial building operations, was economic rather than architectural. The important question therefore was, "What type of layout would be in demand by tenants in this neighborhood?" After studying the problem in some detail, I suggested to my clients

that the practical solution would be an apartment house laid out with small suites and small rooms.

Some of the reasons for my recommendations were as follows. The locality is strictly residential and destined to remain so for many years to come. The choice, therefore, lay between an apartment hotel and an apartment house. The old building was laid out with large suites of seven to ten rooms and many of them were unoccupied. One had to consider, however, that even though this was an old building with apartments poorly planned, light and air inadequate, and mechanical equipment obsolete, these deficiencies did not alone account for the large percentage of vacancies. A demand for such large suites actually did not exist.

MR. LENCH has recently been appointed a member of the Committee on Realty Finance of the National Conference on Construction, Washington, D. C. He lectures at Columbia University on "The Architect's Relation to the Promotion and Financing of Income Producing Buildings," and is now completing a book which will include the subject matter covered by those lectures

LARGER SUITES

A renting specialist recommended large suites with large rooms.
2,100,300 cu. ft.; 543 rooms; rental \$500 per room; 5.7% return on equity.

LARGER SUITES

A renting specialist recommended large suites with large rooms.
2,100,300 cu. ft.; 543 rooms; rental \$500 per room; 5.7% return on equity.

LARGER SUITES

A renting specialist recommended large suites with large rooms.
2,100,300 cu. ft.; 543 rooms; rental \$500 per room; 5.7% return on equity.



LARGER SUITES

A renting specialist recommended large suites with large rooms.
2,100,300 cu. ft.; 543 rooms; rental \$500 per room; 5.7% return on equity.

LARGER ROOMS

Higher rentals, larger rooms and fewer suites proved a fallacy.

2,138,500 cu. ft.; 505 rooms; rental \$550 per room; 6.2% return on equity.

LARGER ROOMS

Higher rentals, larger rooms and fewer suites proved a fallacy.

2,138,500 cu. ft.; 505 rooms; rental \$550 per room; 6.2% return on equity.

LARGER ROOMS

Higher rentals, larger rooms and fewer suites proved a fallacy.

2,138,500 cu. ft.; 505 rooms; rental \$550 per room; 6.2% return on equity.

LARGER ROOMS

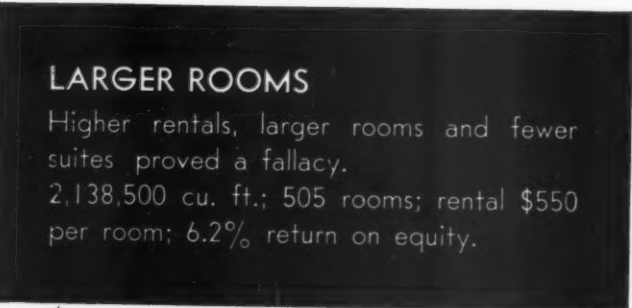
Higher rentals, larger rooms and fewer suites proved a fallacy.

2,138,500 cu. ft.; 505 rooms; rental \$550 per room; 6.2% return on equity.

LARGER ROOMS

Higher rentals, larger rooms and fewer suites proved a fallacy.

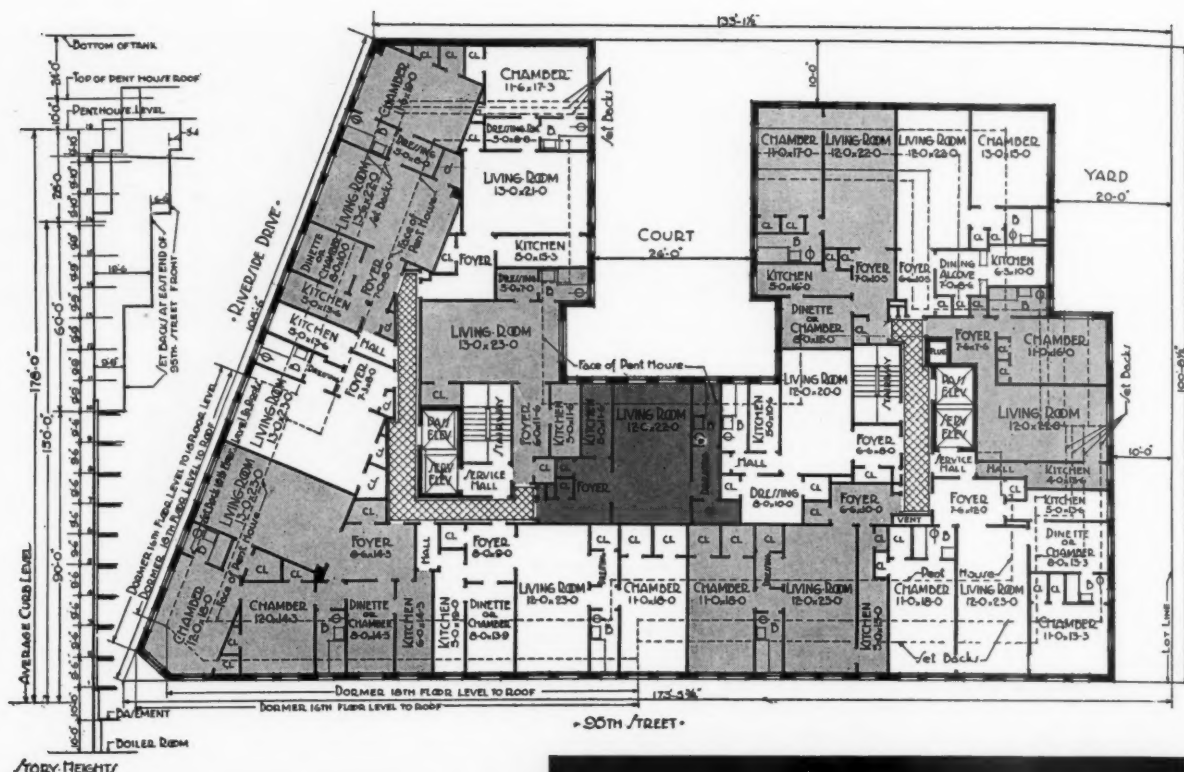
2,138,500 cu. ft.; 505 rooms; rental \$550 per room; 6.2% return on equity.



LARGER ROOMS

Higher rentals, larger rooms and fewer suites proved a fallacy.

2,138,500 cu. ft.; 505 rooms; rental \$550 per room; 6.2% return on equity.



The site is favorably located in relation to subways, street cars and buses. Transportation facilities, therefore are ideal. To meet residential demands there have sprung up in the neighborhood numerous small unit apartment hotels and apartment houses. In considering an apartment hotel, it was known that for more than two years there had been very little money available for such buildings in any location. The matter of financing being an important one, it was believed that an apartment house would not only fulfill an economic need but would also offer least sales resistance to the promoters of the operation.

At the time preliminary sketches were started, the new multiple dwelling law had just been passed by the legislature. This law permitted much taller buildings than were possible under the old tenement house law. It was decided to utilize the maximum provisions of the new law with respect to height. The area of the plot was 15,500 square feet, too small by half for a tower. The limit of height was therefore automatically fixed as 178 feet above mean curb, plus 12 feet for a pent house for dwelling purposes, plus the required roof houses for elevator machinery and tank.

The first preliminary layout of a typical floor (Fig. 1) shows eleven apartments and 37 rentable units of space, with 608 units for the entire building. It will be observed that the largest apartment unit consists of living room, two chambers, dining room and kitchen. Rough set-back plans were also made, together with a cross section giving story heights, and with these data the cubical contents of the building were calculated.

A rough financial set-up was prepared, the main items of which are as follows:

Land	\$750,000
Building, estimated	1,165,000

SMALLER SUITES

This plan sold the land, the promoters taking it to an owner-builder who arranged the necessary financing. Depressed business conditions suggested still smaller suites. 2,175,000 cu. ft.; 697 rooms; rental \$500 per room; 15% return on equity.

FIGURE 5

Carrying charges during construction, estimated.....	185,000
Total estimated cost of operation.....	\$2,100,000

Financed as follows:

First mortgage, assumed.....	\$1,250,000
Second mortgage	350,000
Cash	500,000
	<u>\$2,100,000</u>

Income:

608 rentable units at \$500 each per annum.....	\$304,000
---	-----------

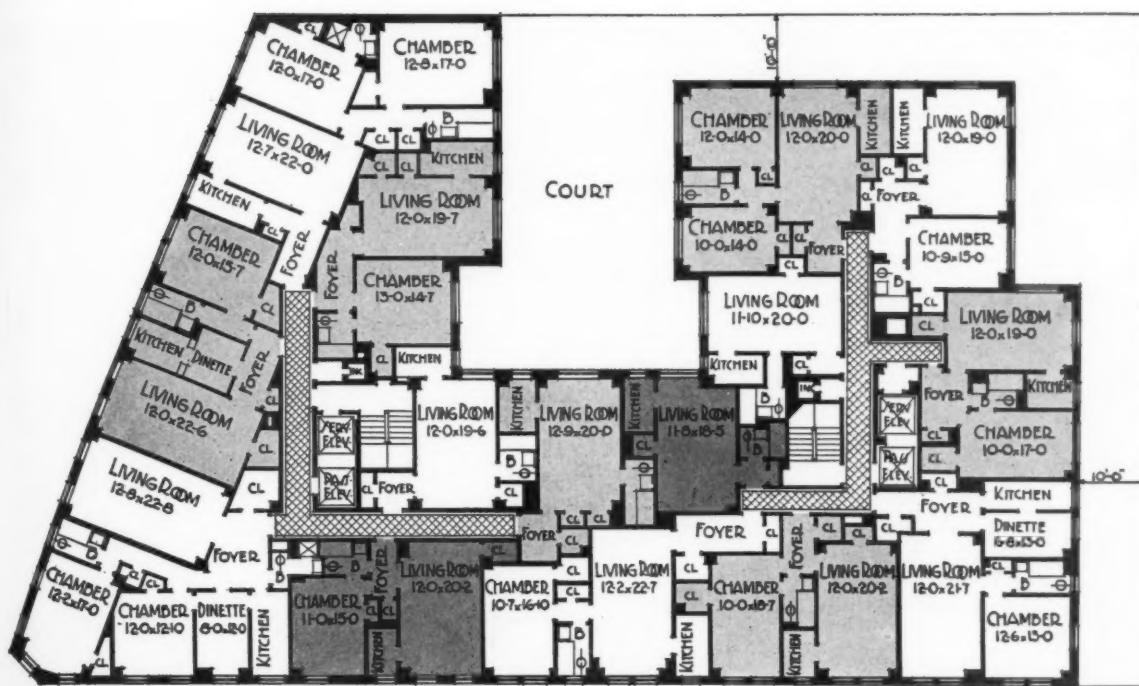
Expenses:

Vacancies, operating expenses, taxes and depreciation, estimated	\$150,000
Interest, first mortgage, \$1,250,000 at 5½%	68,750
Interest, second mortgage, \$350,000 at 6%	21,000
Amortization, second mortgage at 5%	17,750
	<u>\$257,500</u>

Surplus.....	\$46,500
--------------	----------

The difference between estimated expenses and income indicated a surplus of \$46,500, or equivalent to 9.3% on a cash investment of \$500,000. It was obvious that, for a beginning, this return was interesting.

The next step was an examination of the set-up to



SMALLER ROOMS

Smaller rooms provide for two more apartments on each floor and permit reduction in rental, thereby adding still further to the safety of the owner's cash investment. 2,175,000 cu. ft.; 780 rooms; rental \$450 per room; 15% return on equity.

FIGURE 6

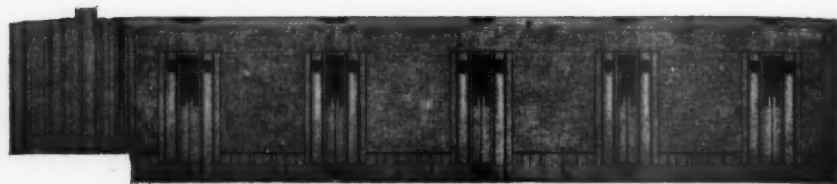
determine whether the proposition could be made even more attractive. In this investigation it was taken for granted that the land owners had no intention of reducing the sales price of their land. Cubical contents of the building and estimated cost were near enough for all practical purposes. Ten per cent of the total cost of land and building for carrying charges during construction would be the probable minimum. For these reasons the total estimated cost of the operation was assumed to be correct. The financing of the building was conservative and no change was believed possible. Cash equalled approximately 24% of the total cost and this was regarded as conservative. Fifty per cent of the rent roll represented a reasonable allowance for vacancies, operating, taxes and depreciation. *Gross income could be increased, however, if additional rentable units could be obtained within the envelope of the building, and if a larger rental than \$500 per unit could be counted upon.*

With these data in mind, a study was made of the possibilities of a larger number of suites and rentable units. Before this investigation was completed, however, my clients sought the advice of a firm which

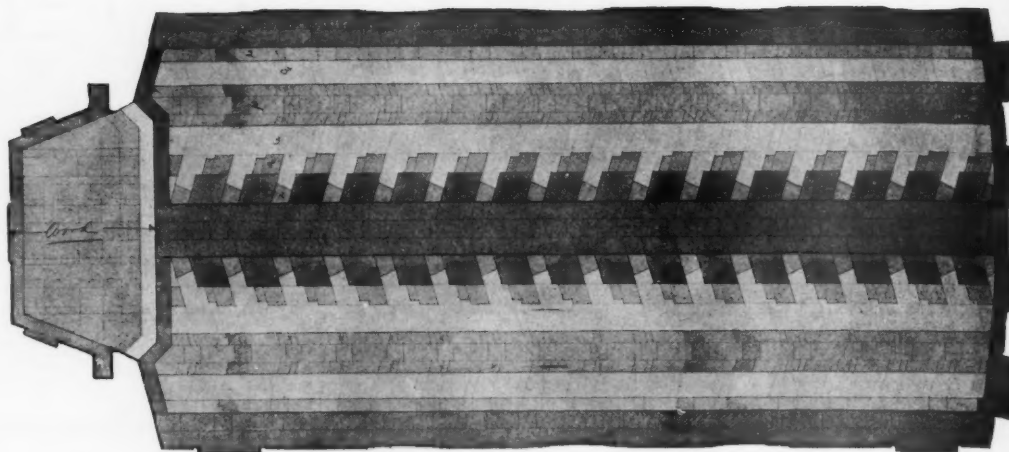
specialized in the renting of apartments in the neighborhood. This firm argued that people who reside in this section of Riverside Drive demand suites of four, five, six and even seven rooms. My clients were impressed with this argument, coming as it did from a well known renting agency, and directed me to prepare a layout (Fig. 2) with large suites. In preparing this layout, I worked under the direction of the renting agency. Fig. 2 shows eight apartments and 33 rentable units of space, with 543 units for the entire building. The largest apartment in this layout consists of living room, two chambers, dining room, kitchen and maid's room. It was estimated by the renting specialists that rooms of this size would bring at least \$500 each annually. A financial set-up revealed the following situation. With the cube of the building approximately the same as for scheme one, the total cost of the operation remained substantially as before. This in turn meant that the financing would also remain the same. The rent roll of \$271,500 from 543 rentable units at \$500 each is \$32,500 less than the \$304,000 obtained from 608 units at \$500 in Scheme One. Figuring fifty per cent of the rent roll for vacancies, operating expenses, taxes and depreciation, the return on the cash investment of \$500,000 equalled 5.7 per cent. It was therefore obvious that, so far, no progress had been made.

THE renting specialists next advanced the suggestion that if the rooms were made still larger, a higher rental would be available—say \$550 per room average. A third plan, (Fig. 3), was therefore prepared which again met with the approval of the renting specialists. This plan shows only seven apartments and 30 rentable units on a floor, with 505 units for the entire building. The cube of the building being

(Continued on page 74)



SKETCHES USED
to visualize the
decoration of the
room illustrated at
the right—lecture
hall, Brooklyn, N. Y.
Telephone Building



How Voorhees, Gmelin and Walker Handle Interior Decoration

Based upon an interview
by Eugene Clute with
DAVID COMSTOCK
Head of Department of Interior Decoration,
Voorhees, Gmelin and Walker, architects,

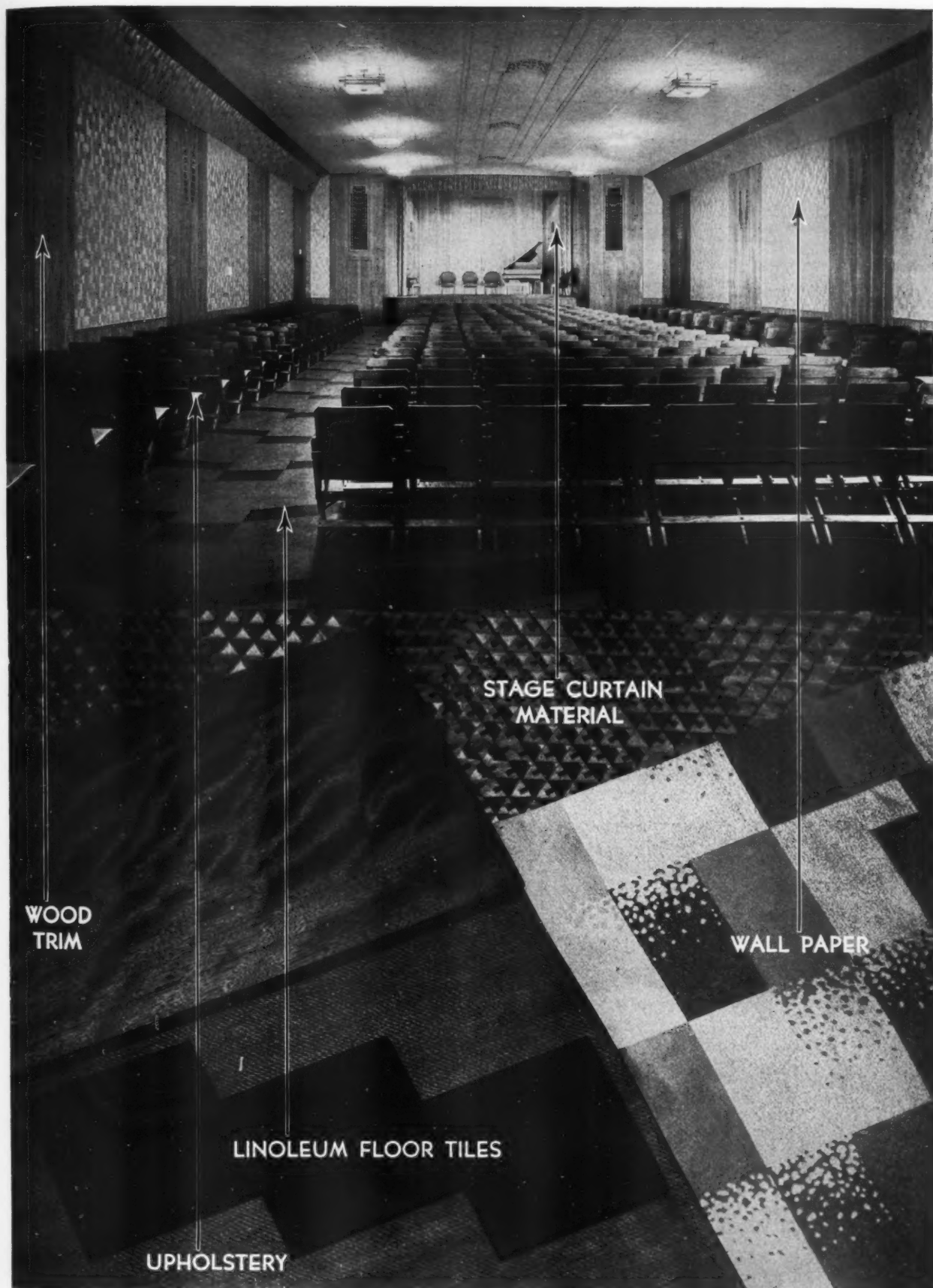
A DEPARTMENT of interior decorating was established in the office of Voorhees, Gmelin and Walker because it is believed that interior decorating and architectural design are so closely related that they should be under one control.

There exists in the minds of many architectural designers the idea that interior decorators, as a class, are concerned only with effects obtained through the use of fabrics, wallpapers and bric-a-brac with but little regard for interior architecture. On the other hand, many interior decorators appear to believe that architectural designers are inclined to treat interiors in a cold and formal manner and that they are unable to visualize how their interior designs will appear when executed. Both points of view are partly right for, in general, decorators tend to humanize the work of the architectural designer, and architects, in turn, often impart to the work of the decorator, clarity and simplicity in design that makes the building and its rooms

one harmonious unit. The problem is to bring the art of the architect and the decorator together, reconcile their points of view, and harmonize the two elements.

