



THE AMERICAN ARCHITECT

August 1931



Specify THORP DOORS

The feeling of dignity, strength and integrity required of a public building has been combined with a simple and expressive beauty of form in the main entrance to the Bristol County Registry of Deeds Building, Fall River, Massachusetts. E. M. Corbett of Fall River is the architect.

Hollow bronze frames and doors, with cast bronze grille work, have been used to close in the entrance opening. It will be noted that the doors themselves are of greater than usual height. All interior doors, frames and trim are of hollow steel construction with enamel finish. Complete execution and installation of all doors was handled by Thorp.

THORP FIREPROOF DOOR CO. Minneapolis, Minnesota

KEWANEE STEEL BOILERS

A Kewanee is never "stunted." It is always "full grown" and "well muscled." Correct in size, weight and in proportion.

65 years of experience have taught us that to give an owner the long period of satisfactory service which he is entitled to demand in a boiler, we must put certain things into it; certain weight; certain sureness of design; certain skill in workmanship.

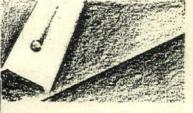
Kewanee Boilers have always been built that way. They always will be. That's why they steadily maintain their position as the best boiler values obtainable.

Steel plus Rivets equals Strength





Miniature Golf may be all right. At least it's a lot of fun for small money. But a miniature boiler sold to carry a full size heating load invariably leads to grief.



For Big Buildings or Small Buildings—for Coal (hand or stoker fired), Oil or Gas.

Kewanee builds 11 types and 160 sizes to heat from 450 to 47,700 square feet of equivalent direct radiation—with typical Stoker Attachment shown.

KEWANEE BOILER CORPORATION

division of American Radiator & Standard Sanitary Corporation

KEWANEE, ILLINOIS

MEMBER OF STEEL HEATING BOILER INSTITUTE
Branches in Principal Cities

Experience Proves—It Costs Less to OWN a KEWANEE

the small cost will surprise your clients!



NERAT

Most home owners know that incineration is one of the welcome conveniences of a modern home. But everyone doesn't know how little it costs!

Compared with other home conveniences the cost of a Kernerator represents a most amazing value. It lasts as long as the building and

there is no upkeep cost. It is a daily convenience and health protection. All garbage and other household waste is placed in the handy hopper door in the kitchen and falls to the combustion chamber in the basement. The accumulation is air-dried and destroyed by burning-no extra fuel is necessary. Non-combustibles are flame sterilized and removed with the ashes.

When you specify a Kernerator you are selecting a product guaranteed by a finan-

cially responsible manufacturer with a nation-wide service organization.

> See our catalog in Sweet's or write for A. I. A. folder.

KERNER INCINERATOR COMPANY Milwaukee 3548 N. Richards Street

Offices in over 150 cities

With GAS or OIL for HEATING -what will you do with WASTE and RUBBISH



1930 K. I. Co.

EXISTING

The American Architect, published monthly by International Publications, Inc., 57th Street at 8th Avenue, New York, N. Y.; Yearly subscription, \$5.00. Entered as second class matter, April 5th, 1926, at the Post Office at New York, N. Y., under the act of March 3rd, 1879. Issue number 2598, dated August, 1931.

AMERICAN STEEL & WIRE COMPANY

WIRE

Where Beauty Demands Permanence

The great buildings of today—monuments of beauty and efficiency—demand permanence of construction to preserve them throughout the ages. The best assurance of this is the short span concrete floor arch reinforced with Wire Fabric. Where such procedure is followed, American Steel & Wire Company Wire Fabric, because of its proved strength and uniformity, is generally specified as standard. Information, including engineering data on Wire Fabric for concrete reinforcement, will be furnished on request.



AMERICAN STEEL & WIRE COMPANY

208 South La Salle Street, Chicago SUBSIDIARY OF UNITED STATES STEEL CORPORATION And All Principal Cities

Pacific Coast Distributors: Columbia Steel Company, Russ Building, San Francisco

Export Distributors: United States Steel Products Company, New York



Reroofing the District Building, Washington, D. C., with a Carey 5-ply Feltex Built-Up Roof, applied according to U. S. Government Specification

Do you specify roofs to meet service conditions?



The Carey Specification Book contains complete specifications for built-up roofs. A copy will be mailed on request.

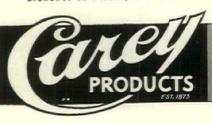
No one type of built-up roof can be recommended for all conditions. That is why Carey Specifications include all types—Asphalt, Asbestos or Tar and Gravel. The selection of the proper type is governed by the service factors, such as the contemplated life of the building, the roof deck and its slope, and climatic and atmospheric conditions.

Carey control of quality starts with the production of the felts and bitumens, and continues through every step, to the finished roof. The application is handled by approved roofers operating under the supervision of Carey branches and distributors located in every large center, and the finished roof is bonded for 10 or 20 years.

Carey roofing engineers are available for consultation regarding the best type roof for any contemplated structure, and will supply cost estimates, if desired.

THE PHILIP CAREY COMPANY + Lockland, Cincinnati, Ohio

BUILT-UP ROOFS
ASPHALT PRODUCTS
ELASTITE EXPANSION JOINT
WATERPROOFINGS
ROOF PAINTS



HEAT INSULATIONS
ASBESTOS MATERIALS
CAREYSTONE CORRUGATED SIDING
ASFALTSLATE SHINGLES
BUILDING PAPERS

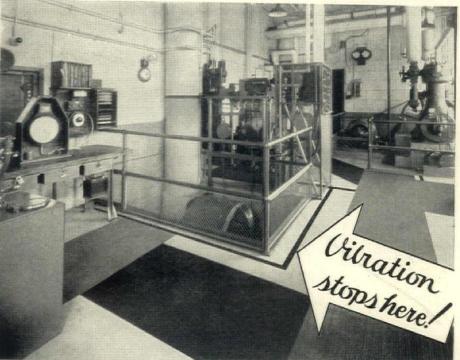
CHRYSLER

protects its test rooms with CORK

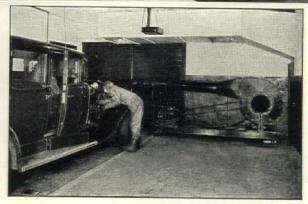
Carter Carburetor, too. and other leading automotive companies guard low-temperatures with ARMSTRONG'S CORKBOARD



FORTY BELOW ZERO tests Carter Carburetor operation here, thanks to Armstrong's Corkboard on the walls and Cork Covering on the cold lines.



CORK BARS VIBRATION as well as at from the Chrysler test rooms. This picture shows how Arm-strong's Vibracork isolates moving machinery.



ARCTIC CLOTHING PROTECTS the workers in this sub-zero testing room of a leading motor company, Armstrong's Corkboard guards the temperatures.

OW will the motor perform at H 20° below zero? Will the carburetor function properly at sub-zero temperatures? What effect will severe cold have on other equipment?

To answer these questions, leading automotive manufacturers are building cold test rooms. The Chrysler Corporation, for instance, has three such rooms. They are thoroughly insulated with 8 and 10 inches of Armstrong's Corkboard, for temperatures from 20° to 70° below zero. Isolation from vibra-

tion has been secured with a cushioning layer of Armstrong's Vibracork. Vibracork is recommended for absorption of vibration and reduction of noise in moving machinery.

Uses like these prove cork's adaptability and safety for any insulation need. Under severe laboratory conditions, or in actual working installations, cork stands up. Its low coefficient of thermal conductivity combines with low moisture absorption to make Armstrongs Armstrong's Corkboard the (A) ideal permanent insulation. Product Lancaster, Pennsylvania.

Almost every day sees the development of some new use for cork and cork products. Armstrong's Research Laboratory, where scientists engage in daily experiments with insulation materials and methods, contributes much to this progress. Armstrong engineers will gladly tell you about Armstrong service and Armstrong products. Descriptive booklets and samples are yours for the asking. Address Armstrong Cork & Insulation

Company, 936 Concord St.,

Armstrong Cork & Insulation Company CORKBOARD . . CORK COVERING . . VIBRACORK . . CORKOUSTIC . . INSULATING BRICK

FOR AUGUST 1931

CANVASSED WALLS



richly beautiful..

thoroughly practical

WALL-TEX

THE people you serve — those who appreciate architectural beauty—are quick to recognize the unusual charm and excellence of quality in Wall-Tex Canvassed Walls.

We invite you to send for samples of these fine fabric wall coverings. Show them to home builders and see for yourself how the richness of fabric texture, distinctive patterns and wellchosen colorings instantly win the enthusiasm of those who want fine things in the home and are willing to pay a moderate price.

Leading Architects everywhere recommend

Wall-Tex for homes, apartments, hotels, schools, hospitals, institutional buildings of all kinds. They recommend and specify it for these many uses because Wall-Tex is completely practical - easily washed and kept beautiful; made with a tough fabric base that resists scuffing, reinforces the wall and protects against plaster cracks.

Every architect should know Wall-Tex. Send us your name and address on the margin of this page - for architect's sample book and interesting folder, "The Modern Trend in Wall Coverings."

COLUMBUS COATED FABRICS CORPORATION .. Dept. B-8 .. COLUMBUS, OHIO

See Sweet's Page C-4178



First the eye, then the balance sheet approves store fronts of Alcoa Aluminum

Dignified smartness and commanding individuality of modern display attracts shoppers. The promise of up-to-date merchandise is carried by store fronts of Alcoa Aluminum. An infinite variety of effects is obtainable by employing Alcoa Aluminum rolled shapes or extruded moulding.

Only 1/3 the weight of other metals commonly used, Alcoa Aluminum may be cast, forged or rolled into individual store front sections at a moderate cost. Alcoa Aluminum store fronts are readily maintained and give long service.

It's good architecture and good merchandising to use Alcoa Aluminum for store fronts. You'll be interested in the facts and figures. Let us show you. ALUMINUM COMPANY of AMERICA; 2440 Oliver Building, PITTSBURGH, PENNSYLVANIA.

STORE FRONTS made of

ALCOA ALUMINUM



Photo by R. I. Nesmith & Associates

Glass with Beauty IN it as well as BEYOND it

HAT you see when you look at a sheet of window glass decides what you will see when you look through it.

Pennyernon Window Glass possesses a striking beauty. Instead of the old time waves and unsightly defects, you find a new flatness and a new brilliance that seems almost incredible. And Pennvernon has no "wrong" side-both of its surfaces retain their original lustrous finish.

Consequently, Pennvernon Window Glass offers remarkable transparency and clearness of vision. Bright and clear as a slice of winter sunshine, it shows the beauties beyond your window as they really are.

It is flatter, brighter, clearer-but Pennvernon costs no more than ordinary glass.

We will be glad to send large or small samples for your inspection, so that you may be convinced of Pennvernon's superiority. At all the warehouses of the Pittsburgh Plate Glass Company-one in every principal city -Pennyernon is available, as well as at leading glass jobbers. Write for our Pennvernon Booklet. Address Pittsburgh Plate Glass Company, Grant Building, Pittsburgh, Pa.

Pennuernon flat drawn WINDOW GLASS

A complete selection of TE-PE-CO FIXTURES

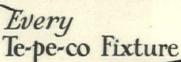


When you specify plumbing -

T is a convenience, an economy and select all your bathroom fixtures from one make. And select all your bathroom fixtures from one make. And T is a convenience, an economy and a satisfaction to to know that you will get the same high quality of workmanship and material in every fixture.

Such is the reputation enjoyed by TE-PE-CO Fixtures. Our unusually complete facilities enable us to offer you the widest possible choice of sanitary fixtures for hotels, apartments, schools, hospitals and residences of every size and description.

To check up on all equipment being installed, it is well to look for the TE-PE-CO Trade Mark-which is the symbol for the TE-PE-CO Guarantee.



We make but one grade of ware—the best that can be produced we make out 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 The Te-pe-co trade mark is found on all goods manufactured by any sanitary ware made in the world. The re-pe-co trade mark is round on an goods manufactured by us and is your guarantee that you have received that for which you have paid.

-has this trade mark on it

THE TRENTON POTTERIES COMPANY

TRENTON, NEW JERSEY, U.S.A.

National Showrooms—New York City, 101 Park Ave., Entrance on 41st Street
Philadelphia—Architects' Bldg., 17th and Sansom Sts.

Branch Offices—Boston and Chicago

Export Office—115 Broad Street, New York City





E-PE-CO

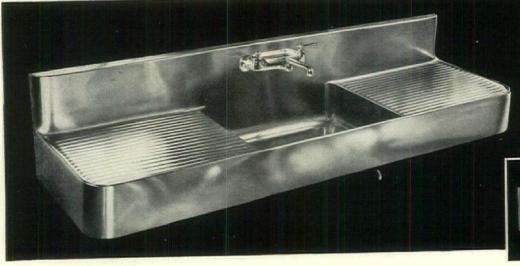
PLUMBING

AT LAST...

a standardized kitchen sink that blends with every color scheme . . .



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

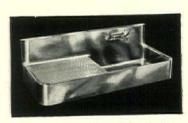


• Why plan a kitchen, perfect in every detail of design, appointment and decoration, only to have the ensemble marred by a sink which does not fit the surroundings?

The new Monel Metal kitchen sinks are the only standardized sinks that give home owners full freedom of expression in kitchen color planning. The neutral, silvery tones of these modern sinks not only harmonize perfectly with colors of walls, curtains and furniture, but actually draw these colors together and heighten their beauty and effectiveness. And when your clients tire of one decorative scheme, they can switch to any other without the slightest concern about the adaptability of the Monel Metal sink.

Thanks to standardized construction and quantity production, you can now bring your clients the color harmony, beauty, durability and convenience of Monel Metal sinks at prices the average pocketbook can readily afford.

Monel Metal corner kitchen sink. Splasher at bowl end, drain board either right- or left-hand. Supplied in nominal sizes of 51"x 21" and 42"x 21".



Single drain board Monel Metal kitchen sink. Available in both left- and right-hand drain board models. Made in nominal sizes of 50"x 21" and 41"x 21".

Specifications and Advantages of the new standardized Monel Metal kitchen sinks...

- 1. Rich, lustrous beauty with a satiny, glass-smooth surface.
- 2. Rust-proof...highly resistant to corrosion...easy to clean and keep clean.
- 5. Solid metal clear through, with no coating to chip, crack or wear off. Steel-like strength gives lifetime durability.
- Neutral, silver tone 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.
- Standardized construction and quantity production methods 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.

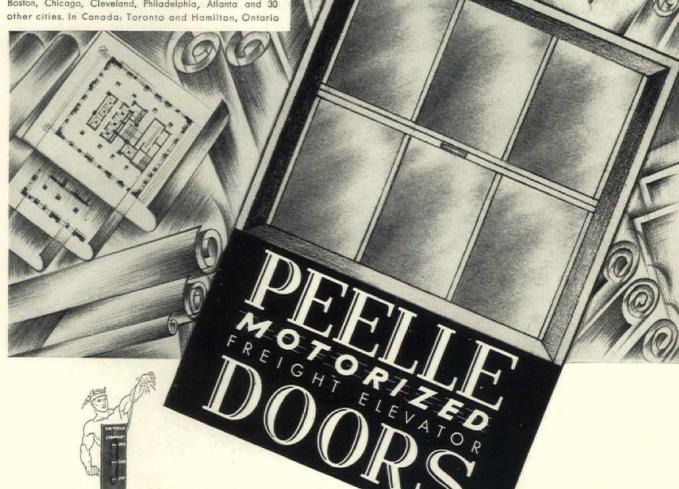


THE INTERNATIONAL NICKEL COMPANY, INC., 67 WALL STREET, NEW YORK, N. Y.

plans

Plans...blueprints...specifications...scraps of paper that chart the course of stone and steel into the sky, bridges across rivers. dams between mountains. In plans that precede modern construction, no detail is too small, no phase unimportant, that guides a definite course of action. Over 15,000 installations record the plan-recognition of Peelle Doors. For over a quarter of a century architects have specified Peelle counterbalanced, horizontal sliding, vertical sliding, and bi-fold doors for varied industrial uses...from skyscrapers to shipping terminals, from steel mills to glass factories. Motorized...at the touch of a button...Peelle Doors afford speedy, safe entrance and exit for men and freight. Write for catalog, or consult our engineers.

THE PEELLE COMPANY, BROOKLYN, NEW YORK Boston, Chicago, Cleveland, Philadelphia, Atlanta and 30 other cities, In Canada, Taranta and Hamilton, October



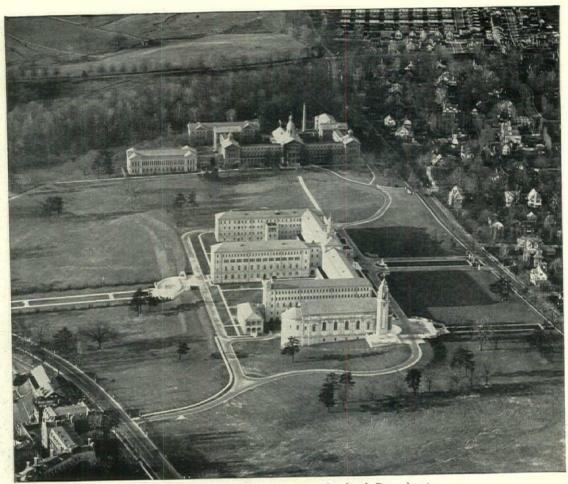
SLIDING AND BI-FOLD DOORS WITH PEELLE OPERATORS

FOR AUGUST 1931

MOTORIZE

HORIZONTAL

VERTICAL



The Seminary of St. Charles Borromeo, Overbrook, Pennsylvania

New Group in foreground:
Paul Monaghan, Architect
Chambersburg Construction Co., Heating Contractors

Alterations to old group in background: Hoffman - Henon Company, Architects S. Faith & Company, Heating Contractors

The Seminary of St. Charles Borromeo

is one of many notable University Groups heated by Webster Systems

Others include Princeton University, Massachusetts Institute of Technology, University of Notre Dame, University of Alabama, William and Mary College, Vassar College, etc.

When the old group (shown in the background) was modernized three years ago the heating system was equipped with Webster MODERATOR Control—in which steam to the entire old group of buildings is actually Controlled-by-the-Weather through a unique Roof Thermostat. Results in terms of fuel economy, enhanced comfort, ease of operation and low maintenance cost deserve the most careful study by university adminis-

trators and their architects and warrant the prediction that true Control-by-the-Weather will play an important part in university group heating during the next decade.



For complete details and able cooperation write: Warren Webster & Company, Camden, N. J.



5,000 square yards of W. & J. Sloane Linoleum have been installed in the Palo Alto Hospital, Palo Alto, Calif.

The fact that W. & J. Sloane Linoleum is double-waxed means that it can be kept immaculate at all times with very little effort. Which is one reason why so many architects specify it for hospital use.

THIS DATA BOOK WILL PROVE MOST HELPFUL WHEN SPECIFYING LINOLEUM FLOORS



WE SHALL GLADLY SEND YOU A COPY ON REQUEST
W. & J. SLOANE, 577 FIFTH AVE., N. Y.

W. & J. SLOANE LINOLEUM

There's Profit in Beauty



An Outstanding Desco Installation

Eastern Outfitting Co. Bldg., Los Angeles, Calif. Claude Beelman, Architect; J. V. McNeil Co., General Contractors; Wigren-Lawrence Glass Co., Glass and Store Front Contractors.

TORE FRONTS

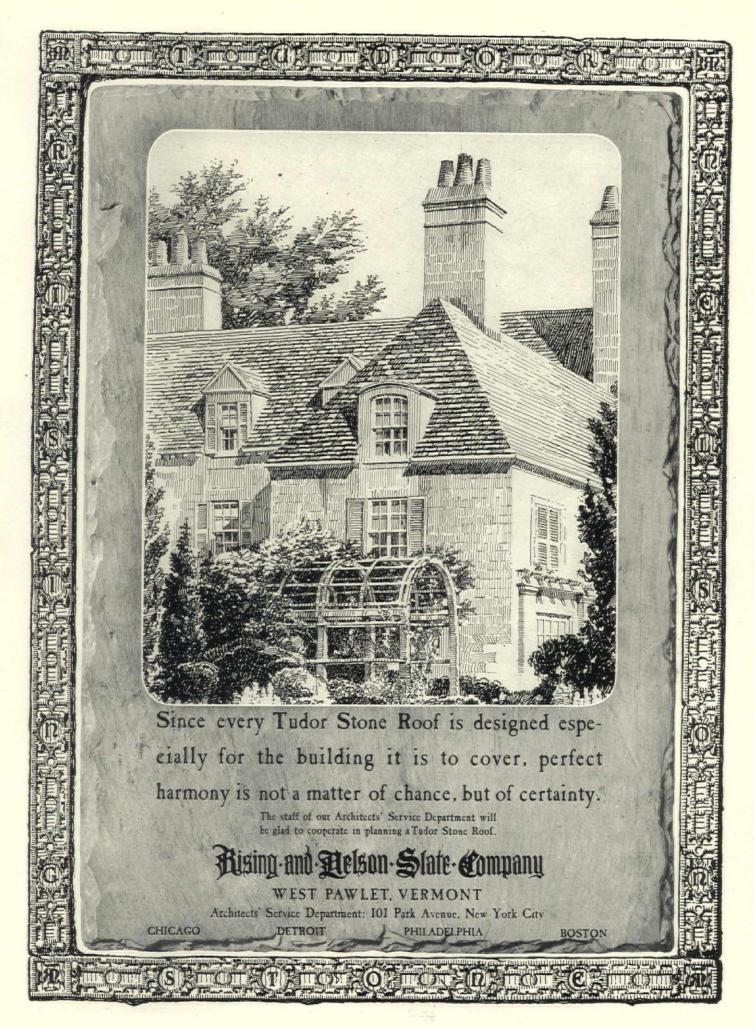
Often architects specify Desco Store Fronts for ground floor shops because their clients find it much easier to rent a store equipped with attractive display windows. Handsome, modern Desco Store Fronts are manufactured in a wide variety of metals, including solid copper (plain or embossed), solid

bronze in all standard finishes and aluminum alloy (white metal). Thus they harmonize with any architectural style. Then, too, they have the additional quality of flexibility which protects the glass against abnormal wind pressure. Adorn the building and please the owner with Desco Store Fronts.

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

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

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





NORMAN SCREENED CASEMENT



W. M. Martin Residence, Grosse Pointe Park, Michigan, J. J. Berger, Inc., Architect.

A NEW RESIDENTIAL WINDOW

FOR high-class residential jobs, Crittall now offers the Norman Screened Casement. This new unit represents a quality window combined with an advanced type of screening arrangement. ¶ The new Crittall Norman Screen lies perfectly flat against the window. Opening and closing the casement is made simple and easy by a convenient sill operator—at no point is the screen panel itself cut. The entire screen frame can be easily attached or removed. ¶ The new Norman Screened Casement is equally suitable for club and office buildings—and has already been selected by architects for such commissions. We will gladly send you a copy of our folder giving complete installation details. Or telephone our nearest representative and he will gladly call and show you a sample.

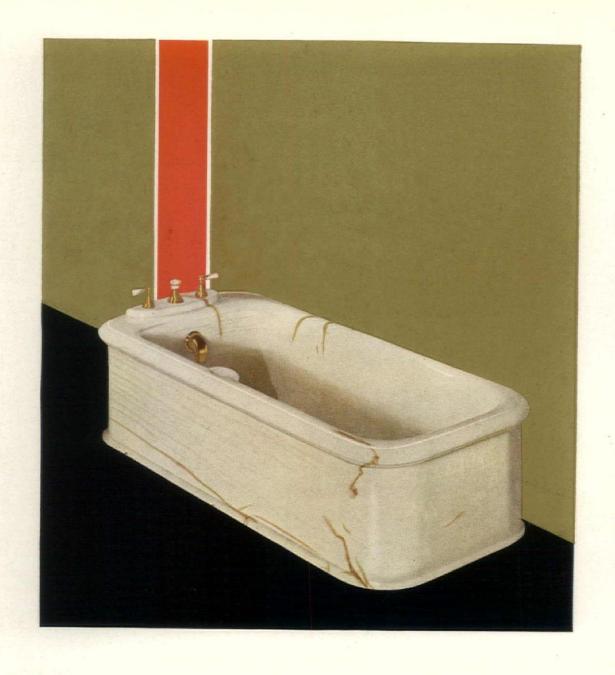
CRITTALL CASEMENT WINDOW COMPANY, 10922 Hern Ave., Detroit, Mich.

CRITTALL

STANWIN & NORMAN & UNIVERSA

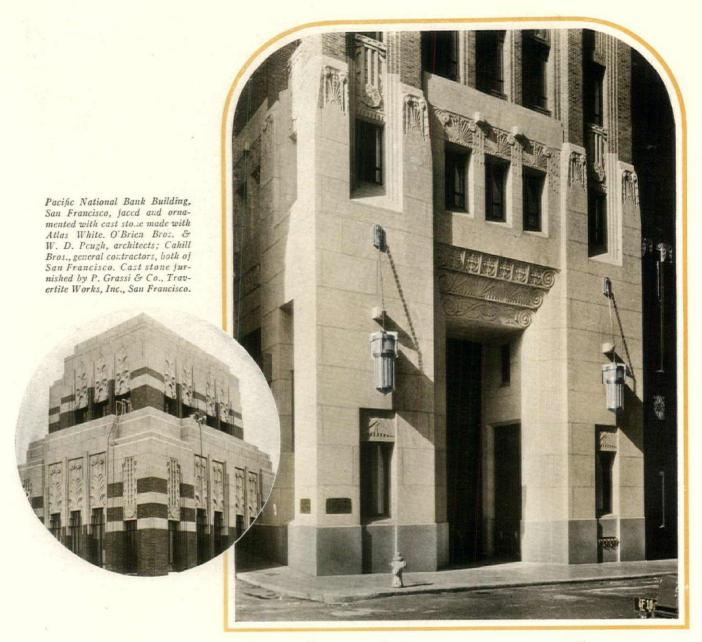


The Norman Screened Casement is operated entirely from the inside



* * Bath of Pedrara Onyx with Design 50 Onyx Trimmings * * * *

CRANE



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

HICAGO . NEW YORK . PITTSBURGH . MINNEAPOLIS . KANSAS CITY



Volume CXXXX Number 2598

The AMERICAN ARCHITECT

AUGUST 1931

(Trade-mark registered, U. S. Patent Office)
FOUNDED 1876



This Month's Cover

TOWERS OF SEMUR

SEMUR is situated in the heart of old Burgundy, one of the fairest and richest of the provinces of France, famous for its vintages. This old fortified feudal town was built on a rocky promontory surrounded on three sides by a deep, quiet stream forming a natural moat. Of its ramparts, six heavy circular towers with pointed roofs remain, two pairs guarding the upper and lower gates. The ancient walls have been absorbed by tall houses with steep pitched slate roofs.

A. C. Webb, the artist, is a former architect, at one time having been connected with the office of the late Donn Barber. After his discharge from the A. E. F., he established himself in Paris as etcher and architect. He recently returned to this country and made a number of striking drawings of New York which were exhibited at the Architectural League of New York, at Kennedy's, and at other exhibitions in Chicago and New Orleans.

At present, Mr. Webb is driving around the United States, making drawings and water colors wherever and whenever the spirit moves him.

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 A. C. Webb

Why Wait Any Longer?	21
Hardware Made by an Architect	22
Reorganize the Office of the Supervising Architect Benjamin F. Betts	24
Chimney Tops	26
Let's Face the Facts	30
Swedish Architecture	32
All in the Day's Work	38
Steel Bridges	40
What to Tell Your Lawyer When You Sue Emery Stanford Hall	42
Etchings by P. M. Jones, W. K. Aykroyd and A. E. Poor.	44
Research Before Planning University Club	46
Put Yourself in His Place	50
The California State Association	52
Sketches by G. Witherspoon, H. L. McCall and L. Pirola	54
As It Looks to the Editors	56
Structural Steel Costs in 30 Minutes	58
Oloron Sainte Marie	60
What Architects Are Talking About	62
Legal Problems	64
The Readers Have a Word to Say	66
Books	70
New Catalogs	74

NEXT MONTH

DESIGN—Woodwork in Irving Trust Company Building LOG HOUSES—How to keep the bark from coming off LIGHTING—Use and design of modern illumination

The American Architect, Published monthly by International Publications, Inc. Fifty-seventh Street at Eighth Avenue, New York, N. Y.

William Randolph Hearst, President; Ray Long, Vice 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. The American Architect is fully protected by copyright and nothing that appears in it may be reproduced either wholly or in part without permission.

HERMAN NELSON CORPORATION



HERMAN NELSON

Invisible

RADIATOR

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.

ible Radiator as the totally practical answer to the modern radiator problem.

Here is a heating unit not only designed to fit within the wall where it is out of view and out of the way, but built to give a lifetime of effective, worry-free heating service.

Completely equipped with a sturdy steel case of correct design, graduating damper, and choice of six outlet grilles, the Herman Nelson Invisible Radiator comes ready for installation. For larger and taller buildings, where access to control valves is required, it is provided with a special removable panel.

If you are planning any type of building that will have a steam, hot water, vapor or vacuum heating system, you will insure your client's satisfaction by specifying Herman Nelson Invisible Radiators. Do you have our catalogue? A request brings it to you.

HERMAN

Factory at Moline, Illinois

Factory a Belfast, me. Springfield, mass. Providence, r. i. Hartford. Conn. New York City Syracuse Albany Rochester Buffalo Philadelphia

SCRANTON
KINGSTON, PA.
BARRISBURG
PITTSBURGH
JOHNSTOWN, PA.
ALLENTOWN, PA.
BEIE, PA.
WASHINGTON, D. C.
BALTIMOPE, MD. WASHINGTON, D. BALTIMORE, MD. CHARLOTTE, N. C.

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

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

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

 Sales and Service Offices in All Principal Cities SAN FRANCISCO LOS ANGELES VANCOUVER, B. C. TORONTO, GNT. WINNIPEG, MAN. CALGARY ALTA, LONDON OSLO MELBOURNE

"Almost every business has its hidden enemies . . .

Some of these enemies are belated adherence to tradition, slavish acceptance of trade custom . . . failure to seek and find new markets and dull self-satisfaction with all-rightness of the product."

NORVAL A. HAWKINS in "The Nation's Business"

Why Wait Any Longer?

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

HEN will business pick up? How soon will prosperity return? What can be done to improve conditions? Questions that are in the minds of all men, everywhere. Questions that have been asked by architects many times during the past two years without a satisfactory answer.

STATISTICIANS, economists, and optimists have answered by saying that prosperity is just around the corner—another six weeks, another three months and the tide will turn. But it has not, nor will it, so long as everyone sits back and waits for business to recover. Many already know this. Many, tired of waiting, have gone ahead, or set about solving their own problems. These men are tomorrow's leaders. Watchful waiting can accomplish nothing. Individual effort correctly applied can accomplish much. Times and conditions have changed. A new point of view is needed now as never before.

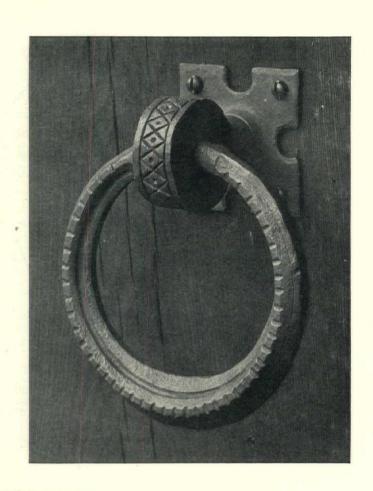
The business of building is a basic industry. Construction work has not ceased. And as long as there is building there is a market for architectural services.

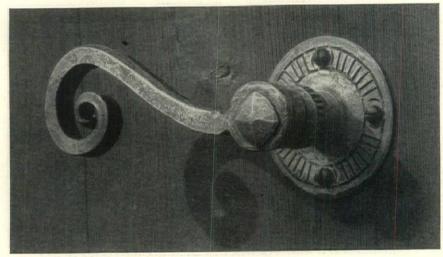
But—no buildings that are not needed will be built for a long time to come. In the next few years more attention than ever before will be given the questions: Is there an economic demand for this type of building? Is this building a sound investment? As never before, architects will be called upon to design the least building for the least money for the maximum return. Where a building shortage exists it will be filled.

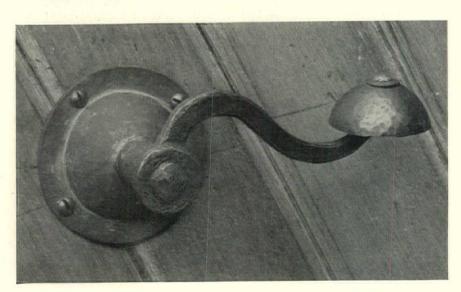
The problem faced by the architectural profession today is fourfold.

- 1. Abandon absurd adherence to tradition and slavish acceptance of "trade custom."
- New outlets for architectural service must be found and lost markets recovered.
- 3. The demand for architectural service must be increased by selling the profession to the public.
- 4. Service rendered by the profession must be improved and extended.