How the interior decorator's knowledge may supplement that of the architectural designer is well illustrated by an example taken from an early experience of this office before complete collaboration had been secured. Two sketch plans shown in the illustration on page 46 represent the architectural designer's furniture plan for an office reception room and the interior decorating department's revision. It will be noted that the settee which was on the axis of the room has been centered on the wall space. The chairs, each with a little table, placed at either side of the wide doorway, have been moved towards the corners to allow the doors to be opened flat against the wall. This has brought the settee, the round table in the corner and one of these chairs, with its small table, together in an intimate group. Two chairs against the wall opposite to the wide door

Decoration in the buildings designed by Voorhees, Gmelin and Walker has been widely commented upon by architects all over the United States. Their manner of handling the woodwork in the Irving Trust Building was described in the September issue of *American Architect*, and the metal work in the same building in the November issue



WOOD
TRIM

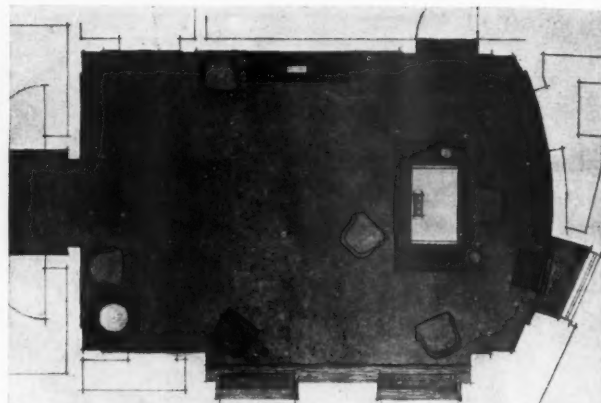
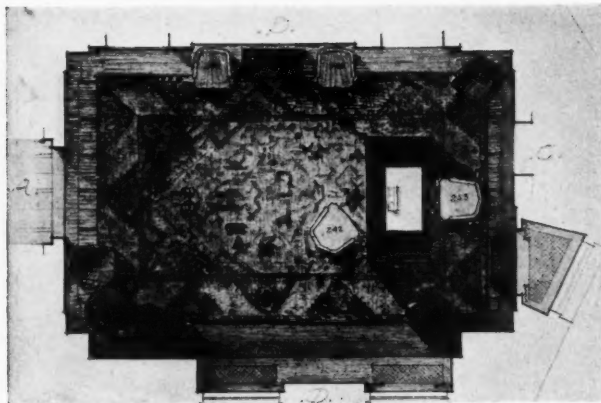
STAGE CURTAIN
MATERIAL

WALL PAPER

LINOLEUM FLOOR TILES

UPHOLSTERY

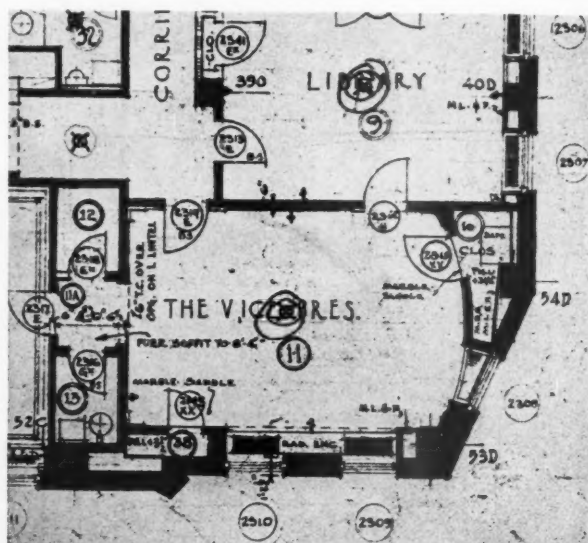
TO INSURE HARMONY, samples are secured so that the actual materials to be used may be referred to in planning decorative effects. These samples are also used to help clients visualize effects when shown sketches



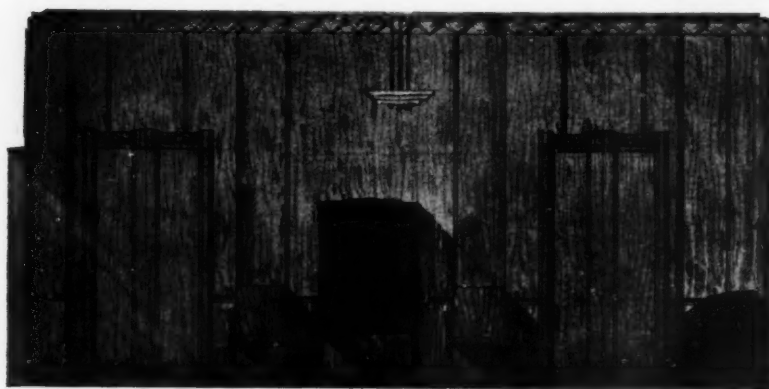
AS FIRST PLANNED . . . Office of vice-president, Brooklyn Telephone Building. Its relation to rest of plan shown at right below. **AS REDESIGNED . . .** Structural changes emphasize the necessity for close cooperation between architect and interior decorator

have been changed, lighter and more formal chairs being substituted for the large easy chairs originally indicated, because there is a line of travel along this wall from door to door and also for the sake of variety. Pictures may be used to give interest to this side of the room.

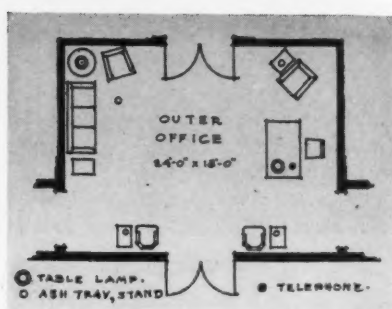
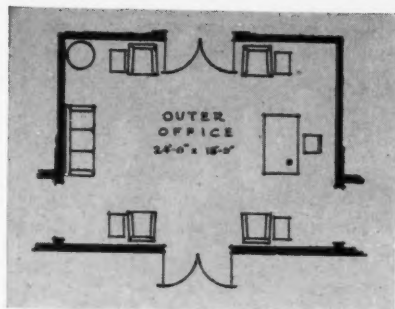
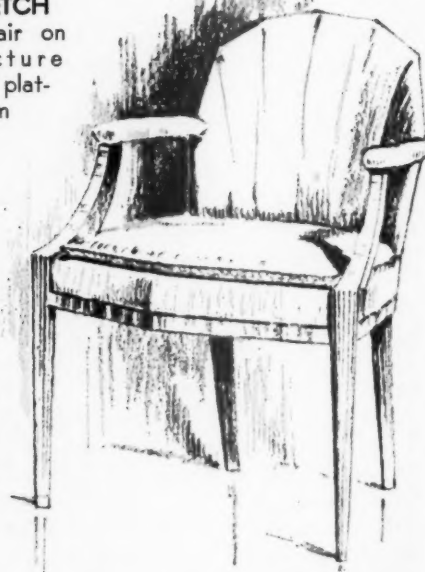
When an architect designs interiors, he is inclined to leave out many minor objects that are necessary to complete a room. He is likely to attend to the wall covering, draperies, furniture and carpet and to forget to provide pictures, lamps and ash trays. Architectural designers often think primarily of the walls, ceiling and other features of the interior and regard the furniture as detail seen against the walls in elevation. Decorators customarily think of a room as an ensemble and arrange the furniture for the convenience of the occupants, and regard the appearance of the (Continued on page 76)



VICE-PRESIDENT'S OFFICE . . .
Sketch elevation of library side



TYPICAL SKETCH
Chair on lecture hall platform



TYPICAL DIFFERENCE between furniture arrangement by architect (outside left) and interior decorator (left)

the classicists are TAKEN FOR A RIDE

By Zuleika Hutchins

a draftsman who, under this *nom de plume*, assumes the guise of an innocent young maiden in search of information

"D O you think, Mr. Snubbers," I said as we taxied by the University Library, "that there is *anything* quite so lovely as an Ionic Colonnade?"

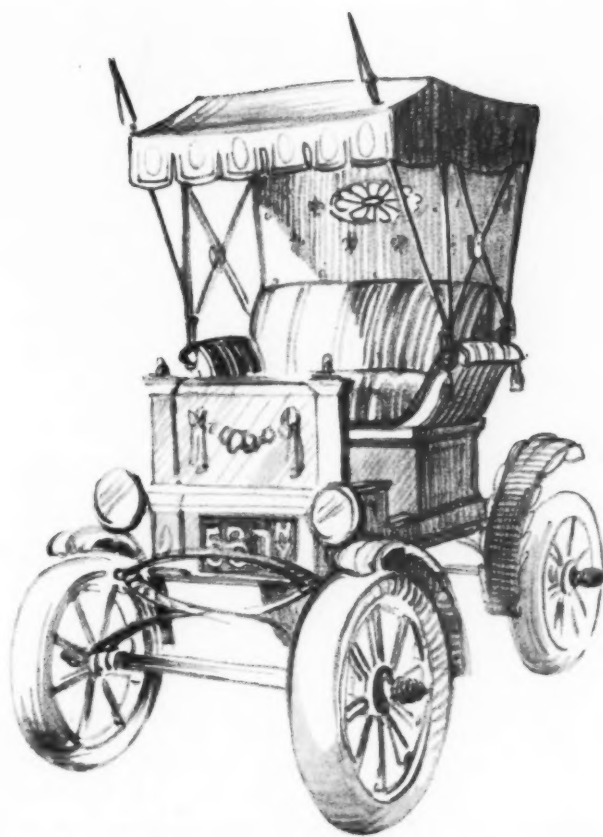
He said "yes" and "no" and crushed my free hand, for though he is a famous architect, no one can say that Gabriel Snubbers doesn't know his little grosseries. So I blushed prettily, just to be chummy, for I've discovered that a reporter learns much more when her subject feels at ease.

"I mean," I said, reaching for my shorthand notes, "don't you think that the really Classic Beauty, the Classic Ideal you might say, far surpasses anything that has been done by our Modern Architects?" I smiled when I said this, for everyone knows Mr. Snubbers is a staunch defender of the *nouveau*.

"My dear young lady," he condescended, "if you, as a representative of the Great American Public—the Thinking Public—he corrected, "were to stop and consider this question carefully, you would shortly discover that there are several other little things to judge besides mere beauty." Then with a certain amount of unction, "Architecture is primarily a functional art, you know."

I, in turn, chided him gently for using technical terms and suggested he provide an illustration to put the lay mind at rest concerning that familiar but unintelligible "functional."

"Well," spake the oracle, "a chair is functional. It must be so constructed as to hold its occupant in a comfortable position. It must continue to do so through a reasonable period of time and with reasonable treatment. It must be portable. These are its general functions. It may have special functions as well. For instance, in the case of the love seat and the commode, both have these general and their own special functions. Now, these several functions must be fulfilled before decoration can be considered, and more than likely by that time the suitable embellishment, you might say, will have suggested itself and will therefore fit naturally and harmoniously upon the basic structure."



IF A CLASSICIST had designed the first automobile, he might have produced something like this

"But," I protested, "there are so *many* kinds of chairs—all filling your requirements and all so different in appearance."

"That is a point I was about to come to. This variation you mention is due mainly to the many different types of minds, of imaginations, of circumstances that are *in* at the inception of an idea. This mark of individuality is the thing folks are proudest of—the thing they work hardest to have recognized—and with this resulting danger. They start with this difference, this variation, and try to control the fundamentals of their design by it, to force the essentials of their problem to fit in with trivialities, which, alas, in their minds seem, for the moment, of importance."

"I can see how that happens in the furniture line," I said, "because I've tried to sit in some of these modernistic chairs and they certainly do leave an impression on one's personality. Still, how does it apply to architecture?"

He mused. Then patiently, "Let's consider that library we passed a moment ago. Let me tell you something about its architects. They were so anxious to include in their design an imposing dome, a beautiful colonnade, a monumental approach and a few other worthy and awe-inspiring features, that the question of library facilities seems scarcely to have entered their heads. For proof—just try to get a book out of that library sometime when you're in a hurry or even when you're not. Try to discover a comfortable, well lighted, accessible nook to drop into for a half hour's browsing."

His brow cleared and the (Continued on page 80)

WHAT ARCHITECTS



FIRST SUPERIMPOSING of a city plan upon an aerial survey. John Nolen, in charge of city planning. Contributed by B. N. Eubank of Eubank & Caldwell, architects and engineers, Roanoke, Va.

HOUSE financing on the same basis as automobile financing was advocated by Joseph P. Day at a recent meeting of the New York Building Congress. He pointed out that 80% of automobiles are sold on the installment plan. Mr. Day emphasized that care should be taken to see that houses are not extravagantly built nor poorly designed, resulting in commercial paper equally as good as automobile acceptances. He said that the only thing selling today is inexpensive one family houses, with 10% down and second mortgages amortized in seven years. According to Mr. Day, this type of inexpensive house has seen only 1% lapses on second mortgages and there has been no difficulty in reselling such houses.

IN case of fire or other danger in a new building for deaf people, erected in Germany, an automatic device will set the mattresses on all the beds shaking so as to waken sleepers. Light signals take the place of bells.

CERTIFIED steel will shortly be available, according to plans of the Concrete Reinforcing Steel Institute. It has been decided to operate in the east first, rather than on a national basis, in order to combat foreign made steel and bars rolled from off-heat billets. The use of steel of questionable origin upon several eastern projects has brought home to the industry the necessity for concerted action to show engineers and architects the benefits of certified steel.

THE Architectural League of New York will hold its 47th annual exhibition Feb. 27-March 12, 1932, at the Fine Arts Building, 215 West 57th Street, New York.

Certified Steel Available

Financing Houses Like Automobiles

Cooperation to Build and Finance
Small Houses

ORGANIZATION of a cooperative group of construction organizations and developers to provide houses is suggested by W. Burke Harmon, a New York real estate man. He points out that large construction companies specializing in tall apartments, commercial and office structures will probably find much less to do for several years to come, whereas there is a growing demand for good small houses. He suggests that the land cost (about 20%) be subordinated by the developer, 60% first mortgage be secured, and the purchaser furnish the remaining 20% in cash. Payments by the home



THIRTEENTH CENTURY French gothic doorway from Limoges, now in the Pennsylvania Museum of Art, Philadelphia. Through the arch may be seen other doorways from old French buildings

buyer could be as low as 1% a month, this including interest, taxes, water charges, and amortization. He states: "A large advertising fund, to which all members of the group contributed, would be the only special capital fund required."

ARE TALKING ABOUT

World's Oldest Skyscraper

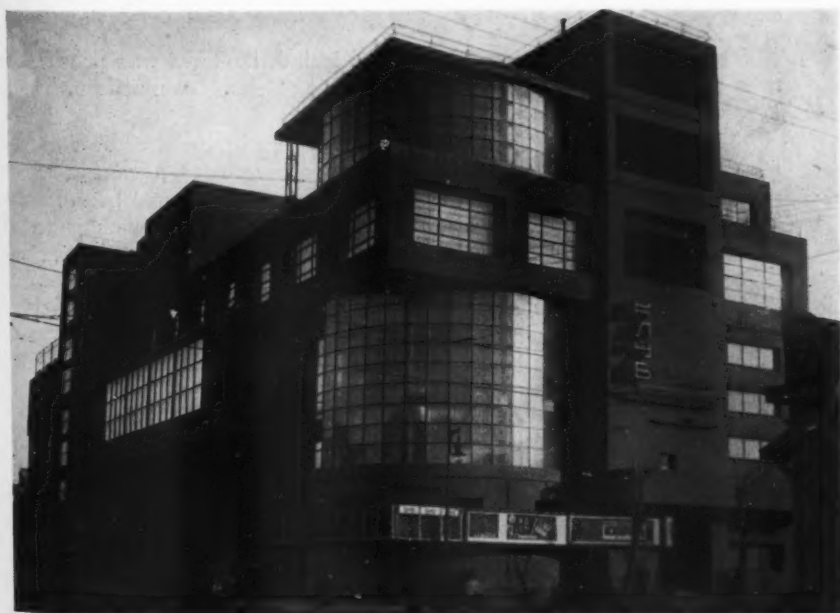
First Installation of
Double-Deck Elevators

Status of Federal Building Program

STADIUM seating has recently been studied by the Forest Products Laboratory, Madison, Wis., seventy stadia and grandstands being analysed. The Laboratory states its willingness to advise with those faced with the problem of installing stadium, grandstand or bleacher seating.

DDOUBLE-DECK elevators have been installed in a skyscraper for the first time—the 67 story building for Henry L. Doherty and Cities Service Companies, New York. Both compartments are loaded or unloaded at the same time, the compartments serving adjacent floors. One compartment serves only odd numbered floors, the other only even numbered floors. The frame supporting both compartments has an over-all height of 25 feet. With single elevators, it had been planned to use 14; with double-deck elevators, only 8 were necessary. This saved 24,000 sq. ft. of floor space, estimated to be worth in revenue \$84,000 annually. Clinton & Russell, and Holton & George were the architects. Elevators were installed by the Otis Elevator Co.

CONTRACTS have been awarded for the first three buildings in Radio City, New York, totaling about \$50,000,000. Awards were made on the 66 story office building, the International Music Hall, and a sound motion picture theatre. It is expected that the 66 story unit will be finished by December, 1932.



PRESS CLICHE



BROWNING

MADE PART OF THE DESIGN instead of regarded as an unwanted necessity. Earl Carroll Theatre, New York. George Keister, architect, Joseph R. Babolnay, designer

ARCHITECTS in Boston are being urged by the Boston Building Congress to insert a clause in their specifications requiring general contractors to agree to conduct their work under the rules of the Board of Trade Claims and to abide by the decisions of the Board. It is felt that this plan is the only effort to settle jurisdictional disputes which holds promise of success.

TO aid unemployed draftsmen, the Architects' Emergency Committee of the Region of New York will conduct a competition for the design of a membership certificate in the New York State Council of Registered Architects, it is announced by Julian Clarence Levi, chairman of the Committee and Fellow of the American Institute of Architects.

The competition is open to architects and draftsmen of both sexes living or working in the State of New York. One design only may be submitted by a contestant.

There is a first prize of \$100, a second of \$50, a third of \$35, a fourth of \$25, and ten others of \$20 each.

(Continued on page 88)

FROM RUSSIA. Club of the city employees of Moscow, U. S. S. R.



2 Months 106 Color Sketches 12,000 Miles of Travel

THE STORY OF A SKETCHING TRIP TO NORTH AFRICA

By J. Scott Williams

Mr. Williams, who is vice-president of the Architectural League of New York, tells what he took along on this sketching trip and the conditions under which he had to work. One of the water colors made on this trip is reproduced on this month's cover

IN January, 1931, we left New York and embarked on a cruise to Mediterranean ports to see some of the places that an artist dreams about north of the Grand Atlas chain of mountains and among the Riffian hills, including an auto trip across Northern Morocco and Algiers.

The trip was planned as a fast moving, intensive one, with no time to sketch except as an artist may decide to force it. I decided on water colors as a fast working medium par excellence and for its light weight. My pad sizes ranged from 5x7 inches to 15x20 inches. I also took tinted stock of various tones for fast working im-

pressions. My kit also included colored wax pencils, but as usual I did not use them often as too much time is lost sorting out the right color and shade.

But a good No. 6 lead pencil works as fast as you desire. It never has to apologize to a camera as its velvet tones slip over a surface. My total bag of color sketches was one hundred and six in two months of twelve thousand miles of travel. This does not include the pencil notes.

My ship's stateroom was large and light and served as a studio between land trips. In this way the hasty impressions of rapidly moving scenes were developed before fresh scenes destroyed the vivid memory and observations of previous scenes.

I worked under almost all conditions during the trip. They included sitting on the back of a mule in Fez, taking quick notes; sketching while walking through streets in various places; making rapid notes in a large Auto Circuit bus on an eight hundred and seventy mile trip from Casablanca to the city of Algiers—and the road was often rough. A ten minutes' stop meant a quick

PENCIL NOTE

A few fast strokes to catch an impression resulted in this, one of about fifteen pencil notes made in a morning's ride over a bumpy road east of Tenes, "the Amalfi Drive of Africa"



COMPLETED SKETCH

And at the hotel that night, the pencil notes were worked up into color sketches such as this one from the note at the left



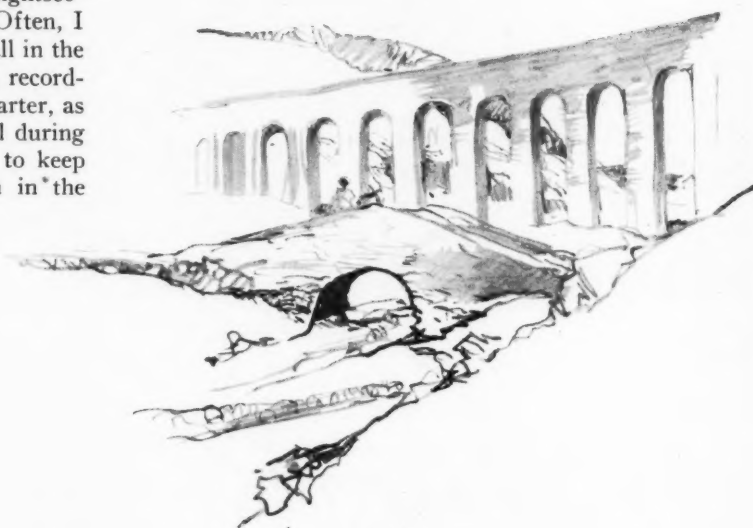
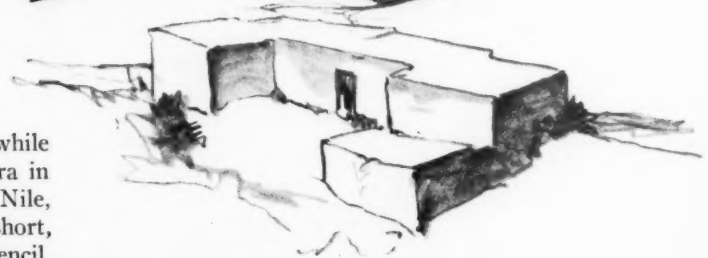
PENCIL NOTE

Olive trees against a rugged mountain, a dramatic sky, and a ready memory for color made this the foundation for the color sketch at the left

COMPLETED SKETCH

Just a few minutes work at night, with the pencil note at the right as a guide, and the wild beauty of the road to Tlemcen becomes a permanent record for future reference





impression or a character sketch. I took notes while on the back of a donkey on the sands of Sahara in Egypt. I sketched from a boat going up the Nile, also sketched from railroad car windows—in short, any condition seemed good enough for a busy pencil.

In Cairo, we stayed a little over a week sightseeing, and doing the things that tourists do. Often, I was up in the morning standing against a wall in the native quarter, before the shops were open, recording the marvelous picturesque life of the quarter, as the city awoke into action. When I sketched during the day, I hired a carriage and dragoman to keep back the curious. I attempted one sketch in the quarter without the aid of a kindly policeman. The good-natured crowd that swarmed about would not let me see the scene and became so thick that I had to quit. It was useless to drive them back for in a few seconds they filled in the hole again.

My worst "lemon" in Cairo was a ten dollar taxi ride to a scene recommended by my dragoman—down to the Nile barrage below Cairo an hour before dark. The scene was un-

MEN, MOUNTAINS AND BRIDGES



solvable—at least after a full day of sketching in the hot sun of the city. My dragoman had piloted me to two “corking” gates and other prizes so one must expect a little “mortality” on a trip like this. I found out also in this section of the trip that when the wind blows on the desert, in twenty minutes

you are working on sand paper so you use your old brushes and save the good ones—and get through a 14"x20" in a half hour!

On the whole, Morocco seemed to have more picture motives per square mile than any other place, with Egypt a good competitor.

Traveling fast, over Morocco, the night found the mind in despair at trying to assimilate a fragment of the thousand impressions that had hammered on the brain during the day.

In a rapid journey through Morocco, four cities stand out in the memory—Rabat, Meknes, Fez and Taza. In a way, Fez sums up the qualities of the other three. Taza has the “edge” on wild surroundings. Meknes and Rabat are easier to analyze. (Continued on page 86)

WERE ALL GRIST TO THE MILL

. . . As It Looks

Business Is Better

INDICATIONS are that we have passed the bottom of the depression and are now on a slight upgrade. There is a greater feeling of confidence than there was six months ago. More and more business men are coming to realize that they must face facts and get down to hard work. The past year has witnessed elimination of many of the unfit in responsible positions. More hard work and clear thinking is being done right now than has been done for several years past. This, in its way, is just as important as stock or commodity price deflation.

Christmas Cards

CHRISTMAS cards are a comparatively new innovation, as Christmas customs go. According to one tradition, the first Christmas card was sent in 1844 by one W. E. Dobson, being a sketch symbolic of the festive spirit of the season. Another tradition attributes the first Christmas card to J. C. Horsley at about the same time. Both these men were English artists.

A Competition Went Wrong

SOME twenty-five years ago a number of architects entered a competition to design a certain building in which a certain political leader was interested. According to history, this leader had seen a photograph of the drawing to be submitted by the man he thought should be awarded the job. The jury anxious to curry favor with this man of influence, followed on his heels when the drawings were hung. As he passed through he waved his cane before one of the drawings and said "I think that's the best design here." That design was placed first. Later it was discovered that his memory of the photograph had erred and he had pointed to the wrong drawing!

General Motors Aids Architects

SUITABLE building set-ups for dealers of the General Motors Corporation are no longer a matter of haphazard decision, but are determined through consultation with the company's dealer building department. The dealer fills out a questionnaire, which is checked by the division to which he belongs, this division knowing policies, the dealer's capital position, his business potential, performance ability and operating requirements. The questionnaire then goes to the company's dealer building department, which makes layout recommendations. The aim of the department is to assist the dealer in getting suitably housed at the lowest rent figure, and to see that his operating area is neither too much nor too little, so that he may be helped to realize the maximum return on his investment. After receiving the layout recommendations, the dealer is free to employ his local architect to develop the actual plans and specifications; the depart-

ment will advise and assist the local architect without charge. The department's layouts are based on research and extensive analyses made by the General Motors Corporation, being developed in multiples of car dimensions rather than standard steel dimensions, and with a view to coordinating the dealer's various departments. C. L. Baumann is consulting architect for the dealer building department, which was organized in June, 1930.

Ideas Are Too Few

O. McINTYRE, New York American columnist, tells the story of a newspaper that wanted a columnist and requested applicants to submit sample column manuscripts. It was later discovered that the most promising candidate's sample was the first and only "column" he could write. Many persons are like that. If they have more than one idea, those ideas come too far apart.

Government and Architects

AS Stephen Voorhees recently said at a meeting of the New York Chapter of the American Institute of Architects: "The government employs private contractors to build federal buildings. Why shouldn't the government employ private architects to design them?" It is noticed with some satisfaction that there has recently been a tendency on the part of the Supervising Architect's office to employ private architects on projects costing less than \$500,000. Several outside architects have been awarded projects in the one hundred thousand dollar range and one for as little as \$65,000.

Less Noise About Noise

THE "un-soundproofing" of a cafeteria was made the subject of an editorial published in the September issue of the AMERICAN ARCHITECT. The editorial was based upon a story told to the Editor. To date, however, it has been impossible to confirm its truth. Whether the story is true or not the fact remains that the Editor's life has been made miserable by many persons who demand proof of the story's correctness. His feelings must be akin to those of the professor who recently made the innocent remark that all whistlers are morons. For now, the Editor, at least, wishes that he had never mentioned noise in cafeterias. The lead editorial in this issue of AMERICAN ARCHITECT sums up his opinion on sound control.

Garden Lights For Santa

GARDEN evergreens bedecked with electric lights of various colors at Christmas time is a custom believed to have been brought to this country from Sweden. There it has long been customary to have Christmas lights burning in the windows.

to the Editors . .

"Consult an Architect"

THE Sedgwick Machine Works is distributing a folder containing the reproduction of one of its advertisements which has the phrase, "Consult an Architect." On the cover of the folder is this: "Believing that every building, whether a residence, apartment, store, or other type of structure, should be erected or altered under the supervision of qualified architects, we are suggesting at every opportunity the recommendation contained in the advertisement reproduced within." This is a policy that should be followed by every manufacturer of building materials and equipment in order that the product might be properly specified and installed.

Rattle! And How

"ASTRAGAL" conducts a column in *The Architects' Journal* of London. His chatty comments are often stimulating and much to the point. Here's one: "I am always a little afraid when I hear it said of the present generation: That there is plenty of ability; but the young men should study the past—especially the sculptors! It has always seemed to me that if anything has driven sculptors into revolt against what is known as academic tradition as opposed to living tradition, it is this admonition, ceaselessly reiterated. I know it is sense if properly understood, and followed in a spirit of resolute inquiry. But is it always meant as that sort of sense—or am I mistaken in seeming to hear the rattle of dry bones?"

How Much to Local Labor?

TO convince the school board of Grand Rapids, Michigan, that it should proceed with its 1931 building program, Henry H. Turner, A. I. A., made an investigation to determine the percentage of total building costs that is actually passed on to local labor. On the basis of a school building costing \$125,000, he discovered that local labor benefited to the extent of about \$52,000 or nearly forty-two per cent of the total cost of the building. Similar investigations in other communities could be utilized to advantage as an argument for proceeding with needed building operations promptly with a view of aiding local labor during the next few months.

Good Ideas Help Sell

CLEVER ideas that cost nothing are often the best selling arguments, as witness the recent experiences of a builder who, in a slow market with many cheap speculative houses for sale, built a well constructed house without any idea of how he was going to sell it. He thought of a sign with red letters on a white background, reading, "Keep away from Wall Street. This is a safe investment. The price is right. H. W. Pendleton,

Owner." Result, the house was quickly sold for \$8,500, an order secured for another house like it, and an active prospect interested for a third house. It is surprising, even in a time of depression, how many people there are to buy things if they are properly presented.

X Calls = X Dollars

"WANT to buy any books today?" inquired a salesman as he thrust his head in the office of a well known sales authority. Upon being taken to task for his poor sales approach, he answered, "I don't know anything about approach. All I know is that if I make 80 calls today I will sell enough books to earn \$20. I am 20 minutes behind schedule now. Good-by." A salesman for Remrandco ribbons, applying this same law of averages, found that if he made 100 calls a day he consistently maintained an average of \$100 a day sales. These two instances, reported in a recent issue of "Advertising & Selling," are illustrative of the theory that if a man exposes himself to enough business, some of it is sure to stick to him. This theory is as true of architectural service as it is of any other line of business. And there are architects using the theory right now to their very considerable profit.

Business We Have Got

IN the chart illustrating the article, "Let's Talk About the Business We Have Got," on page 20 of the November issue of AMERICAN ARCHITECT, the business of an average department store was placed at \$67,340. This figure should have been \$87,340, which was correctly stated in the article itself.

Advertising Has Paid

FIRMS which increased their advertising during the past two years have profited, while those which cut their appropriations have suffered accordingly, according to Joseph H. Appel of the John Wanamaker Store. He states: "Records show that during 1930, out of 97 representative companies whose financial statements were examined, profits declined only 29 per cent in the group of 62 which increased their advertising, while profits declined 55 per cent in the group of 35 which decreased their advertising.

"So far in 1931, of the 63 of these companies whose records are available, the group that increased its 1930 advertising is actually showing 2 per cent more profit than in 1930, while the group that cut its 1930 advertising appropriations is suffering a further shrinkage in profits, fully 25 per cent below last year."

There is nothing surprising in Mr. Appel's statement. There always is some business to be had. Why shouldn't it go to those who seek it most aggressively?

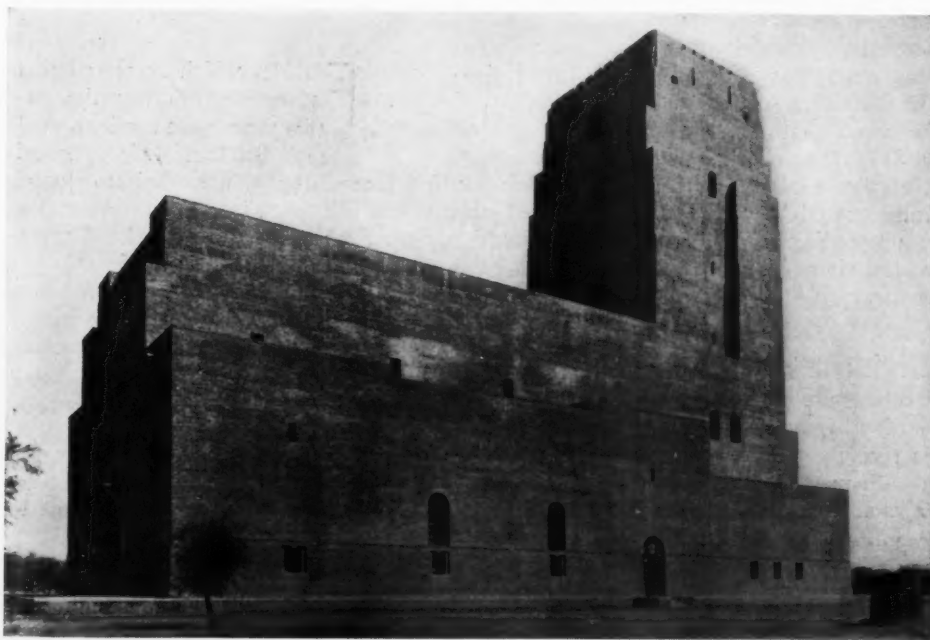
... and ABROAD



GLASS AND METAL semi-circular stair tower of the new building for E. Breuninger, Stuttgart. The design of this building, by Eisenlohr and Pfennig, is characterized by a few materials economically and effectively used in broad areas, resulting in pleasing simplicity. From "Modern Bauformen"



PROFESSOR SALVISBERG has designed a number of buildings recently constructed in Berlin. Among them is the Evangelical Community House. Since the community house also forms an approach to a church, there is good reason for the high open portico. The slender piers of Travertine act as a frame through which the church proper is seen. "Modern Bauformen," September



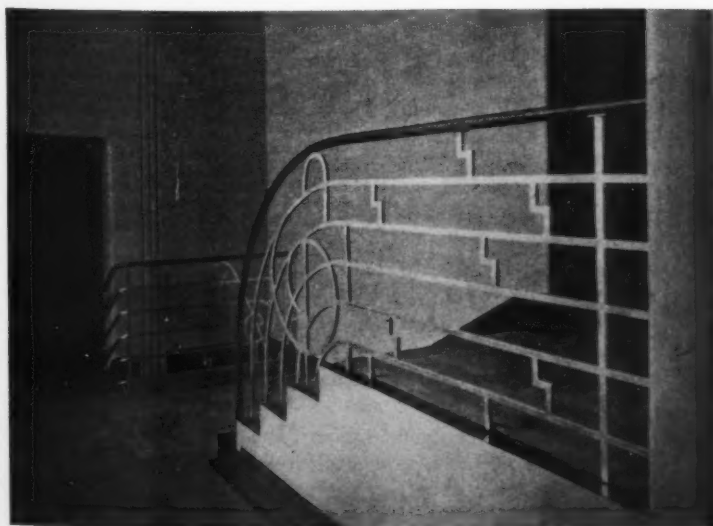
GARRISON CHURCH at Delhi, India, designed by A. G. Shoomsmith, A.R.I.B.A. Small and infrequent windows, due to climatic conditions, set in immense massive walls, make an impressive contrast. The walls are of light muddy red colored bricks set with $\frac{1}{4}$ " recessed joints. "Architect and Building News"



"**DRAMA THROUGH THE AGES**" is the title of the frieze designed for the Saville Theatre, London, by Gilbert Bayes. Awarded Silver Medal of the Royal Society of British Sculptors



BLACK METAL-SHEATHED weather-boarding covers the walls of the Amstel Boat Club, Amsterdam, Holland, designed about ten years ago in the spirit of free yet romantic modernism by the late de Klerk, architect. From "Architect & Building News"



FOR DECEMBER 1931



SIMPLICITY AND COMFORT was sought in the design of Berkeley Hotel bedrooms, London, by Stanley Hall, Easton and Robertson, architects. A governing necessity was provision for sufficient "clothes room." Grey, green and silver is the decorative note of above bedroom. From "Architectural Review"

DRESS CIRCLE ENTRANCE balustrade, Saville Theatre, London, T. P. Bennett and Son, architects. From "Architect & Building News"

IF EXPLOSION DAMAGES WORK

who Pays?

By GEORGE F. KAISER, LL.B.



●WHAT HE DID: The contract The Country Club entered into with The Heating Company provided among other things that the club's architect should have authority in all matters pertaining to the contract, that he should decide on the quality of materials to be used, of work to be performed, and on all questions arising from the plans and specifications. The contractor agreed not to hold the club liable for any damages arising from the fulfilling of the contract, and to make good any injuries prior to the acceptance of the work. A hot water heater and boiler were installed and, while being tested, the boiler exploded and seriously damaged the building. Repairs were made and when the club refused to pay the cost of the repairs, the contractor started suit against the club.

WHY HE DID IT: The contractor claimed that the club was responsible for the cost of the repairs it had

made for the reason that the architect had issued his certificate to the contractor after the explosion occurred and the repairs were made, and that the issuance of the certificate precluded any claim on the part of the club against the contractor.

WHY HE SHOULDN'T HAVE DONE IT: When the case came up for trial, the court decided that the club could not be held responsible unless the damages occurred through its fault, and pointed out that the architect's certificate of final payment issued to the heating contractor after the repairs necessitated by the explosion were made did not preclude the owner from recovering the cost of the repairs and said, "An architect's certificate could not, under any circumstances, be held to have determined who was responsible for the explosion and the damages resulting there from, nor did the architect assume the function of determining that question."

A PARTNER DIED...AND THE WIDOW SUED

●WHAT HE DID: Jones and Smith were both architects and had engaged happily and successfully in their practice as partners for a number of years. Smith died, and Jones and the widow were left to agree upon the mutual rights and liabilities of Jones and the deceased Smith. The lady immediately retained counsel and Jones was forced to do likewise. "Where is your partnership agreement?" asked Jones' lawyer. "We never had any," replied Jones, "I never thought it was necessary so I never suggested that we enter into a formal agreement as we understood each other perfectly."

WHY HE DID IT: Jones had never suggested that a formal written partnership agreement be drawn up because he had every confidence in Smith and did not stop

to think that some day he would have to deal with Smith's widow.

WHY HE SHOULDN'T HAVE DONE IT: There are probably few businesses where partnerships are so loosely formed from the legal standpoint as in the architectural profession, and it is not until the death of one of the members of the firm occurs that things are discovered which should have been done when the partnership was formed. Questions as to how the earned fees of the partnership are to be divided, whether or not the unearned fees are to be divided, and in what proportion, whether or not the business is to be terminated at once, and numerous other questions arrive to vex the surviving partner and oftentimes force him into Court as a defendant in an accounting action.

THE READERS Have a Word to Say

• NEW JERSEY CHAPTER STARTS PETITION

Editor, AMERICAN ARCHITECT:

THE matter of prefacing a petition urging the Government to employ private architects on Federal work was discussed at the October meeting of both the Board of Directors and the Chapter and State Society, when our secretary, Mr. Fairweather, called the attention of the members to the work the AMERICAN ARCHITECT was doing for the profession in actively pursuing a campaign to get the government out of the architectural business.

Following this discussion, in which every one indicated appreciation of the very able efforts which the AMERICAN ARCHITECT was making in behalf of our profession, a motion was carried to the effect that the officers accede to the request of the AMERICAN ARCHITECT and circulate a petition along the lines suggested.

I am happy to advise you of this action and to say that I have appointed a committee to study and act on this matter. Please be assured of the full cooperation of the New Jersey Chapter in your efforts to obtain recognition for the individual practicing architect versus governmental bureau.—*Seymour Williams, President New Jersey Chapter A. I. A., and New Jersey Society of Architects.*

• SUBLETTING BY ARCHITECT OR OWNER ADVOCATED

Editor, AMERICAN ARCHITECT:

THE resolution adopted Thursday last (Oct. 8) by the Contracting Plasterers' Association in convention at New York seems to us to be one of the best moves toward securing better buildings and better general conditions in the building industry.

We believe that the letting of various sub-contracts by the architect or owner in all classes of work, not only public construction work, would be a great improvement over the accepted practice of empowering the general contractor to place sub-contracts at the lowest price which he can get approved.

We do not intend to criticize general contractors, for it is very probable that we or others would follow the same course under a similar system.

On the other hand, it is impossible or impracticable for architects to write sufficiently detailed specifications covering every item required in the modern building, because such detailed specifications permitting no substitutions for the materials or equipment actually wanted would be entirely too voluminous.

Therefore, the placing of sub-contracts by the architect or by the owner would permit not only the obtaining of various prices if desired so that purchases could be made economically, but would also permit careful selection in accordance with the relative merits or adaptability of the materials or equipment quoted.

Without question a better investment of money spent would be effected and better building would be secured.—*J. J. Wakelee, Vice-President and Treasurer, Sedgwick Machine Works.*

• CALIFORNIA ARCHITECTS COMPLIMENTARY

Editor, AMERICAN ARCHITECT:

AT the last meeting of our Executive Board there was much favorable discussion of the active support being given by your publication to the campaign of the profession to get the government out of the architectural business; and I was asked to convey to you the commendation and appreciation of our group for your fine work.

We have also noted with interest the publicity which you have given the unification movement within the profession. However, an unfortunate omission occurred in the article in the September issue when it failed to mention at any place the name of our esteemed President, Mr. Robert H. Orr of Los Angeles. In addition to being chairman of the unification committee representing the state societies, Mr. Orr has been one of the leading spirits in the movement from its inception and has given a tremendous amount of his time and effort to this much-desired undertaking.—*Chester H. Miller, Secretary, The State Association of California Architects, San Francisco, Cal.*

• HOW CAN OVERHEAD BE REDUCED?

Editor, AMERICAN ARCHITECT:

THE AMERICAN ARCHITECT has published from time to time articles on Drafting Room Costs. I have read most of them, all of which have had some good points. The article by H. P. Van Arsdall in the June 1930 issue was especially good.

To expect in these times to find a ratio of overhead to productive cost, such as shown by the article above mentioned, is unbelievable, due to the decreased volume of work, and, therefore, the number of productive hours worked.

We started two years ago to keep a cost system. Our records for the past year, 1930, showed an overhead of four times the actual cost of drafting hours worked. The year 1931 will probably be higher, due to a decrease in productive hours worked, whereas the overhead has continued with slight change.

Our productive drafting cost averages about 1.4% of the job cost, whereas the overhead averages about 5.6% of the job cost (1931 records). Ninety per cent of our work is residential, on which our commission is 6%. You can readily see how we stand during such times as these. There is little chance now of increasing the rate of charges, so the only alternative is to cut down overhead.

(Continued on page 60)

Could you offer any suggestions, as to the size of office an architect should maintain, such as space, number of employees, etc., to handle, under the present business conditions, an average of \$300,000 worth (annually) of building, mostly residential?

An architect is certainly entitled to a profit of 1% on residential work ranging from fifteen to forty thousand dollars. From our experience in the past two years, at least, we lose money on residential work. Cannot something be done over the country to increase the commission for architectural services?

I am wondering if our costs for drafting room and overhead are about the average, or whether we are spending more than we should for the volume of work we are doing.—*G. M. Grimes, A. I. A., Louisville, Ky.*

• NEW JERSEY PROTESTS ARCHITECTS' SMALL HOUSE SERVICE BUREAU

A LETTER has been sent by the Architects League of Northern New Jersey to all chapters of the American Institute of Architects and other architectural organizations. Mr. Tabor, president of the League, sent a copy of the letter to *AMERICAN ARCHITECT* with a request for its publication. The letter follows:

The Architectural Organizations in the suburbs of New York, and at least two within the city, have signified their opposition to the Architects' Small House Service Bureau.

The Bureau undoubtedly was conceived with worthy motives, but in its workings has brought real hardships upon the residential architect and others just starting their practice.

We have found the Bureau acting not so much as a "clinic" for that poor client who cannot afford both an architect and a colored tile bath room, but rather as an aggressive, price-cutting competitor of the architects for their already established clientele: and this at a time of depression when architects need every bit of work they can get.

No other allied part of the building industry, such as the Realtor, mortgage company, material yard nor the labor union has a similar official "bread line" to give away its services and thus endanger its firmly set scale of payment achieved by years of effort.

A director of the Bureau told the writer that he saw no reason why the Bureau's activities should not be extended to include the eight or nine room house with garage attached. The possibilities of extending the "clinic" are unlimited in scope and feasible for every phase of architectural service. Also a large market is open for organizations such as Sears Roebuck, which recently advertised to ten million people that architect's fees could be saved by dealing with that company.

The architectural publications are printing many articles by the officials of the Architects' Small House Service Bureau extolling their new doctrine of their stock plan idea for architects, namely: that supervision is more important than individuality of design. These writers completely overlook the fact that architects are not enthused about supervising somebody else's stock plan; and are not trained to offer their services primarily as supervisors, and secondly as designers.

During the past winter, architects in the vicinity of New York City were solicited for funds to aid the unemployed draftsmen, and they responded generously.

The Architects' Small House Service Bureau became the recipient of that generosity by a gift of forty-eight draftsmen whose salaries were paid out of that charitable fund! This winter promises to be long, hard and meagre for every one; but in addition, architects are expected also to compete against their own last winter's charity.

At the present time the A. I. A. endorses the Architects' Small House Service Bureau.

We consider that this Bureau as now constituted is merely another commercialized stock plan company operating under the guise of a "clinic," and is no more entitled to favored endorsement of the A. I. A. and the U. S. Department of Commerce than you or I, or any other architect or stock plan company.

This continued endorsement, especially during this depression, is increasing an already aroused antagonism and resentment among architects and their organizations, and if allowed to grow will menace the prestige of the A. I. A. and imperil, by loss of good will, its attraction for future membership.

Unity and harmony in the profession are most vitally needed, and we should greatly appreciate an expression of your opinion on this critical matter.—*Clarence H. Tabor, Jr., President The Architects League of Northern New Jersey, Glen Rock, N. J.*

• SUGGESTS CONGRESSMEN BE INFORMED

Editor, AMERICAN ARCHITECT:

I HAVE read with interest your various articles regarding the Treasury Department and their use or misuse of private architects for federal building work.

I am wondering if your magazine is reaching the various congressmen and senators, for it is not much use for architects and material men to read these articles except to know the conditions.

Up to September 1st, according to the Treasury Department, less than forty million of the seven hundred millions authorized had been completed with buildings totaling 181 millions under contract. This is some record when the conditions are surely as desperate as when we were trying to speed things up in 1917.

I have read with interest many other articles in your magazine, but I believe the fight to keep government bureaus out of the architectural profession the most important confronting our profession today. State and city bureaus are fast following the example of the Treasury Department.—*Frederick John Manley, A. I. A., Manley & Young, Inc., 206 Medical Arts Building, Knoxville, Tennessee.*

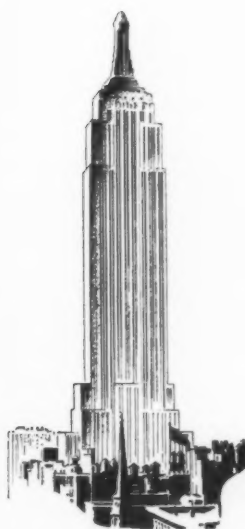
• McKIM, MEAD & WHITE MONOGRAPH FOR SALE

Editor, AMERICAN ARCHITECT:

I HAVE for sale a monograph of the work of McKim, Mead & White, 1879-1915, in three volumes containing Part I to XV; in all 300 plates 14"x20" and numerous extra plates, complete as issued by Architectural Book Publishing Company. In three de luxe portfolios. Plates, folders and portfolios all in excellent condition. Price \$60.00 which is 10% below the pre-war cost.—*George M. Siemens, 1202 Scarritt Building, Kansas City, Missouri.*



TILE SLABS



EMPIRE STATE CLUB—Roof terrace on set-back at 21st floor; **EMPIRE STATE BUILDING**, Shreve, Lamb & Harmon, Architects; Starrett Bros. & Ekin, Contractors. Ludowici Tile Slabs laid by Tuttle Roofing Co.

NEW YORK CENTRAL BUILDING, Warren & Wetmore, Architects; James Stewart & Co., Contractors. Ludowici Tile Slabs laid by Master Waterproofers, Inc.