This hardware was made by an







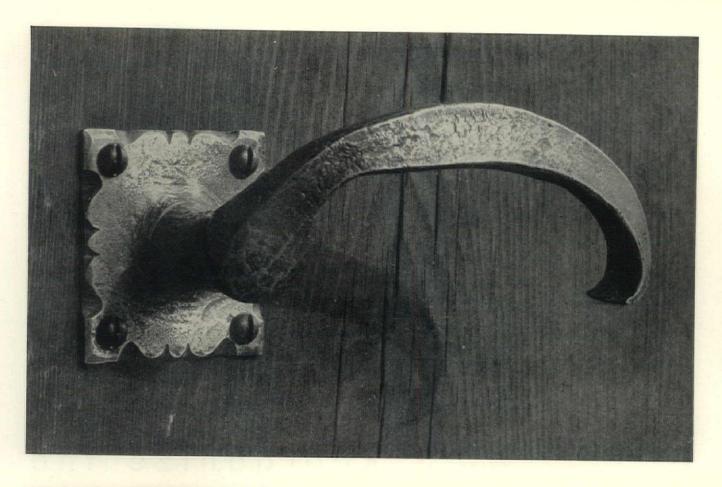
ACED with the desire for unusual wrought iron hardware and with no local forge apparently able to turn out the job as the architects wanted it done, Anthony Lord decided to do the work himself. He writes:

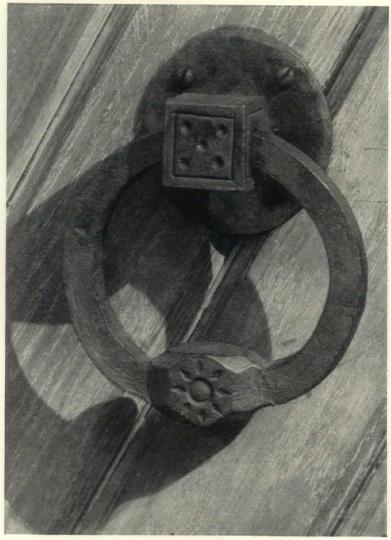
"For this building we wanted hand made iron hardware with some individuality but the disposition of at least one local shop was to cut the hinges from steel plate with a torch. This cheery idea didn't encourage us to give them the job and we looked elsewhere without much better result.

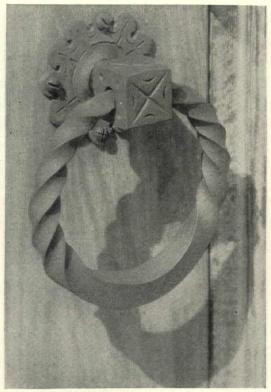
"I am a confirmed tinker and have a friend with the same bias, so we concluded to have a go at the iron ourselves. Thus an unoccupied garage became the smithy, the office brick samples became a forge, and, finding here and there the rest of the tools of the trade, we went to work. We were ignorant and found the going heavy but the first few weeks were the hardest, and when we finished hinges and handles we were much wiser but not much richer. But we had had a lot of fun.

"Cheered by the results gotten on the first job we have since undertaken work for other offices with, we think, some success."

THE AMERICAN ARCHITECT







Designed and wrought by Anthony Lord, A.I.A. of Lord and Lord Asheville, N. C.

- SELIEVING TRAT....

 Public buildings should not only serve utilitaries meeds but should also serve an models and impiration for impreving srchikecture throughout the transfer of the serve of the serve

- PROFILE THE UNICESIAND EXPERIENCE SACCION AND AN OFFICE OF CREEK PROFILE SACCION AND AN OFFICE OF CREEK PROFILE SACCIONAL PROFILE SACCIONA

Rugal Before J. Breds word - Berban, 443 Congress II. Continued. No., Carolatest.

Free Down Soften, Webster - City wis Company II. Continued to achieve.

Steen Bed. Miller & Bed afree 460 Congress A The achieve.

Literal Bed. Miller & Bed afree 460 Congress A The achieve.

Literal Bed. Miller & Bed afree 460 Congress A The achieve.

Charles on Mayor Michielet 465 Congress A

John Howard Stevens architect 477 Congress A but WiRholes auchilet 14 Hyl St. Riappedulunt Whendtooth 445 Conquest Preting Could Walter A. Webster, Debster + Libly, Portland, Ore askt

Canal Haterial Bank & Forthel Co Millekandis fler Porchand Me First National Bank of Pulland Me - Frommer P Ving west with Warren Ja Donald Inspector of Building Cotton Borns & Bury Inc. Portland Min Table Call Configur Jackston Portland Min Table Call property Cotton a moin flotter property of the Canton of Destroy Treats the segment there there its State Radiate Enf., Polland, Ell. M. Vickerson Flow Contractor Portland Men The The lo Enjures of Contractor to Mating Foutstany Por Hant, William & Snow Saleman for Hearting & Planding Suffer 7 Surver Salesman for Heater "Plumber Suffice with phobook Cos Portland Manne emenfordown, it Bus. The Smith about a for Hunting , Heating Suffelier am B Hard on Sabotan for Bloufflete Sufet. The Reguen with arthur AM milton to Unind Been with author of Moulton nic Reden Co my Nobes " The Reden Co my N blemed Blowerd Gladier Co Holl Rollien Lumber Hilland Bottom, Mr. E. M. Brady & Son Sen Portland The Maine Lakes Stroet for Portland Mice John J. Analony Enterton Portland, Mrs. 1 Intland Main Iso & Mountat of De our fort Hapkin son Electrate E. N. CUNNINGHAM CO.
300 CONSTRUCTION OF BY E Majoring fortraction Postland by WERR
PORTLAND. SAME Considered for Painting Contractions Postland by WERR
Boundards B. march 117 herberry St. Lemma Contractions
Both to Same State State Same State Stat 18 Front los Pallent in. ellet Berola , age (att tall) 249 Comment State In M. B. Bourne Hon 216 Gederal St. Portland Me. Pud & Oyler . 157 High dt. " 15 Kelsey St So Portland De

« « « THE FIRST PETITION RECEIVED

was from Portland, Maine. It was signed by nine architects, four banks, and thirty-three contractors and supply houses. This is a remarkable record, as there is no local organization of architects in Portland

THE TIME HAS COME FOR CONGRESS TO

Reorganize the

By BENJAMIN

HE ability, earnestness, and zeal of the men at present responsible for the conduct of the Supervising Architect's Office, and the men entrusted with the preparation of plans and specifications for Federal buildings, is not questioned. On the whole, those familiar with the office refer to the personnel in high praise and the men in charge have earned the kind regard and high esteem of those who know them.

Judge Wetmore, Acting Supervising Architect, and Major Heath, Assistant Secretary of the Treasury, are reported to have stated that their relations with outside architects engaged to handle Federal projects have been most agreeable and that the work of these architects has been exceedingly satisfactory.

There is, therefore, in the present government building situation no element of personal animosity. There is no reason to expect that personalities will enter into the argument. Apparently the Office of the Supervising Architect is manned by well-meaning men of ability and good intentions But—it is decidedly questionable whether the department, organized on a creative or designing basis, is prepared to function efficiently in a supervising capacity.

Rumors are already current that architects are finding it difficult to obtain essential information or approval of plans as quickly as is necessary to permit them to complete their work with dispatch. This is to be expected from a bureaucratic system, and especially one that has been organized and accustomed to create work rather than to transmit information.

As the number of private architects selected to design

"It is my personal belief that, although SMOOTH WORDS were spoken and gestures made by government officials to representatives of the American Institute of Architects prior to ... last April, there was at heart NO SINCERE INTENTION of bringing about a situation whereby the buildings of the government would be the work of the profession at large in the nation."

Statement by A. L. Brockway, Director of the American Institute of Architects, before the regional conference of the New York State Chapters, held June 20, at Cooperstown, N. Y.

Office of the Supervising Architect

F. BETTS, A.I.A.

government buildings is increased, it is probable that it will become increasingly difficult for them to obtain prompt decisions through the Office of the Supervising Architect. Later on the result may be that these architects will be accused of being slow and of delaying the progress of the work. Reflection will thus be cast upon outside architects through no fault of their own. This condition should be foreseen and measures taken to correct the situation.

THE creation of a Federal Department of Public Works, as indicated in the report of the Board of Directors of the American Institute of Architects and approved at the Sixty-Fourth Convention of the Institute, apparently would be in effect a reorganization of the Supervising Architect's Office, giving it broader scope and resulting in its organization as a coordinating office. In scope it might well include the overseeing of all government building activities, now distributed in some sixteen or more departments. It could function to advantage as the representative of the government exactly as does the chief engineer of the American Telephone and Telegraph Company. This officer coordinates all departments of the company and, when a new building is needed, secures from the various departments their specific requirements. This information is transmitted to the architect selected to design the building. The chief engineer in this case is the contact man between the company and the architect throughout the construction of the building. There is no sane reason why the building construction work of the Federal government should not be conducted with the same efficiency, dispatch and common sense as that of a private owner. A Department of Public Works would permit this to be done.

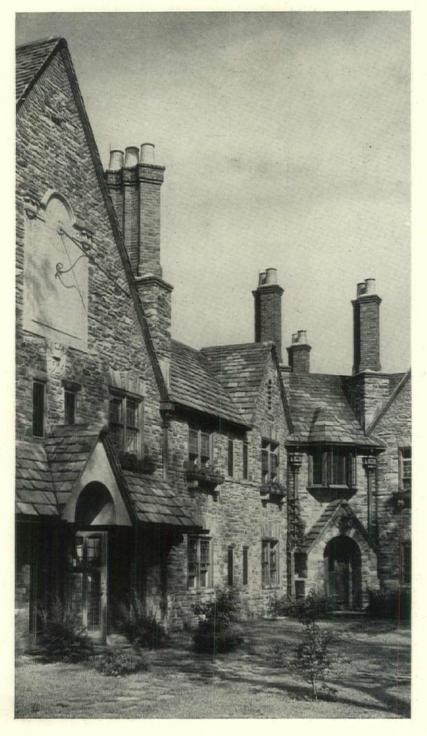
This country has behind it a wealth of experience in organizing and conducting numerous activities. No insurmountable difficulty should be found in organizing a Department of Public Works that would operate to the satisfaction of all citizens.

Under either a Department of Public Works or the existing system, it is of utmost importance that a method be found to select private architects with care and discretion. Capable architects, experienced in designing and building structures of the magnitude of various government buildings, are available in almost every section of the country. These firms should be sought out, their qualifications established, and their selection based upon merit. It is unreasonable to ask or expect one person to be so familiar with the work of all architects throughout the United States that he can assume the responsibility of selection. This should be the work of a carefully selected board composed of several representative citizens including one or more architects who, due to their position, would be ineligible to engage in Federal work. This board should be provided with facilities to determine the standing and qualifications of all architects eligible to design our Federal structures.

It is toward this vital end that all interested citizens should work in order to convince our government officials that a radical change (Continued on page 82)

CHIMNEY TOPS

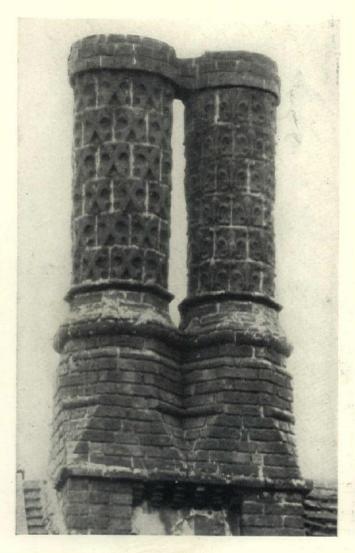
From England and America



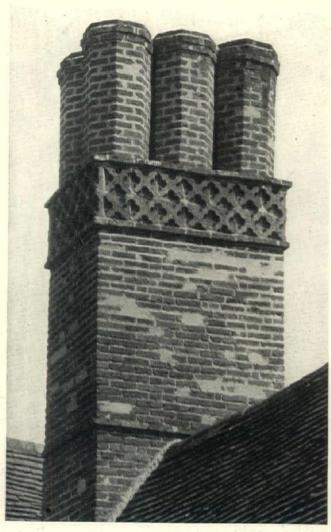


PURPOSE-MOULDED brick used in a pair of decorated shafts of Moot Hall, Aldeburgh, Suffolk. Bricks were plentiful; brickwork good and numerous different shades of color are noticeable in the Tudor brickwork of this section of old England

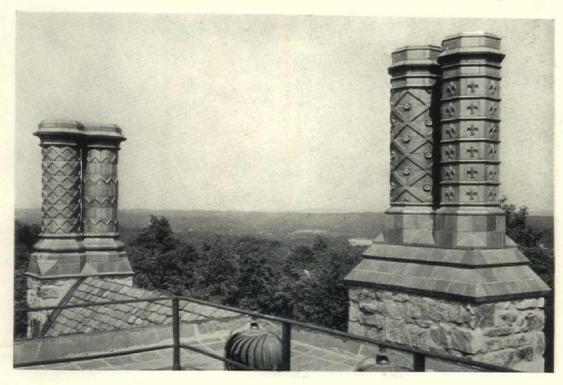
ONE HUNDRED ONE chimney pots, rugged red in color, are features of the Marcus Ward Home, Maplewood, N. J. Office of John Russell Pope, architects. Many of the stacks are ventilators



TUDOR chimney shafts are plentiful in Suffolk, England. The above pair from a residence at Ufford are good examples of the use of moulded brick in the form of fleur-de-lys and saltire in a diaper pattern



CUT BRICK for the shafts and a belt of moulded brick in the form of a quatrefoil diaper design of engrailed St. Andrew's crosses is a curious combination which is to be found at Woolpit, Suffolk, England



TERRA COTTA chimney shafts that simulate the patterns of older brick design. House of Theodore Swann, Birmingham, Ala., Warren, Knight & Davis, architects

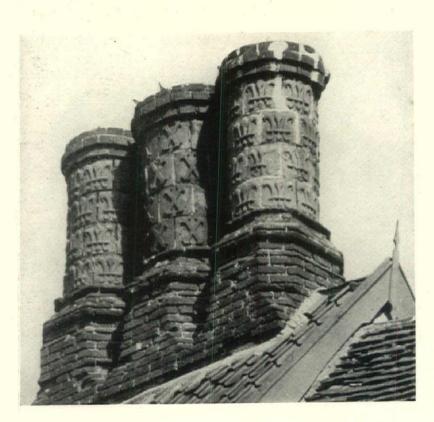
FOR AUGUST 1931

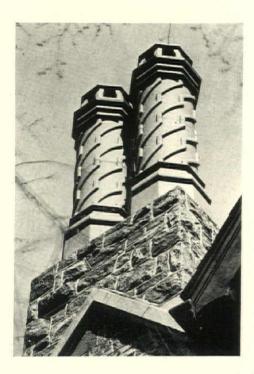


STANDARD size brick have been used in a decorative way in this chimney on a house located at Bronxville, N. Y. James J. Bevan, Architect



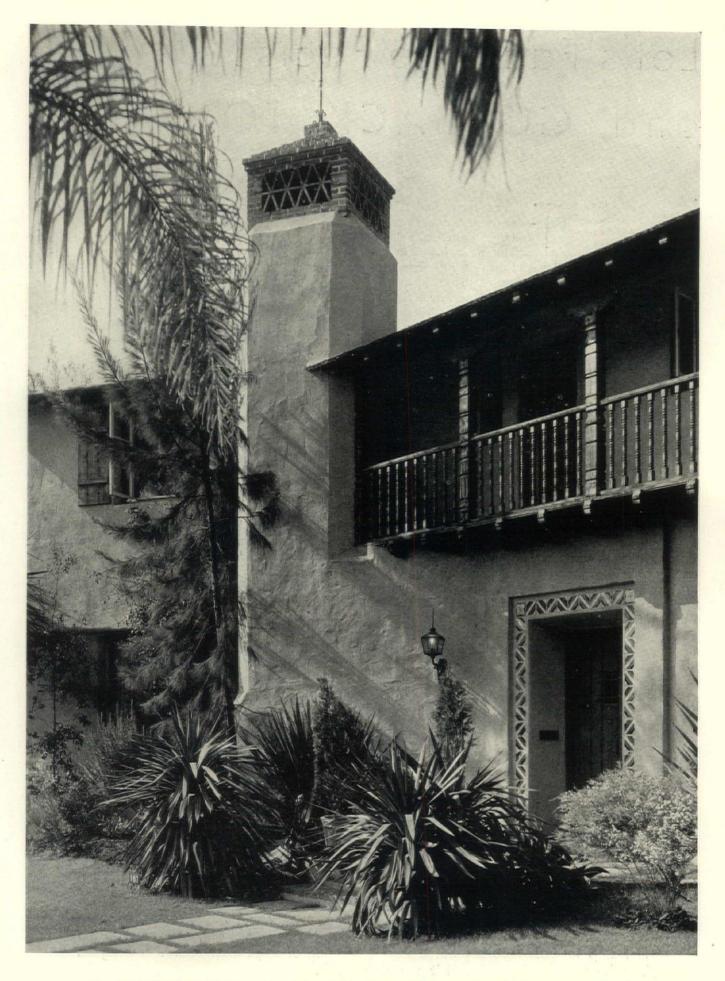
tern has been obtained by the use of chimney pots of terra cotta. The Howard Coonley house, Milton, Mass., Prentice Sanger, architect





■ COLOR and form in terra cotta pots that combine well with the stonework. House of Louis Levi, Dobbs Ferry, N. Y. Taylor & Levi, architects

FLEUR-DE-LYS and saltire were favorite Tudor decorative motives. This triple chimney stack from a house built near Thwaite, Suffolk, England has been shortened and recapped



■ MEDITERRANEAN influence is evident in the design of this chimney which is a decorative as well as practical feature of this house at Beverly Hills, California

Let's Face the Facts... and GO BACK TO WORK

O face facts fearlessly is one of the attributes of courage. Close examination and interpretation often dis-

close that they are less dreadful than they have seemed. Only by such analysis is it possible to obtain all the necessary information upon which to base wise decisions.

Americans, as a race, are born optimists. They resolutely turn their backs on anything unpleasant. The debacle of 1929 did not come unheralded. It had been foreseen for months but the multitude, made up of high and low, rich and poor, paid no attention whatsoever to the danger signals raised by the facts they trampled under foot.

That was why the entire nation was staggered when a remorseless economic tide washed away the sand foundation upon which it had reared its house of cards.

The most gigantic bubble of security speculation the world has ever known was punctured 20 months ago and yet many Americans—perhaps a majority—still are waiting, with as much patience as they can command, for prosperity to return. Time after time they have been told by putative leaders that it has been "just around the corner" and that if they would buy without stint its coming would be miraculously accomplished.

One deception, deliberate or not, but none the less cruel, has followed another. The simple folk who believed what they were told, did as they were told so far as they could. Many of them went hungry to bed but they struggled manfully to believe they would be jobless only a little longer.

After 20 months of disaster and tragedy no concerted attempt is being made to tell the people of the United States what has happened and what they must expect. Economists, who should know, and probably do, still obsessed by a desire to cater to the followers of Pollyanna, are striving to find pleasant information to dispense. Their interpretations are made so obscure only an expert can tell what they are driving at. To the average reader they seem to breathe optimism. They have been saying for months that the depression has scraped bottom and that recovery is near.

It is useless to wait for a big business recovery...We must start afresh from where we are NOW

Ву

JAMES DALTON

Industrial Editor of "Motor," one of the Hearst Business Magazines, which group includes The American Architect

It may be true that the bottom is being scraped but it is a lower bottom than has been reached since 1907. The consequences will be far reaching and today's schoolboys will be voters before we shall have recovered fully from them. The drop has been longer and more precipitate than any which has befallen us in 38 years.

Most of the public press skids delicately around the essential facts and prints only optimism—save in the stock tables. By written and spoken word leaders of commerce, industry and government still attempt to convey the impression that everything will be all right in a little while.

After 20 months isn't it time to get our best brains together, assemble the facts, interpret them, explain to the people what has happened and what to expect, tell them what they should do and try to guide them honestly? The average citizen is on the verge of panic. He has no one upon whom he can rely to advise him. He has lost faith in the once accepted leaders. He is fearful of disaster worse than is likely to befall. Frank acceptance and dissemination of (Continued on page 76)

THIS article was written before President Hoover startled the world with his proposal for a moratorium to save Germany from economic and political ruin.

Since then business sentiment, security and commodity prices have registered sharp advances. The moratorium undoubtedly will exert a beneficial effect. It may be the first step towards recovery but a long succession of steps must follow. If progress is to be sound and permanent it cannot be swift.

Prosperity rests upon volume of commodity consumption and profits of those who produce, fabricate and sell commodities. Purchasing power is the all-important factor.

» » » HERE IS THE PICTURE OF THIS COUNTRY TODAY

THE LEVEL IS LOWER than it has been since 1907, and the drop has been the longest and most precipitate in 38 years.

YEARS TO FULLY RECOVER from the depression are necessary because of its far-reaching effects.

NO SUDDEN "TURNING THE CORNER" can be expected. Even though the general trend of business is steadily upward, the slope will be so gentle that we shall have to look back to realize we have come up-grade.

NO FALL OR SPRING RECOVERY can be expected of more than moderate seasonal proportions, for there is apparently nothing upon which to reasonably base undue optimism.

NO GREAT NATIONAL SHORTAGES are to be supplied.

THE CONSTRUCTION INDUSTRY as a whole is overbuilt on everything except, perhaps, houses.

PUBLIC WORKS can enjoy no great expansion because federal, state and municipal governments are hard pressed for funds.

NO AUTOMOBILE SHORTAGE EXISTS, and estimates of replacement necessities have been exaggerated.

IRON AND STEEL can make but little progress as their principal customers are buying in diminished quantities.

AGRICULTURAL INCOME will show no great expansion.

FOREIGN TRADE can be expected to offer but slight help.

UNEMPLOYED have probably averaged five million for more than a year.

INDUSTRIAL WORKERS are mostly on part time.

SALARY CUTS have affected most "white collar" and clerical workers.

ANNUAL NATIONAL INCOME REDUCED from the 1929 level by fully twelve billion dollars.

ONLY MOST EFFICIENTLY MANAGED ENTERPRISES can hope to survive.

PRICES CANNOT BE RAISED, and the purchasing power of the dollar must be increased.

MERCHANDISING must evolve an entirely new concept.

SUCCESS OUT OF ADVERSITY is open to those who can solve present difficulties.

ENORMOUS QUANTITIES of goods of all kinds are being bought—and will continue to be bought—by the American people.

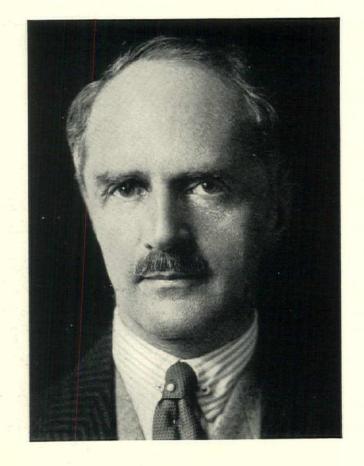
HOW YESTERDAY MADE POSSIBLE

Today's Swedish Architecture

An Interview by Eugene Clute with

IVAR TENGBOM

Architect, Director in Chief Royal Board of Public Works of Sweden



Since the beginning of the century, Sweden has seen the development of a number of tendencies which, interwoven, constitute the fabric of her architecture. This has come about naturally, progressively and on national lines. The results show continuity and consistency of character, the architects striving to solve their problems with sincerity in accord with the changing needs and thought of the times. This has given Sweden an architecture that is flexible and growing, as well as distinctly national and modern.

Director General Ivar Tengbom outlined this development in a very clear and interesting manner when the writer interviewed him for The American Architect during his stay in New York as Swedish Commissioner, at the exhibition of the Architectural League. Mr. Tengbom gave the key to the initial phase of the movement, during the first decades of this century, when he said, "After ransacking other countries, we at last discovered that Sweden possessed an architecture of her own, with an inherent force and individuality, which could reinforce and develop our own creations better than any foreign influence."

This led to the purposeful study of the earlier Swedish architecture in the remaining old examples and in descriptions and drawings of those that no longer existed.

Concurrently, there arose a keen interest in the handicrafts, in materials and their artistic use, stimulated by the study of old work. The importance of using good materials in buildings and of truth in construction was emphasized, and thorough, inspired craftsmanship in every detail was encouraged. Architects and laymen alike were stirred by these ideas. Men of liberal culture, wealth and position outside of the architectural profes-

"After ransacking other countries, we at last discovered that Sweden possessed an architecture of her own, with an inherent force and individuality, which could reinforce and develop our own creations better than any foreign influence."

sion gave their support to this movement. The services of many talented sculptors and painters were enlisted. Skilled workers in various materials, masons, wood workers, iron workers and others found a more lively appreciation of their abilities. As a result of these combined efforts, the handicrafts of Sweden, which had never been lost, arose to new heights.

Regarding this phase of development Mr. Tengbom said, "As the foremost supporters of this movement, two names merit mention before all others. They are Ostberg and Westman, in whose works, the Town Hall and the Law Courts in Stockholm, these strivings towards a common aim have found their highest expression. Of the above works, I believe especially the Town Hall is known over all the world as a beautiful structure, erected at a period when ordinarily more attention was paid to the materialistic point of view than to the idealistic. The building is a typical brick construction, the facades of a hand-made brick of a warm, deep red color. The location, on a point projecting into Lake Malaren in the town's center, is beautiful. To describe the interior would carry us too far. It may be sufficient



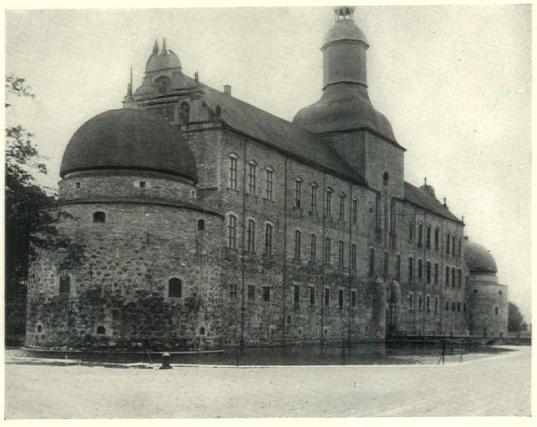
SWEDEN'S MOST FAMOUS MODERN BUILDING
Town Hall at Stockholm, Ragnar Ostberg, Architect

LAW COURTS in Stockholm, designed by Carl Westman, which, though characteristic of the best in modern Swedish architecture is reminiscent of the sixteenth century castle at Vadstena, shown below

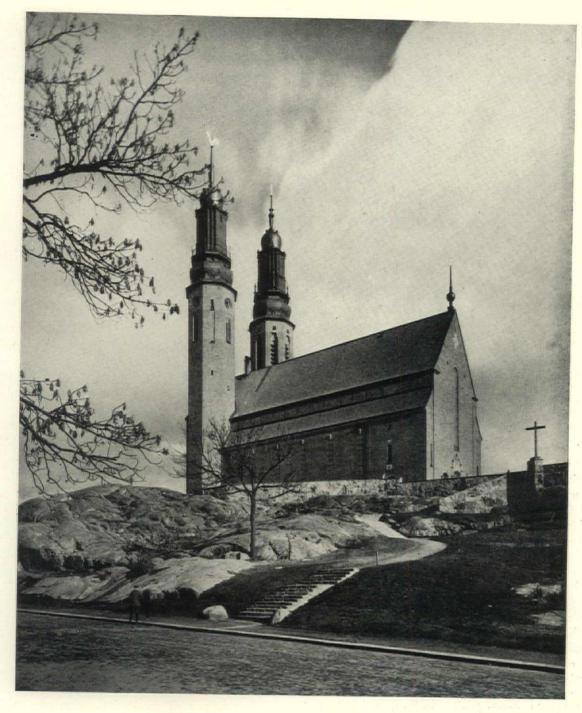
to state that, for the construction of the monument of Swedish architecture, a great many artists of the country contributed their share—from the unknown craftsman to the foremost sculptors and painters. Among the latter, Prince Eugen should be mentioned. I think that the happy artistic cooperation in this building, the erection of which took about ten years, is the main reason for the attention the Town Hall has obtained in other countries. Many other buildings could be mentioned in which the same valuable combination of artistic talent has been employed."

The aim was not to recreate old styles of architecture, but to incorporate old forms, suitably modified, in modern buildings and to enrich these buildings with new designs embodying the best traditions and practice of old handicrafts. The general simplicity that has always been a characteristic of Swedish architecture was dominant. The roof lines, principally, recalled the old architecture together with details used sparingly upon plain walls that were made beautiful by the materials and workmanship. Such sixteenth century buildings as the Royal Castle at Vadstena, Ostergötland, on the shores of Lake Vättern, the castle at Kalmar, Smäland, and the castle at Läckö,





ROYAL Castle at Vadstena, a sixteenth century structure which dominates the town. It is set in a square of four walls which rise from a



HOGALID CHURCH.

Stockholm, a modern church in which the characteristic simplicity of Swedish architecture is dominant. Ivar Tengbom, architect

VARNHEM in Västergötland, a quaint old church with a marked but well controlled romantic tendency

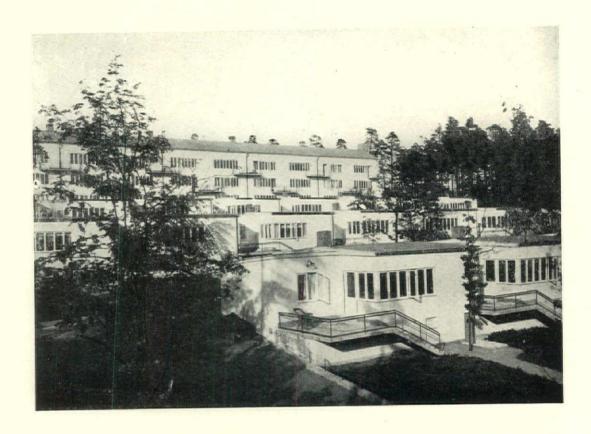
Västergötland, on an island in Lake Vänern afforded some of the most acceptable forms, together with certain old churches, such as the church at Varnhem in Västergötland.

New forces were at work, however. One was the more thorough recognition of the practical requirements for buildings intended to meet the diversified needs of the complex modern life. Another was the distinctive cultural refinement of the day. Then, too, there was the increasing use of modern materials—steel and reinforced concrete—permitting great slenderness of construction, to which people were becoming accustomed. Structural engineering came to exert a powerful influence upon design, replacing the heaviness of masonry vaulting and piers with the openness and lightness of wide spans and slender columns.



WORKMEN'S HOUSES

at Hastholmen, Stockholm, built in 1929. They are multiple dwellings, long and narrow, with ample sunlight and air in every room. Eskil Sundahl, architect



All of this was in keeping with the new spirit. To quote Mr. Tengbom: "It is the significance of a new technique and of new materials evolved therefrom that has here manifested itself, while at the same time the interest in Swedish tradition and in craftsmanship has formed a connecting link with the predecessors of this movement.

"These tendencies, with which I perhaps feel personally most closely associated, have found expression in such buildings, among others, as the Art Gallery and the Concert Hall in Stockholm, the latter one of my own works. It is often from classical traditions, which adapt themselves best to modern construction with their pronounced horizontal character, that these buildings have borrowed their motives. An offshoot of the same tendency, but with an especially pronounced esthetic aim, is represented by such buildings as the new City Library in Stockholm."

It is to be noted that the classic forms have been used often purely as decorations and in such a way that this fact is evident, the structural design of the building being complete without them. The portico on the front of the Concert Hall in Stockholm and the circular colonnade in the interior of the Crematory at Hälsingborg, by Ostberg, are examples of this.

"New currents have appeared," said Mr. Tengbom.
"They are the result of the social upheavals that have occurred all over the world since the War. Social and mass problems have become a primary interest, and the cult of mechanical technique, of new methods of building construction, or organization, has found fertile soil—a tendency toward the industrial, and thus to a certain extent, a thrusting into the background of the draftsman's art. The Stockholm exhibition last summer gave expression to these new aims in a more pronounced esthetic way."

Architecture is being directed into new channels. New materials and new methods of construction, the extended use of machinery and the development of mass production are working changes in design. The great need is for buildings that will serve useful purposes, with a minimum of expenditure for the sake of appearance. With this trend has come the type of buildings consisting of low rectangular masses, long familiar in some of the modern factories and dwellings of other European countries. A number of Swedish architects have endeavored, with more than the usual degree of success, to give to such buildings a characteristic kind of beauty, without increasing the cost or in any way reducing the functional value of the buildings. A notable example is the building for students at the Technical High School in Stockholm by Sven Markelius and Uno Ahrén. Agreeable effects are often produced by the simplest means, such as the use of a dark band of sheet copper turned down over the top of the wall, to draw a sharp line that gives smartness to the design. One of the characteristics of modern Swedish architecture is the lightness of parts that are of strong materials. There is no excess weight; parts are figured for the service they will have to render and are not overdimensioned.

Another example of a simple but effective means of drawing a line at the top of a building of functionalist design is the use of a metal gutter set a short distance below the top of the wall. This is seen on some recent buildings.

Even the church architecture of Sweden is following the very pronounced tendency to design in plain rectangles. An example is a new church for Appelviken, a suburb of Stockholm, by Birger Borgström; even the bell tower has been transformed and appears as a heavy wall with a penetration in its upper part in which the bell is hung.

Large panes of glass are the rule in the new buildings in Sweden and casement sash are universal. A special type of casement is (Continued on page 98)



CHURCH AT ENGLEBRECHT, Stockholm. A fine composition on a rocky hill. Built in 1922, it set a style that reclaimed a rundown neighborhood into one of the most beautiful suburbs in Sweden

» » » A L L I N T H E

Ideas that have solved some

N these two pages are typical examples of what the editors desire for this new department, which will appear from time to time as material warrants—anything that solves an unusual problem, conserves space, provides unusual convenience, saves time in the drafting room, corrects mistakes on the job, and so on. Modest payment will be made for every idea accepted. Descriptions should be as short as possible; sketches should be in ink for easy reproduction.

Address the Editors, American Architect, Eighth Avenue at 57th Street, New York.

ROTTED POSTS AND BEAMS REPAIRED WITH CONCRETE

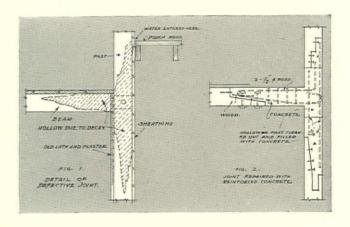
By Charles C. Hurlbut of Hurlbut & Van Vleck, Engineers, New York

A DIFFICULTY frequently encountered in renovating an old building is the repair of decayed timbers. Several cases of this sort have been repaired by the writer by the use of reinforced concrete.

The repairs illustrated are of an old farm-house built over one hundred and twenty-five years ago. In renovating the interior a small hole was discovered near the end of one of the floor beams and an investigation revealed that the end of the beam was completely rotted away and was merely a hollow shell with no strength whatever for a distance of eighteen inches or more from the post. Furthermore, the post at the joint was completely gone and the cavity extended down into it about two feet below the bottom of the beam. The beam seemed to be held up by the floor boards rather than the reverse. The construction is shown in Figure 1.