In the background, **THE WALDORF-ASTORIA**, Schulze & Weaver, Architects; Thompson-Starrett Co., Contractors. Ludowici Tile Slabs laid by Tide Water Roofing Co.



The use of Ludowici Tile is not confined to sloping roofs. • For flat roofs and set-backs, and also for floors and drives, Ludowici Tile Slabs are an ideal covering. • Impervious to moisture—permanently durable—proof against acids—they are particularly suitable where exposed to weather, wear or unusual conditions. • These qualities, in addition to attractive appearance and a safe walking surface, are inherent in this standard product. • The character of the structures on which millions of these slabs have been used is positive assurance of outstanding merit. • Ludowici Tile Slabs are made in a number of patterns, colors and sizes, with fittings to match. • Let us send you samples and information. • Our pages in Sweet's contain helpful data and our representatives are at your service.

LUDOWICI TILE

Made by
LUDOWICI-CELADON COMPANY

NEW YORK: 565 FIFTH AVE. • CHICAGO: 104 S. MICHIGAN AVE. WASHINGTON: 738 FIFTEENTH ST., N. W.

FOR DECEMBER 1931



Living room in Frank Lloyd Wright's own home at Spring Green, Wis.

TWO LECTURES ON ARCHITECTURE

By Frank Lloyd Wright. Published by the Art Institute of Chicago. Illustrated; 63 pages; size 7½x10¼; price 75 cents.

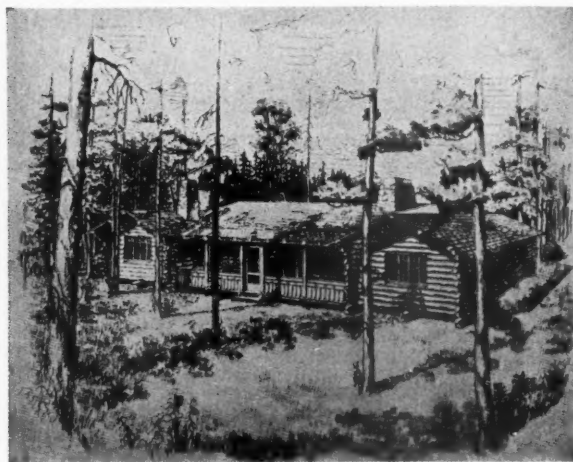
WHAT Frank Lloyd Wright may say is always stimulating, agree or disagree with him as one may. These two lectures are no exception, being full of Wrightesque epigrams with more than their share of human wisdom.

One lecture is titled, "In the Realm of Ideas." Here is said, "An idea searches the *sources* of appearances, comes out as a form of inner experiences, to give fresh proof of higher and better order in the life we live. Finally—an idea is salvation by imagination." Stimulating are his ideas on what a house should be, "the size of the human figure should fix every proportion of a dwelling"—and later—"why not the proportions of all buildings whatsoever? What other scale could I use?"

The other lecture is called, "To the Young Man in Architecture." Some of its thoughts: "The only buildings we have today approaching architecture are the industrial buildings built upon the basis of common sense." And, "The Beaux Arts that made most of your American progenitors is itself confused, now likely to . . . disinherit its favorite sons or be itself dethroned, since posterity is already declining the sons as inheritance; the sons who enabled the plan-factory to thrive. . . . Yes, it is becoming day by day more evident to the mind that

is a mind how shamefully the product of this culture betrayed America."

There are several illustrations, some being sketches by Mr. Wright, some being photographs of his work. Perhaps the most interesting from the human standpoint are those of his own house in Spring Green, Wis.



Hunting and fishing lodge in New Brunswick.
From "The Real Log Cabin"

THE REAL LOG CABIN

By Chilson D. Aldrich. Published by the Macmillan Company, New York. Illustrated; 278 pages; size 6½ x 9; price \$2.50.

THE author is an architect who, after some twenty years of experience in residential work, became interested in log cabins and has been specializing in them for the past ten years. He discusses selection of the site, of logs, etc., in the several chapters going to make up the first part of the book. The second part is devoted to the construction of log cabins; underpinnings, foundation walls and basements; how to lay up logs; gable ends, eaves, purlins, etc.; fireplaces; windows and doors, cupboards and floors; porches, terraces and balconies; hardware; finishing the logs and the woodwork; and so on. One chapter is devoted to log cabin furniture.

The book is illustrated with photographs and sketches of cabins built by the author, construction details, interiors, etc. It was first published in 1928 and recently reissued.

MODERN DUTCH BUILDINGS

By F. R. Yerbury, A.R.I.B.A. Published by Charles Scribner's Sons, 597 Fifth Avenue, New York. Illustrated by 100 plates; size 9x11¼; price \$10.

PRESENTATION of the architecture of Holland since 1925 is the purpose of this book, an architecture which is particularly interesting because Holland is perhaps unique in that she has a very definitely marked present-day architecture of her own. This, in no small

PROTECTING

PUBLIC

BUILDINGS



▶ ▶ IN HARTFORD

When architects design public buildings—structures that house highly valuable property and personnel—they usually specify A. D. T. Protection Services.

The New State Office Building in Hartford is typical. On every floor you will find A. D. T. Night Watchman's Supervisory and Fire Alarm Stations that are connected direct to the A. D. T. Central Station. A. D. T. Fire Alarm Gongs also are installed throughout the building.

Every hour of the day and night—week days—Sundays—holidays—A. D. T. Central Station operators are in constant touch with the building—ready to dispatch emergency assistance or relay a fire alarm signal without a moment's delay.

The Connecticut State Capitol, the State Library, and the Hartford City Hall, also are A. D. T. Protected ... as are the majority of the larger buildings of this type throughout the country.

Specifications in Sweets. Bulletins on request. There are A. D. T. offices in 117 cities in the United States.

Connecticut State Office Building
Smith & Bassette, Architects



Landmarks of Modern Protection

Controlled Companies of

American District Telegraph Company

155 Sixth Avenue, New York, N. Y.



Housing at Amsterdam. P. Kramer, architect. From "Modern Dutch Buildings"

measure, may be due to the law, operating in most cities, which prohibits the erection of a facade in a public street which has not received the approval of a specially appointed committee, ever changing in personnel and composed mainly of architects.

The illustrations are full page plates, printed on one side of the page only. There are a number of plans of the buildings illustrated.



Entrance, 1815. From "Dutchess County Doorways"

DUTCHESS COUNTY DOORWAYS

By Helen Wilkinson Reynolds. Published by William Farquhar Payson, 598 Madison Ave., New York. Illustrated; 280 text pages; 204 full page plates; size $8\frac{1}{2} \times 11\frac{1}{4}$; indexed; price \$22.50.

"DUTCHESS County Doorways and Other Examples of Period Work in Wood, 1730-1830," is the full title of this book. (Dutchess County is in New York State, bordering the Hudson River). It deals with accounts of houses, places, and people, being an historical study of the people in this locality in an effort to show through the kinds of houses in which they lived, their cultural progress. Two preliminary chapters cover "Dutchess County in the Pioneer Period," and "Lumber and Carpenters."

The manner of presenting the material is as follows:

An historical account of the people who owned the land; the various owners of the houses illustrated, and a description of the houses. Each structure is treated in that way. Not only doorways but fireplaces, stairways, shutters, etc., are presented. The book would probably be invaluable to an architect working in that section as giving him an historical background which would tend to make his work more authentic.



The Schlesinger and Mayer Building, Chicago
Louis Sullivan, architect. From "The Brown Decades"

THE BROWN DECADES, 1865-1895

By Lewis Mumford. Published by Harcourt, Brace and Company, 383 Madison Ave., New York. Illustrated; 266 pages; size $5\frac{1}{2} \times 8\frac{1}{4}$; indexed; price \$3.00.

"A STUDY of the Arts in America, 1865-1895." So reads the subtitle of Mr. Mumford's book, stated to be "the first complete appraisal of America's buried renaissance." It is a study of the period between 1865 and 1895—its promise, its achievement, and its influence in our own day.

To quote: "A genuine culture was beginning to struggle upward again in the seventies: a Pierce, a Shaler, a Marsh, a Gibbs, a Ryder, a Roebling, a Thomas Eakins, a Richardson, a Sullivan, an Adams, a LaFarge were men that any age might proudly exhibit and make use of. But the procession of American civilization divided and walked around these men." Although but seventy-two of the pages of the book are devoted to architecture exclusively, yet every page will prove interesting to architects and those concerned with the cultural development of the artistic sense of our nation.

Mr. Mumford's style makes exceptionally easy reading. His manner of expression is in itself a delight. And so he makes "The Brown Decades" not only an illuminating piece of information, but a book that one will genuinely enjoy.

Reflecting *the* Dignity *of* Established Rank

FIRST NATIONAL BANK BUILDING
ST. PAUL, MINNESOTA

Architects: Graham, Anderson, Probst & White,
Chicago, Ill. *General Contractors:* Paul Steenberg
Construction Co., St. Paul; *Plumbing & Heating*
Contractors: Hankee Heating Company, St. Paul.



The First National Bank Building in St. Paul was designed to house appropriately the oldest and largest financial institution in the city and one that has been identified with the development of the Northwest from pioneer days until now. Architecturally and practically, so the men responsible decided, it must be representative of all that is finest and most advanced in such buildings. It was conceived and erected with this in view—thirty stories high, with a skeleton tower reaching up a hundred feet above its topmost roof, graceful in outline, substantial

in structure, at the heart of the business district, dominating the sky line as seen from any direction. The conveniences of the building within are as praiseworthy as the appearance without; and all its equipment has been chosen with a view to the requirements of the most exacting users. For unfailing and satisfactory service in its major uses of pipe, the "First" Building is fitted with NATIONAL—

America's Standard Wrought Pipe

NATIONAL TUBE COMPANY · Pittsburgh, Pa.
Subsidiary of United  States Steel Corporation

NATIONAL PIPE

NEW MATERIALS & EQUIPMENT

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



"Pureaire" Steel Kitchen for Apartments

1M A steel kitchen cabinet occupying a floor space of less than ten square feet and including a stove with oven, sink and drainboard, refrigerator for either ice or electric operation, and storage space, has been placed on the market by the Parsons Company, Detroit, Mich. Connections are provided for gas, electricity, water, drain and ventilating shaft. The cabinet is built of steel throughout finished in lacquer. When not in use, the doors close, concealing the entire equipment.

American Architect
57 Street at Eighth Avenue
New York

December, 1931

■ Please see that I receive further information concerning the following products described in this month's "New Materials and Equipment."
(Write key numbers given at beginning of each review).....

NAME
FIRM NAME
ADDRESS
CITY
OCCUPATION

New Insulation Board

2M The United States Gypsum Company, 300 West Adams Street, Chicago, has placed a new insulating board and lath on the market. It is felted of hardwood fibres as a single unit. It is stated that because of the method of felting and the selected fibres, the board combines high insulation value with high transverse and nailing strength. Low water absorption is also claimed. The board has a hard surface, light ivory in color and semi-textured, economical of paint. When left undecorated it may be cleaned with wallpaper cleaner. There is a tongue and groove joint. The board is suitable for sheathing under clapboards, brick or stucco, as well as for use as a lath and wallboard.

This company has also announced an 18"x32" tongue and groove board with four beveled edges which when applied without joint treatment produces a neat and restrained tile effect. It is suitable for use in class rooms, auditoriums and gymnasiums of schools, also over old cracked ceilings in houses, store buildings, etc., where it serves the triple purpose of a permanent finish, heat insulation and sound absorption.

Curb-Gutter Blocks

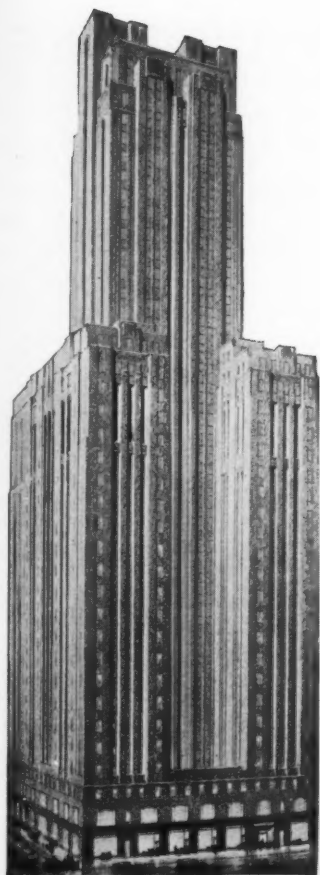
3M The American Curb-Gutter Block Co., Inc., 499 Seventh Avenue, New York, is marketing curb-gutter blocks made in straight, curved and end sections to provide continuous curb-gutters for private driveways and roadways, park and garden walks. Each block is one foot long, forms a gutter one foot wide with a five inch curb, and weighs about 30 lbs.

New Steel Bath Tub 60% Lighter

4M The Mueller Co., Decatur, Ill., has introduced a steel bathtub stated to be 60% lighter than cast-iron tubs of the same size. It is provided with a high leak-proof up-turned flange to prevent capillary creepage of water into the enclosing walls. Porcelain enameled, furnished in standard colors.

Celotex Acoustical Plaster and Mineral Tile

5M The Celotex Company, Chicago, has added to its line a sound absorbing plaster called "Kalite," which is made from a special variety of pumice that permits a wide range of smooth and textured finishes. It is applied like ordinary plasters, can be colored without affecting efficiency,



"When estimating an annual maintenance budget, it is gratifying to know that very little has to be set aside for servicing Chicago Faucets.

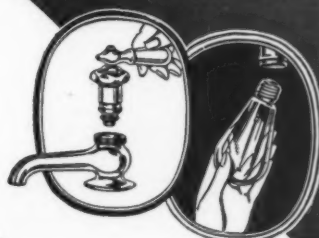
"The LaSalle-Wacker Building, Chicago, was opened in May, 1930, and during the past 18 months we have averaged not over 75 cents a month for new seats and washers on the 835 Chicago Faucets with which our building is completely equipped.

"Maintenance costs are practically negligible, and unquestionably in more than 20 years engineering experience I have never found anything so easy to take care of, and for so little cost, as Chicago Faucets."

(Signed) C. P. BRENNEMAN,
Chief Engineer,
LaSalle-Wacker Bldg., Chicago

75¢
is our
monthly
repair bill
on 835
CHICAGO
FAUCETS

Chicago Faucets have a removable unit with renewable washer and seat. No wear on the body — no replacements. Repairs can be made as easily as changing a light bulb, at the cost of only a few cents. For further information, write The Chicago Faucet Co., 2700-22 N. Crawford Ave., Chicago.

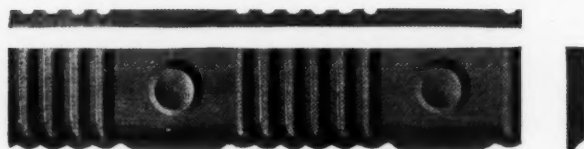


and has a hard, durable and long-lasting surface.

Another product of this same company is the Acousti-Celotex Mineral Fibre Tile, an acoustical material. It is made $1\frac{1}{4}$ " thick and has an absorption value of .85 to .88 at 512 cycles. The tile may be painted or decorated without, it is stated, affecting its acoustical efficiency.

New Line of Wood Carved Moldings

6M The Waddell Manufacturing Company, Grand Rapids, Mich., has placed on the market a series of carved wood moldings for use in residences and other buildings. In addition to the conventional uses of carved



molding, the line includes a number of patterns for decorating ordinary millwork. Special patterns have been developed to use along the edges of shelving. The line is manufactured in gum, maple, oak, mahogany and walnut, furnished in either random or specified lengths.

Carrier Atmospheric Cabinet

7M The Carrier-York Corp., 1541 Samson Street, Philadelphia, has introduced a cabinet to heat or cool individual rooms, the air being humidified and cleaned as it enters the room. The device replaces a radiator, being connected to the same supply and return lines for the existing steam or hot water heating system. Small supply and drain lines are added for humidification. To provide for cooling, the only additional piping required is supply and return lines to and from the source of refrigeration.

Burgess Acoustic Ventilator

8M The Johns-Manville Co., New York, is marketing the Burgess Acoustic Ventilator, which is intended to filter outside dust and to kill street noises. Incoming air passes through an acoustic chamber. The device delivers 150 cubic feet of air per minute. It is designed for sliding wood or steel frame windows. Furnished with either A.C. or D.C. two-speed motor, in 17 different colors or grainings, and can be plugged into any electrical outlet.

Slide Rule for Electrical Industry

9M The Diamond Electrical Mfg. Co., 1320 E. 16th Street, Los Angeles, is offering the Square D calculator, which is a compact pocket unit containing two separate and distinct calculators, one computing wiring, the other computing motor data. It computes all interior and conduit wiring problems: amperes, feet of wire, size of wire, and percentage drop. The motor calculator dial shows size of circuit switch, size of starting fuse, size of conduit, size of wire, running protection necessary, and full load amperes on any of the three principal types of 220 or 440 volt 3-phase motors.

Electrical Control of Humidifying Apparatus

10M The Barber-Colman Co., Rockford, Ill., has added to its electric system of temperature control an instrument called a "hygrostat," designed to provide control of humidifying apparatus by electrical means. It is said to control mechanism on a variation of less than 4% in relative humidity, and indicates the existing humidity by means of a pointer and scale mounted in the instrument.

Marble Cleaners and Stain Removers

11M The Vermont Marble Co., Proctor, Vt., has placed on the market two cleaners and stain removers for marble and other stone work. One is a liquid cleaner for marble, granite and all kinds of natural stone, cast stone and concrete. The other is a rust-remover, which will draw rust and ink stains from natural stones and concrete.

New Program Service System

12M The Stromberg-Carlson Telephone Manufacturing Co., Rochester, N. Y., has introduced a new program service system for use in small hotels, schools, hospitals, etc. It is for use in connection with loud speakers placed in each room and is capable of distributing radio, phonograph or announcing microphone programs originating with the institution. The various types of program—radio, phonograph, or institution—may readily be mixed.

Operating Equipment for Overhead Doors

13M The Barber-Colman Co., Rockford, Ill., has added to its line of garage door operating equipment a Model M operator, for use on overhead type doors.

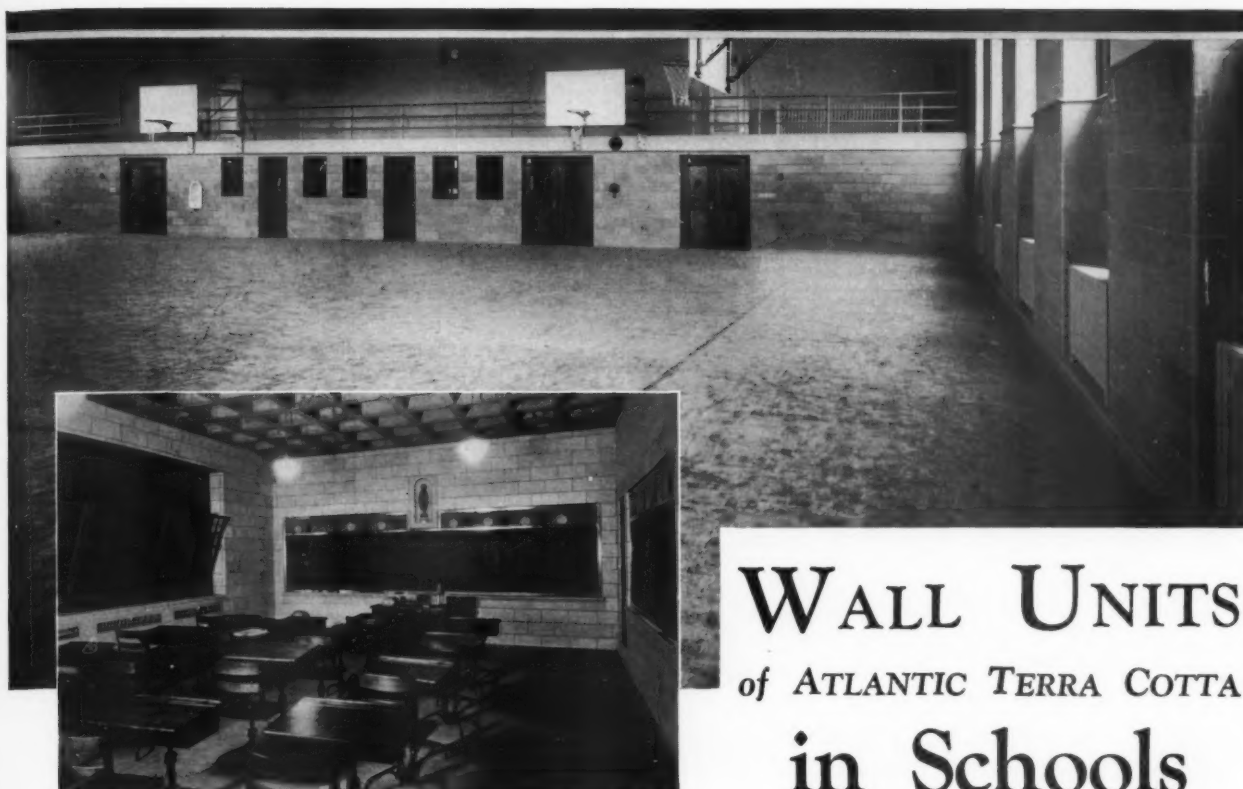


Thermostat With Self-Starting Electric Clock

14M The Minneapolis-Honeywell Regulator Co., Minneapolis, Minn., has adopted the electric clock to thermostatic control. It makes use of ordinary lighting current and is self-starting. The adjustable range is from 55 degrees to 85 degrees F. Silver finish. Dimensions, height $7\frac{3}{4}$ ", width $2\frac{13}{16}$ ", depth $2\frac{3}{8}$ ". Available with week-end shut-off and adjustable holiday shut-off.

Gate Valve

15M The Reading-Pratt & Cady Co., Inc., Bridgeport, Conn., has introduced the Lubrotite gate valve, intended particularly for water supply, air and hazardous liquid systems, and fire line service. The valve has a duct system for introducing a lubricant seal between the seating surfaces and can be used as a regular non-lubricated valve.



WALL UNITS of ATLANTIC TERRA COTTA in Schools

BECAUSE they are so splendidly adapted to use in various rooms throughout the school, and because Wall Units of Atlantic Terra Cotta are machine made and therefore lower in price, many new school buildings are being finished in this very modern facing material.

A recent installation is in the Albany Boys Academy, Albany, N. Y., Marcus T. Reynolds, Architect. Larger view above shows the gymnasium, the lower walls of which are faced in blue-green matt glazed Wall Units.

Another installation just completed is in the Convent, School and Community Center for R. C. Parish of St. Peter Claver, Brooklyn, N. Y., Henry V. Murphy, Architect. Here the corridors, class rooms, basement and gymnasium balcony are finished in mottled white and tan glazed

Wall Units, and the drinking fountains and statues are of hand made Atlantic Terra Cotta. One of the class rooms illustrated in smaller view above shows how Wall Units face entire wall from floor to ceiling. Wall Units were also used for wainscoting in auditorium of St. Anthony's Parish School, New York, pictured below.

These Wall Units are available in any surface finish and in any color. They are fire-resistant, afford desirable insulation against heat, cold and sound, are easy to keep clean and require no painting or other maintenance after erection. We shall be glad to hear from any Architect interested in school construction and submit suggestions as to how Atlantic Terra Cotta Wall Units may be used to best advantage.

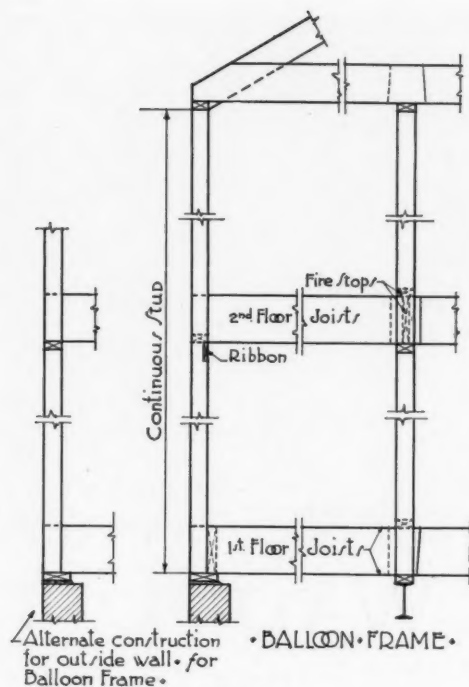
WRITE FOR ILLUSTRATED BOOKLET

ATLANTIC TERRA COTTA CO.

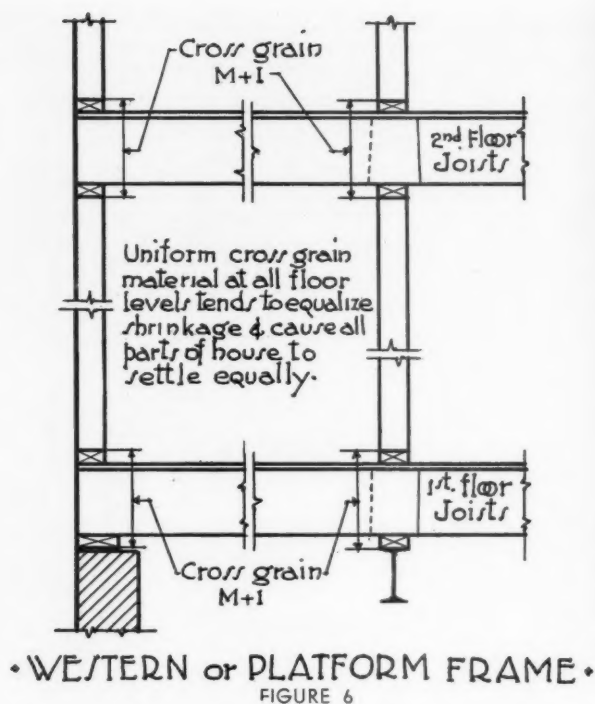
19 West 44th Street, New York, N. Y.

Southern Plant: ATLANTA TERRA COTTA CO., GLENN BLDG., ATLANTA, GA.





MINIMUM SHRINKAGE results if continuous studs are used from foundation sill to attic plate with similar construction in the bearing partitions



SHRINKAGE IS UNIFORM in western frame and cracks are not so likely to occur. Plaster should not contact with non-shrinking parts like chimneys

How to Prevent Plaster Cracks

(Continued from page 33)

remedy is to use metal lath in such corners. This will usually correct the trouble at the corners but will induce diagonal cracks in the partition itself.

» » DIAGONAL CRACKS

If these partitions are securely fastened by spiking, or metal lath used where they intersect non-settling walls or bearing partitions, they will hold there but will sag through the center where they rest on the joists. This will cause the diagonal cracks which are apt to concentrate at the corners of door openings. Doors will bind and the shoe will misbehave.

Indeed the remedy is difficult and unless steel in some form is used or unless it proves possible to suspend the partition, the nearest approach to a remedy or prevention of this condition is the use of dry joist material, to reduce shrinkage.

It might be noted, however, that this which is perhaps the most difficult of framing troubles with the balloon frame and part masonry buildings is nonexistent with the western or platform frame, as all portions of the building, bearing, non-bearing partitions and all, settle uniformly.

» » PITFALLS OF WESTERN FRAME

SO far we have noted troubles which are common to balloon and part masonry construction. In both there is no appreciable settlement of the walls or bearing parti-

tions so long as the foundation itself remains solid.

The platform frame, however, is characterized by short studs between floor and ceiling. Thus all shrinkage is concentrated between the ceiling of one floor and the flooring immediately above. Any decrease in the depth of the floor construction, say of the first floor, lowers the whole structure resting thereon by the amount of this decrease, much as if it were on an elevator. Furthermore, for all practical purposes, if construction is consistently of the platform type, this settlement is uniform throughout all portions of the building.

It is obvious therefore that the settlement caused by decrease in depth of the second floor is added to that of the first. Thus it is that settlement at the roof may be considerable.

» » DON'T USE WITH MASONRY

THE western or platform construction should therefore never be used with masonry or veneer construction, and it is somewhat risky with stucco. Nor should plaster ever be permitted to come in contact with a chimney or vertical metal such as soil stacks. This is a case in which metal lath should be avoided where frame joins masonry.

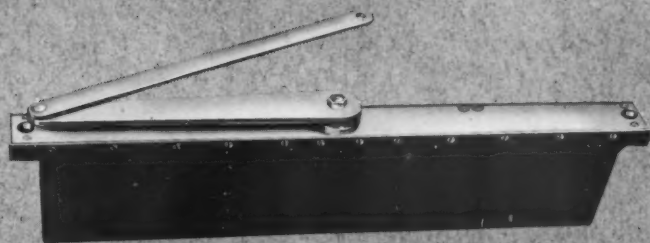
The chimney should be framed about, so as to provide a sort of sleeve (Figure 7) in which it is free to slip up through the building as the structure settles during the drying out process.

The platform frame with such precautions is easily the



*An
Announcement
of considerable
architectural
importance*

Send for the illustrated
folder which gives all
the details



Introducing the New **YALE Concealed** Door Closer « « « « «

HERE is the long-sought development in door closing devices—a CONCEALED Door Closer, just as efficient as the best of the conventional types.

Here are some of the high points. The new *Concealed* Closer is mortised into the door like a lock and can be used for both wood and metal doors. It is equipped with a hydraulic checking cylinder whose piston is operated by a rack and pinion. This means checking control over the entire range of the device, which in turn means effective closing of even a heavy door against a strong draft.

The construction of this new YALE *Concealed* Door

Closer is such that the turning force is balanced through the action of compression springs. This means very little side pressure on the bearings and therefore a high rate of efficiency.

This new YALE Closer is easily regulated, noiseless and smooth in operation, and permits the door to be opened flat back against the wall.

You will be extremely interested in this new and carefully perfected device. Write for the illustrated folder which gives all the details of this long-wished-for development. You can specify it with confidence.

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



View from inside of door equipped with the new YALE Concealed Door Closer. Note the entire absence of any evidence that the door is thus controlled.



View of the same door from the outside. The only external indication of the closer is the small additional member on the trim to permit the action of the arm.



View of the door wide open. Note how the new YALE Concealed Door Closer permits the door to open the full 180 degrees—all the way back to wall.

CHIMNEY FRAMED
for western frame so
shrinkage may take
place without causing
plaster cracks where
wood joins masonry

least subject to cracks.
However, proper
flashing procedure
must be adopted where
the chimney and soil
pipes pass through
the roof.

All details should
be carefully studied
to make sure that
there is the same
amount of horizontal
material, at all parts
of each floor, so as to
provide against un-
even settlement.

It might also be noted that the shoe should be nailed
to the base as there is a tendency for the partition to pull
away from the shoe as shrinkage takes place. (Fig. 1)
If the shoe is nailed to the wall construction it will follow
the wall and slip over the floor a bit and so maintain a
tight joint with the base.

It might be well at this point to reiterate that, how-
ever careful one is in the selection and application of
plaster materials, he may still expect cracks—and bad
ones if his framing methods are not correct.

Metal lath is vital in such weak points as corners, and
may even, under favorable conditions, prevent many

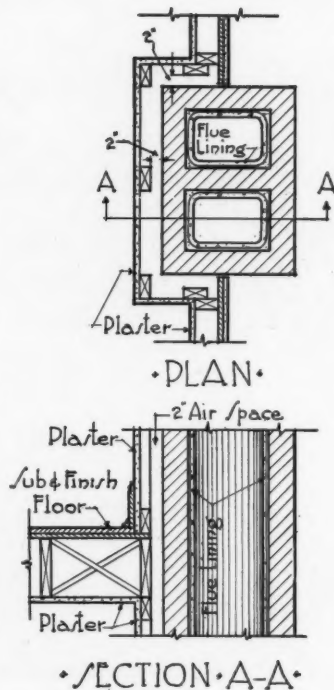


FIGURE 7

of the diagonal cracks in partitions resting on floor
joists. The solution of the problem of cracks caused
by the shrinkage of the frame, however, lies less in the
choice of a plaster base or materials than in the manner
of framing.

» » DON'T MIX TYPES OF FRAMING

It is not uncommon to find the walls of a building
framed with a continuous stud from foundation to
roof, the floor joists being carried on ledger boards as
in the balloon frame, or the walls may be of masonry,
while the bearing partitions rest on top of floor joists
as in the platform frame. Thus we have a mixture of
the two framing types. There will be excessive settle-
ment around the bearing partitions with no correspond-
ing settlement at the walls. This is a common cause of
cracks and similar troubles around stair wells.

» » CONCLUSIONS

FEW carpenter foremen are familiar with these prin-
ciples and framing methods should not be left to
them. All details should be carefully shown on the draw-
ings or specified.

Every important
structural condition
should be analyzed
to ascertain the ef-
fect shrinkage will
have and should be
framed accordingly.
Insistence upon
material, especially
horizontal material
which is known to
be well seasoned,
will greatly im-
prove any structure
whatever method of
framing is used.

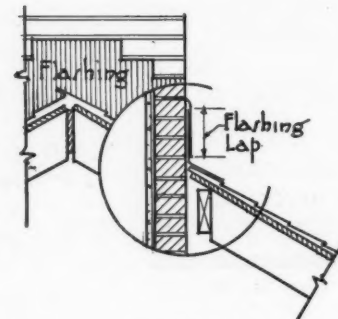


FIGURE 8

FLASHING at chimney should
be lapped to allow for cu-
mulative shrinkage of frame

A Plan to Eliminate Shopping of Bids

IN order to eliminate the evils present in shopping of
bids, several recommendations are made by Benja-
min D. Traitel, member of the Committee on Shopping
of Bids of the New York Building Congress. These
are:

The architect shall specify the names of the bidders
wanted in each trade.

These bidders should be selected with regard to vol-
ume of the contract, quality of workmanship required,
their plant facilities for contract deliveries and their
financial ability to carry them through.

Contracts for 5,000 or less need not be considered
in this way.

Bids exceeding 5,000 shall be opened in the presence
of the bidders, and posted conspicuously in the office
of the builders or architect according to which one it
is submitted.

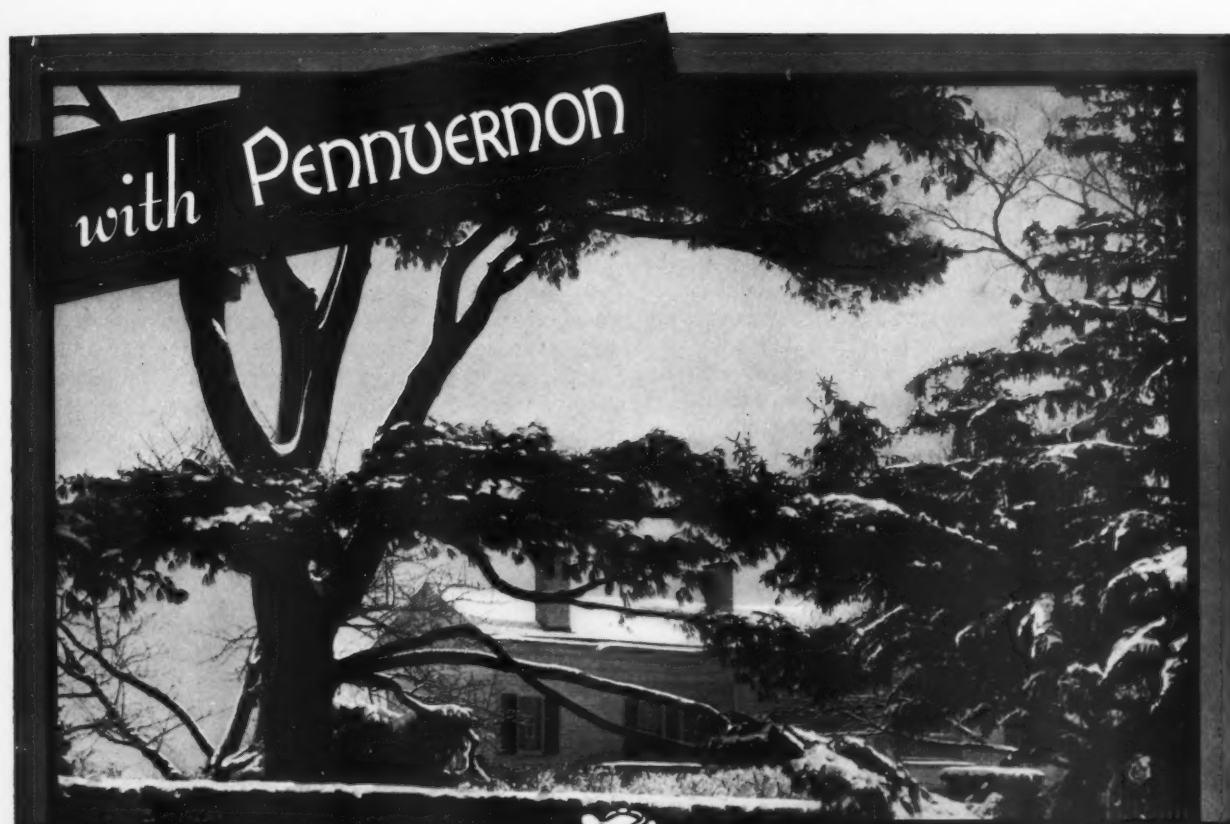
It shall be the privilege of architect or contractor
to award the contract to any of the original bidders at
his bid price without change.

Should there be revisions of plans or specifications
after bids have been submitted and before subcontracts
have been awarded, the estimating for such changes
shall be confined to the original bidders.

In case plans and specifications are materially changed
so as to require new bidding, the original bidders shall
be paid 1½% on the amount of their bid for their
service, with the exception that in case one of the original
bidders receives the contract award he shall not be en-
titled to the percentage herein named.

THE five winners of the Massachusetts War Memorial
competition have been announced as follows: Richard
Shaw, Boston; Maginnis and Walsh, Boston; L. W.
Briggs, Worcester; G. A. Johnson, Worcester; and
Joseph Rustigian, Worcester. Each of these will receive
\$1,000. These five, selected out of 103, will submit
sketches in greater detail for final award involving a
fee of about \$60,000.

Larger Windows mean *brighter* Homes



LARGER windows enable architects to build into the home the beauty of outside scenes—clear, attractive views that only the finest window glass can transmit faithfully and fully. They have discovered in Pennvernion Window Glass the outstanding qualities essential for brighter homes. Remarkable clearness and freedom from distortion are assured by the exclusive process of Pennvernion manufacture, which makes and keeps the glass perfectly flat throughout.

More than this, large windows glazed with Pennvernion Window Glass reflect the landscape so truly and so clearly that they greatly enhance the architectural beauty of the

building. No marring of the design by noticeable distortion. Pennvernion's smooth, lustrous finish on both sides gives a lasting brilliance, which results in 100% better reflection.

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 Pennvernion manufacture, address the Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Penna.

Pennvernion
flat drawn
WINDOW GLASS



15% Profit, 90% Rented When Done

(Continued from page 43)

approximately the same as for schemes one and two, it was obvious that the cost of the operation and the financing would still remain approximately the same as for these other schemes. Income from 505 rooms at \$500 per room equalled \$277,750 and figuring fifty per cent of the rent roll for vacancies, operating expenses, taxes and depreciation, the return on the cash investment of \$500,000 equalled 6.2 per cent.

MY clients now being convinced that there would be no advantage in continuing along the lines of larger suites and larger rooms, suggested that I resume my study at the point where I was interrupted when the renting specialists were consulted. This study, as previously stated, contemplated a layout with more of the smaller suites and with smaller rooms than in Fig. 1. A plan was finally developed (Fig. 4) which shows thirteen apartments and 42 rentable units to a floor, with 697 units in the entire building. It will be noted that the largest suite in this plan is that shown on the corner where the Drive intersects with 95th Street, and comprises living room, two chambers, dinette and kitchen. Most of the apartments of this plan are arranged with living room, chamber and kitchen. The smallest units consist of living room and kitchen only, and these are located around the large inner court.

The cost of land, building and carrying charges during construction for this scheme was figured at \$2,100,000, the same as for schemes one, two and three. In order to reduce the cash investment, a first mortgage bond issue of \$1,400,000 representing two-thirds of the estimated cost of the operation was contemplated. The set-up follows:

Total estimated cost of the operation.....	\$2,100,000
Financed as follows:	
First mortgage.....	\$1,400,000
Second mortgage.....	350,000
Cash	350,000
	\$2,100,000
Income:	
697 rentable units at \$500 each per annum.....	\$348,500
Expenses:	
Vacancies, operating expenses, taxes and depreciation, estimated.....	\$175,000
Interest, first mortgage, \$1,400,000 at 6%	84,000
Interest, second mortgage, \$350,000 at 6%	21,000
Amortization, second mortgage at 5% ..	15,000
	\$295,500
Surplus.....	
	\$53,500

In this case the surplus of \$53,500 is equivalent to approximately 15 percent on the cash investment of \$350,000. This plan proved to be the solution, and was presented by the promoters to a prominent owner-builder, who became interested in the possibilities of the undertaking. He retained mortgage brokers who obtained a building loan and permanent first mortgage in the sum of \$1,400,000, to bear interest at 6%. Upon securing this commitment, he signed a contract with the land owners—who up until now had been my clients—to purchase the plot for \$750,000. The terms of sale were contingent on the land owners taking a second mortgage

on the new operation to the sum of \$350,000, to bear interest at 6% and to be amortized at the rate of \$15,000 per annum.

As the working drawings were developed it was realized that a business depression of major proportions was imminent, and that a great many people would find it necessary to economize on rent. It was felt that it would be safer to cut down on room sizes and obtain a larger number of rooms in the building. The typical floor plan from which the building was erected (Fig. 5) contains fifteen apartments and 46 rentable units, with 780 units in the entire building, as compared with thirteen apartments and 42 rentable units to the floor and 697 units for the building, upon which the first mortgage loan was obtained. The additional apartments meant additional bathrooms and kitchens, all of which added materially to the cost of the building. This additional cost was offset, to a large extent, by simplifying the exterior design. For example: instead of the usual three stories of limestone facing, the brickwork was carried down to the granite base course and one or two bands of terra cotta used instead.

Estimating a rent roll of \$348,500 from 697 rentable units at \$500 each, it was obvious that with 780 units the same rent roll would be available by reducing the rental to approximately \$450 per unit. This meant that the owner could offer tenants a saving of \$150 a year—approximately one month's rent—on a three room apartment. The actual renting indicated that tenants were eager to take advantage of this saving. In fact by October 1st more than 90 per cent of the apartments in the building had been rented.

At various stages during the promotion and financing of this operation it was necessary for the architect to cooperate with some eighteen to twenty different personalities. Included among these were the promoter, banker, builder, real estate operator, real estate broker, real estate attorney, renting agent, building manager, mortgage broker, real estate appraiser, land surveyor, consulting structural and mechanical engineers and last, but not least, the owner.

As in most commercial buildings of this type, very little money was available for exterior ornamentation, the bulk of the funds being spent on interior equipment which, although hidden from view, will keep the annual charges for repairs at a minimum.

The question may be raised as to whether the layout that was finally adopted will be in demand when times improve? The answer is that, without doubt, there will always be a demand on Riverside Drive, at this particular location, for units of this size. It was felt, after much deliberation, that the investment in such a building would be safer, over a long period of time, than in almost any other type of building that might have been erected.

THE Empire State Building acts as a lightning rod for hundreds of nearby buildings, according to the General Electric Company, which has been experimenting with New York's skyline in miniature. The area of protection is said to be cone shaped.

In England,
too—

Safe
Walking
in Public
Buildings



THE stairways illustrated are two of many in the R. M. C. Textile Building, Golden Square, London (Messrs. Gordon Jeeves, Architects). The treads have nosings of grey, 6 x 4" Alundum Stair Tile backed by 6 x 6" Alundum Floor Tile of the same color—a total of 8200 Norton tile.

The architect is highly pleased with the result. The stairways are attractive in appearance. The treads are non-slip and will remain so throughout their entire life. They will withstand years of the most concentrated traffic.



NORTON COMPANY, WORCESTER, MASS.

New York Chicago Detroit Philadelphia
Pittsburgh Cleveland Hartford London

NORTON COMPANY OF CANADA, LTD., HAMILTON, ONTARIO

How Voorhees, Gmelin and Walker Handle Interior Decoration

(Continued from page 46)

arrangement is largely governed by the requirements of use. Studied from this approach the furniture plan develops as an organism made up of furniture groups related to each other and to architectural features.

When the architectural design and the interior treatment are developed at the same time, proper provision can be made for these furniture groups and for the many other details of the interior, thus preventing unnecessary expense and dissatisfaction. For instance, when it is known that certain windows in an office building are to have draperies, those windows will not be pivoted to swing in, making the hanging of draperies impracticable. Also, the outlets for electric light fixtures will be properly placed and many other items properly done to avoid difficulties that otherwise are likely to be encountered later.

The work of this department keeps pace with the designing of the building. Preliminary drawings and specification memoranda are made at the same time as the preliminary drawings for the building. As conferences with the client call for changes, revised drawings are made until what may be regarded as a final scheme of treatment is arrived at. Then an exhibition is arranged for the client, displaying the drawings for each room with samples of the materials grouped about them: wall paper, wood finishes, draperies, furniture sketches, carpets, etc.

WORKINGS drawings, small scale plans and elevations, scale details and full size details, such as are made for the building itself, are prepared with the collaboration of this department. When the furniture is designed in the office as it often is, sketches are made but the details of construction are left to the furniture manufacturer, full size shop drawings, to be approved, being called for. Sample pieces are often required to be built from the designs.

The practice in regard to lighting fixtures is similar, and a sum is often appropriated for models or sample fixtures, the department supplying sketches and specifications and leaving the working out of the designs in the hands of the fixture manufacturer, subject to supervision and approval.

Many of the fabrics used are woven to designs and colorings originated in the office and the department not only makes the design drawings in colors, but, when necessary, sends a member of its staff to the factory to ensure the desired results in dyeing and weaving.

Specifications enable contractors to know exactly what they are expected to supply and to do. In specifying draperies, for instance, the degree of fullness required is stated as well as all other requirements.