As the beams were exposed in the room a method had to be found that would not be unsightly. Of course the defective timber could have been cut out and new pieces carefully spliced in place, but that method would require much labor and very expert carpentry work, as well as the wrecking of considerable finish. Furthermore, it is very difficult to splice a new end onto a beam and make a joint of adequate strength that will look well if the beam is exposed.

The problem was approached from an engineering point of view and reinforced concrete seemed to offer a solution. The repairs were accordingly made as shown in Figure 2, and will be described. This work has now been finished and in use for over a year and has proved



perfectly satisfactory. No cracks have developed in either the concrete or the wood and the change in material is not noticeable.

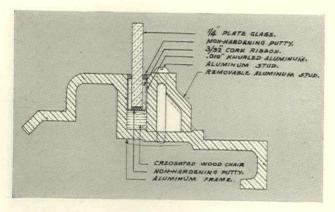
In making the repairs the beam was first shored up from the floor below and a few floor boards were removed with enough outside sheathing to get at the defective parts. The beam was then cut off in the manner of a scarf joint as shown, and all the decayed wood carefully removed from the post. The loads were computed and the beam end designed just as would be the case in a reinforced concrete structure. Reinforcement was computed and placed in position and amount where needed. The reinforcement in the beam extended into the column and was hooked around the vertical rods in the column pocket.

In the same house there were several other cases of badly decayed posts, in one of which the decayed pocket extended from the sill upward for a height of four feet. This post was exposed in the room like a pilaster and it was desired to retain it. On the room side the wood appeared sound, but was only a thin shell. However, if the post were cut off and a new piece inserted, the effect of the old timber frame would be lost and the joint would be apparent even if an old timber could be found to match. It was decided therefore to leave the shell and fill it with concrete. This was done, as in the other case. The sheathing was removed and the post opened from the outside for the full length of the picket. All the decayed wood was cut out, a few rods inserted and nails driven into the sides to tie the wood and concrete together. The pocket was then filled with concrete.

The concrete used in all cases was mixed in the proportion of one part cement, two parts sand and four parts gravel. It was mixed rather dry and thoroughly rammed in placing. Forms were used where necessary, as on the outside faces of posts and the sides of the beams mentioned above. In the latter case chestnut boards were used with grain similar to the grain of the beam. The concrete was stained to match the wood as nearly as possible and the fact that part of the beam is concrete is hard for most people to believe.

DAY'S WORK

problem or made a job easier



KEEPING LARGE GLASS AREAS FROM BREAKING

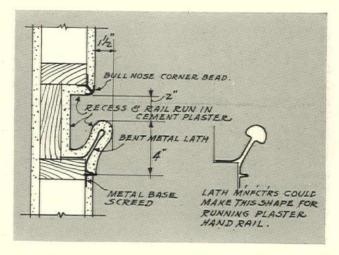
By E. C. Frazier, Industrial Service Section, Armstrong Cork Company, Lancaster, Pa.

N the building of the A. O. Smith Corporation, Milwaukee, there are 262 windows 12' x 14', and 46 windows 12' x 16' consisting of ¼" plate glass. The edges of the glass rest in an aluminum channel consisting of two parts and so constructed that the glass can be slipped easily into one section and then held in place by the second section, which is bolted into place against the opposite side of the glass.

It was discovered that, with such large panes of glass, there would be a severe strain on the edges caused by vibration when the wind velocity was high. It has been determined that with a thirty mile wind, there would be a movement of the glass at the edges of approximately .040". This movement would occur many times per minute, producing a scraping action of the glass against the aluminum and creating an unpleasant noise.

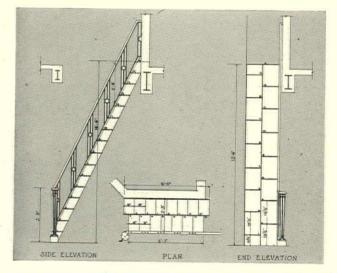
Cork composition in ribbon form was placed between each side of the glass and the aluminum channel around all four edges. In addition to this use, which is illustrated in the above sketch, some small strips of the same material 3 inches long were placed at intervals of 2 feet on each of the side edges, being placed between the edge of the glass and the bottom of the channel.

The actual assembly consists of a U-shaped piece of .010" knurled aluminum fitting snugly inside the channel. Between this piece and the glass, cork ribbon is placed, the knurling on the aluminum holding the cork securely in place. At the bottom of the U is placed a 1/16" layer of non-hardening putty to act as a lubricant. On the bottom edge, this assembly rests on a creosoted wood chair, while on the side edges the assembly rests against the small cork strips previously mentioned. The purpose of these short strips at 2 foot intervals is to compensate for expansion and contraction and to take up any unevenness caused by the glass not being cut exactly square.



STAIRWAY WIDTH CONSERVED By Lancelot Sukert, A.I.A., of Sukert & Cordner, Detroit

HERE space is limited, the handrail may be recessed and run with but a 1½" projection, making it possible to provide the necessary width and yet have a handrail in places required by the building code.



STEEP STAIRWAYS MADE SAFE By A. H. Albertson, A.I.A., of A. H. Albertson & Associates, Seattle, Wash.

HE stairway to the "captain's walk" in the Northern Life Tower Building, Seatle, Wash., is a unique solution of a steep yet serviceable stairway that requires little space. Note that the stairs are split in the middle and that the treads are staggered to accommodate a full step for each foot, in going either up or down. While the rise of each section is 19½", staggered treads give the same result as a stair with 9¾" risers.

FIRST PRIZE, CLASS A

Wabash Avenue Bridge, Chicago. Cost \$1,750,000. Designed by Thomas G. Pihlfeldt, engineer of bridges

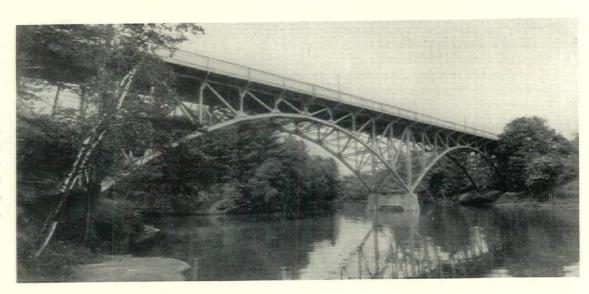


JUDGED THE MOST BEAUTIFUL

Steel Bridges

FIRST PRIZE, CLASS C

Delton Bridge, Sauk County, Wis. Cost, \$54,000. Designed by the Wisconsin State Highway Commission

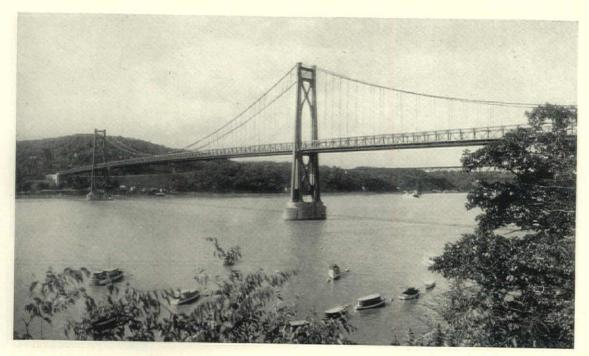


HE third annual competition conducted by the American Institute of Steel Construction for the most beautiful steel bridges erected in the United States and Canada resulted in awards being made as pictured on this page.

Class A was for bridges costing over \$1,000,000, Class B between \$500,000 and \$1,000,000 (no awards, because no entrant of sufficient merit was recorded), and Class C, under \$500,000.

The jury consisted of Francis Lee Stuart, president of the American Society of Civil Engineers; Robert D. Kohn, president of the American Institute of Architects; Frederick L. Ackerman, A.I.A.; Dr. William H. Burr, consulting engineer; and Benjamin F. Betts, A.I.A., editor of The American Architect.

Awards were made on the basis of a proper use of the material, skill shown in arriving at the solution of the problem, and consideration of the general condition under which the bridges were built.



FIRST HONORABLE MENTION, CLASS A

Mid - Hudson Bridge, Poughkeepsie, N. Y. Designed by Ralph Modjeski and Daniel Moran

SECOND HONORABLE MENTION, CLASS A

Montreal Harbor Bridge. Designed by Monsarrat & Pratley



HONORABLE MENTION, CLASS C

Lachine Bridge, Lachine, Cana d a. C o s t \$3,100. Designed by R. Dorion, city engineer

»» what to tell your lawyer

vhen you sue

Emery Stanford Hall, F.A.I.A.



MR. HALL acted as Secretary of the Illinois Society of Architects from 1905 to 1914. He writes, "During that period pretty nearly every architect in Chicago who had to go to court to collect his bill called me in as a witness." Mr. Hall wrote the "Articles of Agreement" reproduced on the facing page

HE legal rights of the architect are but faintly understood by the architectural profession and hardly more by the legal profession. This is because, in order to understand the right of its clients, the legal profession must first understand these clients.

To understand anyone, one must be able to visualize that person's viewpoint. In other words, be able mentally to dramatize his life purpose. The lawyer has to get his knowledge of architectural purpose from his architectural clients. If they do not understand something of the moving of the legal mind, they are unable to tell their story to their lawyers effectively.

The legal mind is bred and trained to believe that there is no right to demand remuneration unless there is an equitable consideration. The lawyer must have properly built equity as a basis for a legal claim. He has to believe in the equity of his client's claim in order to adequately present it. He is trained to talk. Of words, he has many. His repertory is stored with tricks of phraseology and word weapons of persuasion, but he does not score in a court of real discernment and exact integrity unless he believes in the just equity of his case. Both judges and juries are affected by the sincerity of the advocate's plea. They are human, they cannot help it.

The sentiment of architects is rightly opposed to corrupt court or legal practice and were it not, the emoluments of architecture are not sufficient to make it possible for the architect to yield to them. The very existence of architecture is dependent upon its absolute integrity and judicial fairness of expert decision. With these principles bred in the bone, it is impossible to consider any methods of seeking justice other than on

the basis of fair equity.

The equities of architectural service, for which an architect has a right to demand remuneration, must be clearly defined in order to make them tangible to judge, jury and advocate. It is the duty of the advocate to make them clear to judge and jury. If he is selected

- I-WHAT ARCHITECTURAL SERVICE consists of should be clearly explained, including:
 - a . . Notes, preliminary studies, and all other data used to develop the architectural problem
 - b . . Why plans and specifications are merely a means to an end
 - c . . Long and expensive education and practical training of the architect
 - d . . Working and reference library built up through many years, catalog files, etc.
 - e . . Draftsmen and others who have to be employed and paid in order to give preliminary service to the client.
- 2-DIFFERENCE BETWEEN the professional service of an architect and the business activity of a general contractor
- 3—FEASIBILITY OF PROJECT and its earning power are determinable only after the architect has done most of his work
- 4—ONLY THE OWNER is served by the preliminary work, for it was done for a particular site and a particular purpose—it is of no use to any other client
- 5—TIME AND LABOR are involved in the evolution of mass and detail, provable by preliminary studies
- 6—EXPERT JUDGMENT expressed without thought of personal interest is what the owner buys and pays for
- 7—SUPERVISION requires expert decisions, considerable time, and frequently the salary of an employee paid by the architect to protect the owner's interests
- 8-CONTRACTS are arranged and drawn up, contacts made for estimates, and other detail work done by the architect

LAWYERS AND JUDGES WERE INFORMED . . .

as to the services rendered by an architect by a series of direct mail pieces sent out by the Illinois Society of Architects to the entire state bar association and judiciary. This campaign has had an important influence on court decisions

ARTICLES OF AGREEMENT BETWEEN ARCHITECT AND OWNER

THIS AGREEMENT Made the , architect located for the Street, in the City of and State of the Owner.
WITNESSETH: That the Architect and the Owner for the consideration ARTICLE I. The Architect agrees to render full and complete professional services, including the furnishing of Preliminary Studies, General Drawings, Specifications, Scale and Full Sized Details and General Supervision of the Work, for a proposed

Building, to be erected on lots owned by the said Owner, described as

THAT DRAWINGS AND SPECIFICATIONS ARE MERELY INCIDENTS ...

of an architect's professional service is clearly stated in an "Agreement of the Illinois Society of Architects. A copy may be obtained at cost from H. L. Palmer, 160 North La Salle Street, Chicago

ust what does an ARCHITECT do for his CLIENT?

"PRELIMINARY STUDIES", "PRELIMINARY STUDIES",
which are really the diagnosis of the
building problem, proceed first with
the careful questioning of the client
as to that which he wishes to accomplish. In this study the architect
must be sufficiently familiar with
human desire to read between spoken words the unexpressed wish.

And to these wishes he must add those things which his own skill and experience dictate as essential to the full, up-to-date solution of the client's problem, such as location or froms to assure convenience and comfort, straight-line routing of materials in industrial buildings, etc.

In studying these problems the architect must also consider site conditions, prosent and future land values, relationship to transportation, adjoining property conditions, public utilities including severage, gas, water, heat, electricity, etc.

After the plan scheme is worked out, the architect must then design a building dress that shall be a logical interpretation of the plan—pleasing in aspect, harmonious in color combination, and at a cost appropriate to character of use and neighborhood standards.

The architect next prepares an approximate estimate of cost. This is based on floor areas, volume and similar tentative factors. No accurate estimate can be made until working drawings and specifications determine actual quantities of mate-

wishes to proceed with the original scheme as outlined, or if it should be modified to reduce cost, or to increase

2 "WORKING DRAWINGS" scale are now made up. In ond important function of

Beyond the Blueprint . . .

Here are seven vital qualities and services — the intangible merchandise — every worth-while Architect furnishes his client.

ENTY to palect humands, on two No.26 of passes the contract to form correct on the two medicalities contractors; to use unceasing vigitance to the end that the client is everything due him, and at the same time, that the contractor and craftsmen are

EDUCATIONAL BACKGROUND coneisting of:—training in social eclance; a working knewtedge of the history of building down through the ages; training into an understanding of the strength and mechanics of materials; training in the art of design and depiction including both draftsmanship and written went; traval and study of the masterplace of architectural art.

PRACTICAL EXPERIENCE as: a student employee; a graduate office worker; and as a practicing Architect including the handling of the business of building with required incidental knowledge of contract and lien fave.

WORKING LIBRARY containing:—an indexed file of current grahitectural magazines; last books on structural and assthetic subjects; many architectural books required for immediate use; air index of all the more important architectural books and where they can be consulted; a completely induxed catalog file of building malarials and equipment.

IMPERSONAL PROFESSIONAL ATTITUDE toward aach building problem; no financial interest either in building materials or in contracting makes possible skilled, unblased judgment; Architec's remuneration not contingent on whether advice given pleases or displeases the client or the contractor—in other words, expert judgment expressed without personal

These seven factors constitute the EQUITIES OF ARCHITECTURE

ILLINOIS SOCIETY OF ARCHITECTS

wisely, the lawyer can be trusted to do his part. It is his art. It is up to the architect to sell his legal advocate as to the actual equities of the practice of his craft. In such matters, the average architect is like the stammering school boy who said, "I know but cannot tell." It is the paramount task of every architect both to know and to be able to tell clearly so as to visualize accurately just what is valuable in an architect's service and why.

The architect's social obligation to the community, his duty to his client, and his personal necessity with his advocate makes it the architect's duty to define clearly the equities of architecture. Failure to define clearly the actual consideration in contracts for service has cost many an architect his just remuneration for services rendered. A contract with inaccurately defined considerations is a serious handicap in any law case. It is not an extravagant statement to say that more than a majority of contracts which are now drawn between architects and owners do not clearly define what the architect is

to do for the remuneration which is demanded of the client. In many of these, if not most of them, the consideration mentioned in the contract is not the consideration at all but only an incident to the considera-

A lawyer does not make a contract to write so many pages of briefs and make so many pleadings before the court. Neither does a physician bill for so many prescriptions. Yet, a large percentage of contracts between owner and architect are for the merchandise of plans and specifications, plus in some cases the service of the supervision of construction. It would be hard indeed to prove that material, plans, specifications, and details without supervision constitute an equitable consideration equal to the common commission reckoned fee amounting to 4.2% of the cost of erecting the proposed building. It would not be difficult to prove that the natural talent, training, and experience, plus time and the overhead necessary to (Continued on page 88)



ETCHINGS.

CABOT STREET
BOSTON
JONES

By PRESCOTT M. M. JONES

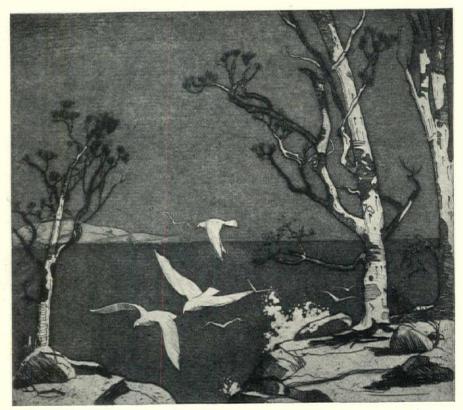
of Rockport, Mass., whose etchings have been exhibited in most of the principal print shows in this country.

WOODRUFF K. AYKROYD

a draftsman, Toronto, Canada. A book of his sketches, "Travel Sketches in the Old World," is now on the press of a Chicago publisher

ALFRED EASTON POOR

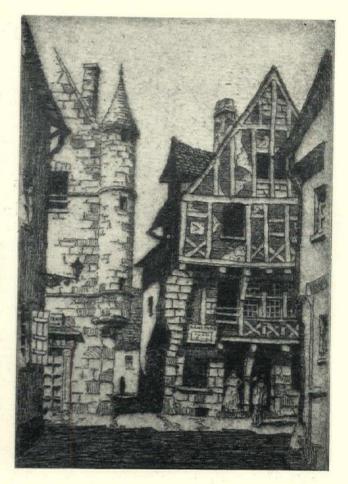
a former holder of the Woodman Travelling Fellowship in Architecture, and associated in the practice of architecture with Robert Perry Rodgers in New York City under the firm name of Rodgers & Poor



"VANGUARDS OF THE STORM"

JONES



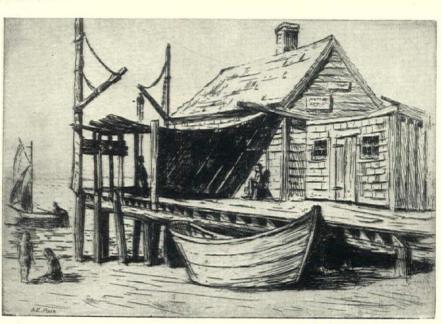


CHINON, FRANCE

AYKROYD

CAUDEBEC-EN-CAUX
JONES

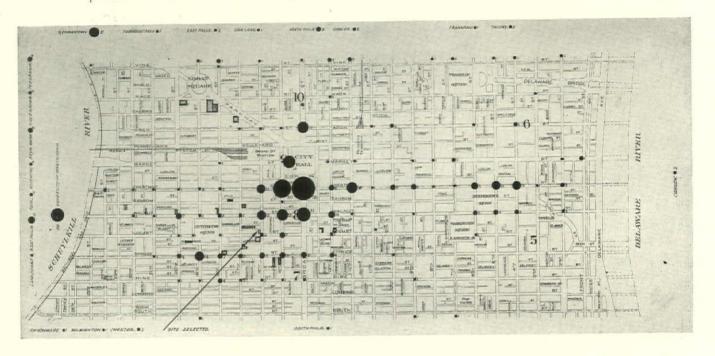


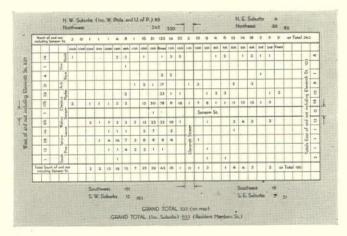


WHAT TO PLAN FOR

By Grant M. Simon, A. I. A.

The story of what was done before starting to plan the University Club Building, Philadelphia





LOCATION WAS DECIDED UPON

after preparing a chart, shown at left, to locate the number of members in each section of the city. Then the totals were transferred to a map, shown above, so that the number of members in each section could be seen at a glance. Thus it was easy to decide which of several available locations would be most convenient

RESEARCH in connection with the design of buildings is always not only of value but highly important. This is true of any type of building and particularly true of club buildings. Its value was proven in the case of the University Club of Philadelphia, where the importance of preliminary investigation was clearly demonstrated. To correctly understand the ultimate solution and interpret the analysis, some knowledge of the local situation at the time of building the club is desirable.

The University Club of Philadelphia is the oldest university club in America. Becoming to its age are its traditions and customs. For thirty years it had occupied a brownstone building on Walnut Street built in the 40's. The old ways were continued, and the members grew accustomed to inconveniences that would not now be tolerated.

But time changes all things—including realty assessments. And so, after many committees had met and adjourned, and in the meantime all had concurred in the

CLUB Interior A. And	const Docs. On Vans. And James	of final	we they To	tal Toh	AND DISB	e pair forcest House Brogn	W Profit	and L	refer. Companie p	The fair	Sec. 4.	And the state of t	Ar. fo. Marie		A Employees		
Now your Copy "30 at 1500 "5000"		NA.	7/9	94472 3741	of management 1 mg 1	Licon.	Port to	12.00 P		100 mg	24.02.02	100 mm	\$ \$	144 445 4	\$4344 \$4344	20 00	
UNIVERSITY Toom Toom sont	E CLUL	Det	e of Total		111	doseste .	M E		RSHII Beriof	B. A. B.	and the	Deathe As bour	to decommend	Morros, En	plymit Buhin	line Educations	
HARVARD #250 \$ 250 A SECOND	Y A L	E 1	97 57	00 100	2974 2618	4 ,	nena.	Grainst Or Nan grain	a somik	190 s	y	1921 1927 To Se	terdining.	drives.	tripaes.	Franklines.	
UNIVERSITY St. Louis Missouri umanuri ex mag.	UNIVERS Now York	city 12	165. 42.	39 309	CLUB.	First	Saksey	iit. Peason	o Chirach	or Duste	- S	and the second	LDING LA Totalsete in .	NO CH	PRACTER	PISTICS:	Anna Maria
RINCETON \$30 Flant 60.	A New York	RD 18	65. 60	67 247	YALE NOW YOU ON	2674:57	da.ac.	d increases	Bisiness		150	22 S	CU		八八十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十二十		100 m
UNIVERSITY TOOMSOOMSOOM 2. Buston . Wass Almon ch.	St. Louis M.	TY IS	7/. 7	88	UNIVERSITY New York City.	AT Drawn.	SPM S	n standa	ARYSIZ	(27)		* 78×8	91	33. 5	The state of the s		120
WIFD LO DILLETTE TOOK SON FROM	RINCETON	v. 18.	19. 36.	51. 44.	HARVARD Now York O	\$ 20°01	. spres si		e, Jaciens	ARIZ	III X	4.5-23	62		Mary Carlo	道.	077
INIVERSITY \$2000 500 12500 5	Boston Mas	y /8	92. 414	19. 430	ONIVERSIT	POLE CALL	sour for	n increas	•				90% 1/2 2/		1000 mm	5 17	3
	BUFFALO ATH BUFFALO ATH		723 343	U. same	PRINCETON New York City	Sem of Bod Bod Ass	Mr. 630	the increases	Bodestis	1. 1928	86"	Tings.	597	Wall So		28	10,00
	UNIVERS!	TY 18.	87. 326	5. 2/.	UNIVERSITY Baston Mess.	Banga St Bridena		Required Largor Buinding	Basiness Roudentia	1926	24500	Contract of the Contract of th	101.075# 88	0 - 2 3	400 F	Te il	
DETROIT. Jose 250 25 7.					BOFFALO ATHLETT Boffato . By.	C	Airgani Debenen		Sociaes:	/923	. ms/x	20 30 20	(38 (38		1 9 1	1000	316. 22 miles
NEW YORK \$200 100 150 \$75					ONIVERSITY Chicogo.	Devices St.	HE Hose	Lograph	Business	409	17/x	8. 4. 83	9% - @.so.* 65	3	4 3 1 8 3 5	E.	165. J
EVELOND \$200 \$ 75 \$ 15 \$ 100 Stark	DETROIT		406	5 me									ARO GOOM	reforeste	4 (1		
TTEN HOUSE Heladelpher Re	NEW YORK	186	8. 8700	1000.	PENN.A.C.								C20 254	SCORE AND			
MON LEAGUE Anger L Philippeliphur Por Life Species	CLEVELANO Attitutio Clu		0 2600		DETROIT Athletic Chis.	- ^	rt given	_	Students.	1916	126 X 154	100	108.	To the Bank		7)	900
YOMCTURER'S Feliadelphia File	RITTENHOUS Anladotobia Pe		5 579	-	NEW YORK	-	r .		Same.	1898	/80 x 4	2 00	60,	Aote. Aux.	By 100×201	0 - 2/ saturbus	high 300 bes
	UNION LEAGU Philadelphia Fa		3207	150 Homeony Lig	CLEVELAND Aththe Chi			Expansion.	Assert	1910.	/NT X 4	7	1000 \$ 69.	0 ,000	4 16	Act and	703
	MANUFACTURE Philadelphia. Pa			19.	RITTENHOUSE Philadelphia Pa.	1870° 78 1678 Disent 1878-1850 TSS Welcot	1690: MH-MIS MANUE.	Aure Aure desirable avantus	Atthet Aparlia t	1890	54 X 4 223.	· s	2.4		8 80	d	4
					ONION LEDGOE Philodephia Pa			- Contract			100 X 396						
					MANOFOCTURER'S Military biorth.	inviery and ef- Brani	-	increase In	Bainess	1919.	96 A	0 753		, N	*		

OTHER CLUBS WERE INVESTIGATED to determine the relationship between size of building, membership, income, and operating expenses; and to afford a basis for analyzing the various income producing departments as to space occupied and income of each

opinion that the club must move, a building committee was appointed, and an architect chosen.

The problem was a difficult one. While it was agreed that a change of residence was imperative, the end of the pilgrimage was wrapped in a fog of conflicting opinions. Some favored a small luncheon club, some an alteration of another old house, and some a fully equipped and elaborate house on the Parkway.

The club owned a valuable site on an important street, members had grown accustomed to its convenient location; they would not walk very far to a new site. There were serious financial problems to be met. There were, in short, many opinions and many problems.

Numerous locations were considered, including sites on the Parkway. Local customs and the Market Street barrier, a Philadelphia social idiosyncrasy, dictated the selection of a site nearer the business and financial center. The business addresses of the resident members were plotted, and the site chosen is adjacent to the greatest density of membership population.

This location with three street frontages, but with an area of only 4700 square feet, is probably one of the smallest building sites occupied by an important club. To secure advantageous use of the site air rights were acquired on the fourth side of the plot.

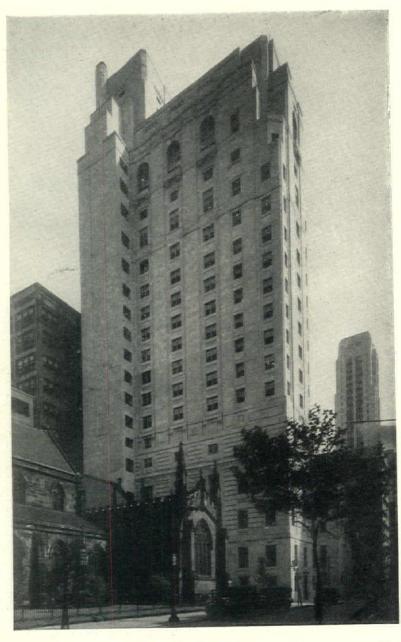
Preliminary to establishing a definite program for the design of the building, a survey and analysis of the then existing club house facilities were made. Some fourteen clubs in the East were visited and data accumulated pertaining to their membership, finances, operation, maintenance, and physical characteristics. This data was analyzed and a series of charts prepared to afford a basis of comparison of different clubs.

As a result of this study the following general considerations were incorporated in a preliminary program:

1. A belief that the various departments of the club could be operated without a yearly loss. This is fundamental.

It was observed in all the clubs visited that the greatest net revenue was derived from the sleeping rooms. The effort then was to determine the maximum





ACTIVITIES WERE PLOTTED in cross section to study the interrelationship of various activities, as an aid in determining the necessary variations in story heights, and to visualize activities in the building for the club members

number of these rooms of which an 80 to 90 per cent occupancy could reasonably be expected.

3. It was agreed that facilities which yielded no substantial revenue should be reduced to the minimum compatible with the members' comfort and habits.

4. It was believed important to provide spaces for later expansion. It was thought that these spaces could be rented in the meantime as a source of additional revenue.

5. It was decided to eliminate facilities of a high annual maintenance cost. A fifty-foot swimming pool, at one time considered, would have required an addition of approximately 12 per cent to the cube of the building and an estimated annual cost of \$14,000.

6. It was believed that too much space had been given to wash rooms in the clubs visited, and that smaller rooms conveniently placed would be adequate.

7. The location of a restaurant easily accessible from the street entrance was considered imperative.

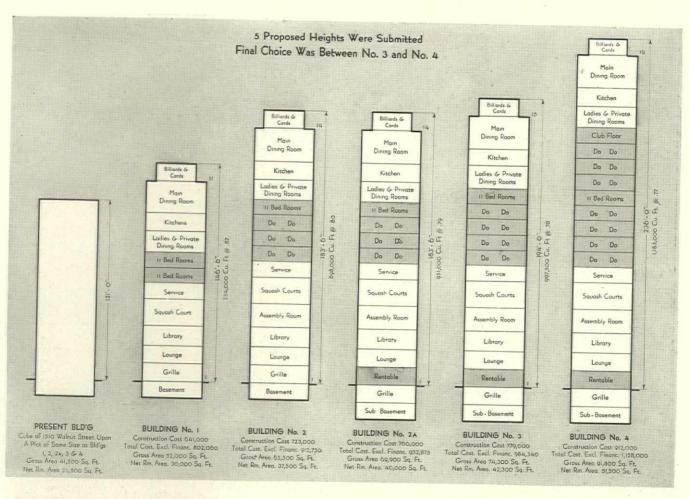
8. A mechanical plant requiring the minimum operating personnel was considered desirable.

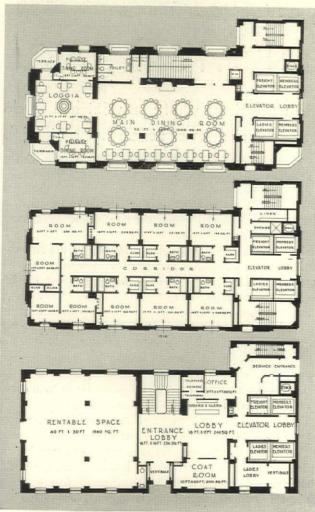
9. It was thought that the ladies' lounge and restaurant should be so planned as to include a separate entrance and an access to these rooms independent of the club circulation.

10. That the dining rooms could be successfully operated even though it would be necessary to locate them both above and below the kitchen.

While this program was accepted in general, a difference of opinion existed as to the amount of money that should be appropriated for the cost of the building, and the amount of money that should be allocated for annual maintenance. The opinion was held that the club could without difficulty increase its membership sufficiently to meet a substantial increase in yearly expenses, but that it would be preferable to have a natural growth rather than one stimulated by organized effort.

With this as a starting point the cubes, cost estimates,





HOW HIGH TO BUILD was a problem solved by studies of various building heights

and maintenance costs were prepared for five different buildings of different heights, as illustrated above. These studies were compared with the facilities of the then existing club building.

The six plans varied from a net room area in the old five-story building of 29,500 square feet, to a net room area in the largest building with nineteen stories of 51,500 square feet.

It was believed that the largest building would amply take care of any future growth of the club; therefore, the new club building would of necessity be somewhere between these two extremes.

In order to present this matter to the membership for approval, a tentative program was made for a fourteenstory building with provision for three additional stories.

This program together with the financial plans was unanimously approved by the membership.

After a careful review of all the data available, the following program was made the basis for the design of the new building.

Two basements should be (Continued on page 92)

INTERIOR COLUMNS were located with reference to economy in planning interior arrangement. Floor plans at the left show the main floor, typical bedroom floor, and the main dining-room floor



PUT YOURSELF IN HIS PLACE

Make it easy for him to understand what you want him to do and how to do it, and there will be fewer headaches on the job

By EDWIN S. PARKER

Consultant on newspaper buildings with S. P. Weston, Inc., New York

ERE you ever in a hurry to get a job going, and then have to stop everything to read directions? Speaking confidentially, did you really stop and read them, or did you just glance through them, assume you knew what was to be done anyway, and get the work going? Well, that is what the man on the job does too, only he doesn't read half as easily as you do.

True, the specifications are a vital part of a contract, and the man on the job should read them in detail. But the fact remains that he is hand-minded and not eyeminded, and he doesn't read them carefully. The only way out is to write something so simple that he can read while he runs and understand when he reads. He is

always on the run and that is the only chance he gets to look at the "specs."

There are three things which happen to a specification. The estimator reads it; the foreman tries to read it; and, on occasion, everybody wrangles over it. So the subject can be divided easily into three parts.

First, it must be possible for the estimator to take off complete quantities and make a fair bid. He must know just what his work is to include and what is to be done by others and by which others.

Second, the man on the job should find it easy to locate the essentials at once; just what he is to do and how he is to do it.

Third, the specification must be discriminating and definite enough to be legally binding in case of a dispute.

The legal end is of very little interest to the workman, and it is useless to keep repeating it throughout the book. The standard A. I. A. documents are invaluable here. Ambiguities should be scrupulously avoided in the body

» IF YOUR SPECIFICATIONS ARE DEFINITE AND EASY TO UNDERSTAND

The estimator can readily take off complete quantities and make a fair bid

The man on the job can locate information quickly and is more likely to follow directions

And the owner receives greater protection in case of a dispute

of the specification to prevent a dispute, on the "ounce of prevention" principle. Take as an example: "The forms for the floors shall be level etc." Well, just how level shall they be? An inch or two out is plainly too much, and to work to 1/16 is too close. On the job, the foreman will assure you that the plaster will easily cover the inch difference that is plainly visible the lathers take care of all that that's as close as we ever set them . . . etc., etc. So unless you say that the forms shall be within some definite dimension of level, the floor gets poured. Then the plasterer says he can't do anything with a ceiling like that just look at the way it waves he'll do the best he can of course. And then you have to take the owners through and assure them most ceilings are like that nowadays, and it couldn't be helped anyway.