A large and varied collection of samples of decorative materials of all kinds, from wall papers to tiles and glass, is kept in the interior decorating department and members of the staff are ready to go out on a moment's notice and get whatever else is needed. They know where to go, and save the architectural designer a great deal of time. And, they are constantly on the look-

out for new materials that may prove useful in the future.

During the progress of the work members of the staff of the department keep the office in touch with conditions on the job and collaborate in the supervision.

It is a big problem, involving much more than fitting a special interior design department into the office organization. There is the matter of fees and charges, for one thing. An architect cannot, of course, handle this side of the work on the basis of making a profit on the materials and labor that enter into the work. The architect must be paid by the client and must act only as the client's agent when purchases are made. One of the difficulties here lies in the fact that the enormous amount of detail involved in designing and supervising interior decoration makes it necessary to charge what seems to many clients a high fee for this work.

Voorhees, Gmelin and Walker have handled interior decoration in several different ways: (1) time plus overhead plus profit; (2) a percentage on the cost of the work; (3) a flat price for the work (estimated cost plus assumed fee); (4) time plus overhead plus a fixed fee. The last named method is preferred as it is looked upon with favor by many clients who feel that under this arrangement the architect is not taking a profit on every move that is made and that at least one element of the cost is not subject to increase. The contracts for decorative work are made in much the same manner as for architectural work.

Perhaps the interior decorating department of this organization is the forerunner of many such departments. Architects have long felt that it would be desirable to ensure the interior decoration of their buildings in a manner in harmony with the architectural design, but difficulties of a practical nature have deterred them and attempts in this direction seem to have been sporadic or, at best, short lived.

When architects were working along traditional lines and practically all buildings were in the character of one historic style or another, it was sufficiently difficult to secure harmony between the work of the architect and that of the interior decorator, though the latter had only to refer to the accepted documents of the particular style in order to produce something that bore at least a family resemblance to the architecture.

Now, however, with tradition largely discarded, buildings have so much individuality and so much of the architect's own manner in their design that the difficulty is multiplied many fold and it seems likely that architects will find it desirable to meet the conditions with some such department as the one here described.

JEAN HEBRARD has succeeded the late Albert J. Rosseau as senior professor in architectural design at the University of Michigan. During the past five years, Professor Hebrard was a professor of architectural design at the University of Pennsylvania, and at one time held a similar professorship at Cornell University. He is a graduate of the Ecole des Beaux-Arts.



On one of America's Most Magnificent Estates...

LONGWOOD, Mr. P. S. du Pont's home near Kennett Square, Pa., is more than an estate—it is a permanent exhibit of architectural taste and horticultural beauty. Its tropical green houses, its Fountains of Versailles, its mammoth organ, have made it a mecca for the cultured as well as the curious.

Above is shown the Administration Building, one of the many beautiful homes provided for the large staff of experts required to tend this vast estate. There is no jarring note of "newness" in conflict with its naturally beautiful surroundings. Much of this mellowness can be laid to its roof and the choice of Ambler Asbestos Shingles in the new-old "Weathered Effect."

Many soft, pleasing colors are available in these

lasting, rigid shingles of asbestos fibres and cement. Fireproof, not merely fire-retardant, they reduce insurance costs and eliminate painting, repairs and replacements. To the eye, these "weathered effect" shingles duplicate all the mellow charm of ancient hand-split cedar, but to the elements they present an endurance and life that outlasts the house itself.

You remove roof complaints when you say — Ambler Asbestos "Weathered Effect" — in the roofing specifications.

Standard colors include Royal Red, Sylvan Green, Lindenwold — a mossy green-black — and four blended tints of soft autumnal browns known as "Rustic Blend." In addition as many as thirty other variations of these shades can be made to order.

Keasbey & Mattison
Company
Ambler, Penna.

Y.W.C.A. Commends BLOXONEND Highly

FREDERICK H. GETMAN, PRESIDENT
MISS OLIVE MOORE, GENERAL SECRETARY
YOUNG WOMEN'S CHRISTIAN ASSOCIATION
MEMBER YOUNG WOMEN'S CHRISTIAN ASSOCIATION UNITED STATES OF AMERICA
422 SUMMER STREET
STAMFORD, CONNECTICUT
TELEPHONE 5-1188
April 14, 1931

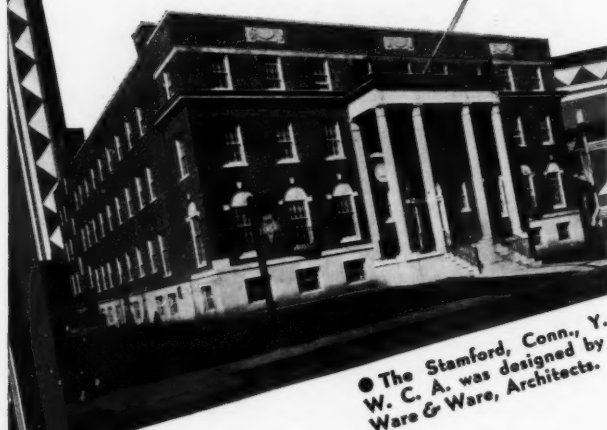
Mr. J. G. Calvin
Carter Bloxonend Flooring Co.,
902 Walnut Street,
Kansas City, Missouri

Dear Sir:

We have one of your Bloxonend floors in our gymnasium and we can commend it highly. The assurance of no splinters, and the resiliency yet firmness of grip seems to give release to those using it. Our dances, parties, basket-ball, badminton and so on are given on this floor and it stands up well under the hard usage.

Very truly yours,

Amy Erb
Amy Erb
Building Manager



● The Stamford, Conn., Y.
W. C. A. was designed by
Ware & Ware, Architects.

● The Floor of Bloxonend will maintain its smooth, non-splinter surface throughout its long life. The flooring is furnished in 8 ft. lengths with the end-grain blocks securely dovetailed onto baseboards.

● Specified by nearly all school architects for gymnasiums and shops and widely used in factory service. Write for literature.

**CARTER BLOXONEND
FLOORING COMPANY**
GENERAL OFFICES — KANSAS CITY, MO. — "IN SWEET'S"

**BLOX-ON-END
FLOORING**



Lays Smooth
Stays Smooth

For the Boy Scouts

(Continued from page 31)

The interior walls are troweled to simulate the plaster of the old pueblos, where the squaws applied and smoothed the plaster with their hands.

The ceilings of all rooms follow the prototypes found in the Taos pueblos, and are structural. Poles, or vegas, from six to eight inches in diameter, spaced unevenly from two to three feet apart, span from wall to wall, projecting beyond the exterior of the walls.

Over the vegas, and at right angles to them, is a thick layer of long slender sapling-like poles, held in place by stripping and hacking apart dried Sahuaro (giant) cacti. Above this layer is heavy tarred paper over which is spread a ten-inch layer of saw-dust—an excellent insulator against the heat of the desert sun. Supported by the vegas, with air-space below, the roof consists of rafters, sheathing, and tar and gravel roofing. In some rooms a slight variation from this type of ceiling is found, in that two large vegas, fourteen inches in diameter, are placed at third points, spanning the short dimension of the rooms, with smaller vegas at right angles above them, and again the Sahuaro poles. Both types are found in the old pueblos.

The interiors of the lodge are necessarily simple. Sand-colored cement floors, unpainted plaster walls, the elimination of all unnecessary wood trim, together with the ceilings just described, form interiors which follow closely those found in the original Indian houses.

ALFRED C. BOSSOM, an English architect who practiced architecture in the United States for 23 years, has been elected a member of the English parliament. He designed the Seaboard National Bank Building and other well-known structures. In 1924 he was elected a fellow of the Royal Institute of British Architects, the first American architect to be so honored. He has achieved many other honors, one of them being the Cross of the Legion of Honor of France for "encouraging understanding between American and French artists."

DEATHS

KENNETH CLARK died in Sibley Memorial Hospital, Washington, D. C., and funeral services were held November 4 in New Rochelle, N. Y. Mr. Clark had been associated with offices such as that of Bertram Goodhue, VanBuren McGonigle and Donn Barber. His principal hobby was photography and he became one of the best known professionals in this field, particularly for his architectural work. Some of his photographs were used to illustrate the story of his trip to Yucatan, printed in AMERICAN ARCHITECT for April, 1930, under the title, "Three Architects Journey to the Land of the Mayas." He was particularly identified with the photographs of Early American Architecture and details in the White Pine series. The Metropolitan Museum of Art, New York, is preserving his work in this field in anticipation of the time when many of these landmarks will have disappeared. His studio was in New Rochelle.

AMERICAN ARCHITECT

You'll see this seal on the letters of progressive manufacturers whose products will stand thorough examination by the keenest, most progressive buyers.



DOUBLY IMPORTANT

AN exposition which brings to alert manufacturers the greatest number of potential buyers in the shortest space of time at a minimum expense.

The seller exhibits, explains, demonstrates. The buyer looks, listens, and chooses. Both are free from the distractions of their daily work.

They give their undivided attention to the product displayed.

Progressive manufacturers and architects will make the most of this opportunity.

Buyer and seller both profit.

Will you?

AN INTERNATIONAL EVENT HELD EVERY TWO YEARS

*Under the auspices of the
American Society of Heating & Ventilating Engineers*

Managed by the International Exposition Company

Ⓜ1054X

In the Better Homes **VICTORIA VENETIANS** *enhance* **THE ARTISTIC**



FOR living room, dining room, sleeping room, bath room—all windows in the modern home—Victoria Venetians harmonize.

They are furnished in any specified tone or shade. The tapes also are supplied in the same or contrasting colors to carry out the decorative effect.

The mechanical excellence of Victoria Venetians commends them for your consideration.



THE
BOSTWICK-GODELL CO.
Blinds since 1894
NORWALK, OHIO
Representatives in Principal Cities



VICTORIA VENETIANS

The Better Blinds

Taken For A Ride

(Continued from page 47)

old smile appeared. "It's all a question of procedure," he concluded. "Suppose the designer of the early automobile had gone right ahead and pasted little features on here and there, trifles that happened to please him, knick-knacks that had proved suitable on other occasions—but notice—not exactly similar occasions. He might have produced something like this." At this point Mr. Snubbers produced a little sketch of the most novel motor car I have ever seen. "It was made by one of my bright young draftsmen who, as you know, really run my business while I am out drumming up trade or speaking at Women's Conventions. Compare today's automobile with this Napoleonic Carriage, this Coupe d'etat, you might call it."

He paused self-consciously, so I gathered he was trying to pun—a carefully cultivated weakness of so many up-and-coming public figures. "Observe that our machines have been allowed first to develop functionally, and then, and only then, has their decoration been developed, logically, harmoniously, beautifully. If, twenty years ago, automobile manufacturers had tried to tack bits and pieces on to the horseless carriage they then had, the results might have been even more remarkable than this little sketch; depending, of course, upon the individuality of the creator, his esprit—"

"Architecture—" I gently prodded.

"Oh, yes—architecture—to be sure, architecture. Is its case any different?" he thundered, half rising and fixing his great eyes impressively, "Can we feel less certain that that Great American Genius which has produced this marvel of engineering, efficiency and beauty, the automobile, can fail in this infinitely more complex task, the modern office building and the modern multiple home; a problem as yet in its infancy with a background of but a score of years as compared to the centuries of effort, experiment and genius expended upon the Greek Temple, the Gothic Cathedral, the Renaissance Palace" (I was completely forgotten by this time.) "Can we doubt that that same Genius, if it observes the proper procedure (which, as I said before, is everything) will, now that it has solved the troublous question of constructional technique, produce—nay, *create*—a New Order, as beautiful and I may say as inevitable as the older ones—suitable—harmonious—complete! Gentlemen—I thank you."

Preparation of Zoning Ordinances. By the Advisory Committee on City Planning and Zoning of the U. S. Department of Commerce. A guide for municipal officials and others in the arrangement of provisions in zoning regulations. For sale by the superintendent of documents, Washington, D. C. Price ten cents.

Sash Operation of Bottom Hung Clearstory Sash

The large triple sash above the side windows of this tennis court are mechanically operated from the floor. Lord & Burnham Screw Thread Operators not only control the bottom hung sash for ventilation, but hold them from falling in, with the attendant risk of broken glass.

Tennis Courts, estate of Mrs. H. E. Talbott, Dayton, Ohio. Peabody Wilson & Brown, Architects. Lord & Burnham Sash Operators.

Lord & Burnham Co.

SASH OPERATING DIVISION
Graybar Building, N. Y. City

Representatives in principal cities of the
United States and Canada



Vertical Section Through Windows showing operation.

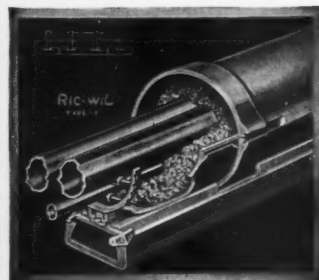




1300 MILES

THIS un-retouched photograph shows part of a Ric-wil shipment ready to be installed after being shipped more than 1300 miles. It shows the perfect condition in which Ric-wil materials land on the job 99 times out of 100... whether shipped a few miles or across the country. It's picture proof of our shipping records which show a breakage of only about one-fourth of one percent.

The completeness of Ric-wil Systems... the elimination of extras... the absence of delays, special field construction and engineering... the simplicity of Ric-wil construction... all combine to make Ric-wil Conduit Systems outstandingly low in installation costs.



Ric-wil Type F Conduit Systems with Dry-paC Waterproof Insulation, insure the highest possible efficiency for underground heating or power pipes. 90% efficiency is guaranteed for this System... tests of actual installations show efficiencies up to 95.6%.

Each part of a Ric-wil System "interlock" with the others to form a compact rigid whole. Sections of the Base Drain stagger with the conduit sections. Pipe supports wedge between sections of Base Drain, resting on Base Drain side shoulders, and extend thru special holes into the conduit to carry the pipes. Top and bottom conduit halves are locked together with the water-tight Loc-Lip Side Joint. Ric-wil Systems are permanent... they "stay put".

Ric-wil Engineers will assist with or furnish plans... also supervise installations if desired. Write for Bulletin C-3101 showing photographs of a Ric-wil multiple pipe installation, using new Base Drain with side shoulders.



THE RIC-WIL COMPANY

1562 Union Trust Building • • • • • Cleveland, Ohio

Branches: New York • Atlanta • Chicago
AGENTS IN PRINCIPAL CITIES

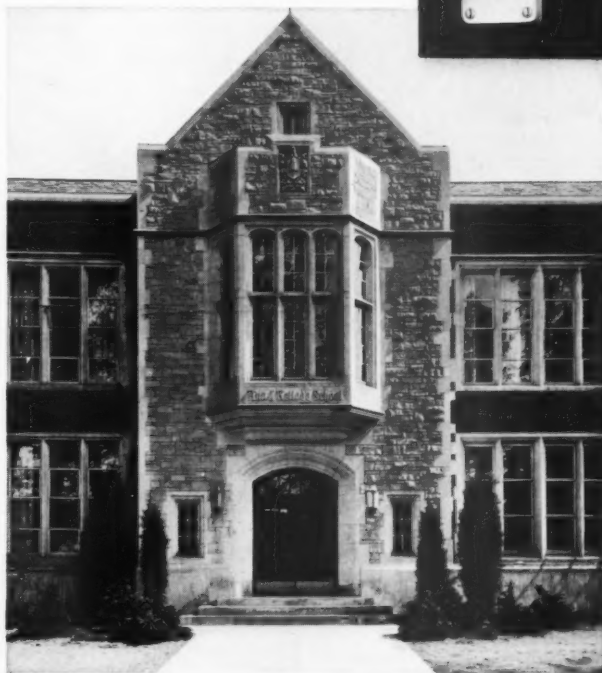
REG. U. S. PAT. OFF.

RICWIL

CONDUIT SYSTEMS FOR
UNDERGROUND STEAM PIPES

"ONE OF OUR FINEST SCHOOLS"

COMPLETELY
HARDWARE EQUIPPED
BY
SARGENT



*Beautiful entrance of the recently finished
Ann J. Kellogg School in Battle Creek, Michigan;
Albert Kahn, Inc., Architects.*

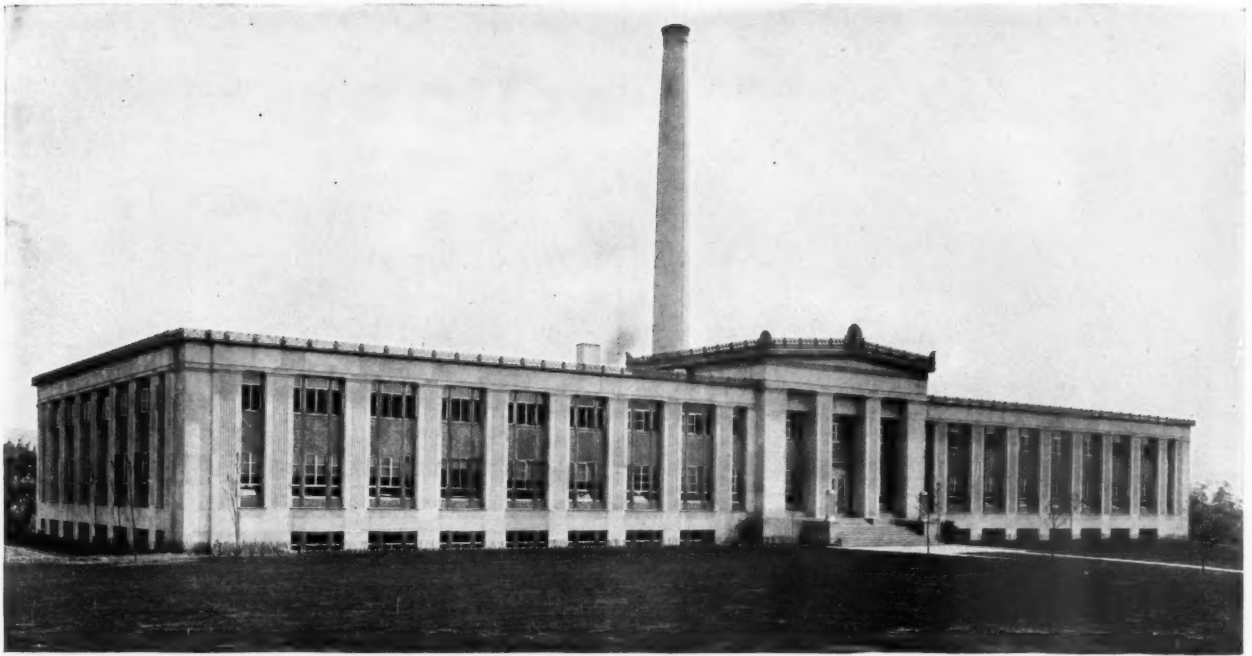
MODERN schools are built to serve and endure. They must supply the proper background. And every kind of equipment must be selected to withstand the hardest usage.

The Sargent knob and escutcheon shown gives an idea of the simply designed, sturdy hardware that has been installed in the Ann J. Kellogg School in Battle Creek, Michigan. Other hardware items throughout the great building are of equal simplicity, in perfect harmony with the whole decorative scheme of the structure.

With Sargent Hardware, this fine school, like so many other educational and institutional buildings of the country, will receive a maximum security from every lock and a continued smooth operation from every hardware item. Sargent & Company, New Haven, Conn.; New York; Chicago; Belleville-Sargent & Co., Ltd., Belleville, Ontario, Canada.

SARGENT

LOCKS AND HARDWARE



Laboratory and Research Building, Aluminum Company of America, New Kensington, Pennsylvania. Roofed with 24,000 square feet of Carey Built-Up Roofing.

Specify roofs as foundations are specified

Carey Slag or Gravel Surfaced Roofs (Bonded for 10 and 20 years)

- (a) Asphalt Saturated Rag Felt construction
- (b) Tar Saturated Rag Felt construction
- (c) Combination Asphalt Impregnated Asbestos and Asphalt Saturated Rag Felt construction
- (d) Combination Tar Impregnated Asbestos and Tar Saturated Rag Felt construction

Carey Mineral Surfaced Roofs (Bonded for 10 and 20 years)

- (a) Asphalt Saturated Rag Felt construction
- (b) Combination Asphalt Impregnated Asbestos and Asphalt Saturated Rag Felt construction
- (c) Asphalt Impregnated Asbestos Felt construction

Carey Asphalt Surfaced Roofs (Bonded for 10 and 20 years)

- (a) Asphalt Impregnated Asbestos Felt construction
- (b) Asphalt Saturated Rag Felt construction
- (c) Combination Asphalt Impregnated Asbestos and Asphalt Saturated Rag Felt construction

ROOFs, like foundations, should be built to "carry the load." Consider the variable factors which must govern the choice of a built-up roof—the type and slope of the roof deck, the climatic and atmospheric conditions, and the anticipated life of the building. Time has proven conclusively that no single type of built-up roof can always serve best, and therefore Carey Built-Up Roofs include all types—Asbestos, Asphalt, or Tar and Gravel.

Carey production and distribution facilities have been steadily developed for 58 years; Carey Built-Up Roofs are applied in every locality by our authorized roofing contractors.

Carey Built-Up Roofing Specifications are indexed according to service conditions, and thus facilitate the selection of the particular roof which will protect a specific building at the lowest cost per year. If the new Carey Specification Book is not in your files, write for your copy.

THE PHILIP CAREY COMPANY • Lockland, Cincinnati, Ohio
Branches in Principal Cities

BUILT-UP ROOFS ASPHALT PRODUCTS ELASTITE EXPANSION JOINT WATERPROOFINGS ROOF PAINTS		HEAT INSULATIONS ASBESTOS MATERIALS CAREYSTONE CORRUGATED SIDING ASFALSLATE SHINGLES BUILDING PAPERS
--	--	---

596

NEW CATALOGS . . .

Readers of AMERICAN ARCHITECT may secure without cost any or all of the manufacturers' catalogs described on this and the following page by mailing the prepaid post card printed below after writing the numbers of the catalogs wanted

BRYAN BURNERS

250 . . . 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

251 . . . 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 colors. A. I. A. file c 41.

KLIEGL THEATRICAL, DECORATIVE, SPECTACULAR LIGHTING

252 . . . Catalog A of Kliegl Bros. Universal Electric Stage Lighting Co., Inc., 321 West 50th St., New York. Describes, illustrates and gives prices and other information concerning products made by this company.

AWNING, WINDOW SHADE AND SIDEWALK CANOPY SPECIALTIES

253 . . . Catalog No. 3 of F. J. Kloes, Inc., 269 Canal Street, New York. Illustrates and describes equipment made by this company. Also includes pictures of installations and information concerning built-in awnings and similar structural data.

SPECIFICATIONS FOR SUB-FLOORS TO RECEIVE HANOTILE

254 . . . Booklet illustrated with construction drawings and giving specifications for sub-floors to receive Hanotile asphalt tile flooring made by the American Asphalt Tile Corp., 1 Madison Ave., New York. Describes use over various types of bases, also as wainscoting.

CARVED MOULDINGS FOR MODERN INTERIORS

256 . . . Catalog illustrating carved wood mouldings for various interior purposes. Issued by the Waddell Manufacturing Co., 1125 Taylor Ave., N. W., Grand Rapids, Mich. A. I. A. file 19 c 3.