Say exactly what you want or don't say anything. If it is ambiguous you will take whatever the contractor chooses to give you, perhaps with much argument and no results. Tell him how much water he must use in his concrete and just how he is to measure his materials. Say beforehand what will be considered an equal—it is awkward and difficult to settle it later, and it has to be settled some time. And if you find that your wording is beginning to ramble—stop and think, for evidently you don't know exactly what you want done.

But don't specify at length things you can't possibly get or check. Don't specify a material that is not available—everything on the market is "equally good" to the average contractor. Don't specify such things as the chemical or physical properties of iron or steel. They are both so made that you will get the regular product anyway unless you pay a price. Such things increase the size of the book and make it harder to find the important items.

The ultimate aim of a specification, however, is to reach the man who actually does the work. There should be a clear grouping of items so that what is relevant only as preliminaries or as technical or legal, does not have to be read when looking for particular instructions. Keep things distinct, clear and make them brief, and remember that the man on the job works easier than he reads. Capitalize important items so he can find them. Say a thing once, clearly, and in its place.

I quote from a section on stone work which was picked at random from a typical specification. "The face shall be set on thoroughly soaked wooden wedges which shall not be removed until the building is cleaned and ready for pointing." A cook-book doesn't waste words like that. It is all wrong from the point of view of exposi-

tion. True, you can find what is wanted if you read it carefully, but a workman reads with difficulty and under confused conditions. The directions should be explicit. Say rather: "Set face on thoroughly soaked wooden wedges. Leave them in place until ready to point." This makes for brevity and clearness, and leaves no doubt as to what is expected of him. Elsewhere it should say that the building shall be cleaned before pointing, and what the workman actually does is to pull the wedges out as he points.

THIS instruction element is really the important thing. If everyone is told what to do and what to use so that there is no question there will be no legal problem to settle. Buildings are not built in law courts, and good faith is at the bottom of every transaction. When a wrong material gets in place or a piece is wrongly set, do we order it out? Very rarely, for there is always some qualifying circumstance. And besides, the delay in the job would cost everyone more than the item is usually worth. So we get our heads together and go through the agony of finding some way out.

Good faith is at the bottom of a job, with human variations of course. I defy anyone to tell what a plasterer is putting into his mortar box. If you go poking around a job they are apt to dislike you and do things to spite you behind your back. A lot of things are their business anyway, but they, fundamentally, want to know just what you yourself want done—that is at the bottom of it all. That is what a specification is for.

Let us examine the situation from another point of view. A set of men, highly trained to think and read, and who are constantly engaged in thinking and reading, plan a building. They must pass their ideas on to men who work with their hands and who read much less easily. Hence the vital instructions should be in short sentences, well grouped, and with special points emphasized. Legal points, which are always involved and lengthy, should be kept separate. Then when the plumber, for instance, is ordering valves, he can quickly find out if he can use his choice or must get a certain kind. And if he has to put a certain kind of trap in certain places, he discovers it before he has all his lines run.

Our highly developed schemes may be perfect, but if the man on the job doesn't grasp them, we have the heart-break of seeing the job botched. It is no use pointing to a secluded paragraph afterwards and proving that it is his fault. It should have been so plain that he couldn't have missed it. When he misses it—is it his fault or our own?

« « "We Represent Every

BY HENRY C. COLLINS

Editor of the Bulletin of the Northern Section

California has perfected a state organization with a good income which can go before the state legislature and truthfully say, "We represent every architect in California"

HEN the Northern California Chapter of the American Institute of Architects invited all certified architects of Northern California to a meeting to discuss the subject, "Support of the State Board of Architecture," the seed was cast for an activity within the profession which was to come to flower in the organization of the State Association of California Architects.

With an attendance of approximately one hundred architects, the meeting was held February 28, 1928, in San Francisco. Four of the members of the Northern District of the State Board of Architects were present at the meeting and presented the situation to the assembly. Albert J. Evers, then secretary of the board, pointed out that enforcement was not uniform over the entire state. He proposed that, to make the law equitable, enforcement should be uniformly applied in the smaller communities as well as in the large cities, and that this result be brought about by unanimous, organized support of the board by all certified architects in the state. Mr. Evers said, "The building industry and the public at large should place their influence and support behind the board, but it is hoping for too much unless the architects themselves make the primary moves."

Discussion from the floor showed that a spirited feeling of enthusiasm had been aroused. This manifestation of unity and conviction of thought was brought to a climax by the passing of a resolution calling for the formation of a temporary association of certified architects in Northern California to promote the enforcement of the Act, and for the appointment, by the President of the Northern California Chapter, of a committee to arrange for such organization and for policies and methods; and for the president to advise the Southern California Chapter, A. I. A., of this action, suggesting some similar activity in the southern part of the state.

An organization committee was appointed. Selecting for the organization the name, The State Association of California Architects, and deciding that all certified architects of California would be considered to be members, the committee set about outlining general purposes and objectives. The organization committee issued a circular letter addressed to all certified architects in

the Northern District. Outlining the work to date and advising of the drafting of a constitution and by-laws, this letter stated that a meeting would be called to vote on such documents; and that, prior to this meeting, a conference would be held with architects in the Southern district.

A general correspondence had been carried on with the secretary of the Southern District Board, and with Myron Hunt, then regional director of The American Institute of Architects; but an opportunity to present the matter to the directors of the Southern California Chapter did not immediately occur. As a result the organization committee in the North, spurred on by the impetus given it by the enthusiasm manifested on every side, deemed it advisable to call a general organization meeting before the Southern California Architects had been more than barely advised of the movement.

Just at this point, very fortunately, the annual joint meeting of the State Board of Architecture was held in Los Angeles April 10 and 11, 1928. The Northern District Board members were fully informed of the work which had been done on the Association because the secretary, as an ex-officio member of the organization committee, had participated in all of its deliberations. The entire membership of the Northern District Board attended the Los Angeles meeting and, after considerable discussion, the Southern Board agreed to support a state-wide movement as represented by the proposed State Association.

The second week following the joint state board meeting, the secretary and the regional director, who was also a member of the state board, met with the directors of the Southern California Chapter, A. I. A. Again, after much discussion, it was agreed that while the directors were not unanimously in favor, they were at least convinced of the advisability of a state organization under the auspices of and with the support of the Institute chapters.

THE Southern California Chapter called a mass meeting of all certified architects May 8, 1928, and invited a delegation from the North to help present the situation. The outcome of this meeting, attended by over 200 architects, was the passing of a resolution calling upon the president of the Southern California Chapter to appoint an organization committee to work with the similar committee in the North. The following day the Northern delegation met with a group from the South. Many of the details of organization worked out at this meeting were those finally adopted. It is interesting to note that at this meeting it was decided not to prosecute violations of the Certification Act, but rather to prepare for revision of the Act at the earliest possible date.

There was then undertaken the huge task of effecting an organization embracing the some 1200 architects scattered from one end to the other of the nation's second largest state. The state was divided into districts, and one architect in each district was asked to call the local

Architect in California"

HOW THE ASSOCIATION WAS ORGANIZED

A LL certified architects of northern California were invited to a meeting held by the Northern California Chapter, A.I.A., to discuss enforcement of the state Certification Act.

It became obvious that a state association was necessary to effectively deal with matters such as this. Decision was made to form the State Association of California Architects with every certified architect in California a member.

THE Southern California Chapter, A.I.A., was advised of this action, and called a similar meeting.

To bring all 1,200 architects in the state into the organization, the state was divided into districts. One architect in each district was appointed to call the local men together to elect a district advisor.

Upon certification, every architect automatically becomes a member unless, by written request, he excludes himself from the association. He is advised of his membership and the district advisor gets in touch with him and outlines the aims of the association.

There are two classes of members. Active members pay annual dues of \$3; associate members are those who do not contribute to the support of the association.

To provide funds, the association made arrangements with a building report service to furnish building project news in return for a commission. Last year, \$10,000 was secured from this source.

men together to acquaint them with the developments to date and to elect a district advisor. At the same time the organization committees were working on the framing of the constitution and by-laws.

The first meetings of the two sections of the newly formed Advisory Council were held in June, 1928, at which meetings the most important item of business was the selection by each council of two architects at large to serve on the Executive Board. The chapters of the Institute and the State Board of Architecture having named their representatives to the Executive Board, the two sections of the board held the first joint meeting at Santa Maria, a point midway between Los Angeles and San Francisco, July 17, 18 and 19, 1928. At this meeting officers were chosen to serve until the convention of 1929; and discussion revolved about the framing of the objectives of the organization and details of the constitution.

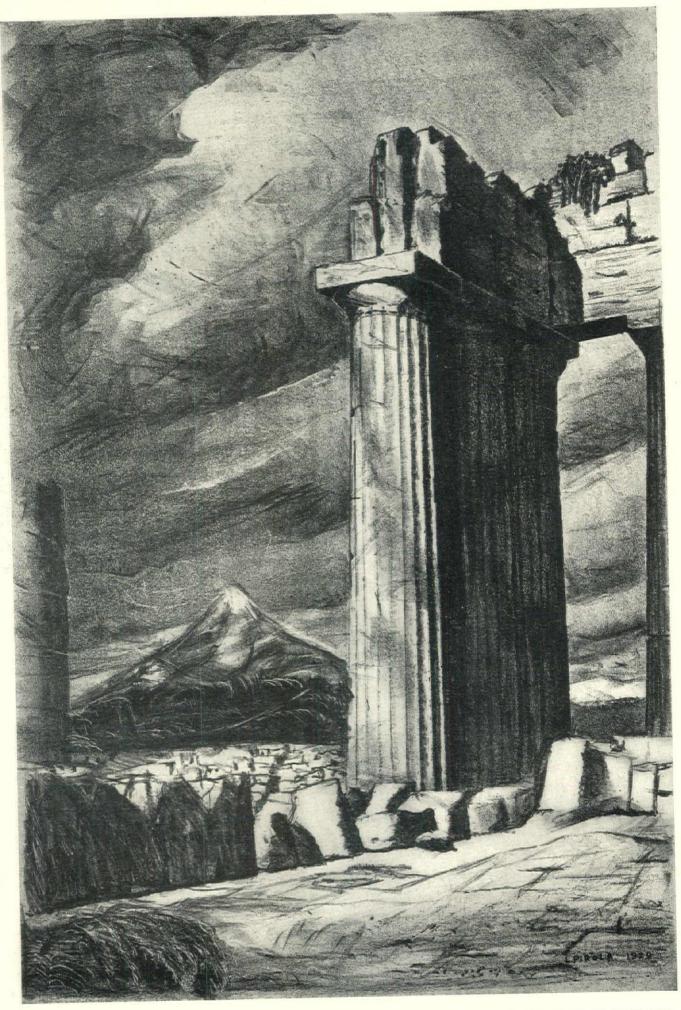
A T this point it might be well to introduce a brief statement of the purposes and organization as follows:

"The State Association of California Architects is a voluntary and non-profit organization comprising for its membership every person who, by authority of the state law regulating the practice of architecture, holds a certificate as an Architect in the State of California. The objects of The State Association of California Architects, as set forth in its constitution, are:

"To advance the science and art of architecture; to insure to the public efficient architectural service; to encourage architectural education; to maintain the honor and dignity of the profession of architecture; to enlighten the public in relation to the province of architecture in the body politic; to advocate proper legislation and to oppose improper legislation affecting architectural practice; to support the State Board of Architecture; to cooperate with other professional associations, and to cultivate social intercourse among its members.

"The highest authority of the organization rests in a democratic gathering of architects in annual convention held in October. In the interim between conventions full power and authority, within limitations fixed by the constitution and by-laws, is vested in an Executive Board. For administrative purposes the Association is divided into the Northern and Southern Sections with headquarters at San Francisco and Los Angeles. The Executive Board of each section is composed as follows: Two members named from its membership by the district board of the State Board of Architectural Examiners; two members named by the local chapter, or chapters, of The American Institute of Architects; and four architects at large elected by the Advisory Council of the Association. The Regional Director of The American Institute of Architects for its ninth district is, ex-officio, a member of the Executive Board of The State Association of California Architects.

"The two sections have been further divided—usually by counties—into districts (Continued on page 80)



THE AMERICAN ARCHITECT



JOHN KNOX HOUSE, EDINBURGH

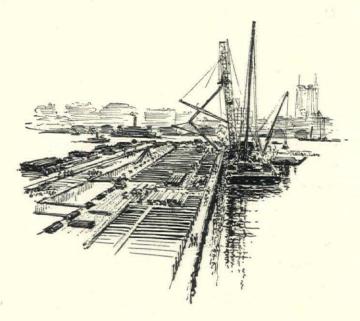
crayon drawing by
GEORGE WITHERSPOON
of Theodore Visscher & James Burley
architects, New York

A HUDSON RIVER DOCK

pen and ink sketch by
H. L. McCALL
of New York

RUINS

lithograph by LOUIS PIROLA of Chicago



SKETCHES

10000

· As It Looks

Why Conceal True Beauty?

HE bridge across the Hudson River from Manhattan Island to New Jersey nears completion. Strong, stalwart and

beautiful, the massive steel towers rise skyward. They are true, honest, sincere. They need no added virtues to make them satisfy the eye. The original design calls for these towers to be encased in stone. Neither beauty nor utility would be better served by covering the massive steel columns. Why do it? The Port Authority has stated that final decision has been reserved. Some forty persons have protested the concealing of the supporting structural elements to one that argues for it. Truth is beauty. Why conceal it?

Unification Plan Progresses F vital importance to the architectural profession was the meeting of the Unification Committee, recently

held in Indianapolis for the purpose of developing a plan whereby the American Institute of Architects and the various state societies would be combined in an harmonious whole to work unitedly for the good of the profession. The committee was appointed at the San Antonio convention of the Institute, Edwin Bergstrom of Los Angeles being chairman. A working plan was developed which, however, is not yet in final shape for publication. It is expected that the plan will be presented to the Board of Directors this fall and finally voted upon at the next convention of the Institute, to be held this coming spring.

Let's Face the Facts UGUBRIOUS indeed is the picture painted by James Dalton in his article in this issue, "Let's Face the Facts and

Go Back To Work." But it is a picture that needs to be clearly understood. It is a picture that many farseeing architects will feel strikes close to home. For with lessened construction, with lessened business prosperity in general, the architectural profession need look for no easy plums to pick. What business there may be -and there always will be plenty, no matter how bad conditions may be-will go to the men who buckle down to hard work with a full realization of what confronts them. If architects are content to wait for their share of business to be handed over on a silver platter, they will sit down to many an empty dinner table. But if they make sure that the public understands just how valuable an architect is, just how great is this value in cold, hard dollars and cents, then it is reasonable to expect that they will handle a larger percentage of the building business than they ever did before. And this larger percentage can more than take care of the decrease in the total number of building operations. To get this larger percentage needs merchandising ability of no mean order, carefully planned cooperative advertising campaigns, and aggressive salesmanship.

Army Buys Russian Matches ITH our own American industries needing business, it seems farcical to read that the United

States Army, requiring matches, called for bids and accepted that from Russian manufacturers. This bid was 25% below that of the lowest American bid. Under the law, according to Major Barry of the Quartermaster's Department, the Army must accept the lowest bid.

If the Public Only Knew F the public had a better understanding of the functions of the architect, it is probable that the attitude of

Government officials would be far different from what it is today. Since the public generally believes that the function of an architect is to make drawings, it sees no reason why those in government employ cannot make just as good drawings. As a matter of fact government employees can make just as good drawings and if these were the sole function of an architect, little would remain to be said on the question.

A Trademark Idea A CERTAIN architect, well, Harold Zook, Chicago, Ill., to be exact, has adopted a trade-mark. It is a

spider web. Just why a spider web he fails to explain. But it's the idea that counts. On every job he finds a place to work in his insignia—in the pane of a leaded window, painted in the corner of a wall or as other opportunity may offer. It is a fortunate insignia, for should he fail to place his stamp of authorship on a building, probably a spider would find its own place to spin a web.

Material Advertising ONSIDERABLE harm is being done to the development of public good taste by the use in building

material advertisements of poorly designed and even ugly buildings. Realization of this harm, which reacts to the detriment of the advertiser, caused the Indiana Society of Architects recently to pass the following resolution:

"That the Indiana Society of Architects questions the value of the advertising of building materials in newspapers, magazines, or other mediums that include with the advertisement illustrations and descriptions of poorly designed work not executed by architects. In the opinion of the Society the publication of stock plans and illustrations of poorly designed buildings in connection with the advertising of worthy building materials, leaves a false impression in the minds of the public as to the quality of the materials, is misleading as to what constitutes good design, and should be discontinued."

to the Editors

Washington Fees Raised ARCHITECTS' fees are not high enough to cover production cost and to show a profit commensurate with the

skill and experience necessary to design and plan a thoroughly efficient building. It is consequently of considerable interest to note that the Washington State Chapter, A. I. A., has adopted a new and higher schedule of charges. Their new fee for commercial, educational and similar buildings is from six to seven per cent; on churches, collegiate buildings, etc., seven to eight per cent; on residences, alterations, store fronts, interiors, etc., ten to fifteen per cent. The new schedule states that two-thirds of the commission represents production cost, and the remaining one-third professional fee.

Called "Fuller Brush Man"

NE New York architect is called by his associates, "The Fuller Brush Man." Why? Because he has

developed a penchant for ringing doorbells. Recently he located three schoolhouse jobs in one day, each running well over one million dollars—just because he doggedly went out ringing doorbells. And consequently, his firm is in at the inception of the projects instead of being informed after the usual rush of competition starts. That is the easiest sort of selling, finding the prospect in time to help him make up his mind.

The Oldest A.I.A. Member

HE distinction of being the oldest living member of the American Institute of Architects is held by George

Keller of Hartford, Connecticut. In 1869 he became an Associate member and was made a Fellow of the Institute in 1886. If memory is not at fault he is eighty-eight years young, and hale and hearty. Among his architectural monuments is the war memorial gate at the entrance to the State Capitol grounds at Hartford, Connecticut. It was erected soon after the close of the Civil War and is an interesting monument of its time with its towers and frieze of soldiers in the uniform then in vogue. Many persons have passed through the gateway. Almost as many vogues in architecture and building have passed before the eyes of its designer.

Congratulations Dr. Butler!

A DEGREE of Doctor of Science has been conferred on Charles Butler of New York City by Rensselaer

Polytechnic Institute. Ordinarily this would not be news for honorary degrees are often conferred on deserving architects. But, when a school primarily recognized as an engineering school confers a degree on an architect, and it happens in New York State too, it becomes news. Congratulations, Dr. Butler!

Quotes Or No Quotes DITORS have many perplexing questions placed before them. Here's one. When an inscription reading, for

instance, Ben Franklin said "So and so," is placed on a building, is it essential that quotation marks be used? Apparently the question arose due to letter spacing or decorative consideration of the punctuation marks. Do inscribers, like poets, have special license? Is the omission of the quotation marks in such event justified by precedent? What would you say?

Many Men, Little Work AXPAYERS in Hartsdale, N. Y. voted on two propositions, one for the purchase of a \$13,000 fire truck and the other

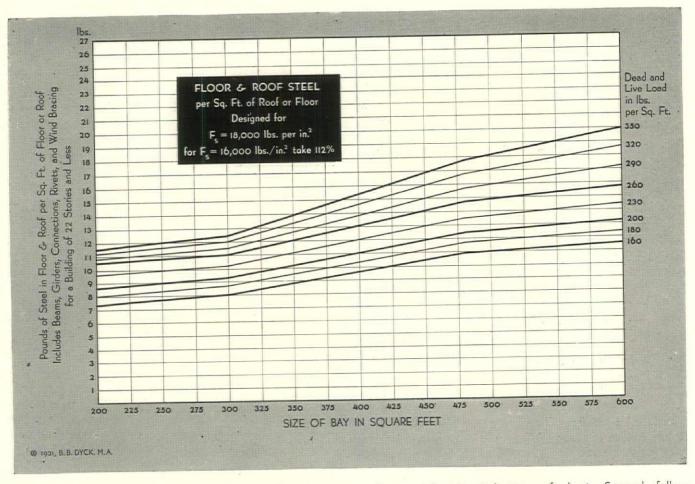
to pay six men to operate the truck. The proposition to buy the truck lost. The proposition to engage six men to operate it won. The town found itself with six truckmen and no truck. This condition maintains in many lines of endeavor. The simile can be given wide and obvious application today.

Maybe Wall Paper Helps A STORY is going the rounds of two men who purchased houses that had been built on speculation in the

same development. They met several years after their purchases and were comparing notes. One complained about the way his house had gone to pieces and thought that the other's house had stood up better. The second man explained it by calling attention to the fact that the walls of his house were papered when bought and that the walls of the other house were only painted.

Architects In Industry B EAUTY is an intangible quality which, because of its very intangibility, is a thing difficult to secure, particu-

larly in a commercial product. Such products are only too often the output of a designer who, though often thoroughly understanding the material he uses, yet has not the viewpoint of a trained artist. And so it is refreshing to see advertisers in the building field come more and more to a greater appreciation of the architect as a designer of their products. Among these is the Harrington and King Perforating Company, which recently conducted a competition for grille designs. As is usual with sketches submitted by those skilled in architectural design, the results were decidedly pleasing. Beauty has a large cash value, and it is to be hoped that more and more manufacturers will come to the architect for expert advice and counsel in order that the full measure of beauty possible may be obtained.



BEAMS—First, determine number of square feet in average bay and locate at bottom of chart. Second, follow vertical line to where it crosses heavy lines. Third, knowing the design load, locate this load at right side of chart. Fourth, follow heavy line to its intersection with vertical line found in second step. Fifth, follow light horizontal line from this intersection to left of chart. Sixth, multiply this figure by number of square feet in typical floor, multiply result by number of column-supported floors. This final figure is weight of steel in pounds for floor construction.

HOW TO Structural Steel

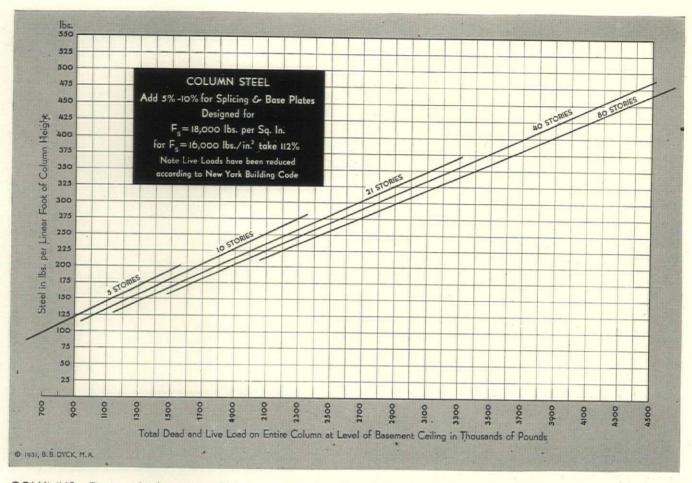
Mr. Dyck is an engineer who, to speed up his own estimates, developed this quick and easy method of figuring the amount of structural steel in apartment, hotel, office, and loft buildings of the standard commercial type.

TRUCTURAL steel is one of the major items of building cost and requires for its detail quantity estimate an unproportionally large amount of time. The tonnage of steel in a building with a given ground area varies with the loads carried, spans and height. All other conditions being the same, the shape of the building has a negligible effect on the weight of steel required per square foot of floor and can be disregarded in all cases where relation of width to length does not exceed 1:3.

An ideal short-cut method of estimating steel for a commercial structure ought to have the following features: a scientific basis, simplicity in use, economy of time.

With the case in hand a scientific basis can be established: first, by a realization of cause and effect; and second, by the application of the principles of applied science to establish the continuity in the relationship of these two phenomena.

In seeking the cause, we have to discard classes of buildings as inadequate. As far as steel is concerned, any class of building is designed to carry loads. If we assume that four classes of buildings—apartment, office, loft and warehouse—cover the total range in loads, we still have a range in loads within each of these classes, as building codes of various communities will show. Loads, dead and live, thus, are the prime cause. The effect is a certain amount of steel for a given column spacing, as far as floor or roof steel is concerned. Ex-



COLUMNS—First, multiply square feet in average bay by design load. Second, multiply result by number of floors, which gives total load at level of basement ceiling; locate corresponding figure at bottom of chart. Third, follow vertical line from this figure to heavy line indicating number of stories. Fourth, follow light horizontal line left, where will be found pounds of steel per linear foot of column height. Five, multiply this figure by height of building, also by number of columns. This final figure gives total steel in all columns.

Costs in 30 minutes

By BERNARD B. DYCK, M.A.

pressed in other words, each given design load and column spacing will effect a certain amount of floor steel per square foot of floor area. The latter quantity, thus, is dependent on two independent variables, the design load and bay size. Using the language of mathematics, we would say that amount of steel per square foot of floor is a function of design load and bay size. The accompanying floor chart is the expression of this relationship. It shows that floor steel increases with the increase of either design load or column spacing.

With column steel the case is not so simple. Height enters here as another factor, both story height and number of stories. Column steel per square foot of floor, thus, is a function of bay size, design load, story height and number of stories. The other three variables being constant, column steel per square foot of floor

increases with the increase in the number of stories, increases with the increase in story height, increases with the increase in the design load, and remains constant with the increase in bay size. The latter holds true, however, only as long as base plates are not included. In other words, the amount of steel here is a function of four variables.

To leave the four variables in the picture and still get a chart of maximum utility, it was found necessary to change the unit quantity to be found from "column steel in pounds per square foot of floor" to "column steel in pounds per lin. foot of column." This unit quantity is independent of story height within the usual range and, the other variables being constant, increases with the increase in bay size and design load, but decreases with the increase in number (Continued on page 86)

« » » In the
Foothills of
the Pyrenees

OLORON SAINTE MARIE

Ву

TRENT ELWOOD SANFORD

Architect, Evanston, Illinois

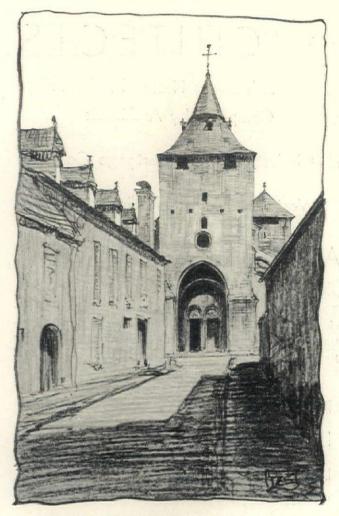
HERE are certain monuments of architecture, certain cities of architectural and historical importance that we all include, as a matter of course, in our travels through Europe. In some, especially if we have a tendency to too thoroughly visualize, we are disappointed; in most we are not. In any event, those places and those monuments we take more or less for granted. We knew them before we saw them, and we know them better for having seen them, and we are not sorry—we even want to see them again.

But the places that stand out in our memories—memories that we do not share with everyone who has seen Paris and London and Rome—are those places and those things that are unheralded; some obscure bit in an unknown town; some little village tucked away out of reach of any but the most zealous searcher or the least impatient with branch line railroads. Vast cathedrals and history-making palaces satisfy in us an urge, but in doing so often leave us overwhelmed, and then is the time to indulge in simpler things for the sheer enjoyment we get from them.

So when your brain is fagged, when your senses be-

come numbed with the beauty of Gothic cathedrals and your mind a jumble of Renaissance chateaux, here is a suggestion.

In the foothills of the Pyrenees, not far away on a branch line railroad from Pau, but in decided contrast to that so-called Paris of the south, is a little village called Oloron-Ste.-Marie. It was once two villages divided by the Gave d'Aspe which unites with the Gave d'Ossau to form the Gave d'Oloron, but when Henri IV became king of France and the crowns of Bearn and of France were united, so too, were the villages of Oloron and Ste.-Marie. Once a feudal stronghold, it



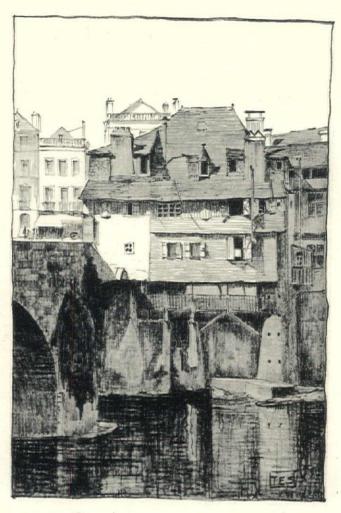
ELEVENTH CENTURY Church of Sainte Marie, once the cathedral of the diocese. Of prime interest is the richly sculptured Romanesque portal

then settled down to the peaceful existence which it enjoys today beside the swift-moving streams upon which it is built.

On the sides of these streams balconied houses grow out of the rock, piled up one above another, winding steps leading from their doors through openings in the walls below down to the water's edge. Between them, along the narrow streets, huge black oxen vie with bonnetted women carrying large baskets heaped high with vegetables for possession of the right of way. Men wearing berets, baggy trousers, and long dusters hold aloft long sticks with which to guide their patient teams, who, stepping slowly and heavily along, heads down, turn at a light touch of that long stick.

It was market day when we were there, and the Place Gambetta was crowded with stalls of fruit and vegetables, and all sorts of clothing as well. All of the nearby streets were lined with carts; where the horses were, I can't imagine—perhaps the stout women tending their stands had pulled the carts to town themselves.

Typical of old French towns, the streets wind and twist, and along them, houses of one or two stories on the street drop down five or six on the water front. Many have thick walls of stone rising abruptly from the stream, with upper stories of stucco or slate. The roofs are steep and are of tile or slate, thoroughly punctured with slate-covered dormers, in character more like



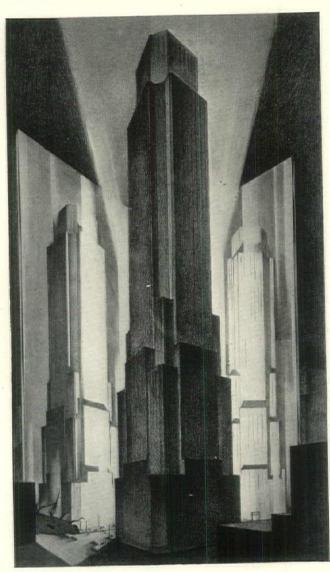
BALCONIES afford delightful places to sit and gaze at the water—but are popularly used to hang out laundry. Old house, Place Thiers

the houses of Normandy or Brittany than those of Provence to which they are nearer in miles though not in spirit. Balconies clinging to the sides of the houses afford delightful places for the dwellers to sit and gaze down at the water, but are more popularly used for hanging out laundry.

A PICNIC lunch in some secluded spot along one of the streams appealed to us as being more fun as well as cheaper than lunch at the rather uninviting looking hotel. So, after a morning of wandering, photographing and sketching, we hastened back to the market where huge melons sold for a song but grew heavy while being transported to a picnic ground. Tomatoes, a long loaf of bread, camembert cheese and gaufrettes added to the load (the weight of the gaufrettes the least), and a litre of wine at a cost of three francs did its bit to bring out the perspiration which a hot and bright September day had started.

A zigzagging path leading down behind old houses to the stream where the banks were not so steep opened out eventually into a grove of trees and a stone wall along the water. Old deserted stone mills across the stream framed the curious old domed church of Sainte Croix, rising above the houses on the summit beyond. The huge trees afforded shade, the stone wall a seat, and slices of melon soon (Continued on page 96)

WHAT ARCHITECTS



ALL SIDES AT ONCE. An imaginative study rendered with Wolff's crayon by T. de Postels Studio, showing possibilities of presenting all sides of a structure in the one drawing

THE National Homes Finance Corporation has been organized by the Associated Leaders of Lumber & Fuel Dealers, and is stated to be the first industry-owned mortgage company. The first stockholders' meeting was planned to be held July 14 in Chicago. Alton J. Hager, Hager & Cove Lumber Co., Lansing, Mich., was made temporary chairman of the incorporation committee, and nearly two million dollars have already been subscribed.

A SERIES of radio programs has been started by the building industry of San Antonio under the leadership of the West Texas Chapter, A. I. A. Thirty minutes will be used each week for three months. The programs will consist of music with a five minute talk by an architect, these talks to form a continued story about the importance of good design, the functions of an architect, financing, etc.

Borhek Advocates National Advertising Campaign by Architects

First Industry-Owned Mortgage Company

West Texas A. I. A. Radio Programs

A NATIONAL exhibition of the allied arts of design is planned for Washington during the Institute convention in 1932, according to J. Monroe Hewlett, chairman of the Committee on Allied Arts of the A.I.A. The National Sculpture Society and the National Society of Mural Painters are cooperating with the Institute in arranging for this event. It is intended "to bring to the national consciousness the importance of allied arts in our architectural development."



ANOTHER SKYSCRAPER for downtown New York is now under construction at 19 Rector Street. Lafayette A. Goldstone, architect; Herbert Lau and Hugh C. Porter, associates

O speed limit on New York elevators is provided for in the new building code, and several buildings will shortly step up their rate from 700 feet per minute to 1,200 feet per minute. The new code also permits the operation of two elevators in one shaft.

ARE TALKING ABOUT

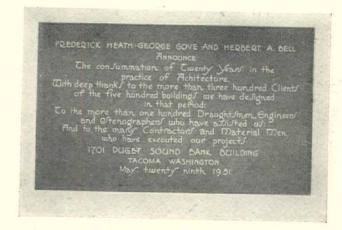
Washington A. I. A. Wants Government Out of Architectural Business

No Speed Limit on New York Elevators

First Arc Welded Steel House

WHAT is believed to be the first house of complete arc welded steel construction built in the United States was recently started in the Shaker Heights district of Cleveland, Ohio. Three inch light weight standard Carnegie channels and six inch light weight standard Carnegie beams are the principal shapes employed, all steel being cut to size before delivery to the job. It is expected that the entire arc welded steel framework will be erected in 2½ working days. George Howard Burrows, the architect, states that the house will cost about 40 cents per cubic foot, and that the complete cost will be about \$72 more than the usual type of wood structure.