THE NEW CARRIER ATMOSPHERIC CABINET

257 . . . Illustrates and describes individual room units that cool, de-humidify and ventilate in summer. Also for winter use. Issued by Carrier-York Corp., 1541 Sanson Street, Philadelphia.

TEXROPE FOR HEATING AND VENTILATING SYSTEMS

258 . . . Bulletin 1247 of the Allis-Chalmers Manufacturing Co., Milwaukee, Wis., illustrating and describing Texrope drives for use on heating and ventilating systems. Gives pictures of buildings where used. Contains a table of squares and square roots.

TRUSCON STEEL LINER PLATES

259 . . . Catalog containing first complete presentation of Truscon steel liner plates for use in permanent underground work such as sewers, water and mine tunnels, caissons, etc. Issued by the Truscon Steel Co., Youngstown, Ohio.

GENERAL ELECTRIC HEAT REGULATOR

260 . . . Gives details and specifications of a new heat regulator for every type of heating system. Made by the General Electric Co., Schenectady, N. Y. A. I. A. file 30 f 2.

SPECIFICATIONS FOR WARNER'S SIDEWALK ELEVATORS

261 . . . Folder giving architect's specifications for Warner's all steel and iron standard electric sidewalk elevator made by the Warner Elevator Mfg. Co., Cincinnati, Ohio. A. I. A. file 33.

SAVE 25-50% OF FUEL BILL WITH COAL-O-MATIC

262 . . . Illustrated booklet explaining how the Coal-O-matic works, describing its construction and how it uses underfeed firing and forced draft with automatic operation. Issued by the Butler Manufacturing Co., Kansas City, Mo.

GARAGE DOORS ETERNAL

263 . . . Folder 2 of the American Sash & Door Co., Kansas City, Mo., illustrating and describing this elevating garage door for private garages. Includes installation details.

BATHROOM CABINETS

264 . . . Folder issued by the Butler Manufacturing Co., Kansas City, Mo., illustrating the various types of mirror bathroom cabinets made by this company and giving the sizes in which they come.

ANACONDA ARCHITECTURAL DRAWN SHAPES

265 . . . Catalog in stiff covers compiled and published by the American Brass Company, Waterbury, Conn. Shows various sections full size with dimensions.

LAYING, FINISHING AND CARE OF OAK FLOORS

266 . . . Thirty-ninth edition of a booklet issued by the Oak Flooring Manufacturers' Association, Memphis, Tenn., giving this information, also grading rules, standard thickness, widths, etc.

ELECTRIC FURNACES

267 . . . Illustrated booklet of the General Electric Company, Schenectady, N. Y. Explains construction of various types of electric furnaces, gives pictures of installations, operating data, etc.

VENEER-STEEL SERVICE FOR HOSPITALS

268 . . . Booklet illustrating and describing partitions, lockers, radiators, etc., made by the Hart & Hutchinson Co., New Britain, Conn., for use in hospitals. A. I. A. file 28 a 3.

NO POSTAGE REQUIRED ON THIS CARD

December 1931

AMERICAN ARCHITECT

57th Street at Eighth Ave.
New York City

Kindly have mailed to me the following catalogs, whose numbers I have noted, reviewed on this and the following page.

Numbers

Name

Address

City

Occupation

FOR DECEMBER 1931

These NEW Catalogs may be obtained through AMERICAN ARCHITECT

INLAND 4-WAY FLOOR PLATE

269 . . . Folder issued by the Inland Steel Co., Chicago, describing this company's 4-way floor plate, which is non-skid in all four directions.

ROCOP ROME CONVECTORS

270 . . . Booklet illustrating and describing the convectors made by the Rome Radiation Co., Rome, N. Y. Gives installation measurements, capacities and weights. A. I. A. file 30 c 4.

CONSEPTIC SEWAGE TREATMENT AND DISPOSAL

271 . . . Folder issued by the Concrete Septic Tank Co., Cincinnati, Ohio, illustrating buildings in which this company's septic tanks have been installed and showing construction and placing of tanks. A. I. A. file 29 c 21.

SOUTHERN PINE FARM BUILDINGS

272 . . . Booklet issued by the Southern Pine Association, New Orleans, La., giving pictures, plans and detail drawings of farm buildings together with bills of materials.

ARCO RADIATHERM

273 . . . The American Radiator Co., New York, has issued a booklet on the new Arco Radiatherm automatic radiator control which explains the manner of operation, instructions for installation and operation, and pictures of installations. A. I. A. file 30 f 2.

TALL BUILDING ECONOMY

274 . . . The Concrete Reinforcing Steel Institute, Chicago, has published a booklet giving data on savings effected through the use of a reinforced concrete frame and showing pictures of the buildings in which the savings were effected. Gives some general data on reinforced concrete construction. A. I. A. file 4 e.

THERMAX INSULATION PLUS FIREPROOFING

275 . . . Illustrated booklet of the

Thermax Corp., Chicago, describing the advantages of this fireproof insulation and containing a diagram showing where it can be used to advantage in residential construction.

CONDO-VAC RETURN LINE VACUUM AND BOILER FEED PUMP

276 . . . Booklet issued by the Chicago Pump Co., Chicago, illustrating this company's Condo-vac return line vacuum and boiler feed pump for vacuum heating systems and industrial services. Gives specifications for use of architects and consulting engineers, also $\frac{1}{4}$ in. scale diagram for Condo-vac. A. I. A. file 30 c 5.

PEEL-KILL

277 . . . Booklet issued by the Marietta Paint & Color Co., Marietta, Ohio. Discusses causes of peeling of paint, importance of priming coat, pictures of results when various types of priming coats are used, etc. Explains advantages of Peel-kill applied to the priming coat and gives specifications for its use.

HAYDITE BUILDING UNITS

278 . . . A data book for architects and engineers issued by the Haydite Manufacturers Association, Kansas City, Mo. Supplies information about these light-weight aggregate building units, concrete and pre-cast products. Describes properties of material, uses, construction details, suggested specifications, etc. A. I. A. file 10 a 2.

HEATILATOR FIREPLACES

279 . . . Booklet illustrating fireplace units which act as heating units. Issued by the Heatilator Company, Syracuse, N. Y. Contains pictures and sketches of installations together with manner of installing. Gives dimensions of units. A. I. A. file 14 e 2.

CARNEGIE STEEL SHEET PILING

280 . . . Data book issued by the Carnegie Steel Co., Pittsburgh, giving information about this company's steel sheet piling. Gives pictures showing

product in use and various technical data of value to engineers.

NEW KITCHEN FAUCET BY KOHLER

281 . . . Folder issued by the Kohler Company, Kohler, Wis., illustrating and describing this new type faucet with gooseneck spout for added utility. Specially designed for use on modern 8 in. back sinks, spout being 12 in. above bottom of sink.

ARC-WELDED MILL BUILDINGS

282 . . . Folder containing drawings and data concerning bar frames. Issued by the Lincoln Electric Co., Cleveland, Ohio, as plate 28 in this company's studies in structural arc welding. A. I. A. file 13 c 2.

ALL-ALUMINUM SCREENS FOR HOSPITALS

283 . . . Illustrated folder issued by the Orange Screen Co., Maplewood, N. J., describing this company's screens for particular use in hospitals. A. I. A. file 35 p 1.

VAPORPROOF INDUSTRIAL FIXTURES

284 . . . Bulletin 2235 issued by the Crouse-Hinds Co., Syracuse, N. Y., illustrating and describing this company's vaporproof industrial fixtures.

SPECIFICATION FOR WIRING IN INDUSTRIAL STRUCTURES

285 . . . "Minimum Specification for Adequate Wiring of Lighting Circuits in Industrial Structures," issued by the National Electric Light Association, New York City, for use of architects and engineers as a guide in making plans for electrical installations. A. I. A. file 31 c 61.

HOW TO WIRE BUILDINGS FOR RADIO

286 . . . Booklet of the Carter Radio Co., 407 South Aberdeen Street, Chicago, illustrating and describing how to wire building for radio with Carter radio outlet plates. Presents diagrams and other data of interest.

AQUA-FORCE HEATING SYSTEMS

287 . . . Folder of the Automatic Florzone Heating Co., Conshohocken, Pa., giving information about automatic gas heating for moderate cost houses and stated to be operated with 75 cent gas at a cost comparable with oil or hard coal. A. I. A. file 30 c 4.

TAYLOR FORGE FITTINGS

288 . . . Illustrated booklet of the Taylor Forge & Pipe Works, Chicago, illustrating and describing this company's new seamless steel pipe fittings for welding. Gives specifications.

AMERICAN ARCHITECT

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

BUSINESS REPLY POST CARD
NO POSTAGE STAMP NECESSARY IF MAILED IN THE UNITED STATES

-POSTAGE WILL BE PAID BY-

AMERICAN ARCHITECT

57th Street at Eighth Avenue

New York, N. Y.

Engineering and Research Building of the
A. O. Smith Corp., Milwaukee, Wisconsin
Holabird and Root—A. O. Smith Corp., Architects
A. O. Smith Corp., Contractors



PARTITIONED by HAUSERMAN

Added to the dominant list of important commercial structures "partitioned by Hauserman" is The Engineering and Research Building of the A. O. Smith Corporation. The striking originality and efficiency of this building make it of world-wide interest. The Hauserman Co. has again demonstrated its ability to carry out specialized partition problems.

It is an admitted fact that Hauserman engineering and design study is responsible for the present-day high efficiency of movable steel partitions and it is inevitable that Hauserman partitions should always be a step ahead.

The fact that there are many times more Hauserman partitions in use today than any other make is not the cause of Hauserman leadership, but the result. Hauserman is the logical organization to solve your partition problems.

THE E. F. HAUSERMAN COMPANY

"Organized for Service Nationally"

6917 GRANT AVENUE

CLEVELAND, OHIO

Factory Directed Planning and Erection Service from these
13 Factory Branches

Newark

Philadelphia

Buffalo

Boston

Kansas City

Chicago

Pittsburgh

Detroit

Cincinnati

St. Louis

Washington, D. C.

New York

Cleveland

Albany

HAUSERMAN MOVABLE STEEL PARTITIONS

A Sketching Trip to North Africa

(Continued from page 53)

because they are smaller, but Fez has plenty of variety and combines all that one desires in picturesque Mohammedan quality with the poetry of natural settings of olive orchards, hills and anything you wish for in color.

You are impressed with the idea, when you are in Fez, that you are in the midst of a civilization far removed from our own—a complete expression of Mohammedan fatalism, medieval and feudal suspicion, untouched and untarnished by the swift changes of our own mechanical and strictly up-to-date system.

Fez grew as haphazard as a crowding swarm of human beings could make it and so it is picturesque and pictorially a joy. For the sketcher, Fez is good for a season—unspoiled medieval Mohammedan as yet untouched by the tourist. Shops, quarters, camels, donkeys, mules, natives, trees, walls and nooks and corners—arranged in every conceivable picturesque combination to suit every taste for the pictorial. We left Fez regretfully.

After living in efficient New York, an artist naturally "goes wild" over the delightful inefficiency of a decaying Morocco town. Time may destroy the handiwork and architectural work of men, but it is the "will of Allah" that this is done and the Arab therefore does not remove the ruins of decaying buildings but simply builds anew, beside the ruin or out of it or upon it as it suits his needs and—the will of Allah is respected. Time, as we think of it, means nothing to the Moor—just night and day eternally moving with the first call to prayers before daybreak and many prayers during the day and

a child-like faith that Allah assumes all responsibility for his children. All this peculiar fatalism is visualized in Fez. The Moor has time to sit in contemplation, or in mere laziness, so when sketching there is plenty of human interest for foregrounds.

While the tourist is impressed by the squalor, dirt and diseases, and perhaps condescends to admire, as he peeps into the open shops or booths, the marvelous examples of handicraft that old men, young boys and very young children are making with the simplest of tools, he mostly wonders how people can live in such unhygienic and smelly surroundings. While the tourist is philosophically musing thus, the artist is blind to these "influences" and raves over the the amazing number of pictures in front of him. It may smell to Heaven but for him Allah is good with an eye for artistic values.

A PLAN to establish 12 regional real estate discount banks, with one bank to each Federal Reserve district, is being considered by the federal government, which would make an initial investment to get the banks started. In opposition to this is a plan proposed by Senator Bulkley of Ohio, whereby the government would establish a two billion dollar pool to be handled by federal land banks. The objective of each plan would, however, be the same—to free funds now tied up in slow assets. It is felt that the real estate situation is one of the main burdens on the present economic condition and that anything which would be done to correct it would be of considerable help toward recovery.

PERSONALS

DAVID CLOSE COMSTOCK has established an architectural practice, specializing in decorative design and design of building materials, with offices at 101 Park Ave., New York

Leo J. Sharps has opened an office for the practice of architecture at 1412 Burlingame Ave., Burlingame, Cal. He would like to receive manufacturers' literature and samples.

S. Walter Katz has announced that he is no longer a member of the firm of George and Edward Blum, and

that he will continue the practice of architecture under his own name at 49 West 45th Street, New York.

Clarence Kivovitch, architect, has moved his offices to 504 Victor Building, Kansas City, Mo. He would like to receive manufacturers' literature and samples.

Samuel Z. Moskowitz has opened an office for the practice of architecture at 578 Madison Ave., New York. He would like to receive manufacturers' catalogs and samples.

BULLETINS

HUMIDIFICATION FOR RESIDENCES. By Alonzo P. Kratz. Bulletin 230, Engineering Experiment Station, University of Illinois, Urbana. Price twenty cents.

A NEW TEST FOR PREDICTING THE DURABILITY OF VARNISHES. By J. H. Wilson. Research paper 333 of the U. S. Bureau of Standards. For sale by the Superintendent of Documents, Washington, D. C. Price 5 cents.

STEEL REINFORCING BARS: SIMPLIFIED PRACTICE RECOMMENDATION R26-30. Copies of this may be se-

cured from the Concrete Reinforcing Steel Institute, Tribune Tower, Chicago.

DISTRIBUTION AND MECHANICAL PROPERTIES OF ALASKA WOODS. By L. J. Markwardt, senior engineer, Forest Products Laboratory. Technical bulletin no. 266 issued by the United States Department of Agriculture, Washington, D. C. Price twenty cents.

ELECTRAGIST STANDING FOR WIRING INSTALLATIONS. Published by the Association of Electragists, 420 Lexington Avenue, New York. A. I. A. file 31 c 61.



A finely proportioned Georgian house described in December Good Housekeeping. Ralph Harrington Doane, Architect

BUILDING *for* BUILDING

FOR more than a year Good Housekeeping has been making good domestic architecture a subject of major importance to its readers. By reason of living standards, income and environment, they are among the architect's most logical prospects. Through the use of a goodly number of pages in every issue, conducted as a leading editorial feature, it is creating a greater appreciation and demand for the architect's services.*

In every city and town where

its 1,800,000 readers live, Good Housekeeping is doing its part towards stimulating building activity. This is important news to manufacturers of building materials and supplies, who must now, more than ever before, concentrate their sales efforts in the most productive fields.

Good Housekeeping is laying the foundation. The time is ripe for manufacturers to do their own building on it. They will find Good Housekeeping's guaranteed advertising pages an investment possibility too potent to overlook.

**1450 letters from interested readers were received in recent months by Good Housekeeping Studio of Architecture and Furnishings. One-third were from men.*

GOOD HOUSEKEEPING
Everywoman's Magazine



THE CUTLER MAIL CHUTE

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.

General Offices and Factory
ROCHESTER, NEW YORK

What Architects Are Talking About

(Continued from page 49)

Copies of the program may be had upon application to the Architects' Emergency Committee, 115 East 40th Street, New York City.

A "BALANCE SHEET" of the public buildings program, showing the progress of federal work throughout the United States, was published in "The Federal Architect" for October. Quoting, "It will be noted that of the projects in the drawing stage on September 30th about \$151,000,000 worth of work has been given to private architects. The Office of the Supervising Architect has \$16,600,000 worth in the drawing stage on the same date." Following is the "balance sheet":

STATUS OF \$700,000,000 PROGRAM AS OF SEPTEMBER 30, 1931

(Total specific authorization to date \$496,584,192.26)
Completed 124 buildings, total limit.... \$40,154,569.04
Under contract either in whole or in part, 249 projects, total limit..... 201,712,700.00
Sites purchased in the Dist. of Columbia 25,433,285.00
Bids in, on market, or in specification stage, 54 projects, total limit..... 15,622,000.00

Drawing Stage:

Supervising Architect, 95 projects total limit 16,617,500.00
Private Architects, 121 projects, total limit 151,022,023.22
Land owned, ready for drawings, 9 projects, total limit 1,235,000.00
Sites selected, title not yet vested, 118 projects, total limit..... 29,354,900.00
Sites advertised for, examined and awaiting selection, 36 projects, total limit 9,565,500.00
Held for amended legislation or for other reasons, 10 projects, total limit.... 2,620,000.00
Available for purchase of sites in the District of Columbia 3,246,715.00

Total specific authorization.....\$496,584,192.26

CLAIMS that the Home Insurance Building, Adams and La Salle Streets, Chicago, was the world's first skyscraper have been substantiated by a committee appointed to observe the wrecking of the building. This committee consisted of members of the Chicago Chapter, A. I. A., and of the Illinois Society of Architects. T. J. Ferrenz, chairman, states: "Wrecking of the top three stories, which were added after the original structure was completed, shows that the walls on both street elevations employed true skyscraper construction, and indications are that this is true of the lower stories as well. The two lot-line walls, however, are of load-bearing masonry construction.

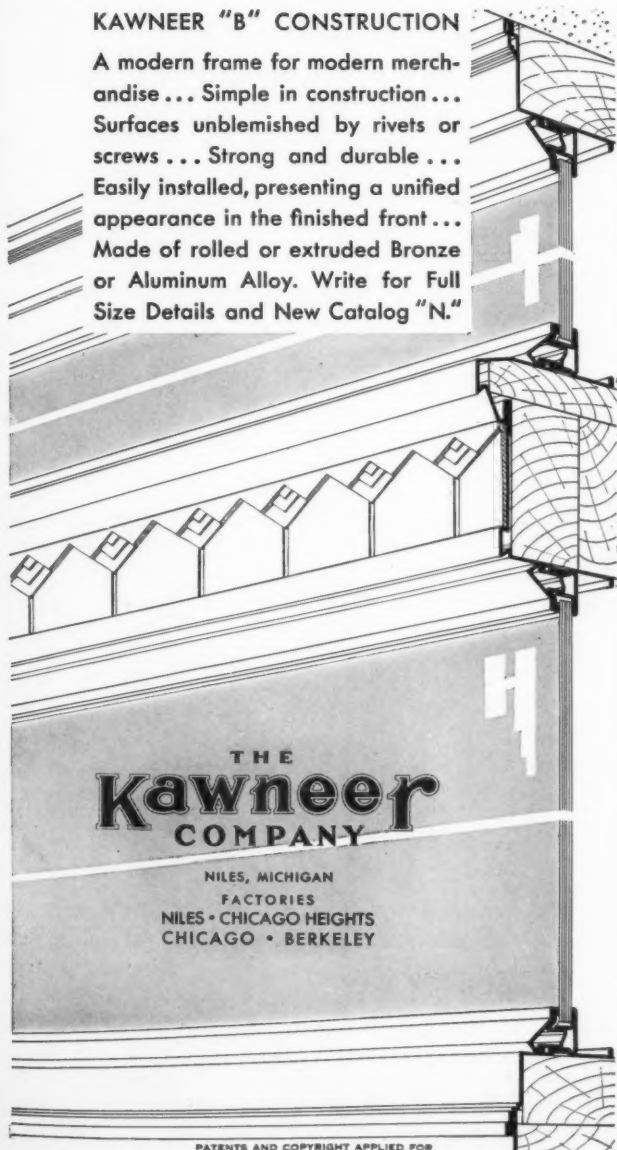
"The upper stories employed steel construction, the lower floors, composing the original building, employed cast-iron columns and "I" beam spandrels supporting masonry, thus showing true skyscraper construction. There is every indication that this construction prevails throughout all the lower floors as well, although con-

STORE FRONTS



KAWNEER "B" CONSTRUCTION

A modern frame for modern merchandise... Simple in construction... Surfaces unblemished by rivets or screws... Strong and durable... Easily installed, presenting a unified appearance in the finished front... Made of rolled or extruded Bronze or Aluminum Alloy. Write for Full Size Details and New Catalog "N."



THE
Kawneer
COMPANY

NILES, MICHIGAN
FACTORIES
NILES • CHICAGO HEIGHTS
CHICAGO • BERKELEY

PATENTS AND COPYRIGHT APPLIED FOR



Apartment Building at Riverside Drive and 103rd St., New York City. Also housing the Roerich Museum and the International Art Center. Helmle, Corbett & Harrison, architects. Longacre Engineering & Construction Co., builders. Double Gypsum Block Partitions sound-proofed with Cabot's Quilt.

Reduce Sound— Transmission 60 to 88%

Newer and more accurate figures on the flow of sound through partitions and floors of many types of construction are now available through exhaustive tests of Cabot's Quilt made by Professor William R. Barss of the Massachusetts Institute of Technology, Cambridge, Mass. The cases tested show a reduction in sound-transmission of from 60 to 88% through the proper use of Cabot's Quilt. These findings are given in our Laboratory Bulletin #5 which will be sent you without obligation on receipt of coupon below.

Cabot's "Quilt"

COUPON

Samuel Cabot

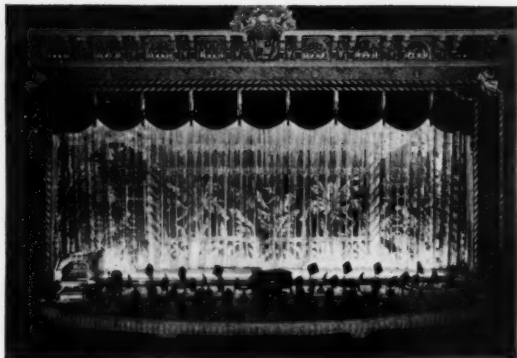
141 MILK ST., BOSTON, MASS.

Gentlemen: Please send me Cabot Laboratory Bulletin #5.

Name

Address

A.A. 12-31



Specifications for this theatre read
"STAGE EQUIPMENT
by PETER CLARK"

ALL stage equipment in the Warner Theatre at Atlantic City, pictured above, was designed and manufactured by Peter Clark, Inc. When the architects specified Peter Clark equipment here, they did so because they knew they were selecting the best.

Peter Clark stage equipment is used in leading theatres from coast to coast. For 25 years it has set the standard of excellence.

Let us cooperate with you in suggesting and designing equipment best suited for each 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

firmation cannot be had until the wrecking progresses further.

"The steel and iron throughout is in perfect condition, displaying no evidence of deterioration, except the unprotected steel beams at the elevator shafts. These have deteriorated badly and in several instances have been virtually eaten away."

THE American Institute of Architects has announced the appointment of F. Leo Smith as technical secretary of the Structural Service Department of the Institute, succeeding LeRoy E. Kern. Mr. Smith is a member of the Columbus Chapter and is a graduate of the Department of Architecture of Ohio State University. For two years he served as assistant chief of the Division of Factory and Building Inspection of the Department of Industrial Relations of Ohio, having charge of the administration of the Ohio Building Code during that period. From 1924 until 1929 he was employed by the state as technical secretary to the Ohio Board of Building Standards. For the past two years he has been employed as field engineer in northern Ohio for the Portland Cement Association. He served as secretary of the Ohio Plumbing Code Committee since its creation in 1928. He was formerly a member of the Building Officials Conference of America and chairman of the Columbus Building Code Committee.

JAMES F. BLY, Brooklyn, N. Y., was elected president of the New York State Registered Architects' Association, Oct. 22. Karl C. Schmill, Buffalo; Walter G. Frank, Utica; Howard B. Peare, New Rochelle, and Henry Holder, New York, were elected vice-presidents. Maxwell A. Cantor, Brooklyn, was named secretary and Fred Mathesius, New York, treasurer. A. L. Brockway, Syracuse, was made chairman. M. H. Cassebeck, Rochester, Alexander Selkerk and Thomas Gleason, Albany, Arthur M. Cobb, Ithaca, and William A. Sanders, Brooklyn, were elected members of the board of directors.

THE George Washington Bridge over the Hudson River between upper Manhattan Island and New Jersey was dedicated October 24th. It has a span of 3,500 feet and cost \$60,000,000. A lower level will be built later at a cost of \$15,000,000. It is expected that the bridge will be paid for in 22 years; the net income for the 23rd year is estimated at \$12,000,000. Piers on the Jersey side were carried nearly 80 ft. below the surface of the river; suspension cables on this side were anchored in the rock. On the New York side, cables were anchored in concrete as large as a city block and 130 ft. high, weighing over 700,000,000 lbs.

WHAT is the oldest house in the United States? The present indications are that a residence erected in 1555 by Captain John Billop, Tottenville, Staten Island, N. Y., holds that honor. The Hardesty house, located a few miles from Bridgeport, Conn., is also said to have been built in the sixteenth century. Santa Fe, New Mexico, has a house claimed to have been built about 1545. The structure in St. Augustine, Fla., is said to date from 1565, though grave doubts are cast on the authenticity of that early a date for the building.



Cast Iron Verandas by Smyser-Royer

Cast iron verandas bring the picturesque charm of the early 19th Century to the modern home.

The veranda shown above is cast from a pattern almost a century old, and possesses all of the charm and appeal of the original. In fact, many of the Smyser-Royer designs are almost 100 years old—others, of course, are more modern, but all bear the stamp of Smyser-Royer craftsmanship in metals.

Architects and builders who are contemplating the use of cast iron verandas are cordially invited to consult Smyser-Royer about any phase of design.

A booklet showing a variety of Smyser-Royer cast iron veranda designs will be mailed at your request.

Smyser-Royer Company

Main Office and Works, York, Pa.

PHILADELPHIA OFFICE, 1700 WALNUT STREET

Where Air Must Be “Dry as Punk”



THE walls of a cold storage plant must resist moisture even more effectively than ordinary buildings to avoid a continuous loss. The moisture that finds its way inside condenses on pipes and walls, causing damage and decreasing plant efficiency.

Even though windows and doors are eliminated as completely as possible, there remains a very considerable leakage of moisture-laden air as well as some actual dampness through walls. Part of the ordinary leakage can be prevented.

Masonry is particularly difficult to make tight where there are joints of dissimilar materials and where water or snow or dirt can lodge. A little attention to these vulnerable spots will effect a considerable saving. Calking them properly will stop the leakage.

Pecora Calking Compound is characterized by its permanent plasticity and by its ability to adhere indefinitely to all building materials. Under the rubbery skin that forms on its surface the substance remains unchanged, completely sealing up joints. It may be used with confidence.

On receipt of the coupon, we will be glad to forward complete information on Pecora Calking Compound and its use.



Pecora Paint Company

Third St. and Erie Ave.
Philadelphia, Pa.

Established 1862 by Smith Bowen



PECORA PAINT COMPANY
Third St. and Erie Ave., Phila., Pa.

Name

Street and No.

(CC)

Town and State



THIS new Eternit Tapered Asbestos Cement Shingle combines beauty of color, massiveness, long life, strength and fire-proof qualities at a moderate cost.

Investigate.

Eternit

ASBESTOS CEMENT SHINGLES

ETERNIT, Sales Division of The RUBEROID Co.

Offices: BALTIMORE, MD., CHICAGO, ILL., ERIE, PA., MILLIS, MASS., MOBILE, ALA., NEW YORK, N. Y.

Factory: ST. LOUIS, MO.



*Painted
Decoration*

BANKS

CHURCHES

CLUBS

SYNAGOGUES

HOTELS

RESTAURANTS

THEATRES

PUBLIC BUILDINGS

RAMBUSCH
Painting, Decorating and Murals
2 West 45th St ~ New York City



THE Seventh National Conference on Church Architecture will be held December 17, 18 and 19 at the Hotel Pennsylvania, New York. This exhibit is sponsored by the Christian Herald. While the personnel of the conference is predominantly Protestant, no ecclesiastical work will be barred from the exhibit because of sectarian considerations. There is no charge for entry, though the committee reserves the right to reject any material below standard. A committee of architects headed by Hobart Upjohn, F. A. I. A., and representing six architectural organizations of New York and Northern New Jersey is cooperating with Christian Herald and the leader of the conference in arranging for the exhibit. Entry forms may be secured from Hobart Upjohn, Grand Central Terminal Building, New York.

FURTHER extension of the service of the Producers' Council was decided at its semi-annual meeting, held in Philadelphia Oct. 20-21. Improvement of members' products, as suggested by Robert D. Kohn, president A. I. A., is to be handled through Council headquarters and such committees be appointed or action taken as necessary to make materials fit together better in a building. It was felt that architects and producers alike would be benefited by the showing at engineering and architectural gatherings throughout the country of moving pictures featuring design and use of materials. The Construction League of the United States was joined.

"THE greatest difficulty in promoting steel residence construction," said Lee H. Miller in his annual report before the American Institute of Steel Construction, "is that probably more than 75% of this class of work has passed out of the architect's hands into those of the speculative builder. The existing system of residence financing is based upon an appraisal procedure that does not distinguish between cost and value, and puts a premium on the cheapest materials and workmanship that can be concealed by plaster. This system is so firmly rooted that architects cannot compete with the so-called Jerry builder, and the only chance to restore this field of work to the professions is through the use of materials which financiers will underwrite on a basis of their merits."

NO fuses are used in the household wiring circuits of Ridgeville, South Carolina, small circuit breakers providing the necessary protection. This is said to be the first town in the United States where this system has been put into effect. The South Carolina Power Company is employing this system in all towns of under one thousand population.

"TODAY a building has a short life that is determined not by the solidity of its construction but by obsolescence with a social order, changing as rapidly as is the social order today. No one can build a building that will foresee what the next generation will want. So, when we must build two or three buildings on a piece of property, each to last twenty or thirty years, where formerly we built one building to last sixty to one hundred years, it is evident that we must find shorter, quicker and cheaper ways of building." Remarks by Raymond Hood before the Management Division of the Real Estate Board of New York.



WE HAVE MADE IT
CONVENIENT
FOR YOU TO SPECIFY
«TIDEWATER RED»
CYPRESS

NOW, when you specify cypress, you don't have to wonder whether or not your specifications will be filled. You can know in advance that they will be.

The Florida Louisiana Red Cypress Company is a concentrated base of supply for cypress dealers throughout the country. Your specifications, when sent to us, will be immediately filled . . . and immediately shipped.

No matter what the nature of your specifications, whether they be for doors, panelling, molding, window-frames, baseboards . . . or anything else . . . the Florida Louisiana Red Cypress Company always has the cypress to fill them. And all cypress marketed by us is genuine "Tidewater Red" trade and grade marked . . . the true "Wood Eternal." It comes from the deep swamps of the St. Johns, Withlacoochee and the Suwannee rivers in Florida and the Atchafalaya in Louisiana . . . two of the world's most noted cypress growing regions.

Our job, as we see it, is to see that all your cypress specifications are filled to the letter. All our efforts are being directed to that end. We can assure you of a constant supply of genuine "Tidewater Red" Cypress . . . now and for many years to come.

**FLORIDA LOUISIANA RED
CYPRESS COMPANY**

JACKSONVILLE, FLA.

Tide Water Red
Cypress
"The Wood Eternal"

Insulate
with
**U. S.
MINERAL WOOL**

The Perfect Insulator

**COLD PROOF, HEAT PROOF, FIRE PROOF
SOUND PROOF, VERMIN PROOF**



**Do Away With Uncomfortable
Cold Rooms!**

Cold rooms in winter or hot rooms in summer can be made comfortable and livable the year round by insulating with U. S. Mineral Wool. It is your best protection from cold, heat, sound, fire and vermin.

Insulation will make your rooms many degrees warmer in winter and a much smaller, less expensive heating unit will heat them. The same heating unit in a non-insulated house will burn about one third more fuel.

You save not alone on the cost of heating plant but also on fuel and this saving continues year after year, as long as the building lasts — U. S. Mineral Wool is indestructible.

No home should be built without insulation.

Our FREE Booklet tells you why—and explains the economy, protection and greater living comfort it supplies. Send for it and free sample of U. S. Mineral Wool.

U. S. Mineral Wool Company
280 Madison Avenue, New York

Western Connection

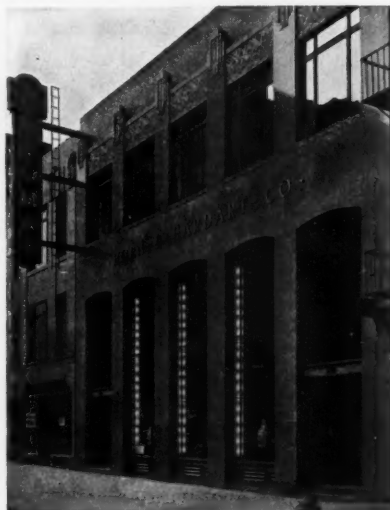
Columbia Mineral Wool Co. - South Milwaukee, Wis.

U. S. MINERAL WOOL CO., DEPT. F
280 Madison Ave., New York
Send FREE sample and illustrated booklet to

Name
Address
City State

TECHNICAL CO-OPERATION

In this Horn & Hardart Company restaurant in New York the co-operation of the local electric service company with the architects resulted in an electrical installation that assures the store against electrical obsolescence.



HORN & HARDART CO. RESTAURANT
1165 Sixth Avenue, New York, N. Y.
Architects: F. P. Platt & Bro., New York

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

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

STATEMENT OF THE OWNERSHIP, MANAGEMENT CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912,

OF AMERICAN ARCHITECT, published monthly at New York, N. Y., for October 1, 1931.
State of New York)
County of New York { ss.:

Before me, a Notary Public in and for the State and county aforesaid, personally appeared R. F. Gardner, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the AMERICAN ARCHITECT and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management, etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the name and addresses of the publisher, editor, managing editor, and business managers are: Publisher, International Publications, Inc., 959 8th Ave., New York City; Editor, Benjamin Franklin Betts, 959 8th Ave., New York City; Managing Editor, Ernest Eberhard, 959 8th Ave., New York City; Business Manager, R. F. Gardner, 959 8th Ave., New York City.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given. International Publications, Inc., 959 8th Ave., Sole Stockholder, Star Holding Corporation, c/o Corporation Trust Co. of America, Wilmington, Delaware, Sole Stockholder, W. R. Hearst, 137 Riverside Drive, New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there is none, so state). None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

R. F. GARDNER, Business Manager.

Sworn to and subscribed before me this 28th day of September, 1931.

(Seal) WILLIAM J. SPERL.

Notary Public Queens County, No. 1790, Reg. No. 7014 Certificate filed in N. Y. County, No. 1071, Reg. No., 3-S-706. Commission expires March 30, 1933.

RAYMOND HOOD bobs up in an article in an English publication, "The Architect & Building News." Howard Robertson, F.R.I.B.A., S.A.O.G., and F.R. Yerbury saying:

"As soon as one hears of anything startling in New York architectural circles, one looks for the name of Raymond Hood. He is the bad boy of New York, the fellow who bobs up with some hair-raising turn just at the time when everyone is going comfortably off to sleep. And before you know he has put a black tooth with a gold crown on it right up against the pallid Palladianism of the New York Library; or else has shot walls and windows up into the air in their vertical streaks in order to make a home for home newspaper men.

"Hood and his partners get to work so quickly that the building is up before people know about their devilish intentions. And then, while they are gnashing their teeth and fellow architects are talking criticism out of the low corner of the mouth, the firm is busy hatching out some fresh scheme with a bigger "story" to it than ever. Raymond Hood is the journalist's joy."

THE American Academy in Rome has announced its annual competitions for fellowships in architecture, landscape architecture, painting and sculpture. The competitions are open to unmarried men not over 30 who are citizens of the United States. Entries for competitions will be received until February 1. Information may be obtained from Roscoe Guernsey, executive secretary, American Academy in Rome, 101 Park Avenue, New York.

AWARDS on the Columbus memorial competition have been announced. First prize was awarded to J. L. Gleave, Nottingham, England. Second prize went to Donald Nelson and Edgar Lynch of Paris and Chicago. It was felt that no third or fourth design was sufficiently meritorious for an award.

THE Southern Pine Association and the North Carolina Pine Association have been merged under the name of Southern Pine Association. The objectives of these associations have been the same, the only practical difference in the new association being elimination of effort and duplicated offices.

METAL flaws in steel may be discovered by gamma rays of radium, according to Prof. Gilbert E. Doan of Lehigh University. The process is really X-raying the metals with high power X-rays.

THE Association of Federal Architects, composed of architects working for the United States Government, held an architectural exhibition from October 24-27. The exhibition was held in the patio of the Agricultural Building and was composed of sketches and working drawings.

A NEW building for the Forest Products Laboratory, Madison, Wis., is under construction and will be ready for occupancy Aug. 19, 1932. Holabird and Root are the architects.

This Country Never Cries "Enough!"

THIS WINTER thousands of men and women will face circumstances that look too big for them.

These people are the backbone of our industrial and commercial life. They're calm, not panicky. They know that this is just another battle—but a little stiffer, perhaps, than most they've faced before.

They deserve your help.

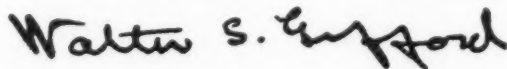
President Hoover has appointed a committee on Unemployment Relief. It is organized to support local relief groups in obtaining funds to help those who need help during this world-wide emergency.

A proud spirit of self-dependence is an American tradition. But so also is the American readiness to rally to the aid of a brother in distress.

Give what you can. Give *more* than you think you should. The money you give helps preserve that spirit from which has sprung the highest standard of living the world has ever known.

No cause has ever deserved your support more than this one. When your local relief organization appeals to you for aid, remember that every dollar you give not only provides needed food and warmth and shelter, but also helps to keep American courage high and lay the foundation for better days.

The President's Organization on Unemployment Relief



WALTER S. GIFFORD, DIRECTOR

Committee on Mobilization of Relief Resources



OWEN D. YOUNG, CHAIRMAN

The President's Organization on Unemployment Relief is non-political and non-sectarian. Its purpose is to aid local welfare and relief agencies everywhere to provide for local needs. All facilities for the nation-wide program, including this advertisement, have been furnished to the Committee without cost.



Photo by Ewing Galloway

DESIGN A

FROM cover to cover American Architect
embraces only the highest principles of magazine editing.
It is first and foremost a business magazine—edited in the
interests of the business of architecture.

AMERICAN A

DESIGN is the basic part of architecture. But it is only part. Clients must be obtained . . . offices managed . . . materials specified . . . jobs supervised . . . and too frequently, legal problems encountered. ¶The profession is as many-sided as a polygon. And the magazine that would serve it well and adequately, must possess a high degree of editorial versatility. ¶American Architect undertook such a type of editorial service two years ago. That it fulfilled a recognized need is evidenced by a consistent circulation growth that has carried American Architect to a position of leadership. ¶American Architect is the only magazine that covers thoroughly the business of architecture.

Alone is *Not* Enough

ARCHITECT 57th Street at Eighth Avenue, New York, N.Y.

INDEX TO ADVERTISERS

This index is an editorial feature, maintained for the convenience of readers. It is not a part of the advertiser's contract and American Architect assumes no responsibility for its correctness.

American District Telegraph Co..... 63	Good Housekeeping 87	Pecora Paint Co. 91
American Sheet & Tin Plate Co..... 20		Peelle Co., The 8
American Tel. & Tel. Co. 7		Pittsburgh Plate Glass Co. 73
Armstrong Cork Co., Floor Division.. 17	Hauserman Co., The E. F. 85	
Armstrong Cork & Insulation Co..... 100	Heating & Ventilating Exposition, Sec- ond International 79	Rambusch Decorating Co. 92
Atlantic Terra Cotta Co. 69	Herman Nelson Corp., The..... 6	Ric-Wil Co., The 81
	Holtzer-Cabot Electric Co., The..... 11	Rising & Nelson Slate Co. 5
		Ruberoid Co., The 92
Bethlehem Steel Co. 3		
Bostwick-Goodell Co., The 79	International Nickel Co., Inc., The.... 13	Sargent & Co. 81
Burlington Venetian Blind Co. 88		Sloane, W. & J. 10
	Kawneer Co., The 89	Smyser-Royer Co. 91
Cabot, Inc., Samuel..... 89	Keasbey & Mattison Co..... 77	Stromberg-Carlson Telephone Mfg. Co. 90
Carey Co., The Philip..... 82	Kerner Incinerator Co. 4	
Carter Bloxonend Flooring Co..... 78		Thorp Fireproof Door Co.Second Cover
Cheney Co., The 15	Lord & Burnham Co. (Greenhouse) Back Cover	Trenton Potteries Co., The..... 14
Chicago Faucet Co., The 67	Lord & Burnham Co. (Sash Operating) 80	
Clark, Inc., Peter 90	Ludowici-Celadon Company 61	Universal Atlas Cement Co. 18
Columbus Coated Fabrics Corp..... 9		U. S. Mineral Wool Co..... 93
Crane Co. 99	National Electric Light Association.... 94	U. S. Ozone Co. of America..... 98
Cutler Mail Chute Co. 88	National Tube Co. 65	
	Norton Co. 75	Warren Webster & Co. 16
Detroit Show Case Co..... 1		Westinghouse Electric Elevator Co. Third Cover
	Otis Elevator Co..... 2	Westinghouse Lamp Co. 94
Florida Louisiana Red Cypress Co.... 93		Yale & Towne Mfg. Co. 71
Fulton Sylphon Co..... 12		

Trade Mark



Reg. U. S.
Pat. Office

UNITED STATES OZONE COMPANY of AMERICA

SCOTTDALE, PA.

**OZONE AND ELECTROLYTIC WATER STERILIZERS
OZONE AIR CONDITIONING EQUIPMENT
INDUSTRIAL OZONIZERS**

We shall be glad to send
you Complete Information
and Engineering Data

(Business Established 1910)

This Company Controls Exclusively
United States Ozone Company
Pennsylvania Charter
1928

O. K. . . . who would have thought that the illiterate error of a Confederate General would have come to symbolize "All Correct"? It wouldn't if that officer hadn't had enough confidence in his staff to stand back of their field orders. It wouldn't if he hadn't through prompt and determined action been winning battles while his more timorous brothers who wrote "Subject to Change" on their orders were being chased from the Mississippi to the Atlantic.

O. K.

Building is full of parallel cases. The builder who is firm enough to back up his architect's judgment by writing O. K. on his architect's specifications is using his capital where it will work for him and where it will get results. On the other hand, the builder who lacks faith in himself and in his architect, who holds specifications subject to change by outsiders weakens his plans. With every reconciling change he is substituting chaos for order, waste for economy.

Valves  **CRANE**  Fittings
CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK: 23 WEST 44TH STREET
Branches and Sales Offices in One Hundred and Ninety Cities

An occasional NO is as necessary in building as it is in banking. It is the preserver of good ideas.

NO

promises in completion because someone said NO to proposed changes and substitutions.

A true NO man will carry a project to a successful conclusion long before a yes man has finished trying to reconcile every muddling suggestion that comes along. There are many buildings that promised profits when they laid on the draftsman's board, and that are surpassing all

Conversely, there are many buildings that looked good in models but are failing in realization because someone said yes.

Every builder needs a NO man. The builder's architect is best fitted for the job, his experience, his judgment are safest to rely on.

Valves  **CRANE**  Fittings
CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK: 23 WEST 44TH STREET
Branches and Sales Offices in One Hundred and Ninety Cities

In the interests of Architects

Success in speculative building depends on trusting architect's judgment and barring the interference of outsiders. This is the burden of the campaign which Crane Co. is running in building and

building investment magazines of nation wide distribution. For Crane Co. well realizes that the great future of American building cannot be realized until architects receive their full measure of recognition.

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO
NEW YORK: 23 W. 44TH STREET
Branches and Sales Offices in One Hundred and Ninety Cities



WINTER LOSES *when CORK guards indoor tennis court*

YEAR ROUND TENNIS is possible here because of Armstrong's Corkboard Insulation. Estate of former U. S. Senator L. C. Phipps, Denver, Col. Architect John Gray. Contractor, Platt-Rogers, Inc., Pueblo.



EVEN a Colorado winter can't stop tennis on the estate of ex-Senator Phipps in Denver, Colorado! For the court is enclosed, and Armstrong's Corkboard insulates the building. Furnace heat, supplied through radiators set in cork-insulated recesses along the wall, stays inside!

The architect, John Gray, of Pueblo, made full use of the decorative possibilities of the cork. Each board was given a coat of cream-colored paint before it was erected, adding greatly to its attractive appearance. Because of its high insulating value, resistance to moisture, structural strength, and light weight, corkboard is the choice of many architects for all types of buildings.

You'll find Armstrong products have a wide application in the building industry. Armstrong's Corkboard provides ideal insulation for the walls and roofs of normally heated buildings, as well as for installations where low temperatures must be maintained. Armstrong's Cork Covering protects cold lines. Insulating Brick help control high temperatures.

Many architects use them in hotels and apartment houses to protect adjacent rooms from the heat of stacks.

Armstrong's Vibracork absorbs vibration and muffles the noise that it causes. Under moving machinery, it eliminates vibration annoyances. Armstrong's Corkoustic quiets air-

borne noises and provides better hearing conditions. Literature describing all these Armstrong products, and samples of each are available on request. Armstrong Cork & Insulation Company, 936 Concord St., Lancaster, Pennsylvania.



FOR PUBLIC ARENA, TOO

The Boston Garden, huge public arena of the Boston & Maine Railroad, in Boston, Mass., has used 100,000 board feet of Armstrong's Corkboard and three tons of granulated cork. Architects, Finck & Wilcox. Contractor, Dwight P. Robinson Company.



Armstrong

Cork & Insulation Company

CORKBOARD . . . CORK COVERING
VIBRACORK . . . CORKOUSTIC . . . INSULATING BRICK