A LL members of the Associated Metal Lath Manufacturers have approved the certification plan of the Bureau of Standards. Under this plan, any public official, architect, building owner or contractor who desires uniformity of bidding and the use of high quality products requests manufacturers to state in their bids that they are willing to certify that their products will conform to the Federal Master Specifications governing metal bases for plaster and stucco. The successful bidder tags materials shipped for the specified contract,

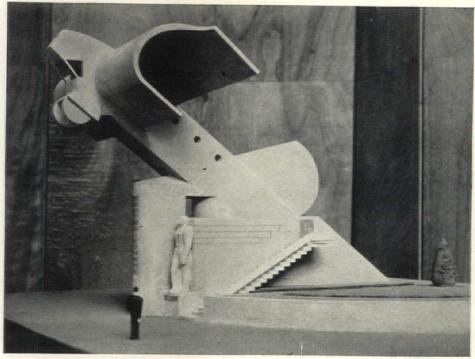


TWENTIETH ANNIVERSARY card form mailed out by progressive firm of architects in Tacoma, Wash.

indicating that they are made in accordance with the Federal Master Specifications.

S INCE only a small proportion of the building public now employs architects, a national advertising campaign should be instituted to inform the public and create a demand for adequate architectural service, is an opinion expressed by Roland E. Borhek, president of the Washington State Chapter, A. I. A. He said that similar work was being done for other professions and should be done for the architect.

"THIS Chapter is strongly in favor of any action being taken to get the Government out of architectural practice," is a statement in a report of the Institute Affairs Committee of the Washington State Chapter, A. I. A. (Continued on page 102)



REINFORCED CONCRETE.

Model of monument to honor the memory of the French transatlantic flyers, Coste and Bellonte. Designed by the twin sculptors, Jan and Joel Martel of Paris

BONNEY

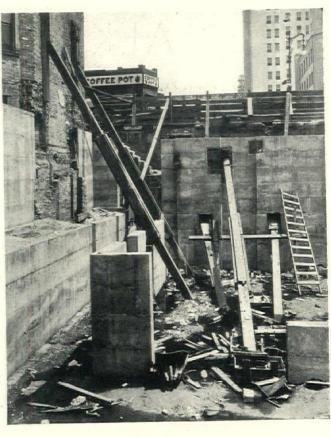
Is architect liable for DEFECTIVE Foundations?

By GEORGE F. KAISER, LL.B.

• WHAT HE DID. A. B. Stemer, an architect, prepared plans and specifications and superintended the construction of a hotel. On completion there was some \$8,000 due him. When the owner refused to pay, Stemer sued. The owner put in a counterclaim for damages alleged to have been sustained by reason of "faulty design, defective plans and specifications and want of care and skill in the erection and completion of the building." Stemer, in turn, denied the owner's claim and pushed his suit on to trial, even when advised the claim of the owner was predicated on a charge that one of the walls was so badly cracked as to depreciate the value of the building.

WHY HE DID IT: The architect disclaimed liability and insisted that the cracking of the wall was due to defects in the foundations, thinking he was not responsible for such defects.

WHY HE SHOULDN'T HAVE DONE IT: When the case came on for trial the court decided against the architect and in favor of the owner on his counter claim, saying, "That the construction of the building was de-



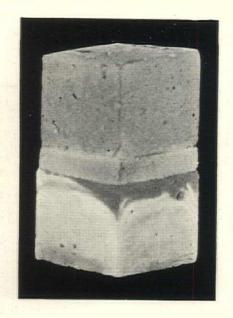
fective is clearly shown by one of the walls being so badly cracked as to depreciate the value of the building. The architect does not deny the existence of the crack but attributes it to a defective foundation at the place in the wall where it is found. It was the architect's business and duty to see that the building was constructed with reasonable care. A building is not constructed with reasonable care when the foundations are so defective as to cause the walls to crack. The building by repairs and alterations, we conclude, from the evidence, could be made to be of the value it would have been had it been constructed with proper care for about the sum claimed by the architect. We, therefore, conclude that the architect ought to recover nothing in this action and a judgment for costs should be entered against him."

Contractor's Claim for Extras Not in Writing

•WHAT HE DID: An owner desired to remodel a certain building. The contract expressly provided that no extra work would be allowed unless an itemized estimate thereof should be submitted by the contractor, and an order in writing be given by the architect. After the contract had been fully performed and paid for, the contractor put in a claim for alleged extra work he claimed had been orally authorized by the architect, although never furnishing the itemized estimates called for.

WHY HE DID IT: The contractor insisted that he had done certain extra work and that he was entitled to be paid for it even though the provisions of the contract as to extra work had not been complied with, claiming that the architect was the owner's agent and as such had waived the provisions with respect to "extra work."

WHY HE SHOULDN'T HAVE DONE IT: The court, however, decided against the contractor and in favor of the owner and, in explanation, said, "The architect was expressly made the agent of the owner for the purpose of the contract, but such agency, so far as it related to making alterations or directing that extra work should be done, was limited to such orders as the architect should give in writing. The restrictions on the authority of the architect were for the protection of the owner. The contractor is not required to make changes or perform extra work unless he first receives written authority therefor and the contract is therefore neither unreasonable nor severe and it should be enforced. An agent cannot enlarge his own powers by waiving the limitations thereon."





There's just one material that will stand a test like this

THE NEW CARNEY CEMENT

THIS cube of common brick, laid up with one part new Carney Cement to three parts sand, was immersed for two days in sodium sulphate solution to a depth of one-half inch. Sodium Sulphate, as you know, is the common cause of efflorescence. The lower brick absorbed the solution immediately and efflorescence became apparent in it within twenty-four hours. But Carney Cement prevented its spread into the joint and the upper brick completely—which demonstrates two great improvements—the control of efflorescence and the effective resistance of this new material to the absorption of moisture. This same test was tried with several other materials, and in every case the solution was drawn up through the joints into the top bricks, causing hideous disfigurement.

The perfection of a masonry material that resists the spread of efflorescence and assures water tight joints is but one of the marked advances in Carney Cement. Now, Carney Cement attains its full smooth working qualities the instant it is mixed—without soaking, slaking or adding lime. Furthermore, because of its moisture resisting characteristic, it holds colors perfectly. A Carney representative will make a practical demonstra-

tion for you in your office or on the job. Call your nearest office.

CARNEY

COMPANY

DISTRICT SALES OFFICES

CHICAGO

CINCINNATI

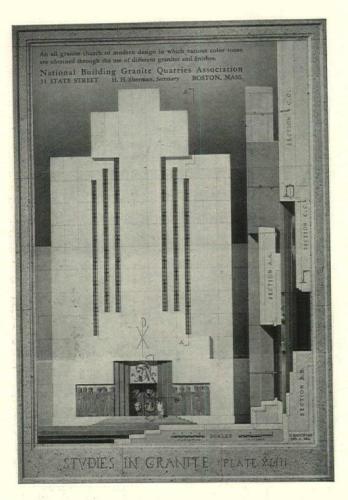
DETROIT

ST. LOUIS

Mills: Mankato and Carney, Minn. Originators of Masonry Cement-Established in 1883

(for Brick and Tile Mortar

THE READERS Have a Word to Say



AN ARCHITECT WHO ADVISES MANUFACTURERS

NOTE: The editors were sent a proof of one of the excellent "Studies in Granite" of the National Building Granite Quarries Association with the comment that, "It is intended to prompt the architect to think in terms of modern quarry methods of granite when designing buildings to be executed in that material." Upon inquiry, the following letter was received from Vahan Hagopian, A. I. A.

Editor, THE AMERICAN ARCHITECT:

YES, I am doing the entire series of the "Studies in Granite," of which I sent you Plate 43.

At the inception of this work I suggested to the National Building Granite Quarries Association this method of presentation of their material to the architectural profession. My theory was that this academic form of illustration would appeal to the architect as well as to the student and besides, it having an attention commanding value, would help to make the new generation in the profession granite-minded.

The Association's hope of getting about one thousand requests for reprints has been exceeded by more than

ten thousand already. I understand that several architectural colleges in the country are placing these plates in the hands of students as examples of composition and rendering.

I also have reasons to believe that a series of 26 plates which I made for the American Enameled Brick and Tile Company was the cause of glazed brick being used in the Chrysler Building. These plates depicted new uses for decorative purposes of a material heretofore used in courts and service quarters.

Among other such accounts I have the Anaconda architectural bronze and the Hanley tile. I also advise a number of building material manufacturers as to their products.

At present most advertising pages are so hideously laid out that they are unbecoming to the standard and dignity of a paper serving a body of highly cultured professional men.

Most manufacturers at present sin by ignorance. Often they are advised by an agency whose art director knows nothing about architecture and architects, and who makes no distinction between the architect and the public to whom he also tries to sell canned soup. The advertisements are laid out with the same appeal and illustrated with the same methods, with the result that unless the architect is actually looking for such information he will turn the page. . . . The manufacturer not getting the expected returns on his advertising campaign will discontinue or curtail it to the detriment of the magazine to which he is vital.

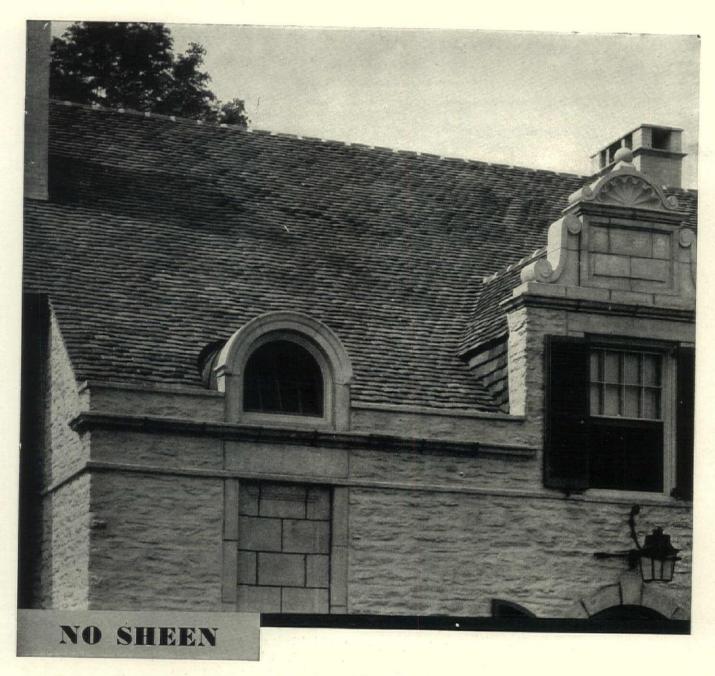
Concluding this letter, for the length of which I apologize, I wish to refer you to an editorial "Advertisers who Forfeit Respect" which appeared in The American Architect, April 1931, in the department "As It Looks to the Editors." And also to the one by F. S. Lawrence which appeared in The American Architect of November, 1929, under the heading of "The Architect as an Advertising Objective."—Vahan Hagopian, A. I. A., 400 East 58th street, New York.

• AN IDEA TO KEEP DRAFTSMEN EMPLOYED

Editor, THE AMERICAN ARCHITECT:

N these days of general gloom in architectural circles with perhaps hundreds of draftsmen tramping from one office to another seeking employment, the question arises, "Why is it that architects dismiss the draftsman as soon as a slack spell occurs? Is it not possible for architects to carry their men over these periods?" In answer to this puzzle, I am writing with a hope of promoting possible improvement in the relation of the architect to his draftsmen.

We cannot overlook the fact that the average architectural draftsman is handicapped by the confinement of his employment, which curbs his view and thought of the various problems pertinent to an architect's suc-



or unpleasant reflection detracts from the soft beauty of this tile roof. And yet it is perfectly appropriate for the chateau character of the detail. The pattern used is Ludowici "Antique" Shingle Tile. Note the barrel tiles used on the ridges and hips, and the fine texture due to warpage of the tile as well as to the actual laying. Ludowici



Residence of A. B. Steele, Chestnut Hill, Pa. Robert McGoodwin, Architect

Tile is the most adaptable of roofing materials in its appropriateness for all types of architecture. The cost is reasonable, the protection permanent. We will gladly mail our catalogue or have a representative call. And, your attention is called to our pages in Sweet's.

LUDOWICI TILE

Made by LUDOWICI - CELADON COMPANY CHICAGO: 104 SOUTH MICHIGAN AVE.

NEW YORK: 565 FIFTH AVE. • WASHINGTON: 738 FIFTEENTH ST., N. W.

cess. As a rule, he is ignorant of the possibility of heavy losses on certain architectural commissions. He has never been introduced to the well-known Green Dragon -"overhead expenses," "costs," "back charges to the architect for errors," etc., and he seldom stops to analyze his obligation to his employer other than the giving of so much service for an agreed sum per month.

It is quite true that the architect's fees are considerable, but it must be remembered that a goodly portion of a fee is absorbed in the drafting room. For an architect to succeed he must pursue a course similar to those in other lines of business, namely: the overhead's relation to income must be continually watched and controlled, and should this be ignored a draftsman is sure to lose his position with a possibility of the architect

passing out of the picture also.

We must expect that some fine day the draftsman will see the possibility of securing his first commission; as a rule he is all enthusiasm. He does not stop to take inventory of his qualifications but feels that with his drafting room experience he is justified to take this commission and become independent. He puts out his shingle and is the last word in self-satisfaction. He does not realize that to succeed he must receive additional commissions and at reasonable intervals.

Has he taken this first commission at the established fee or did he cut his fee to attract a client? Does he realize that he is now competing with a hundred or more established architects, most of whom have many completed buildings to their credit; in other words, established reputations, which is one of the most valuable assets to a practitioner? Does our beginner have sufficient foresight to know the necessity of sufficient capital to carry on his business over slack periods? Has considerable of his labor put in sketches come to naught? I am afraid he has overlooked many of these important details and it is to be expected as there are many important departments in an architectural office's make-up of which he is ignorant, and I can almost say he is now discouraged and cannot understand why as an architect he should meet failure when he was going to the top of the ladder in the drafting room.

Viewing this situation from another angle, let us assume that this draftsman made it his business to secure commissions where possible for the firm that employed him. He might succeed in bringing in one, two or more commissions a year and he would naturally receive special remuneration from his firm, making this practice profitable and fascinating. He would become more valuable to his firm and there is no question but what this feature would be readily recognized by his employers. Furthermore, he would have the satisfaction of knowing that while the client he secured would pay the usual fee, the client would be much more satisfied with the complete services of an established and experienced firm than the first piece of work undertaken

by a beginner.

As time rolls on and our young friend finds it possible to secure additional commissions, it is more than likely that he will become a junior partner in his firm which affords possibilities and substantial promotions. If our draftsman now wishes to start in the practice of architecture under his own name and with the reputation of the firm that he has been associated with, he is well pre-

pared to do so. But jumping out with that first commission, while a short cut, often leads to disaster and is by no means the quickest way for an architect to succeed.

I might mention that over a period covering thirty years I have seen many young men of promise take this unfortunate jump and in almost every case their business existence lasted less than two years. Furthermore, the unhappy feature of the young architect's failure is that he eventually goes back to the drafting board, broken in spirit, courage gone, and with a distorted view toward the profession that is despair in itself.-M. Nirdlinger, A. I. A., Empire Building, Pittsburgh, Pa.

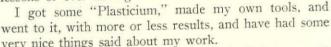
ARCHITECTS' HOBBIES

Editor, THE AMERICAN ARCHITECT:

WAS very much interested in "Architects" Hobbies" in "As It Looks to the Editors," published in your May issue. Thinking you might be interested in mine. I am taking the liberty of sending you a specimen.

In extenuation of the perpetration, will explain that the said hobby has been taken up within the last few years without

lessons or ever having seen the work done.



modeled bust made with the aid of mirrors and calipers. Would also add that I was enjoying my seventy-ninth year of age while doing it. One very kind friend remarked that I had made a pretty good job of it, as it looked almost intelligent!-Edwy. E. Benedict, A. I. A., Waterbury, Conn.

very nice things said about my work. The enclosed photo is one I "Kodaked" from a self

MORE ABOUT PIPE ORGANS FOR PUBLIC SCHOOL STAGES

Editor, THE AMERICAN ARCHITECT:

WE note Mr. L. N. Leet's letter of criticism in your June issue, (page 66) which is very interesting. The fact is that in our LaSalle High School we had openings into the auditorium as well as on the stage. When the organ was installed, the openings on the stage were used and those directly into the auditorium were closed and we supposed that this was the policy of the Aeolian Organ Company. We now learn that the openings into the auditorium did not meet the requirements of the Organ Company as to location or size. On that account, the openings into the stage were used.-Frank A. Childs, Childs and Smith, Architects, Chicago

Protecting the Federal Reserve

HE Birmingham Branch of the Federal Reserve is a typical example of the way the U. S. Government protects its property.

Each vault is individually protected by the A. D. T. Phonetalarm which reports all suspicious noises by wire to the A. D. T. Central Station.

Stations for night watchman supervision and fire alarms and for police calls are also permanently wired to A. D. T. headquarters.

All five branches of the Federal Reserve Bank of Atlanta use A.D.T. Service. Nineteen

Federal Reserve banks and branches and the great majority of the larger banks in every city are A.D.T. Protected.

A. D. T. has been a Symbol of Protection since 1873. Its electrical fingers and experienced patrol forces protect industrial, commercial and public buildings of all kinds — day and night.

Complete Protection is not expensive—in fact, the right combination of A.D.T. Services will often save your clients money.

Specifications in Sweet's. Catalog on request.

Controlled Companies of

American District Telegraph Co.

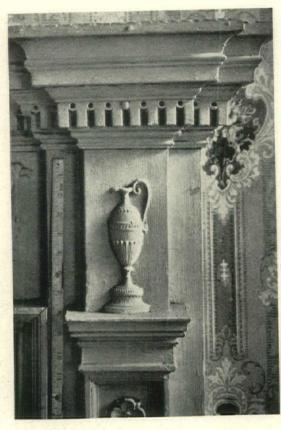
155 Sixth Avenue, New York, N. Y.



ARCHITECTURE ALLIED ARTS

S ENGINEERING BUSINESS ECONOMICS

ENGINEERING



Mantel detail, Stocker House. From "Colonial Houses of Philadelphia

COLONIAL HOUSES, PHILADELPHIA

By Philip B. Wallace, with measured drawings by N. Luther Miller. Published by the Architectural Book Publishing Company, 108 West 46 Street, New York. Illustrated; 248 pages; size 91/2 x 121/2; price \$20.00.

A FINE collection of pictures of pre-Revolutionary Philadelphia, with measured drawings of many interesting details. The photographs are all by Philip B. Wallace, well-known architectural photographer. Exteriors and interiors go to make up the book, and include buildings still lived in as well as those long since deserted.

ZONING IN THE UNITED STATES

Edited by W. L. Pollard. Published by the American Academy of Political and Social Science, 3622 Locust Street, Philadelphia. Illustrated by maps; indexed; 299 pages; size 6 x 9; price \$1.00.

THIS book is part of the annals of the American Academy of Political and Social Science and is a collection of articles published in them. It is divided into four parts, the first part covering the historical and legal aspects of zoning such as zoning laws and their relation to taxation, legal consideration in the planning of airports, analysis of zoning ordinances, etc. The second part covers the procedure of zoning, including stand-

ardization of zoning symbols, state zoning, business zoning, mechanics of zoning adjustments, etc.

Part three covers economics and zoning, including zoning and the home, effects of zoning on the investment in public works, etc. Part four covers the general aspects of zoning such as the esthetics of zoning, progress in the science of zoning, etc.



Fireplace in living room above boathouse, Gardner camp, From "Camps in the Woods"

CAMPS IN THE WOODS

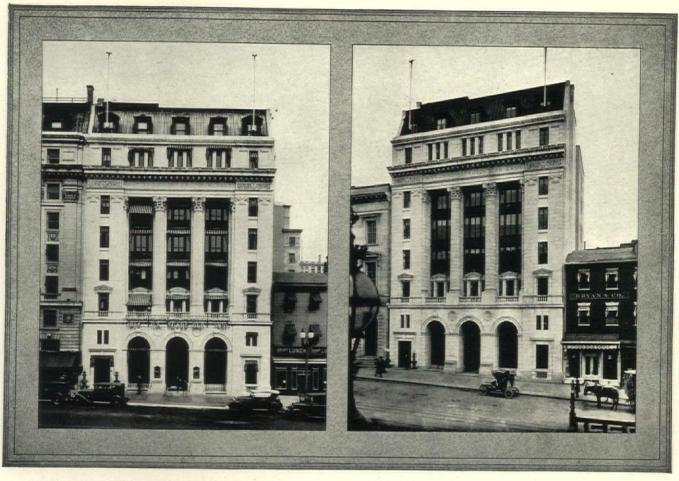
By Augustus D. Shepard, A.I.A.; compiled and edited by R. W. Sexton. Published by the Architectural Book Publishing Company, 108 West 46 Street, New York. Illustrated; 96 pages; size 91/2 x 123/4; price \$6.00.

M. SHEPARD has designed many summer homes in rural regions. This book presents a number of pictures and plans of such work of his, together with many photographs of details and also drawings showing construction.

There is considerable text covering Mr. Shepard's ideas of planning and construction; many of the things he has learned by experience are little known, such as the use of a flue enlarging towards the top when the height of the chimney is only about twelve or fifteen feet.

Architects interested in this class of work will find many interesting ideas scattered through the pages of the book, ideas on construction as well as planning and design.

Two photographs of a Georgia Marble building and one of them was taken 25 years ago



NATIONAL METROPOLITAN BANK, Washington, D. C., Gordon, Tracy & Swartout, Archts., and B. Stanley Simmons, Asso. Archt., Thompson-Starrett Co., Inc., Builders...One photograph taken in 1931, the other in 1906.

THERE is no change in the Georgia Marble... only the surroundings have changed. The lunch room on the right has worn several new fronts during the past twenty-five years; a theatre has been built on the left; the runabout with its buggy top has given way to the sleeker motor cars of today; Brownie and Pete have been out of the harness for a score of years.

WHAT CHANGES WILL ANOTHER
OUARTER CENTURY BRING?

A photograph taken in 1956 will no doubt show a new building on the right, new types of motor cars in the street, making today's models look angular and clumsy, and possibly a small helicopter hovering in the air waiting to drop into any parking space that might open up.

But through all of these changes, this Georgia Marble will still be as sound and beautiful as it is today... as it was twenty-five years ago, because Georgia Marble is non-absorptive. This essential quality deprives the elements of their favorite method of attack...getting below the

THE GEORGIA MARBLE COMPANY

Tate, Georgia

New York . . 1328 Broadway
Atlanta . 814 Bona Allen Bldg.
Chicago . 648 Builders' Bldg.
Cleveland . 1200 Keith Bldg.
Dallas . . 622 Construction
Industries Bldg.

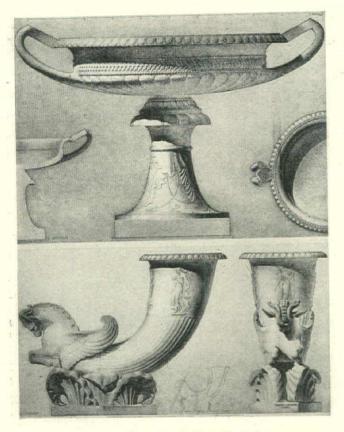
GEORGIA MARBLE surface and working havoc under cove. Georgia Marble being practically impervious to moisture, time and the elements can not dull its sparkling beauty. Georgia Marble is easily and economically cleaned—removing any dirt that has collected on the surface reveals its original beauty.

FREEDOM FROM REPAIR EXPENSE

This marble bank exterior is proving to be a sound investment. It will continue to pay dividends in beauty, dignity and freedom from repair expense as long as the owners care to let the building stand.

INEXHAUSTIBLE SUPPLY · STRICT
ADHERENCE TO DELIVERY SCHEDULES

It is safe to use Georgia Marble in any building program that is likely to extend over a period of years. The same superior grade of durable crystalline marble will be available for many centuries. Our quarries and finishing plants are in operation throughout the year. Architects and General Building Contractors appreciate our strict adherence to delivery schedules.

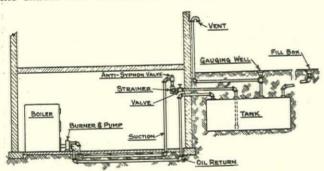


Vase a Pompeii at Vase - Fountaine. From "Architectural Shades and Shadows"

ARCHITECTURAL SHADES AND SHADOWS

By Edgar Greer Shelton, B.S. Published by D. Van Nostrand, 250 Fourth Avenue, New York. Illustrated; indexed; 159 pages; size 8 x 103/4; price \$3.50.

THE problem of architectural shades and shadows is reduced in this book to three fundamental methods, each of which is carefully explained by the author in detail. A number of problems are presented to enable the student to become thoroughly familiar with the actual application of each method. There is also a chapter on the shades and shadows of the orders of architecture.



Typical piping arrangement for storage tank above level of burner. From "Handbook of Oil Burning"

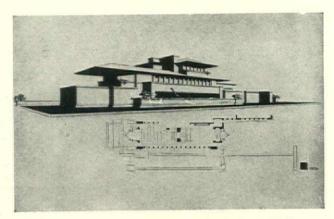
HANDBOOK OF OIL BURNING

By Harry F. Tapp. Published by the American Oil Burner Association, 342 Madison Avenue, New York. Illustrated; indexed; 629 pages; size 43/4 x 171/2; price \$3.00.

NTENDED as a source of reference . . . a convenient, useful guide in the solution of the problems that are constantly met in everyday commercial

practice. Enlarged in scope to embrace industrial as well as commercial and domestic applications of oil as a fuel."

Mr. Tapp, as executive secretary of the American Oil Burner Association, has naturally unusual opportunities to gather authoritative data and to present it in an unbiased fashion. The book covers oil as a fuel; comparative fuel costs; estimating fuel requirements for the heating season; boilers and warm air furnaces; oil burner types and principles of construction; oil burner controls and motors; fuel oil tanks and storage; pumps, preheaters and piping; etc. It is well illustrated by drawings and charts.



From "Modern Architecture," by Frank Lloyd Wright

MODERN ARCHITECTURE

By Frank Lloyd Wright. Published for the Department of Art and Archaeology of Princeton University by Princeton University Press, Princeton, New Jersey. Illustrated; 115 pages; size 81/2 x 103/4; price \$4.00.

FRANK LLOYD WRIGHT is almost a tradition, despite the fact that he is very much in the land of the living. What he says, as well as his work, always causes a storm of discussion. This book, a series of lectures delivered before Princeton undergraduates interested in architecture, is full of sage observations. It is a human, sometimes enigmatical, document fully expressive of a forcible yet thoroughly lovable personality. It is one of those rare books which, though interesting as a romance, impresses one as bearing the stamp of the immutable logic of centuries.

E. Baldwin Smith, in his introduction to the book, writes, "I, at first, made the mistake of wishing that he had been more explicit, had told more about his methods and less about his theory of life. As I listened to his lectures and talked with the man I saw my mistake, and realized that Wright did not want to give to his public merely his particular forms, developed by him to meet specific conditions. Instead, fearful lest his buildings be copied and repeated as an easy ritual for unimaginative moderns, he wanted only to stir others with his dreams of the possibilities open to architecture in our present age.

"His lectures, then, are not didactic rules and architectural short-cuts for making the possibilities of living expression into a new academic tradition. Rather are they the sermons of an engaging, self-confident and enthusiastic artist fired with a faith." (Cont. on p. 110)

Standardized installation in Rochester Public Schools-Fitzke tells why







The Chicago Faucet is made with a standard-ized, removable unit. Only seat or washer ever needs replacing. Cost: A few cents. Labor: No harder than changing a light bulb. Body of faucet lasts indefinitely.

Write for catalog and cut-open sample, free.

"In 1919, your Mr. H. E. Agness of Minneapolis helped me select the brass goods for our new Holmes School, then being built by our Board of Education. He insisted on my using Chicago Faucets on this job 12 years ago. We installed 22 pairs of Chicago Faucets and in all that time I have renewed only one washer. So it remains true that your faucets will last the life of the building.

"Now, all of our eight schools are equipped with Chicago Faucets and we call it the Rochester Public School Standard Installation. We now insist on your faucets on all new work.

"I wish to thank your representative for helping me make a good selection." OTTO H. FITZKE, C.E.,

Rochester Public Schools, Rochester, Minn.

THE CHICAGO FAUCET COMPANY

2700-22 N. CRAWFORD AVE., CHICAGO FOR AUGUST 1931

NEW CATALOGS

Covering What Manufacturers Have to Say About the Advantages and Uses of Their Products

BATHROOMS AND KITCHENS

175 . . . "To Help You Plan Beautiful and Dutiful Bathrooms and Kitchens," published by the Kohler Company, Kohler, Wis., contains a typical showing of Kohler equipment. It presents in a general way some of the things an owner should know about plumbing, and contains illustrations and text giving hints on planning these rooms.

SOLVING THE PARKING PROBLEM

176 . . . Bulletin of the Turner Elevator Company, Kansas City, Mo., illustrating and describing this new type of parking equipment, consisting of an elevator in a circular shaft, the elevator delivering cars at any level to the parking space outside of the circle. Operation is automatic.

WATERPROOFING WITH SIKA

177 . . . Data issued by the American Sika Corp., 56 West 45th Street, New York, describing waterproofing walls and floors of Portland cement with this integral waterproofer.

"WATER, WATER, EVERYWHERE"

178 . . . A thoroughly interesting and educational brochure, beautifully illustrated in colors, giving a number of scientific facts about water. It tells why the ocean is salty, what dew is, what makes a water-spout, how water runs up-hill, and many similar things. It is the sort of brochure which, because of the fine beauty of its illustrations, will appeal to the artist and, at the same time, answer many of the questions which puzzle child and adult alike. Issued by the American Asphalt Paint Co., 844 Rush Street, Chicago, and well worth a place in one's personal permanent library.

NEW GRILLE DESIGNS

179 Booklet containing designs of grilles submitted in the recent contest conducted by the Harrington and King Perforating Company, Chicago. A. I. A. file 30 e.

METAL LATH PRODUCTS HAND BOOK

180 . . . A hand book including practically every type of metal lath and the necessary accessories and sundries for its erection. Issued by the United States Gypsum Company, 300 West Adams Street, Chicago.

THE "ELEVETTE"

181 . . . A new type of miniature elevator specially adapted to the private residence through simplicity of installation and comparatively low cost. Issued by the Watson Elevator Company, 407 West 36th Street, New York.

THE "INCLINATOR"

182 . . . A miniature incline elevator, placed on the stairway of the private house and running on a track up the stairs without restricting the use of the stairway. Issued by the Watson Elevator Company, 407 West 36th Street, New York.

LUNKEN SPANDREL WINDOW

183 . . . Booklet illustrating and describing a new sliding window that can be cleaned from inside the room and also making possible the addition of nearly a square foot of rentable floor area per running foot of exterior wall. Issued by E. H. Lunken, 103 Park Avenue, New York.

August, 1931

American Architect

57th Street at Eighth Avenue, New York City

Please see that I receive the following catalogs reviewed on this page:

Numbers .	 • • • •	 ٠.	 	٠.			 	• •	٠.	• •	٠,	•		• •	•	•	 •	• •			• •	• •	•
Name	 	 ٠.	 				 •		• •		 						 		•				
Address	 	 	 	٠.	٠.	٠.			٠.				 	•				• •		•••	•		
Occupation	 	 	 				 				 	***	 						•				

HALICO MASTIC TILES

184 . . . Booklet in colors illustrating and describing the mastic tiles made by the Hachmeister-Lind Company, Pittsburgh, Pa.

OFFICE FURNITURE

185 . . . Illustrated booklet issued by Wood Office Furniture Associates, Inc., 420 Lexington Ave., New York. Shows modern types of office furniture and explains advantages of wood furniture.

MERCOID AUTOMATIC CONTROLS

186 . . . Catalog H-7 of the Mercoid Corporation, 4201 Belmont Avenue, Chicago, illustrating and describing automatic controls for heating equipment and industrial applications, manufactured by this company.

STEEL KITCHEN UNITS AND MEDICINE CABINETS

187 . . . Loose leaf folder of the Acme Metal Products Corp., 4217 Belle Plaine Ave., Chicago, illustrating and describing the Majestic all-steel kitchen units and medicine cabinets for the modern apartment. A. I. A. file 35 c 12.

NEW DOUBLE HUNG STEEL WINDOW

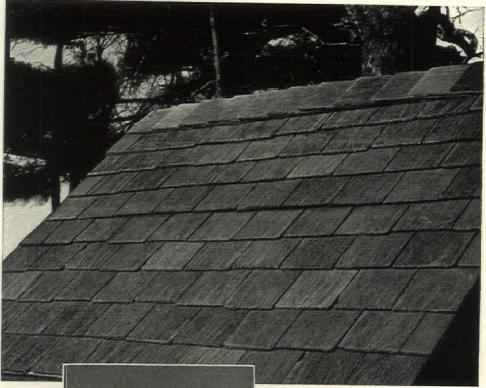
188 "The New Georgian Steel Window" is the title of a booklet issued by David Lupton's Sons Company, Philadelphia, illustrating and giving detail drawings of these new double hung steel windows designed to reproduce the graceful pattern of fine windows of the Georgian period. A. I. A. file 16 e 1.

Specifications for the Use of White Lead Paint

189 . . . Booklet issued by the National Lead Company, 111 Broadway, New York, with the assistance of the American Institute of Architects, giving specifications based on modern painting practice. Covers preparation and general requirements, materials and mixings on various bases, application of paint to various materials, etc. A. I. A. file 25c.

PROTECTION FOR WOOD AGAINST ROT AND WOOD-EATING INSECTS

190 . . . Illustrated booklet issued by the E. L. Bruce Co., Memphis, Tenn., explaining Bruce Preservatives developed for this company. A. I. A. file 19 a 31, 19 a 34.



-"but that's not quite my color"

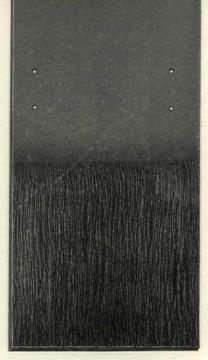
APROMINENT Philadelphia Architect recently said "I'm sold on the economy and wearing qualities of Ambler Asbestos Shingles but with any shingles I often end up by saying 'But that's not quite my color.' I usually want a certain shade which no company can supply."

However, we told the architect that there were mighty few shades which we couldn't match with our new exclusive process. And with practically no delay we matched his sample.

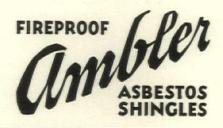
The new Ambler "Weathered Effect" rigid asbestos shingle is enduring and fireproof and has all the mellow charm of an old shingle roof.

Architects need no longer worry about securing a certain roof blend to complete their designs. Ambler "Weathered Effect" Shingles will do the trick and give your clients lifelong satisfaction. Just keep the name in mind when you specify.

AMBLER ASBESTOS SHINGLE & SHEATHING CO.
Ambler, Penna.



The standard colors of "Weathered Effect" Shingles (any of which are subject to change if desired) include Royal Red, Sylvan Green, Lindenwold—a mossy green-black—and four blended tints of soft autumnal browns known as "Rustic Blend."



Let's Face the Facts and Go Back to Work

(Continued from page 30)

the facts, interpreted with utter honesty, will dispel gloom rather than engender it Ghosts and phantoms are more terrifying than tangible dangers.

Frank analysis will do far more than deception to ward off panic. The American people have stamina and backbone. They can endure hardships but they are entitled to know what to expect. The honest analyst is neither an optimist nor a pessimist. He tells faithfully what he thinks the facts mean.

F we know what to expect we can make plans accordingly. Sound planning is more vital than it ever was before. Over-estimate is far more dangerous than under-estimate. The soundest philosophy is to hope for the best but to be prepared to make the best of the worst. It will require the best brains of the nation to determine what to expect in the next five years. It seems of little purpose to measure the future by statistics of the more recent past. We are confronted with conditions which have not been paralleled since the world went to war-and that was 17 years ago. We emerged from that conflict far wealthier than when it began. We had the means to gratify our every desire and all nations were our customers.

For a decade and a half, save for a brief period of drastic deflation in 1921 and minor recessions to catch our breath, we climbed steadily to unprecedented heights of national prosperity. Pollyanna, smiling radiantly, sat enthroned, heedless of danger to herself while other nations, one by one, slipped into the quicksands of depression. Desperate, they raised within their own domains every possible ounce of foodstuffs and bought the rest where they could buy cheapest. Overseas markets for our agricultural surplus withered away. Foreign demand for manufactured products dwindled and, to cap it all, we raised artificial tariff barriers which aroused enmity everywhere.

At almost the same time home markets became glutted with commodities of every kind which our own people, already gorged, were unable to absorb. Accumulation of surplus stocks precipitated the punishment which was inevitable after a prolonged and frenzied orgy of speculation. Thus came the cold gray dawn which put to rout the new school of economists which had proclaimed our entry into a new era with no more cycles of recession

and recovery.

So sudden and so colossal was the reverse that it was impossible immediately to assess its effects. Even today we still are stunned and can comprehend its extent only by comparing our present volume of business with the

peaks of 1929. For example:

The daily average value of building contracts awarded in May of 1929 was \$22,500,000 while in May of this year it was \$9,500,000, a drop of 58 per cent. Domestic sales of passenger automobiles in May, 1929, aggregated 454,000 and in May, 1931, the total was 264,000, a decline of 42 per cent. May freight car loadings were down 30 per cent and Prof. Fisher's wholesale price

index of 200 representative commodities had dropped from 97.1 to 70.3, or 27 per cent. First quarter exports were cut in half. Other barometers show proportionate declines.

Details of what has happened in the last year are too fresh in mind to require enumeration. The number of unemployed probably has averaged at least 5,000,000. Virtually every factory and mill hand has worked only part time and many of them have taken wage cuts. The white collar man who has not had a salary reduction is a rarity. The same applies to all varieties of office help, male and female. In many cases the initial salary cut has been followed by a second and in countless others the same result is being attained by enforced vacations without pay. Dividend payments have been sharply curtailed. The national annual income has been reduced by fully \$12,000,000,000.

All this is history, although it isn't widely known because the facts haven't been given to the public. We are concerned chiefly with what the future holds. Distress has been cumulative. The reserves of millions of families have been wiped out. Expenditures have been curtailed by almost everyone. The average worker is prudently laying aside every possible penny in preparation for possible unemployment. Factories will close earlier and longer for mid-summer "inventory." Seasonal activities have done little more in relieving unemployment than to offset additional dismissals.

These are simple facts but it is the interpretation of them in respect to the future which is important. Upon what ground can we honestly base expectation of an early or pronounced recovery? We have no great shortages to be filled. There still are surpluses of many commodities. We can expect no relief from the construction industries. We are away over-built now on everything except, perhaps, homes. There can be no great expansion in public works because federal, state and municipal governments are hard pressed for funds.

A GRICULTURAL income will show little expansion. There is no shortage of serviceable motor vehicles and estimates of replacement necessities have been greatly exaggerated. Few railroads have the money to initiate improvements on a large scale or to replace worn rolling stock. All the industries which cater to the construction trades face a long period of depression. Little expansion is to be expected in textile operations. With their principal customers buying in diminished quantities iron and steel can make but little progress. We can expect slight help from foreign trade.

What, then, is to set in motion the fall recovery about which many persons are talking? Or a spring expansion more than seasonal in its scope? Far more reason to believe we are faced with a long period of relative stabilization at levels much below the recent peaks but well above those preceding the war inflation. The long swing trend promises to be steadily upward but the slope will

FOR LARGE ESTATES . . . THIS ROOM-TO-ROOM AND BUILDING-TO-BUILDING TELEPHONE SERVICE . . . OVER REGULAR BELL TELEPHONES



Built-in telephone conduit serves fifteen outlets on the estate of Mr. Halstead Lindsley, Lenox, Massachusetts. Ten are in the residence itself and five in the three outbuildings (two in the garage, two in the gardener's cottage, one in the greenhouse). Underground conduit connects the house telephones with those in each of the other buildings. JOHN C. GREENLEAF, Architect, New York City.

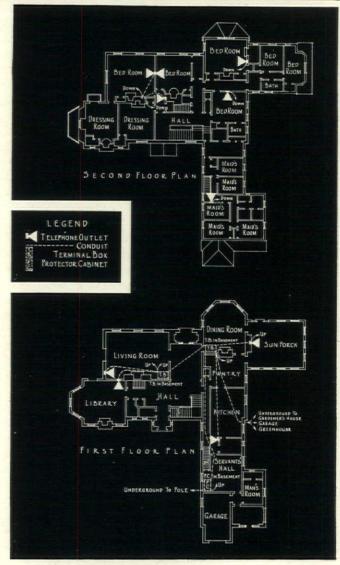
COTTAGES, greenhouses, stables and garages, grouped around a residence, make the large estate a little community. Such a community, like every other, has its own telephone requirements. Communication from one room in the residence to another, or to any outbuilding, is always desirable, often essential.

This complete telephone convenience is best achieved by the aid of telephone conduit, built into the walls and floors of the residence, run underground to outbuildings . . . in combination with one of the several intercommunicating systems developed by Bell engineers.

The conduit conceals all wiring, protects against service interruptions and permits telephone outlets to be located wherever they are most convenient. The intercommunicating system allows calls to be made to any part of the house, to any point on the estate or outside it, with equal ease, over the same instruments. No switchboard attendant is necessary. Calls received on any telephone can be transferred to any other.

Whether you're planning a big estate or a modest home, let the local telephone company help you with the telephone arrangements. Their advice means increased comfort and efficiency. It is given gladly, without charge. Just call the Business Office.





be so gentle we probably shall have to look back to realize we have been going up-grade.

But why despair? Even after nearly two years of acute depression the wealth, the buying capacity and the actual purchasing volume of the United States are so far above those of every other country that there is no possible basis of comparison. The conditions which will prevail for the next few years are comparable to those which existed from 1907 to 1914, with the vital difference that the Federal Reserve system has made impossible money panics similar to those of the past. Ample funds at unprecedentedly low interest rates are available to any sound credit risk for any legitimate enterprise which offers a reasonable chance of success.

OUR forefathers made this country great and prosperous with far fewer opportunities than now are open to their sons and grandsons. But we must return to their fundamentals of thrift and hard work. Mass prosperity, which placed inefficients in positions of responsibility and made wealth possible even for the undeserving, probably has gone for at least five years but America still is the land of opportunity for those who deserve success.

That no business can stand still isn't literally true. It can, for a while, but over a longer period it must progress or retrogress. Most concerns engaged in trade and commerce—individuals and companies—have been marking time for two years with steadily diminishing sales. The ever ready alibi has been the depression. True, the total volume of sales has been sharply reduced but in every field there are outstanding examples of men who haven't marked time. They have gone after a larger share of the business available and won it on merit.

Everyone, of course, has done the obvious things. They have cut their overhead and reduced production and selling costs but they deserve no particular credit for that. There was nothing else to do. The commonest ways of pruning expenses have been to eliminate non-essential personnel and cut salaries. This has been necessary but it has impaired purchasing power. No other means has been devised to lower sales costs except the curtailment of advertising.

Concerns which have held their own or forged ahead haven't done it merely by employing these obvious expedients. Many of them have made their products more attractive intrinsically, have built more quality into them and have cut the price to the consumer. They have demonstrated their ability to supply the public with what it wants at a price it will pay.

Price, plus quality and style, are the strongest selling arguments in a period like this. Those producers and merchants who are crying for higher prices to eliminate "profitless merchandising" are swimming against the stream. With an income drastically reduced the public will buy in no larger quantities than it is buying now until the purchasing power of the dollar comes up to meet them. Where low profit margins have been based on much larger volumes some way must be found to make possible the same margin, or a larger one, on a smaller volume. Ways are open to those who have the ability to find them.

With expenses cut as they have been by many concerns, even a slight increase in volume may raise profits

to a point where dividend payments can be resumed.

The days when success might be attained with mediocre or even less than mediocre management have gone by. If present executives are unable to adjust themselves to new conditions they must be replaced with men who can. These captains of tomorrow may not be captains today. They may be corporals or sergeants or even privates in the army of industry but plenty of them are available with knowledge, power, ambition and ability to surmount or get around obstacles.

Executives who are hopelessly tangled in the red tape of tradition and precedent are of little use today. We may as well abandon the illusion that the tremendous sales volumes of recent years were the result of superior merchandising ability. They were made possible by a fictitious general prosperity plus an enormous growth in installment selling and an abandonment of some of our principles of national thrift.

Americans bought huge quantities of goods because they wanted them and had the money to buy them and not because the person who made or sold them displayed super-salesmanship. A couple of generations ago few books were written on the psychology of selling but it wasn't because our merchants didn't know that psychology. They did and it would be helpful today if we could study their methods. Maybe if we "asked dad" we could get some valuable information. He could at least recall conditions paralleling those which confront us now.

Nothing is to be gained and much is to be lost by attempting to mark time while waiting for "business to recover." It isn't going to recover in the accepted sense for a long time, neither this year nor next. There may and probably will be gradual improvement but it will be painfully slow. Before we are through we shall have a new conception of what constitutes a normal sales volume and it will be far smaller than in 1928 or 1929.

The rewards will go, to a greater extent than in the past ten years, to those who deserve them. There is today a magnificent opportunity for the individual who can and will go out and get a larger part of the business available. Even in the throes of depression the United States is consuming enormous quantities of goods of all kinds. Those who expect to survive the heavy seas now running must do something more than cling to a raft with one hand. They can't be quiescent and merely wait for rescue. They must rescue themselves.

THERE'S only one way to get business and that's to go after it. The "go-getter" must be supplied with products the public wants, attractively priced, and he will abandon hackneyed, lackadaisical sales methods. There is no room today for mental or physical lethargy. Long hours of hard, intelligent work, with the ability to accept rebuffs cheerfully, will work wonders. Salesmen who make ten calls where they used to make five will find business surprisingly good.

Manufacturers who make the goods merchants sell are faced with new problems. They must not only produce saleable merchandise—no easy task in hard times—but they must use uncommon ingenuity in holding down their costs, especially those which relate to selling. Furthermore, they must maintain strong, virile selling organizations. Consumer demand is of no value if sales outlets to supply it are lacking. And sales outlets which are

GUARDING the Arteries of Modern Skyscrapers



Fidelity-Philadelphia Trust Bldg., Philadelpnia, Pa.,— Simon & Simon, Architects. H. Berkley Hackett, Engineer. W. M. Anderson, Heating Contractor. Irwin & Leighton, General Contractors.

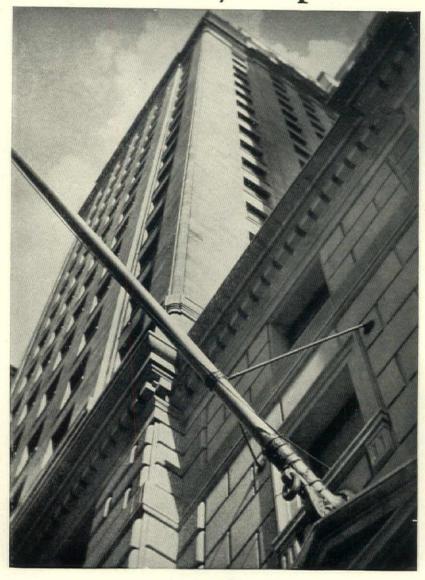
Steel and stone acres stretching skyward. Vertical cities under single roofs. Steam must follow upward to bring comfort and convenience.

Along the miles of heating risers
—vital arteries in modern buildings—are countless Sylphon Packless Expansion Joints.

These joints, requiring very little more room than ordinary pipe fittings and as easily installed, are permitting material economies in construction costs—are helping to reduce the non-revenue producing space in modern structures to a minimum.

Because these Expansion Joints are PACK-LESS, they may be installed and forgotten with confidence that they will never leak, never jam, never need repacking or other attention.

The prominent buildings in which these timetested Sylphon Expansion Joints are in use, are an impressive collection of outstanding modern office buildings, hotels,





hospitals, institutions and public structures. Write for Bulletin PJ-300. It is a valuable treatise on modern practice in the arrangement of building heating lines. Sent free on request.

FULTON SYLPHON CO.

KNOXVILLE · TENNESSEE

European Representatives, Crosby Valve and Eng. Co., Ltd., 41-2 Foley St., London, W.I. Eng., Canadian Representatives, Darling Bros., Ltd., 140 Prince St., Montreal, Que., Can. REPRESENTATIVES IN ALL PRINCIPAL CITIES IN U. S. A. moribund are useless. Competition for those of the

other type grows sharper every day.

The manufacturer must offer not only desirable merchandise but a merchandising policy which will bring him more and better sales outlets than his competitors can get. Furthermore, he must forswear expediency and build for the future instead of for the present alone.

Failures will be many. That bromide about the sur-

vival of the fittest will assume a grimmer significance. But out of it all will come a sturdier, abler, more alert and clear thinking race of manufacturers and merchants. Every individual must demonstrate whether he has the skill to carve success out of adversity. If he hasn't he will sink back into the ruck. The opportunities are there for those who have the brains and the will to seek

We Represent Every Architect in California

(Continued from page 53)

with a district society organized in each. The architects of each district elect from their number a District Advisor who is the administrative officer for the district and a member of the Advisory Council which meets jointly with the Executive Board at stated intervals. The Executive Board handles all of the affairs of the Association within the section; but in matters of general policy or in state-wide activities the two sections of the Board act together. Two regular joint meetings are held each year.'

There are two classes of membership: those who subscribe annually to the work of the Association are the active members; all others are termed associate members. The rights and privileges of both groups are the same except that only active members may be officers or serve on committees. In the Northern Section the subscription for 1931 was \$3.00. There are no initiation fees.

Particular attention is paid by the Association to new men entering the profession. Immediately upon learning from the State Board of Architectural Examiners of the granting of a new certificate the Association writes to the recipient, advising him of his membership in the Association; and the district advisor of the Association is asked to get in touch with this architect and explain the Association, its organization, aims and objectives. A special effort is made to have new architects attend the annual convention. This year an important event on the convention program will be the presentation of the "Class of 1931.

A few words might be said regarding the keynote of any success which the organization may have had. It is this: every architect is a member of the Association by virtue of having a state certificate; and since no person is allowed to use the title architect in California without having such certificate there are no in-between groups. The constitution of the Association provides that "membership shall exist continuously with such registration, except that any member, by written request, may exclude himself from the Association." In the Northern Section there has been only one such request, and not more than two in the Southern Section. It does not follow, however, that all the remaining architects are active members. Not in times like the present!

Some architects felt that with the passing of the amendments to the Certification Act The State Association of California Architects had fulfilled its purpose. But one of the first acts of the Executive Board, in its initial meeting, had been to discuss this matter; and the judgment of those present had been that the Association was to be a permanent organization.

At this point the story turns to something which is new in architectural organizations, although there is an old saying that there is nothing new under the sun.

The Association soon found that little could be accomplished without funds. But there then appeared upon the scene a child of hope which was later to be named by the Northern Section, "Architects' Reports."

It developed, as one architect has very aptly put it, that the profession has a valuable by-product which has been going up the flue. It seems the building industry is very much interested in what is going on in the architect's office; and it willingly pays for this information.

A business-like proposition was offered to the Association, (not, bear in mind, to any individual architect) a percentage of the gross proceeds in return for official recognition and cooperation to the common cause of making the news authoritative and authentic.

THE Executive Board of the Northern Section, during a period of four months, considered every possible angle of the proposition; and finally the contract was entered into February 4, 1930, and the service officially started March 1. No one needs to be reminded that business was poor during 1930. It was a crucial test year for the new enterprise. Suffice to say here, however, the news service came through with great credit and is now firmly established; and the Northern Section received from this source \$10,000, the greater part of which has been, or will be expended in undertakings in which the entire building industry benefits along with the architectural profession.

The good work of the Association goes steadily on. In the state legislature of this year further minor amendments to the Act were secured, and the Association threw its strength and influence behind the engineers and helped them secure amendments to their Registration Act. Thus was further cemented a fine feeling of cooperation which exists between these two professions. The Southern Section of the Association has just completed its plans for the inauguration of the report service for Southern California. No miracles are being performed; but the organization is making itself felt both within the profession and in outside circles. And the prospects for the future indicate an even larger sphere of influence and accomplishment.

And, most happily, may be recorded a perfect feeling of harmony and unity of purpose between the chapters of the Institute and the Association. As a matter of fact, the active workers in the Association's affairs are, with few exceptions, the active workers in the affairs of the Institute. At the present time a joint committee is arranging the activities of the Northern California Chapter, A. I. A., and the Northern Section of the Association so that there will be perfect correlation.



Reorganize the Office of the Supervising Architect

(Continued from page 25)

is essential in the handling of Federal building activities. Our citizens are too often prone to look upon themselves and their government as things apart. Citizens of the United States forget that they are the government and that government officials are in office to conduct the governmental affairs of the land. Citizens have the right to know how these affairs are conducted and have the right to say how they shall be conducted.

FOR the government to enter into private business in competition with its own citizens is contrary to the principles upon which the government of the United States is predicated. In time of war, the people may be justified in taking over private enterprise as an emergency measure. But we are, at present, at peace and faced by an economic emergency wherein it is desired to provide as much work as possible for as many people as possible as soon as possible. It was upon this basis that the public building program was speedily prepared and put under way. The best interests of this program will be served by placing a large number of buildings in the hands of a large number of architects at one time, rather than attempting to expedite the program through a large bureaucratic organization that is too unwieldy to function advantageously.

Within the past few months, the matter of placing work in the hands of private architects has been speeded up. Approximately one hundred projects are now in the hands of private practitioners. In addition to these, a number of architects have been selected to act as consultants. While a few architects are thus benefited, it is not for this reason that a reorganization of the Supervising Architect's Office should be urged, but rather as a principle of government and one that will serve the best interests of all taxpayers and the cause of architecture in America.

Many other bodies are lending their support to the movement to reorganize the office of the Supervising Architect—among them that of the landscape architects. At a special meeting of the Pacific Coast Chapter of the American Society of Landscape Architects, held May 21, 1931, a resolution was passed which stated in part:

"Now therefore be it resolved that we believe the governing bodies should discourage the further development of working bureaus in such matters, and should encourage the employment of professional firms of skill and ability to develop plans for architectural and land-scape architectural work, and

"Be it resolved that we send copies of these resolutions to the President of the United States; the Secretary of the Treasury of the United States; the Supervising Architect of the Treasury; the Chairman of the National Commission of Fine Arts; the Director of National Parks and the Governor of the State of California."

A. L. Brockway, Director of the American Institute of Architects, at the regional conference of the New York State Chapters held June 20 at Cooperstown, N.Y., said: "It is my personal belief that, although smooth

words and gestures were spoken and made by Government officials to representatives of the American Institute of Architects prior to the last convention of the Institute in San Antonio last April, there was at heart no sincere intention of bringing about a situation whereby the buildings of the government would be the work of the profession at large in the nation.

"It would seem that those entrusted with the administration of the Federal building program had deliberately determined upon the expansion and tremendous increase of the personnel of the Supervising Architect's Office rather than the utilization of the architect in private practice in any and all localities of the nation where appropriations had been made for buildings to be constructed.

"The underlying principle involved is whether the men who are responsible for the design and execution of the marvelous buildings in the various cities of this nation are to be considered incapable of designing the buildings for their Government, and are to sit quietly by and be told by public officials in bureaus that the Government itself can do the work better, quicker and for less cost than the private practitioner.

"If this claim contained a grain of truth, it would be an indictment of the profession which the profession could not afford to ignore.

"If the government attitude were correct every corporation of any size would be doing its own architectural work rather than employing the private practitioner. This is doubly true because of the fact that a private corporation must make a profit to exist whereas this is not true in the case of the government."

TO convey the wishes of our citizens to our government officials with authority to correct the existing situation it is suggested that a petition be prepared and circulated in every locality of the United States. A suggested form of petition was published in the May, 1931, issue of American Architect. Reprints of this petition may be obtained, if desired, by addressing American Architect, 57th Street and 8th Avenue, New York City.

To organize the movement, a meeting of all architects in every locality should be called and the work of securing signatures to the petition divided among those present. Chambers of Commerce, Rotary Clubs and other civic organizations should be interested as well as engineers, contractors, building material dealers and other citizens. After the petition has been circulated, it may be forwarded to the editorial offices of AMERICAN ARCHITECT for later presentation to government officials.

FOR the complete combustion of one pound of anthracite coal, 150 cu. ft. of air, weighing 11 lbs., are needed, according to the research department of the Petroleum Heat and Power Company. A pound of fuel oil requires 190 cu. ft. of air. A cubic foot of city gas requires $4\frac{1}{2}$ cu. ft. of air, and a cubic foot of natural gas requires twice as much.

ARMSTRONG INTRODUCES A NEW

Inlaid Linoleum

Patterns Veined True to Marble

FOR the first time in this country linoleum captures all the magic of marble. Notice the delicate tracery, the realistic veining. There is a clearness and an intensity of color in these Armstrong Marble Inlaids never before achieved. Each color is inlaid and will not fade.

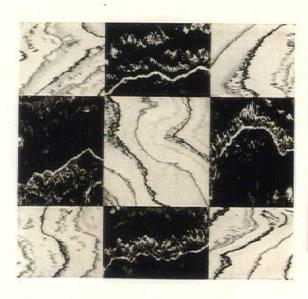
Because of their strong, contrasting colors which do not reveal traffic marks, these new Marble Inlaids are ideally suited for lobbies and corridors, dining-rooms and restaurants, offices and service rooms. They are built for heavy traffic.

Six new designs are now available. Let us send you samples and colorplates so that you can see for yourself their full beauty and utility. Armstrong Cork Company, Floor Sales Division, Lancaster, Pa.



Armstrong's Linoleum Floors

for every room in the house



Lerr — This predominantly black and white design is available in three block sizes —No. 151, 6 × 6 inches; No. 153, 9 × 9 inches; and No. 155, 12 × 12 inches.

RIGHT—Observe the depth of color and clear-cut contrast in design No. 150, 6 x 6-mch blocks. Its companion coloring, No. 154, is a 9 x 9-inch block.



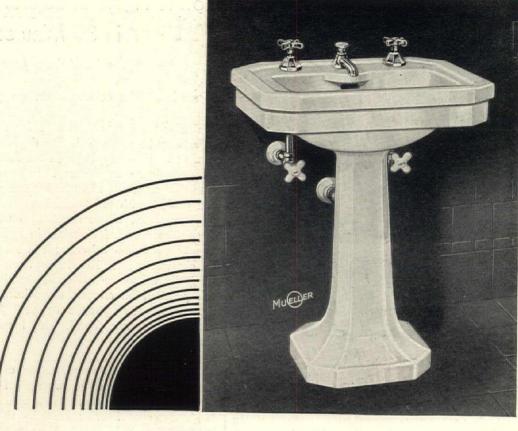
TT IS well known that uniformity of design and finish greatly enhance the appearance of a building. This likewise is true of its furnishings. Carrying this truth to elevators, it is logical that the same concern should furnish the complete elevator installation. And that is why the architect will find the uniformity of design between Otis elevator entrances and cars and fixtures particularly helpful, either in planning a new building or in modernizing an old one. Harmony in Otis design is apparent in the two pictures at the right showing cars and entrance of a recent installation. Also, Otis foundries and shops are amply equipped to produce any special design or finish that the architect may wish. . . . The Otis plan of keeping elevator equipment in perfect running order, making regular examinations and all necessary repairs and replacements, for a flat yearly rate, is a service that is appreciated everywhere.



The upper picture shows the cars and the lower picture a ground floor entrance manufactured and installed by Otis in the Bacardi Building, Havana. Note the harmony in design and effect between the finish of the cars and the entrance.



ELEVATOR COMPANY 339 OFFICES THROUGH-



Minus Flourishes and Heliotrope..

We've tried to steer clear of all doodads and other deplorable embellishments in the designing and manufacture of the MUELLER Lavatory shown above. We like to believe that this simple yet elegant type of lavatory has a very definite place in the well-ordered home. Should you desire further information on this product—the "Decatur De Luxe"—the MUELLER Company will consider it a privilege to send it to you upon request. MUELLER CO. (Established 1857) Factory: Decatur, Illinois. Branches: New York, 135th St. & Walnut Ave., Bronx, Telephone Ludlow 8629-30-3; Dallas, Atlanta, Los Angeles, Chicago. Canadian Factory: MUELLER, Limited, Sarna.



MUELLER

Trade-mark Reg. U. S. Pat. Office



NOISE CHAINS MENTAL ENERGY

"If I could only move my office to a hospital!" an executive said to us. He envied the attention given to noise elimination in the construction of hospitals and sanatoriums. Unconsciously this business man faced the problem that each architect, builder or contractor must face in planning every public building: — door control. It is a vital factor in the fight to relieve that nervous tension that is caused by unnecessary noise and static interruptions.

THE ILCO-BLOUNT Door Check aids the acoustician in the noble campaign of sound insulation. Its service is dependable and effective. Under the most variable of atmospheric conditions, in actual use, it has proved every claim made for it. Not only does it close the door, quickly and surely, but by simple adjustment it will check it in any position desired.

Write to us direct or get in touch with any of our branch offices for complete specifications and prices on the various ILCO-BLOUNT models.

Independent Lock Company FITCHBURG . . . MASS.

Twelve Branch Offices Throughout the United States — NEW YORK — PHILADELPHIA — PITTSBURGH — BALTIMORE — ATLANTA — CLEVELAND — DETROIT — CHICAGO — KANSAS CITY — DENVER — LOS ANGELES and SAN FRANCISCO



How to Figure Structural Steel Costs in 30 Minutes

(Continued from page 59)

of stories. The column chart on page 59 expresses this relationship.

The preliminary calculations for the use of the floor chart may be made with any degree of accuracy. But it must be kept in mind that the final answer will have the same degree of accuracy. In figuring steel for alternate designs, loads must be estimated to include beams and girders with the finished floor structure, partitions plastered, etc., all assumed as uniformly distributed. Special care should be taken in estimating the average area between four columns; it is then only necessary on the chart to spot the bay size on the horizontal axis, move vertically up to the proper design load line, and from this point of intersection to go horizontally to the vertical axis, where pounds of steel per square foot of floor or roof are found, with inclusions as noted on chart.

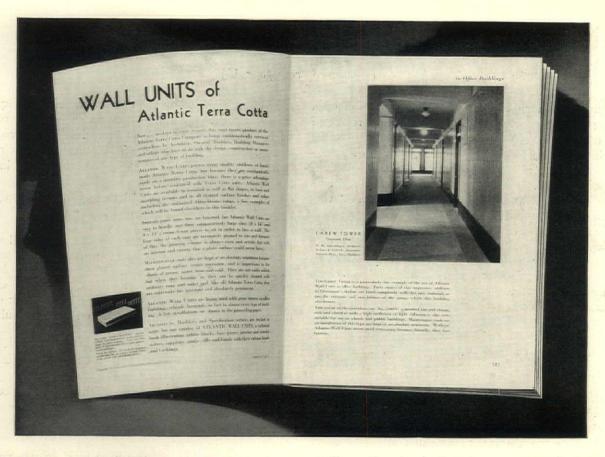
O use the column chart, the uniformly distributed load as determined before must be multiplied by the previously found average bay size in square feet and the number of floors carried by the column. The resulting product, in pounds, may be used as first approximation in getting the steel weight of the column. Adding this column weight plus fireproofing to the product first obtained, will give the total load carried by the column for a second, more correct, determination of steel in the column. Reduction of live loads according to the New York City Building Code having been considered (see note on chart), this total load is found on the horizontal axis of the column chart; go up vertically to intersection with inclined line corresponding with the number of stories under consideration. From this point a horizontal move to the left will strike on the vertical axis the number of pounds of steel per lin. foot of column height. This figure multiplied by the story height in feet and divided into square feet of average bay size, as used in the beginning, gives column steel in pounds per square foot of floor. Add from 5% to 10% for splicing and column base, depending on bay size.

After a careful study of this article and charts, anyone should be able to make a computation in about thirty minutes. With increase in skill, this time can be reduced and judgment and accuracy increased to come at least within 2% of the actual or projected tonnage. Given the same care in estimating alternate designs, the charts guarantee the same accuracy or error, and thus even a small saving in steel may be detected.

To illustrate the range of accuracy in use, a tabulation of three examples is given below.

of three examples	Floor area in sq. ft.		Typical Bay in	age story	Design load per	sq. ft.	Esti-
Office Building on Times Square	642,000	25	460	10	200	19.90	20.2
Office Building, 120 Wall Street	*550,000	34	785	12.2	†200	28.00	27.62 12.35
Beaux Arts Apartments	‡215,000	17	275	8.95	150	12.80	14.00

* Estimated, † Assumed. ‡ Estimated from architect's drawings.



THIS NEW BOOKLET

A Pictorial Study of the Varied Uses for ATLANTIC TERRA COTTA WALL UNITS



The response of the architectural profession to the introduction of mechanically made Atlantic Terra Cotta Wall Units proved so immediate that already many installations have been made of this new facing material. Its primary advantages are: lower initial cost, lower installation cost, lower maintenance cost, lifetime permanence, and availability in any color and in any surface finish.

In an endeavor to be of constructive service to those architects who are interested in the subject, we have recently compiled an illustrated booklet in standard A. I. A. size. It presents in pictorial form with brief description, the wide range of uses for these Wall Units. It is designed to enable the architect to determine readily the applicability of these new Wall Units to his individual requirements.

We shall be glad to send a copy of this booklet to the office of any architect upon receipt of letterhead request.

You are invited to view an interesting exhibit of Atlantic Terra Cotta at our New York address.

ATLANTIC TERRA COTTA COMPANY

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

Offices at: Philadelphia, Pa.; Dallas, Tex.

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

What to Tell Your Lawyer When You Sue

(Continued from page 43)

the planning and supervising of the construction of a building is only poorly paid by a commission reckoned fee of 6%.

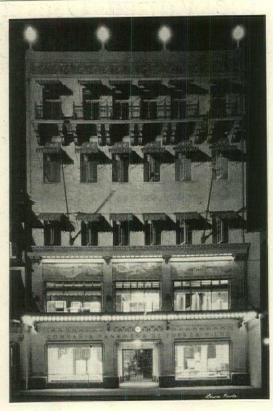
Architects have fallen into a careless habit of speaking of architectural service as the furnishing of plans and specifications. They sometimes win their legal case because the lawyer on the other side does not know what a small part of the actual cost of rendering architectural service the mere mechanical making of plans and specifications is. Let the defense attorney stand before a judge and jury and wave a roll of blue prints and a book of specifications and say, "This is all my client got, a mere roll of blue prints and a collection of typewritten pages which any draftsman and typist could produce for a few hundred dollars. My client has already paid him \$1,000 and he is demanding \$20,000 more. I say to you this contract is not equitable. It amounts to robbery. It is therefore contrary to public policy to enforce it." And what does the jury do? It finds for the defendant, and the architect's advocate cannot help him if he has a contract with no other consideration than plans and specifications.

If there is no contract, reasonable and customary practice may be introduced as proof, and expert architectural witnesses can be brought into the case to prove valuable consideration. In such cases, however, as a reinforcement to "reasonable" an adequately intelligible cost accounting system of office records is valuable supplementary evidence. No such accounting system can be considered an accurate criterion of the cost of rendering service if it does not allow interest and depreciation on capital invested in education, experience, library and general research, office equipment and overhead as well as actual salaries paid.

T is helpful in making clear to the jury if all of the esquisses, studies, preliminary drafts, etc., are brought in and offered as evidence of the processes involved in producing the final results obtained. A clever witness guided by an adroit lawyer can trap the lawyer on the other side into asking questions on cross-examination which will enable the architect to explain to the jury and help them to visualize the long and expensive evolutionary process of developing beautiful, practical, and efficient architectural design. If evidence can be placed before an honest jury showing that an architect has actually earned his fee, the architect's case is won.

It is wise for the architect to keep every scrap of paper and every note made in the process of developing an architectural problem until after he has collected his fee for that service.

Architects need to remember that they cannot visualize



Facade at night, Fuerza y Luz Building, Panama. Buckley, Arango & Lyons, Architects. R. W. Hebard & Co., Builders. Metal work includes the bronze marquise, and hundreds of feet of bronze grilles, railings, etc.

A Thousand Ocean Miles Between Our Shops And The Job

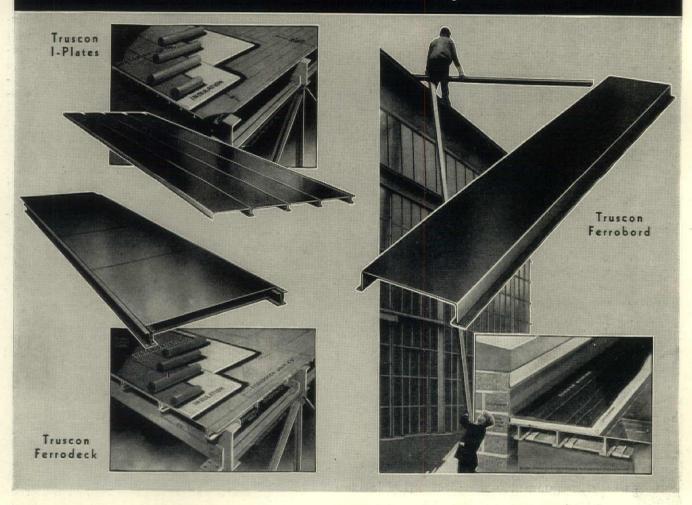
For the Fuerza y Luz Building in Panama we fabricated in our shops here all the ornamental bronze and iron, including the bronze marquise. All finished work was carefully crated and shipped to Panama, over a thousand miles away.

"Every piece had to fit, — and it did." Without alterations or special fitting on the job.

This same exactness of execution is the basis of our cordial relations with architects and builders everywhere.



STEELDECK ROOFS Insulated and Waterproofed



Modern Roofs for Modern Buildings

Architects throughout the country are specifying Truscon Steeldeck Roofs for modern buildings. Their light weight, fireproofness and permanence offer substantial economies, saving also in structural supports and foundations.

Truscon Steeldecks can be insulated to any degree to prevent heat loss and condensation. They are simply and quickly installed on new or old buildings.

The three types of Steeldecks-Ferrodeck, I-Plates and Ferrobord-efficiently meet every requirement. Complete information, catalog and prices on request.

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO Engineering and Sales Offices in Principal Cities

STEEL WINDOWS " STEEL DOORS " STEEL JOISTS " METAL LATHS " STEELDECK ROOFS " REINFORCING STEEL

TIDEWATER RED CYPRESS

According to your Specifications

Now, when you specify cypress, you can be sure your specifications will be met. The Florida Louisiana Red Cypress Company, marketers of genuine "Tidewater Red" Cypress, is able to supply just the cypress necessary to meet all your specifications, regardless of their nature.

If you like to be "cranky" about the proper filling of your specifications, simply suggest that they be sent to us . . . or send them yourself.

Every piece of cypress we market is guaranteed "Tidewater Red" trade and grade marked. We can make this guarantee because all Florida Louisiana Cypress comes from the deep swamps of the Withlacoochee, the Suwannee and the St. Johns rivers in Florida and the Atchafalaya in Louisiana, two of the most noted cypress growing regions in the world. The vast resources and exceptional facilities of this organization assure you of a steady supply of the finest "Tidewater Red" Cypress you can buy . . . now and for many years to come.

FLORIDA LOUISIANA RED CYPRESS COMPANY

JACKSONVILLE, FLA.



to others anything that they do not clearly know themselves. If they still subconsciously think that they are engaged in the merchandising of plans and specifications, they will convey that impression to others, and thus do themselves much harm.

Illustration: A Mechanics Lien Law of a certain

state provides:

"That any person who shall by any contract or contracts, expressed or implied, or partly expressed or implied, with the owner of a lot or tract of land, or with one whom such owner has authorized or knowingly permitted to contract for the improvement of, or to improve the same, furnish materials, fixtures, apparatus or machinery, forms or form work used in the process of construction where cement, concrete or like material is used for the purpose of or in the building, altering, repairing, or ornamenting of any house or other building, walk, or sidewalk whether such walk or sidewalk be on the land or bordering thereon, driveway, fence or improvement or appurtenances thereto on such a lot or tract of land or connected therewith, and upon, over or under a sidewalk, street or alley adjoining, or fill, sod, or excavate such lot or tract of land, or do landscape work thereon or therefor; or raise or lower any house thereon or remove any house thereto; or perform services as an architect or as a structural engineer for any such purpose; or furnish or perform labor or services as superintendent, timekeeper, mechanic, laborer or otherwise, in the building, altering, repairing, or ornamenting of the same; or furnish material, fixtures, apparatus, machinery, labor or services, forms or form work, used in the process of construction, where concrete, cement, or like material is used, on order of his agent, architect, structural engineer or superintendent having charge of the improvement, building, altering, repairing, or ornamenting the same, shall be known under this act as a contractor and shall have a lien upon the whole of such lot or tract of land and upon the adjoining or adjacent lots or tracts of land of such owner constituting the same premises, and occupied or used in connection with such lot or tract of land. . . . '

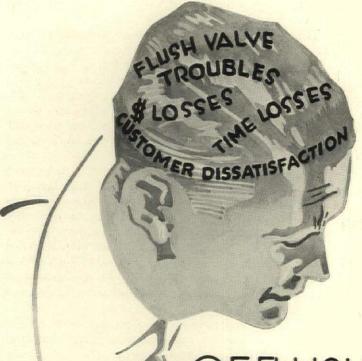
OW, in the interpretation of acts of this nature, the courts have set up in substance that "since mechanics lien legislation is special legislation it shall be strictly construed." It may be supposed that they mean by this literally without implication.

Under this law there have been several decisions against general contractors where they have claimed remuneration for breach of contract, the contractor not having actually executed any work under the contract.

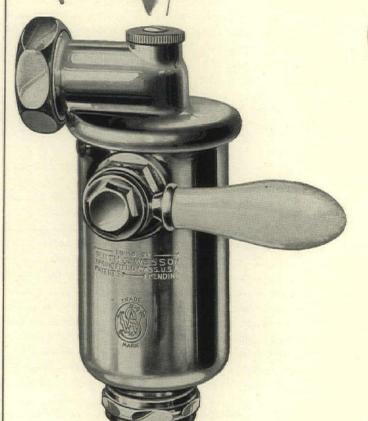
Lawyers, because of these decisions against general contractors who have not done any actual work on the lot, have immediately jumped to the conclusion that architects and structural engineers are not entitled to a mechanic's lien for work which they have actually done unless they have supervised specific construction work at the site. Lawyers arrive at this conclusion because a very large percentage of them have no understanding of the difference between the professional service of an architect and the business activity of a general contractor.

In the light of what really constitutes architectural and engineering work, if the architect or structural engineer is entitled to any lien at all for his services—

IS YOUR HEAD FULL



OFFLUSH VALVE WORRIES





You cannot afford "flush valve headaches". They are too costly to your business and reputation.

And they are unnecessary! Smith & Wesson Flush Valves solve once and for all the old problems of—installation—service and dependability.

Because of their advanced design and balanced performance, they reduce this part of the job to an assured certainty.

> INVESTIGATE! ASK YOUR JOBBER.

SMITH & WESSON

FLUSH VALVE DIVISION

SPRINGFIELD - - MASS.

SMITH AND WESSON

FLUSH



In the Stanley Theatre, Pittsburgh,

it's PETER CLARK Stage Equipment!

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

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

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

PETER CLARK, INC.

Stage Equipment Specialists for Over 25 Years

544 West 30th Street

New York City

DUNHAM CONCEALED RADIATORS

important development
enhancing
the values of

Dunham

Differential Heating

Write for Bulletin No. 500

C. A. DUNHAM CO.

450 E. Ohio Street

Chicago, Illinois

the law specifically says they are—they are entitled to a lien for work done preliminary to the starting of actual building.

The cases of the architect and engineer are not parallel with the case of the general contractor in any particular. One has done something of value to the property that has cost actual time and money. The other has not.

The lawyer's conclusion is based on ignorance of what actually constitutes architectural or engineering service. The professional service of the architect or engineer, or both, makes it possible to determine the earning power of the land, the cost of improving the property, and the feasibility of financing the project—all advance information which has enabled the owner to determine whether it is safe or practical to proceed with the improvement at this time.

The work has been caused to be done by the owner and is for his particular property and no other. It could not be used for another because it has been specially prepared for this particular site to meet the needs of this particular owner. The law says "for the purpose of,"—the architect's and the engineer's service before construction is "for the purpose of"—"perform labor or services in the building" "or furnish"—labor or services. The architect has furnished both "labor" and "services."

Nothing so impresses the average jury as a graphic illustration of the time and painstaking labor involved in the evolution of a beautiful bit of ornament, the study of mass in silhouette, or the devising of an efficient bit of practical detail. With the development sketches in evidence, it is possible to paint the picture graphically. The law and the contract may be on the side of the architect but unless the judge, jury and advocate can visualize the fact of actual equity, the architect loses his case.

What to Plan For

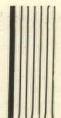
(Continued from page 49)

provided for the necessary mechanical equipment and storage rooms. A third basement, just below the street level, should provide for a grill room of 2250 square feet to serve 140 persons, and an adjacent wash room.

It was determined that the first floor should contain the main desk, coat room, steward's office, service entrance, telephone exchange, and ladies' entrance. It was believed important that the steward's office should control the service entrance, the telephone exchange, and be readily accessible from the members' lobby, and that the ladies' entrance should be entirely independent of the club lobbies, and yet be easily accessible from them.

A space of two thousand square feet was allocated to the main lounge on the second floor and provided with easily accessible telephone booths, wash room, and other facilities.

The third floor was selected for the library with a capacity of 15,000 volumes and a floor area of 2750 square feet. Telephone booths, wash rooms and other facilities were also believed essential for this floor. It was also believed that the water and soil lines should be so located that maximum protection would be afforded



When Progress Demands Holtzer-Cabot Serves



Superintendent of Group: Dr. George V. O'Hanlon Architect: John T. Rowland, Jr.— Jersey City Hospital. Christian H. Ziegler-Margaret Hague Maternity Hospital.

Engineer: Frank Sutton, New York City.

General Contractor: James Mitchell, Inc.—Jersey City Hospital. Auf der Heide Contracting Co., Inc.— Margaret Hague Maternity Hosp. Electrical Contractor: Hoffman-Elias, Inc., of New Jersey, Jersey City. THE New Jersey City Hospital is New Jersey's largest medical center, rivaling all others in the country.

This mammoth group of hospital buildings is equipped throughout with Holtzer-Cabot Nurses' Call, Doctors' Paging, Doctors' In-and-Out Register and Night Light Systems.

As special apparatus and special systems were necessary to meet the requirements of this enormous institution, it was only natural that Holtzer-Cabot was called upon to produce the unusual equipment required.

THE HOLTZER-CABOT ELECTRIC COMPANY

BOSTON



CHICAGO

OFFICES IN ALL

PRINCIPAL CITIES

PIONEERS IN HOSPITAL SIGNALING SYSTEMS

the valuable library collection from leaks or other faults in the plumbing system should any occur.

An assembly room of three thousand square feet was assigned to the fourth floor; three thousand square feet to a squash court meeting championship requirements on the fifth floor; general office and squash court spectators' gallery on the fifth floor mezzanine; barber shop, baths and dressing rooms on the sixth floor; tenant club rooms, provided with separate entrance and elevators on the seventh and eighth floors; and thirty-two bedrooms and eight living-rooms on the ninth to twelfth floors. The thirteenth floor was arranged for banquet rooms having a total area of 3500 square feet and providing service for 140 persons. The large room can be divided into three rooms by means of folding doors and are capable of five room combinations. A ladies' lounge, dressing rooms and dining-rooms to provide service for one hundred were placed on the fourteenth floor; main kitchen, equipped to serve five hundred persons at one time, on the fifteenth floor; main dining room to serve 126 on the sixteenth; staff lockers and facilities for employees on the sixteenth mezzanine; and a game room on the seventeenth floor. These facilities amounted to about twice the accommodations of the old club house.

It was apparent that to provide these accommodations and not exceed a budget for the building of about \$900,000, an unusual solution would be required.

The old club house was pleasantly reminiscent of other days, and the rooms, while not large, were well arranged. It was thought that insofar as possible the proportions of these rooms should be followed in the new building,

and that the entire effect of the interior must depend on the absence of "architecture."

The ceiling heights were kept low and the room dimensions small. It may be noted that in the principal rooms the clear dimension between the two center rows of columns is only sixteen feet.

While a complete system of air conditioning is provided, it is so designed that each floor is operated separately. This has resulted in a considerable economy both in installation cost and in maintenance.

THIS same kind of economy was sought in all the details of the building; the plan arrangements and the materials selected were expected to be sufficiently attractive to avoid the necessity of elaborate decorative schemes. On the other hand all of the equipment is of the best, and where desirable, in duplicate.

The building contains 1,150,000 cubic feet.

The contracts were let in 1929 and compare favorably, it is believed, with depression prices. The building cost approximately 55 cents per cu. ft. The building and mechanical equipment cost 77 cents per cu. ft.

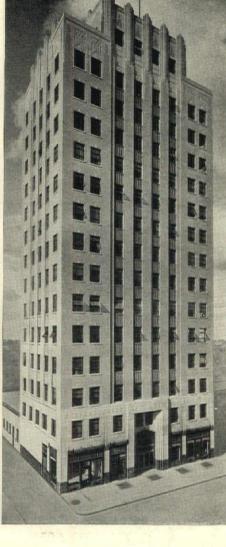
The architect may be permitted a little vanity in pointing out that this was 8 cents per cu. ft. less than the first estimate and exactly the same price per cu. ft. quoted at the completion of the preliminary drawings. The building, equipment and all furnishings including kitchens, linens, dishes, in short, everything ready for occupancy cost 88 cents per cu. ft.

The building was completed in 221 working days.



THE VALUE OF BEING MODERN





Broadway Tower
Building
Enid, Oklahoma

Layton, Hicks & Forsyth Architects

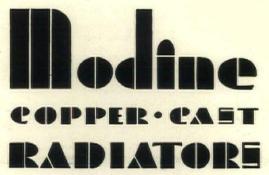
G. E. V. Blumenauer Associate Architect

John L. Swafford Heating Co. Heating Contractors

MODERN, in today's interpretation of the word, means more than exterior design and interior decoration. It implies demonstrable economy, increased convenience and certainly the highest standards of comfort. To neglect these things in today's buildings imposes an unnecessary penalty on profitable operation in competition with tomorrow's structures. • Modine Copper-Cast Radiators put heating on a "strictly modern" basis. They set a new standard of convenient comfort for the tenant because of their new balanced, convection-radiation principle. They increase his usable floor space. Their dignified design is so simple that they never intrude themselves into room appearance. These things have a definite value in terms of high tenancy rate and a sustained profitable return. • Consider, too, the savings to the owner in installation costs and economies in operation. Check Modine Copper-Cast Radiators by any modern standards. The more you examine them the stronger their bid for your endorsement. We'll be glad to furnish complete data at your request.

MODINE MANUFACTURING COMPANY

Racine, Wisconsin Offices in Principal Cities



CHURCHES
CLUBS
SYNAGOGUES
HOTELS
RESTAURANTS
THEATHES
PUBLIC BUILDINGS

BANKS

Painted PUBL Decoration

Under the direction of the Architects, Rambusch has executed decoration in the following buildings:

Empire State Building . New York City Shreve, Lamb and Harmon, Architects

New Waldorf-Astoria Hotel . N.Y. City Main Foyer, Lobby, and Appurtenant Rooms Schultze and Weaver, Architects

Nat'l Title Guaranty Co. Bank . Bklyn. Corbett, Harrison and MacMurray, Architects

120 Wall Street, Lobby . New York City Firm of Ely Jacques Kahn, Architects

Club Boca Raton . Boca Raton, Florida Schultze and Weaver, Architects

Roxy Theatre . . New York City Walter W. Ahlschlager, Architect

Paramount Theatre . Stapleton, S. I. C. W. and Geo. L. Rapp, Architects

RAMBUSCH

Painling, Decorating and Murals
2 West 45th St. New York City



Oloron Sainte Marie

(Continued from page 61)

reached from ear to ear in true Southern fashion. All went well and quickly, as we were nearly starved by that time—until a bee found his way into the bottle of wine, the cork of which had disappeared, and was merciless in venting his wrath at having stooped to such folly. But his was the worse penalty—death; while his victim suffered but a swollen lip.

Retracing our footsteps along the stream back to the Place Thiers where a delightful old house hugging the bridge and the stream contrasted agreeably with modern, more pretentious buildings facing the other side of the Place, we climbed to the upper town of Ste. Marie. The church of Sainte Marie, formerly the cathedral of the diocese, begun in the eleventh century, has a heavy square tower, built during the twelfth or thirteenth century, the ground floor of which is an open porch entered through a high Gothic arch. The most delightful feature of the church is a richly sculptured Romanesque portal consisting of three arches, the largest enclosing two smaller arches divided by a marble column.

ALKING back down the hill, we were constantly obliged to find a doorway—or finding none, flatten ourselves against the walls—to make room for a lumbering team of oxen. We arrived at the little park near the station before time for the evening train back to Pau, and, seating ourselves on an iron bench, watched the people come straggling back from the market. The first touch of autumn was in the air; a man was raking leaves in the park and creating a smoke screen with his bonfire. We sat dreamily watching the smoke curl up, until startled by a shriek of the train, and hastened down to the station just in time to hear the trainman shout, "En Voiture."

Seated across from us in our dingy third class compartment and jabbering away in their native Basque tongue were two peasant women dressed in many voluminous black skirts. They were returning from the market carrying large black cloth sacks filled with supplies which they had bought in the village with the money their vegetables had brought. Next to them sat a dapper young man with trousers, neatly pressed but much too short and barely covering his garterless, gray wool socks, and wearing a white tie stiffly starched,—evidently a village dandy off to Pau to hear the band concert in the park that evening.

Making myself as comfortable as is possible on a hard flat wooden seat, I felt the urge of a cigarette, and, addressing the women across from me, I asked, as I had learned to do, "La Fumée vous gêne-t-elle, mesdames?" As I received no response, my pride in my French took a fall, and I carefully repeated the question. They seemed conscious of the fact that I was addressing them, but looked at me blankly until the other occupant of the seat, until then quite absorbed in his own thoughts, mumbled to them words which I did not understand at all. Whereupon they bowed and smiled, and the young man turned to me and said, in French, "No; go ahead and smoke, Mister, if you want to," and nodding in the direction of his companions, added, "they don't understand French."

TECHNICAL CO-OPERATION

In the Lefkovits Store in Canton, Ohio, the cooperation of the local electric service company with the architects resulted in an electrical installation that assures the store against electrical obsolesence.



LEFKOVITS STORE

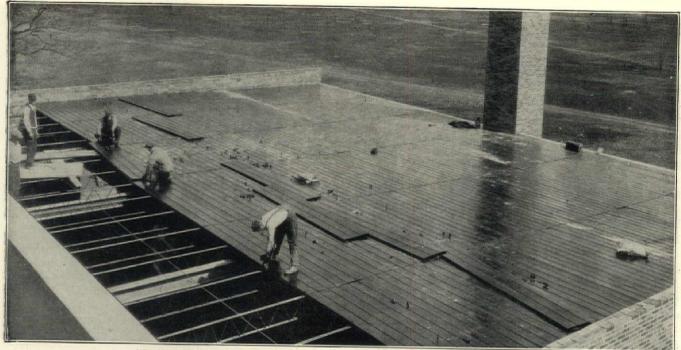
Canton, Ohio

Architects: Lorentz & Lorentz,

Canton, Ohio

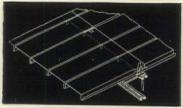
For information about trends in lighting standards and about adequate wiring call on the Wiring Bureau of your local electrical service company, or write direct.

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



Laying Berloy Roof Deck, All work done from roof top without additional fabrication.

Check this One for Investigation



Clip Clamped To Purlin

THE IMPROVED NEW TYPE BERLOY ROOF DECK



ERE is a roof deck embodying all the important features demanded by progressive architects and engineers. ** It is simple to install. No extra preparation nor additional fabrication is required. Speedily erected because of greater width. All work of laying is done from the roof top. Easy to handle. Has great strength and rigidity in fabricated section. Light weight reduces the load on the roof. ** Benefit by these and many other advantages. Specify Berloy improved roof deck. Made from open hearth steel, galvanized and copper bearing metals, and from the world famous Toncan.

RACKS



Easy to Install

Send for complete information and load tables. Estimates will be gladly furnished upon request.

THE BERGER MANUFACTURING COMPANY CANTON, OHIO

Republic Steel Corporation



LOCKERS BUILDING PRODUCTS

Today's Swedish Architecture

(Continued from page 37)

much used that has double glass with an air space between and that is double rabbeted to more effectively exclude cold air.

With the present enthusiasm for functionalism, Swedish architecture has not lost its artistic quality. This is due to the care with which compositions are studied and proportioning of the parts adjusted. This applies to the minor details, nothing being too small for careful study. For instance, in a very pleasing functionalist building there is a tall little window up in one corner of the façade that recalls by its proportions the long low range of windows, below and to the right, which is the chief feature of the front.

There is in general a basic orderliness and refinement that has been learned, probably, from the practice of classical design and carried over into functionalism. Sometimes the monumentalism and formalism have been carried over also.

The secret of the fine appearance of Swedish functionalist buildings is, usually, that they are designed by men who are capable of making the most refined and elaborate designs of a traditional character.

The versatility that betokens a mastery of design is one of the outstanding characteristics of contemporary Swedish architects and artists. E. G. Asplund, the architect of the Stockholm Exhibition, has to his credit de-

signs for such varied works as the beautiful wrought iron gate for a funeral chapel outside of Stockholm and a silver christening bowl of the utmost refinement of design. Carl Milles, the sculptor, designed the fine wrought iron gates at the entrance to his villa.

This breadth of interest leads to the understanding use of various materials in the enrichment of buildings. Modelled stucco is used admirably for instance, on the piers in Mr. Tengbom's Concert Hall and in the window niches of the Prince's Gallery, in Ostberg's Town Hall. Fresco, glass mosaic, cast metal, textiles and innumerable other media are employed in ways that show complete accord between the architect and the artist or craftsman. Mr. Tengbom's Swedish Match Company building is particularly rich in this respect.

A S will have been gathered from the foregoing, there is nothing hard-and-fast about the modern architecture of Sweden. It is constantly changing with the life, for Swedish architects endeavor to keep pace with the progress in all other activities. The attempt which is often made to classify certain men as romanticists, classicists, or functionalists is futile, for there is a constant interchange of views and more agreement than differences. The growth that is in evidence is an important sign of the vitality of Swedish architecture. (Cont. on p. 100)

LOGICAL, ISN'T IT?

When you are inspecting an old building preparatory to remodeling, the chances are that the first thing you plan to revamp is its electrical system. That's logical. Nothing has progressed more than the demand for and availability of Convenience Outlets.

By replacing the old baseboards with Conduo-Base, and

running base receptacle circuits and low tension wires in its two concealed, fireproof raceways, you can make the out of date wiring as up to date as in the latest skyscrapers, at a nominal cost.

Conduo-Base provides a potential outlet for either base receptacle or low tension, just where the tenant wishes, ready and available.

Write for details or see SWEET'S D-5848

CONVENIENT

INEXPENSIVE

FIREPROOF

ATTRACTIVE

KNAPP BROS. MFG. CO. Chicago, III.

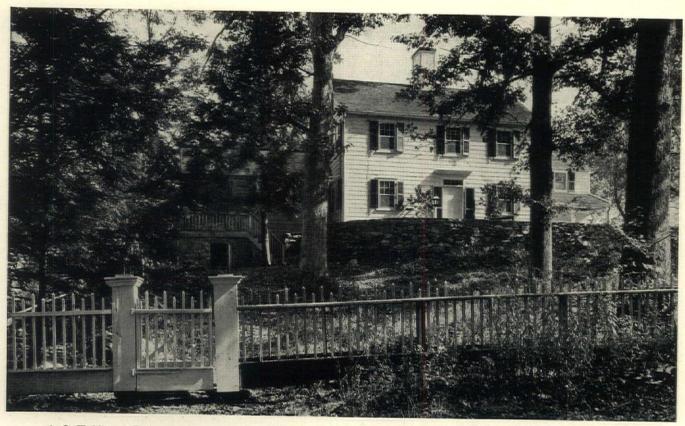
Licensed Manufacturers

DAHLSTROM METALLIC DOOR CO.

Jamestown, N. Y.

UNITED METAL PRODUCTS CO. Canton, Ohio

CONDUO-BASE .. FOR CONVENIENCE OUTLETS



A. C. Holden, A.I.A., was the architect of this remodeled farm house described in August Good Housekeeping.

The difference is vital to the architect

A man who knows architecture said recently that the work of Good Housekeeping Studio of Architecture and Furnishings "surpasses any attempt being made to educate the public to an appreciation of good architecture."

This, of course, might be a matter of opinion. There are other magazines which have well conceived departments devoted to home building interests. But none of these which can be compared with Good Housekeeping in scope or fundamental interest has at best more than 300,000 readers.

On the other hand, Good Housekeeping reaches nearly 2,000,000 readers, largely people who by environment, ideals and incomes are logical prospects for the architect's services.

There is this vital difference about Good Housekeeping: It is doing its good for architecture in a way that does the architect the most good.

GOOD HOUSEKEEPING

Everywoman's Magazine





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.

As to the future, the direction in which Swedish architecture is going, it is interesting and inspiring to note that it is not concerning itself chiefly with great monumental buildings, but with forms of construction vastly more important: the homes of the people, the places in which they work and in which they take their recreation-houses, multiple dwellings, factories, offices, also the concert hall, the theatre and the cinema. The outlook from the windows must be pleasant. The streets and squares through which the people pass must be attractive, and not marred by ugly buildings or by clashing designs or by inartistic advertising signs.

When asked about this newest trend, Mr. Tengbom replied, "'Charity begins at home,' says the old proverb. In our country we maintain that functional architecture begins in city planning. We have set as our aim the giving of sunshine and fresh air to everybody. This is impossible to attain in the older sections of cities. The problem is, however, of vital importance and must be faced. In Swedish cities we are now engaged in what we call 'a sanitary remaking' of the city plans even in

regard to traffic."

MANY of the new groups of multiple dwellings consist of long and narrow buildings extending north and south with broad open spaces between them, so that sunlight and air freely enter every room. A plan has been made for improving the neighborhood of the Town Hall in Stockholm and improvements of a like nature are being made elsewhere. The town planning and housing activities include the planning of industrial districts with factories, workmen's living quarters and other facilities as part of well designed schemes.

Attention is being given to the designing of all such practical utilities as oil storage plants, silo plants, laundries, hydro-electric plants and other structures that were not formerly regarded as within the province of architecture. The intention is that nothing unsightly shall meet the eye anywhere. Closely allied to this trend in architecture is the movement that is bringing beauty into the homes of all the people through well designed "everyday wares." These things, machine made by mass production, often cost no more than the articles of inferior design which they are replacing, and the handicrafts are contributing their share of beautiful things for the

The importance of this latest development was made clear by Mr. Tengbom when he said, in concluding this interview, "The leading exponents of this view of the requirements of the age are especially the younger set of architects. But the circumstances are now so changed that nearly all kinds of building operations must be considered as a functional problem in which the social, economic and practical factors have become dominant. Nobody can ignore them today."

I EON STERN, F. A. I. A., died June 30. He graduated from Cornell under a scholarship in 1889. He was a member of the Central New York Chapter of Architects, the Rochester Society of Architects, the University Club and the Cornell Club of New York. Among the Rochester buildings he designed are the Commerce Building, the University Club, the Theta Delta Chi Chapter house at the University of Rochester, several churches and a number of industrial plants.

The Dallas Gas Company Building

Dallas, Texas

Architects: Lange and Witchell Structural Engineers: Gardner and Howe General Contractors: Jopling Construction Company

BETHLEHEM SECTIONS

Framework of



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

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



At the present time the Dallas Gas Com-pany Building is 13 stories high. Provision has been made for an ultimate height of 23 stories, as shown above.

BETHLEHEM

What Architects Are Talking About

(Continued from page 63)

A NEW system permitting the discount of mortgages through a new central bank, established by Federal legislation, is proposed through action taken at the recent annual convention of the National Association of Real Estate Boards. President Hoover will be asked to consider the possibility of securing such legislation. The Association's Board of Directors states:

"The weakness of the present system is shown by the

following facts:

"Banks, even when in ample funds, frequently must refrain from lending on mortgages because of the danger of jeopardizing their liquid position. Building and loan associations in many localities become periodically subject to frozen condition so far as accepting new mortgages is concerned. Depositors under such circumstances often are unable to withdraw their savings, a fact which disturbs the whole financial structure.

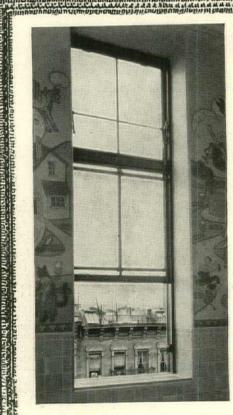
"Short term home financing has been always a hazard, deterring buyers, investors and builders. The home owner who is unfortunate enough to have a short term loan come due in a period of depression is a victim of

the present system.

'The excessive cost of junior financing has increased the cost of homes and at the same time has driven many small builders out of business."

GOVERNMENT work now in the hands of private architects is analyzed by Fred C. Croxton, acting chairman of the President's Emergency Committee for Employment, as follows: "Of the 194 jobs now in the drawing stage, private architects are handling the design of 72 projects valued at \$152,687,023, while the Treasury is preparing drawings for 122 projects valued at only \$26,953,600, or scarcely more than one-sixth as much. The work being done by the Treasury is mostly in specialized types of buildings in which the long experience of designers in the Supervising Architect's Office is believed to make for maximum efficiency. The design of the larger and more important public buildings is being entrusted to a large degree to private architects."

NDERGROUND water, which has caused much trouble in the Triangle at Washington, will be dealt with in the new Post Office building by what is termed an "underground filter unit." This apparatus is a large screen sunk deep in the ground to form a well into which the underground water can flow, and yet keeps out the earth. Pumps will then be used to pump out the water, thus reducing underground water pressure.



Windows in the Guggenheim Dental Clinic, East 77th Street, New York City. York & Sawyer, Architects. Steel windows by Truscon Steel Co.

Providing Positive Control For Pressed Steel Transom Sash

The large top-hung transom sash, over the double hung pressed steel windows of the operating rooms in this hospital, are positively controlled by Lord & Burnham vertical screw thread operators.

This inconspicuous apparatus is operated with one hand, by a small crank near the sill. The transom is firmly locked at any desired angle.

Arm sets are attached to both stiles of the transom, preventing it from twisting and rattling.

Gears and gear box are of brass and bronze, the rest of the equipment being painted to match the sash.

ord & Burnham Co.

SASH OPERATING DIVISION Graybar Building, New York City

Representatives in principal cities of the United States and Canada

one messagamamamamamamame and managament de co

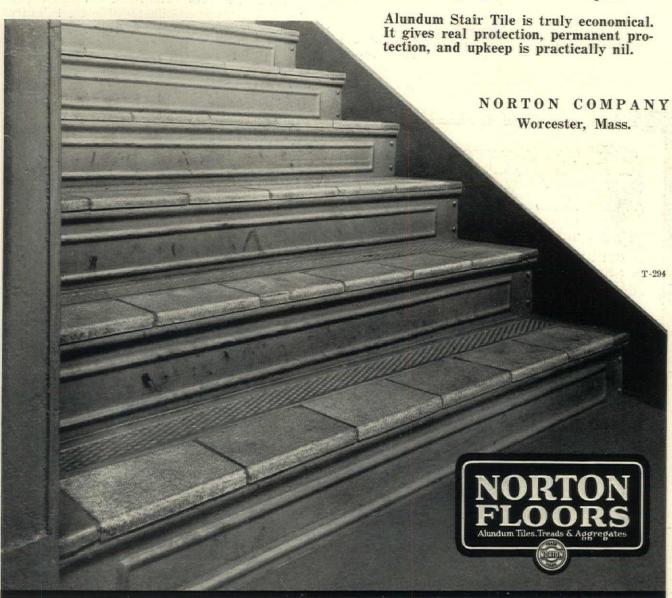


Ten Years of Hard Service— But Not a Trace of Wear



IN August, 1921, Alundum Stair Tile was installed on all stairways of this trade school for girls. The unretouched photograph reproduced below was taken in June, 1931. You can sight along the edge of any tread on any stairway without seeing a sign of wear—even at the corners where traffic is concentrated—and the tile is as non-slip as the day it was installed.

"In all the ten years not a single girl has been known to fall on the stairs. And not a single tile has become loose"—the building superintendent's report.





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

PRIZES totaling \$1,200 have been awarded for the most esthetic design of a steel bridge in a competition held by the American Institute of Steel Construction, and participated in by architectural and engineering students. The first prize for the best design by a student of architecture went to R. F. Weber, Atelier Adams Nelson, Chicago; second prize to Glenn E. Crippen, Iowa State College; and the third to Lester W. Casey, Iowa State College. First prize for the engineering student class was withheld; second prize went to Jeremiah C. Iandolo, University of Pennsylvania; and third prize to Covert Robertson, University of Michigan.

A NY prospective buyer may rent for a tryout period, and a substantial part of the rent will apply towards the purchase price, according to a plan worked out by the Belhall Company, developers of "Mountain Lakes," New Jersey. The rent charged is 11 per cent of the cost of the house and the lease runs for either two or three years.

THE Northern Life Tower, Seattle, was selected as the most outstanding building in the State by the Washington State Chapter at the request of the Chicago Tribune. A. H. Albertson and Associates were the architects. This building was illustrated in the February, 1930, issue of The American Architect.

SEVENTEEN per cent vacancies in office buildings, or 7 per cent above the normal 10 per cent vacancy allowance, is reported as of May 1 by the National Association of Building Owners and Managers, which surveyed 1,982 office buildings in 42 of the largest cities in the United States and Canada.

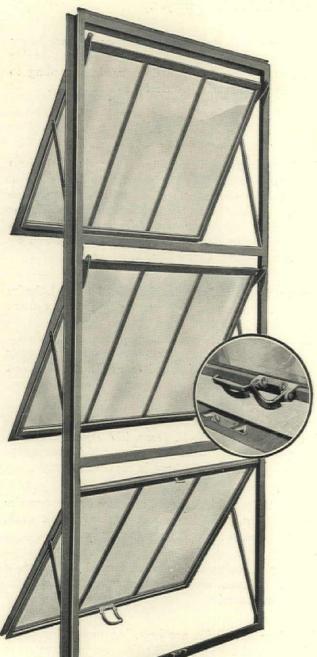
A "LIGHTING director" in front of the stage will be a feature of the new Earl Carroll Theatre, New York. In a space covering six seats in the first and second rows of the center aisle, the electrician, in full dress, will sit so that he may observe the color effects produced as he operates the board.

THE amount of the average mortgage given by the savings and loan associations in the State of New York from January to June, 1931, was \$3,175, according to figures released by George A. Plant, executive secretary of the New York State League of Savings and Loan Associations.

P HILADELPHIA, Pa., has organized a Federation of the Construction Industry which has, as its primary purpose, stabilization of the industry in the Philadelphia area. It includes bankers, real estate men, architects, builders — in fact, everybody whose line of business is connected with the construction industry.

EW YORK UNIVERSITY was awarded the University Medal of the Groupe Américain, Société des Architectes Diplômes par le Gouvernement Français, for the work submitted in the competitions of the Beaux Arts Institute of Design during the past year.

DONOVAN AWNING TYPE S T E E L WINDOWS



For Better Daylighting and Ventilation

Sunlight without glare and fresh air without drafts are provided for schools and offices through the scientifically designed Donovan Awning Type Windows.

The individual shades on each sash act as awnings and reflect the sunlight to the ceiling where it is diffused. Movement of lower sash operates the upper sash; all sash may be opened to any angle or upper or lower sash closed. Windows may be controlled by crank operator if desired.

High quality materials, workmanship and hardware are used throughout Truscon Awning Type Steel Windows. Their moderate price makes them practical for all good buildings. Complete data, suggestions and catalog furnished on request.

TRUSCON STEEL COMPANY youngstown, ohio

Warehouses and Offices in all Principal Cities



MONUMENTAL PROJECTED STEEL WINDOWS

A superior type of projected window for good commercial and public buildings. Complete range of types and sizes withor without hoppervents.



DOUBLE-HUNG STEEL WINDOWS

Highest quality, one-piece, welded construction. Spring bronze weather strips. Furnishedin steel, bronze or aluminum, with heating recess if desired.

TRUSCON

STEEL WINDOWS . STEEL DOORS . STEEL JOISTS . METAL LATHS . STEELDECK ROOFS . REINFORCING STEEL

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 H. VAN BUREN MAGONIGLE, A. I. A., has been given the first honorary degree of doctor of architecture ever conferred in this country. The degree was presented at the 1931 commencement of the University of Nebraska.

OFFICERS of the Brooklyn Chapter, A. I. A., were elected May 25 as follows: Charles G. Wagner, president; William A. Sanders, vice-president; George Francis Kiess, secretary; Herbert G. Bowman, treasurer; Ralph M. Rice, surveyor.

LIVING costs of the average wage-earner are lower than at any time recorded within the past twelve years, and the trend is still downwards, according to the National Industrial Conference Board.

PERSONALS

A. F. Wysong and T. P. Jones, formerly of the firm of Wysong, Bengtson & Jones, Charleston, West Va., announce their association with Russell Seymour, Jacksonville, Fla., for the practice of architecture under the firm name of Wysong, Seymour & Jones. Offices will be in the Schmidt Building, Cincinnati, Ohio, and Peoples Bank Building, Charleston, West Va.

Raymond M. Hood, Frederick A. Godley and J. Andre Fouilhoux, announce the dissolution by mutual consent of the firm of Raymond Hood, Godley & Fouilhoux, as of March 31, 1931. Raymond M. Hood and J. Andre Fouilhoux will continue the practice of architecture under the firm name of Hood & Fouilhoux, 40 West 40th Street, New York.

Announcement is made of the re-opening of the architectural offices of T. F. Doan, 217 Sunset Building, Bellingham, Wash. William Aitken is the successor to Mr. Doan; Alfred F. Moberg is resident manager.

Louis P. Roncoli has opened an office for the practice of architecture at 30 Le Moyne Parkway, Oak Park, Ill. He wishes to receive manufacturers' catalogs.

William G. Kafes, architect, has opened new offices at Trenton, N. J., and would like to receive manufacturers' catalogs and samples.

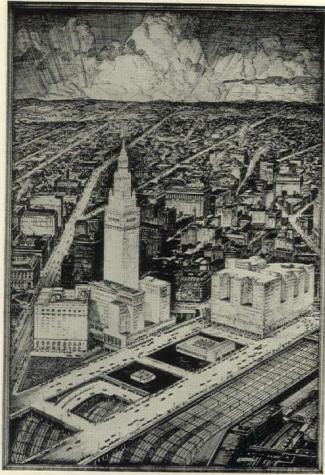
Theodore R. Jacobs, architect, has moved his offices to the Central Building, 108 West Sixth Street, Los Angeles.

O'Meara and Hills, architects, announce new offices at 5709 Waterman Boulevard, St. Louis, Mo.

Maurice J. Sullivan, A. I. A., Houston, Texas, has moved to 4301 Main Street, Houston, Texas.

Nichols & Fritzsche, Inc., architects, have moved to new offices at 1836 Euclid Avenue, Cleveland, Ohio.

A GREAT PROJECT —WELL EQUIPPED



An artist's conception of the Sargent-equipped Cleveland Terminal Group; Graham, Anderson, Probst & White, Architects

SARGENT HARDWARE contributes to the beauty and usefulness of each one of the buildings that make up the great Cleveland Terminal Group—office building, hotel, and railroad terminal. This fine-quality hardware is a usual specification when excellence of equipment must finish off excellence of construction.

Sargent Hardware covers the entire field of building—hotel, apartment, hospital, public and educational buildings and residences of every size. Designs range from classic, authentic reproductions of the various period patterns to the extreme simplicity of the ultra-modern.

Sargent & Company, New Haven, Conn.; 295 Madison Avenue, New York; 150 North Wacker Drive, Chicago. Belleville-Sargent & Co., Ltd., Belleville, Ontario, Canada.

Our line is adequately represented in Sweets', 1931 edition, Volume C, pages C3780 to C3878.

SARGENT

LOCKS AND HARDWARE

Saves Money For Your Clients

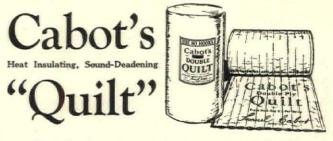
- Cabot's Quilt is quickly and cheaply installed in any house.
- ¶ Cuts heating-plant size and cost.
- Saves hundreds of dollars in fuel bills.
- Insures year-round comfort.
- Is rot-proof, vermin-proof, fireresistant.
- Has everlasting insulating power.

Mail the coupon below



A new house in Bryn Mawr, Pennsylvania.

Architects, Wallace & Warner. Insulated with Cabot's Quilt.

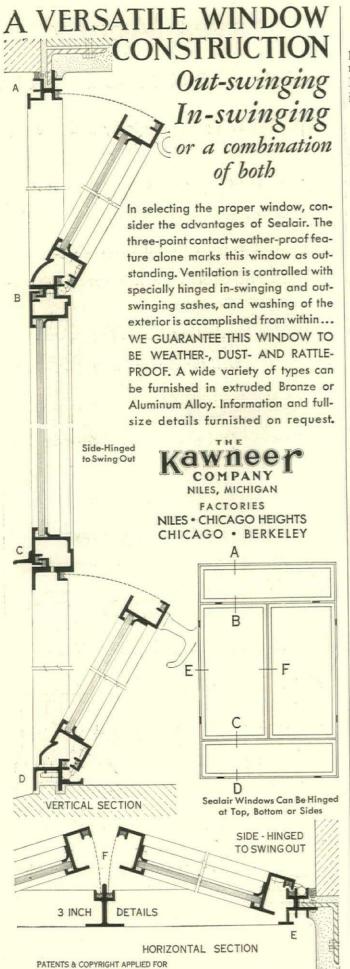


Made by the makers of the famous Cabot's Stains and Cabot's Collopakes, for use instead of paint

Samuel babot 141 Milk Street, Boston, Mass.

Please send me your Quilt Book, Build Warm Houses

Name			*	*		*	*		25				r)		*	٠	٠		٠					
Address:		-	(48	7	 100						,	1.						 		A.	1	١	8-	3



ARCHITECTS DESIGN == KAWNEER BUILDS

BULLETINS

Tests of Welds. By Wilbur M. Wilson, research professor of structural engineering, University of Illinois. A report of an investigation conducted by the Engineering Experiment Station, University of Illinois, in cooperation with the Chicago Bridge and Iron Works.

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.

WIND PRESSURE ON A MODEL OF A MILL BUILDING. By Hugh L. Dryden and George C. Hill. Research Paper No. 301 of the U. S. Bureau of Standards. For sale by the Superintendent of Documents, Washington, D. C. Price, 10 cents.

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

EFFECT OF BUILDING MATERIALS ON PAINT FILMS. By H. M. Llewellyn. Building Research Bulletin No. 11 published by the Department of Scientific and Industrial Research, 16 Old Queen Street, Westminster, S. W. 1, London, England. Price, 2d net.

Government Competition With Private Business

A MONG the general objectives in the Platform for American Business, and fundamental in the planning of sound business development, is one of greatest importance to the power field—"Encouragement of Private Initiative and Responsibility vs. Extension of Governmental Activity," states *Power*.

The extent to which private initiative is being encroached upon is little suspected by many and deserves review.

It has long been a source of dissatisfaction among our shipbuilders that they should be placed in competition with the Federal Government in the building of naval vessels, and if all the cost of navy yard built ships were charged against them it is a practical certainty that their prices would suffer greatly in comparison with privately built vessels. . . . But a short time ago the United States Navy requested a substantial appropriation of Congress for the manufacture of diesel engines and included a request for \$500,000 for the purchase of European diesel engines for experimental purposes. . . . One may very properly ask why the navy should not spend its \$500,000 helping diesel manufacturers at home. This would be a really constructive thing to do and would have the immediate virtue of aiding private initiative and the employment of men as well.

The most recent effort of government to extend its activity was concluded with the President's veto of the Muscle Shoals bill. Had it become law, the government would have gone into the business of making fertilizer, and of operating a public utility in competition with its

BLOXONEND FLOORING

LAYS SMOOTH-STAYS SMOOTH

Shown below is a BLOXONEND floor in the plant of the American Lithographic Co., Buffalo. This is an instance where Bloxonend replaced a comparatively new floor of another type which was durable enough but not sufficiently smooth.

After all, LASTING SMOOTHNESS is really the big thing to look for in a factory floor. SMOOTH-NESS is what speeds up trucking, cuts upkeep cost on equipment and saves vibration damage to goods in process of manufacture. A durable factory floor that does not stay smooth is a liability—its long life is valueless.

Bloxonend is resilient, bright in color, odorless, noiseless, splinterless and permanent. Its unique construction insures lasting smoothness. Widely used by leading industries

and in the gymnasiums and shops of prominent schools. Ask for sample and specifications from Carter Bloxonend Flooring Co., Kansas City, Mo. See Sweet's for branch office addresses.

BLOXONEND

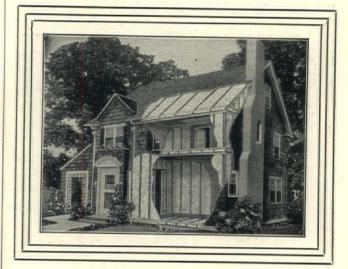


Insulate

U.S. MINERAL WOOL

The Perfect Insulator

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



Greater Comfort And Actual Saving!

The proper insulation of a home is not an additional building expense but is a positive money saver.

Year after year, as long as the building lasts, the original installation of Mineral Wool never fails to provide greater living comfort and reduced expense.

It saves annually about one-third in fuel costs, assures a warmer house in winter, a cooler one in summer, thoroughly sound-deadened and free of vermin.

Although the nominal cost of installation will be made up in a short period of time, the added comfort is alone worth many times the original

Our FREE booklet explains the real economy of insulation. Send for it and free sample of 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 an	d illustrated	booklet to	
Name					

Address City...... State.....

lengths. The tough end-grain forms the wear-

ing surface.

In Hotels, too VENETIAN BLINDS add to



The beautiful and restful dining room of the Hotel Cleveland, famed hostelry at Cleveland, Ohio

THIS attractive installation in the Hotel Cleveland is typical of the use of Victoria Venetian Blinds in the finer hotels and clubs, nation-wide.

No other type of window equipment gives the delightful lighting effects, softening and deflecting the sunlight . . . at the same time allowing draftless ventilation.

Victoria Venetians are furnished in all colors and tones. They fit into any decorative scheme.

THE BOSTWICK-GOODELL CO.

Blinds since 1894

NORWALK, OHIO

Representatives in Principal Cities See Sweet's for detailed specifications.

VICTORIA VENETIANS

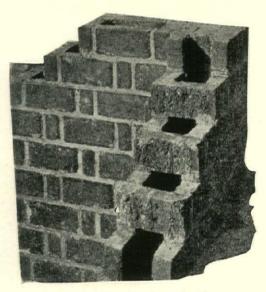
The Better Blinds

own citizens, upon the prosperity of whom the government itself depends.

Business men and individuals are deeply affected by these tendencies of government to enter into competition with the hand that feeds it. Government can not do business with the efficiency of private enterprise. Because one's personal life may not directly contact with these affairs, his prosperity is none the less definitely tied into the support and advancement of a sound Platform for American Business, of which the encouragement of private initiative and responsibility vs. the extension of governmental activity, is a plank of special significance.

Books

(Continued from page 72)



Eight-inch all rolox Flemish bond. From "Brick Engineering"

BRICK ENGINEERING, VOL. 2

By Major L. B. Lent. Published by the Common Brick Manufacturers' Association of America, Cleveland, Ohio. Illustrated; indexed; 126 pages; size 5 x 71/2; price \$1 in fabricoid, 50c in paper.

THE subtitle of this book is, "Design and Construction Brick Buildings." It discusses the design and construction of those basic structural parts and design considerations which are common to most any type or style of building.

It covers brick masonry materials, physical properties of brickwork, designing brick masonry, reinforced brickwork, essentials of good workmanship, construction details of solid or hollow brick walls, and similar practical data. There is a glossary of terms used in brickwork.

The book is written in language easy to understand. Major Lent, the author, has for a number of years been chief engineer of the Common Brick Manufacturers' Association and is well known to readers of The American Architect as a contributor of articles on brickwork.

LABORATORY TESTS OF REINFORCED CONCRETE ARCHES WITH DESKS. By Wilbur M. Wilson. Bulletin 226 of the Engineering Experiment Station, University of Illinois, Urbana. Price 50 cents.



St. Paul's Memorial Reformed Church, Reading, Pennsylvania Miles B. Dechant, Reading, Pa., Architect

by Kundtz Craftsmen....

The intricate detail and beautiful finish typical of the wood carvings produced by Kundtz Craftsmen add dignity wherever installed.

St. Paul's Memorial Reformed



Typical Balcony Rail

Church of Reading, Pennsylvania is a typical Kundtz installation. Architects all over the country are specifying Kundtz craftsmanship. Let our representative tell you why.

THE THEODOR KUNDTZ CO. Cleveland, Ohio



Trouble Breeds in Masonru

Joints



HERE there is a crevice, however small, between courses of masonry, there you will find dust, moisture, chemical action, and, in cold weather, frost.

Where there are dissimilar materials joined in building construction, there you may expect to find crevices. Coefficients of expansion have a way of exerting rude force.

There is a way to beat Nature at her own game. Seal up each joint by calking it with a permanently plastic material, a substance that "takes up" any variation in the space. Does the joint contract? So does Pecora Calking Compound. Does the joint widen by a hair's breadth? Pecora holds grimly to both materials. It "stretches." It shuts out the causes of disintegration and decay.

In addition to its fundamental qualities, it must be non-staining and must be available in colors matching materials for unusual work. Needless to say, our sixty-nine years of manufacturing building materials have assured a substance that has proven dependable. It is protecting much of the finest masonry erected in the last two decades. We will forward additional information about Pecora Calking Compound if you will fill out and mail the coupon below.

Pecora Paint Company

Third Street & Erie Avenue Philadelphia, Pa. Established 1862 by Smith Bowen



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

Name			 	٠	*1					 		**					
Street																	
Town	and	State												((C))	

"I want..."

A department conducted without charge as a service for readers of The American Architect

Permanent, temporary connections desired with Architect, Firm or Owner intending building; by first-class carpenter-cabinetmaker, ex-foreman. Expert on installing finest interiors; panelling designs, concealed locks, etc. Go anywhere, even abroad. American Architect Want No. 156.

ARCHITECT now in private practice, would like to give all or part of his time to some manufacturer, as representative, promotional work, publicity work, contact man, draftsman, erection superviser, or in any other capacity. Salary secondary. Age 38. Married. Can go anywhere. American Architect Want No. 157.

ARCHITECT'S SUPERINTENDENT. University graduate in Architecture. Superintendent of proven ability. Twenty-four years of experience, the last eighteen years on large high-grade work—very fine residences, high schools, hotels, office buildings and court houses. Well recommended by architects and owners. Moderate salary. Available on short notice. American Architect Want No. 158.

ARCHITECTURAL DRAFTSMAN, university graduate, with several years' experience, including two with one middle-western A. I. A. architect, seeks position in New York. Fully capable of developing residential commercial and industrial work from sketches to completion. Salary secondary to opportunity. Age 26. American Architect Want No. 159.

Position Wanted as architectural draftsman or general assistant to architect or engineer. Over 30 years' experience on all types of buildings and classes of construction in New York, Cincinnati, Cleveland, etc. Considerable school work. Thoroughly practical, accurate and rapid. Sketches to specifications. Some ability of design and rendering. Practiced 8 years. A. I. A. 1912. Will go anywhere. Moderate salary. American Architect Want No. 160.

The American Architect receives many requests for information, covering everything from men who seek positions and architects who require men or want back copies of a magazine. To make this service as useful as possible, such requests will be published without charge. Address your reply to The American Architect Want No. () and enclose in a separate envelope. It will be readdressed and forwarded.

Types of subjects eligible for listing are: Architects seeking designers, draftsmen, engineers, specification writers or other assistants—men seeking positions—partner wanted—practice for sale—architects draftsmen and students who have books for sale or exchange, or who want back issues of a magazine—firms seeking a man with architectural training—architects who wish commercial connections, etc.

Construction Engineer, member A. S. M. E., desires position with architect and others in building and manufacturing industries. Former executive and engineer on skeleton buildings, miscellaneous structures, industrial plants, machine shop products. Broad business experience. Any connection or situation acceptable. *American Architect Want No.* 161.

REGISTERED ARCHITECT, college graduate, 12 years practical experience, fireproof and non-fireproof buildings. Can handle complete jobs. Would like position as architectural draftsman. Best of references. Salary reasonable. *American Architect Want No.* 162.

OFFICE HELPER or other job. Young man (21) determined on becoming an Architect. Carpenter, with a knowledge of "Blueprints and Drawings" in a practical manner. "History of Architecture" and a beginning in Drafting. Consistent and alive. Want to get a progressive Architect (U. S. or Can.). Will go to any inconvenience in order to progress in this direction. American Architect Want No. 163.

Architectural Designer and structural engineer, college graduate, fourteen years experience, wants position with established architect in small city or town with promising future. Can invest a reasonable amount of money in the business if necessary. *American Architect Want No.* 164.

THE SIMPLICITY OF RIC-WIL MAKES IT FOOL-PROOF AND EASY TO INSTALL

These installation pictures tell the story

After smoothing trench bottom with sand-cement cushion, Base Drain Foundation is set to a line and banked with broken stone. Bottom conduit halves are installed and bells cemented. Base Drain provides ample immediate drainage and a solid foundation for Conduit.



Ric-wiL guarantees an efficiency of 90% or better—and every job must completely satisfy the owner.

Heavy saddles, resting on Base Drain shoulder, support these multiple pipe supports every 12 feet. Broken stone is banked to Conduit centerline and covered with filter cloth. Opening in Conduit for pipe supports is completely closed with mortar.



Ric-wiL top and bottom Conduit halves are the same—they can't be put in wrong,



Installing, welding and testing pipes is exceptionally easy because pipes are out in the open readily accessible. All pipes are completely installed and tested without interruptions, delays or interference. Anchors and alignment guides are easily provided for.

Ric-wiL Service Details, with drawings, necessary dimensions and complete installation instructions, are available upon request.



Dry-paC Insulating Filler, or Ric-wiL No. 11 Filler, are easily applied. Then the exclusive Loc-liP Side Joint is cemented the final operation sealing conduit halves together with a water-tight joint. Refer to Sweet's or write for Catalog No. 8



THE RIC-WIL COMPANY

1562 Union Trust Building · · · · Cleveland, Ohio

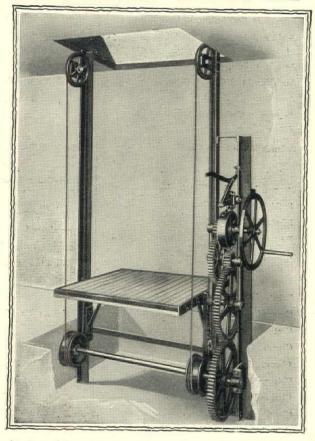
Branches: New York - Atlanta - Chicago

AGENTS IN PRINCIPAL CITIES



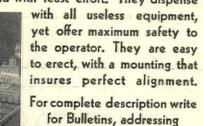
CONDUIT SYSTEMS FOR UNDERGROUND STEAM PIPE

BASEMENTS BECOME USEFUL



Architects, seeking to add every extra bit of profitable space to the building project, are specifying ENERGY Sidewalk Elevators for the handling of merchandise and removal of ashes. Floor space once wasted is thus made profitable.

ENERGY Sidewalk Elevators—Electric or Hand Operated—have many advantages. They are geared to move capacity load with least effort. They dispense



ENERGYELEVATOR COMPANY 220 New Street Philadelphia SINCE 1887





INDEX TO ADVERTISERS

		-	
1	Aluminum Co of America	7	F
	Ambler Asbestos Shingle & Sheathing	-	I
	Co	75	
	American District Telegraph Co		
	American Steel & Wire Co	3	(
	American Tel. & Tel. Co	77	(
	Armstrong Cork Co., Floor Division		
	Armstrong Cork & Insulation Co	5	
-	Atlantic Terra Cotta Co	87]
		"	1
	Berger Mfg. Co., The	97	1
	Bethlehem Steel Co		
	Blank & Co., Frederic		10
	Bostwick-Goodell Co., The		3
	Burlington Venetian Blind Co		1
	Burnington venetian Dinie		in
	Cabot, Inc., Samuel	107	
	Carey Co., The Philip	4	
	Carter Bloxonend Flooring Co	109	
	Carney Cement Co., The	65	-
	Cheney Co., The	94	1
	Chicago Faucet Co., The	73	
	Clark, Inc., Peter	92	
	Classified Ads	112	
	Columbus Coated Fabrics Corp	6	
	Conduo-Base Co	98	1
	Crane Co	17	
	Crittall Casement Window Co	. 16	
	Cutler Mail Chute Co	104	
	Detroit Show Case Co	14	
	Dunham Co., C. A		
		44.5	
	Energy Elevator Co	113	

	Florida-Louisiana Red Cypress Co 90
	Fulton Sylphon Co 79
1	
	Georgia Marble Co., The 71
	Good Housekeeping 99
1	
	Halback & Co., C. E 88
	Herman Nelson Corp., The 20
	Holtzer-Cabot Electric Co., The 93
	Independent Lock Co 80
	ziidepenavii.
	International Nickel Co., Inc., The 10 "I Want" Page
1	1 want rage
	Johns-Manville Corp8
	<u> </u>
	Kawneer Co., The 10
	Kerner Incinerator Co
	Kewanee Boiler Co
	Kundtz Co., The Theodor 11
	Lord & Burnham Co. (Greenhouse) Back Cove
	Lord & Burnham Co. (Sash Operating) 10
	Ludowici-Celadon Company
	and the second s
	Milcor Steel Co
	Modine Mfg. Co
	Mueller Co

National Electric Light Association 96
Norton Co
H MAR MILE
Otis Elevator Co 84
Otis Elevator Co 84
Pecora Paint Co
Peelle Co., The 11
Pittsburgh Plate Glass Co 8
and the second s
Rambusch Decorating Co 96
Ric-Wil Co., The 113
Rising & Nelson Slate Co 15
Ruberoid Co., The
Manager 1997
Sargent & Co 107
Sloane, W. & J
Smith & Wesson
Smyser-Royer Co
Stromberg-Carlson Telephone Mfg. Co. 100
Thorp Fireproof Door CoSecond Cover
Trenton Potteries Co., The 9
Truscon Steel Co
Truscon Sect Communication
Universal Atlas Cement Co
U. S. Mineral Wool Co 109
U. S. Ozone Co. of America 114
Warren Webster & Co 12
Westinghouse Electric Elevator Co.
Third Cover
Westinghouse Lamp Co 96

Trade Mark

ONE

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 1920

EMPIRE STATE BUILDING

Architects: Shreve, Lamb & Harmon Contractors: Starrett Bros. & Eken, Inc.



A smart Salubra pattern (No. 31658) in one of the T1 Dining Rooms in the Empire State Club—all of which are rendered fadeless and washable by means of this modern wall treatment.



Tekko—a companion-product of Salubra with silk or metallic finishes instead of a paint surface—was used in this private Dining Room. Tekko, like Salubra, is both fadeless and washable. (No. 31335)

SALUBRA ... selected for the smart interiors of the EMPIRE STATE CLUB!



One of the main corridors of the Empire State Club, showing a novel and interesting wall treatment achieved by using three different Salubra patterns in combination (Nos. 31518—31516—3230-5)

Again Salubra is chosen for an outstanding interior—the Empire State Club, which occupies an entire floor of the world's highest and most famous sky-scraper. And here are the reasons—summed up for your convenience:

- 1 Salubra's patterns are exclusive. They cannot be obtained elsewhere. Many of them are the work of world-famous decorative artists, and there are hundreds and hundreds from which to choose—ranging from plain colors to the most brilliant modern designs.
- 2 Salubra's texture is distinctive. It gives unusual warmth and softness to the walls—adds depth and character to color and design.
- 3 Salubra's practical advantages are outstanding. It is non-porous, sanitary, permanent—equal in protection to six coats of oil paint on a base of zinc. Salubra will not fade and when soiled can be returned to its original freshness simply by scrubbing with brush, soap and water.

Let us tell you more about this entirely different wall covering and its advantages for offices, hotels, homes, etc. Frederic Blank & Co., New York Central Building, 230 Park Avenue, New York—Marshall Field Annex, 24 N. Wabash Avenue, Chicago.



Irogress Demands Changes

in Our method of doing!

Plaster has become the decoration for houses, offices, schools and other buildings. Not so long ago it was covered up . . . it was the base upon which the decoration was applied.

With this new development of exposed plaster surfaces, more care was given to the selection of the plaster base . . . and expanded metal came into more universal use.

Plasterers found that a metal base made their work more permanent, crackproof and firesafe . . . Then began the development of metal lath . . . and in this Milcor has been a pioneer.

Always seeking for new ideas that would make the plasterer's work more permanently beautiful, Milcor perfected a ribbed lath of greater stiffness than others of equal weight. Later a small mesh ribbed lath was developed . . . Kuehn's Specialmesh.

Then the Milcor Expansion Corner Bead was announced. Its wings of expanded metal gave a mechanical key right up to the edge of the bead . . . the narrow bead itself became an integral part of the plaster,

making it stronger and more permanent. It was also found that forming

corners on Milcor Expansion Corner Bead resulted in better corners at lower cost.

The expansion wing was also applied to Milcor Expansion Casing with almost instant success. Again Milcor contributed to the advancement of the art of plaster-





Milcor Expansion Corner Bead

Milcor Expansion Casing



ing by creating a product that has increased demand for mechanically keyed plaster. Sincerely interested in the development of better plastering, Milcor has invested hundreds of thousands of dollars to perfect these products and the machines with which they could be made economically.

We will continue to do so as the need arises. Progress demands changes in our methods of doing . . . and Milcor is ever alert to perfect new products that will help to maintain a world-wide preference for Better Plastering.

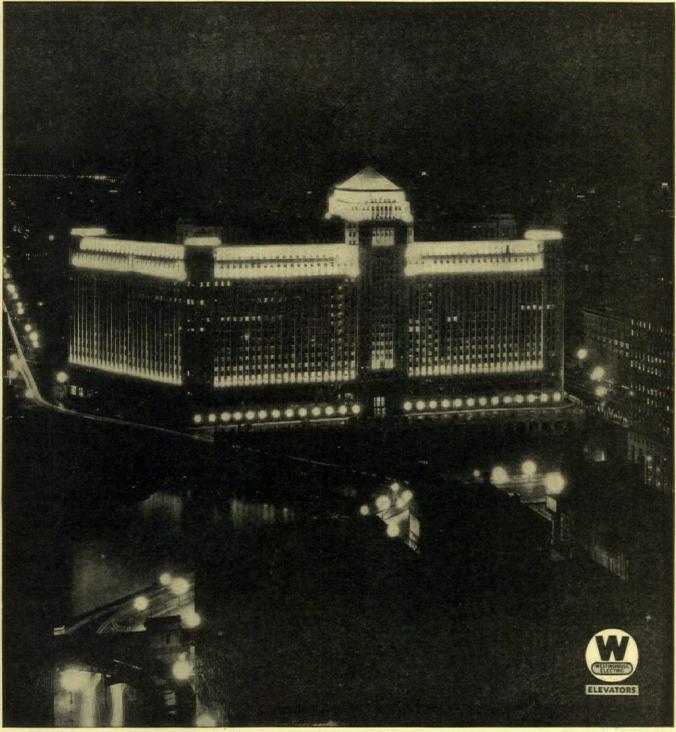
MILCOR STEEL COMPANY

MILWAUKEE, WIS., 4101 W. Burnham St. CANTON, OHIO Chicago, III. Kansas City, Mo. LaCrosse, Wis. Sales Offices: New York, at 418 Persbing Square Building; Boston, Mass., at 136 Federal Street; Atlanta. Ga., at 207 Bona Allen Building; Minneapolis, Minn., at 642 Builders Exchange Building; Little Rock, Ark., at 104 W. Markham Street

Copper Alloy Steel

Save with Steel

THE AMERICAN ARCHITECT



Graham-Anderson-Probst & White Architects

THE MERCHANDISE MART-CHICAGO

John Griffiths & Son Company Builders

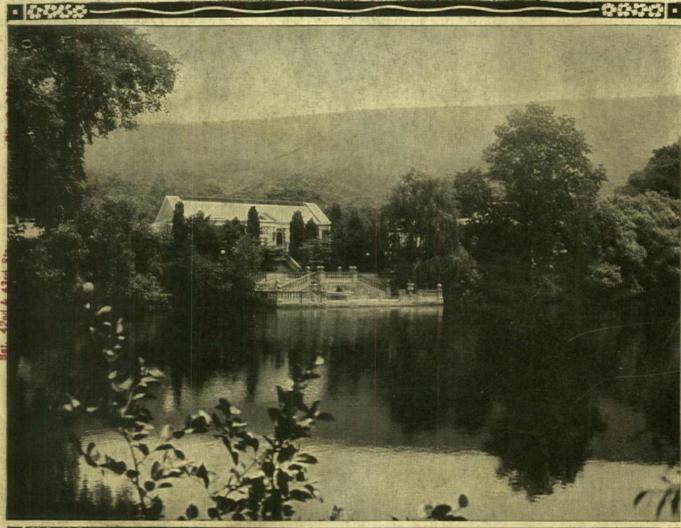
Westinghouse Elevators for the World's Largest Building . . . This choice of Westinghouse Elevators . . . accurate, smooth, swift, quiet operation and ease of control . . . reflects the growing universal demand for finer elevator performance.

Westinghouse Elevators are the logical highways of modern architecture

Westinghouse Electric Elevator Company

HEADQUARTERS FOR BACK NUMBER MAGAZINES N. 00 MIDTOWN MAGAZINE AND BODKSHOP YORK

105 - 6th AVENUE



Glimpse on Estate of W. H. WALKER, Great Barrington, Mass.

To FERRUCCIO VITALE and ALFRED GEIFFERT, JR.

The Credit Is Due

THE temple-like orangery is but one of the group of extensive glassed-over-gardens, forming practically three sides of the walled gardens. There are numerous fruit houses, general cut flowers houses, not to mention three for orchids.

This group was completed about 12 years ago. Long enough for it to have thoroughly seasoned, so to speak. Long enough for the houses to have indicated their practicalness for growing purposes; and superiority structurally.

However, in thinking of us in connection with these extensive layouts, do not overlook the fact, that the majority of the greenhouses we build are the moderate size ones, 50 to 75 feet long. Ones divided in two or three compartments.

The Improved Master V-Bar Construction has many outstanding points of advantage. Full particulars gladly furnished.

lord & Burnham Co.

Irvington, New York

NEW YORK DETROIT PHILADELPHIA ST. LOUIS CHICAGO BUFFALO MONTREAL BOSTON CLEVELAND ST. CATHARINES DENVER TORONTO

Generations

Dwynam Pub Schools

AMAR-1913
0219

WFTS NOTES 2015







· ILLVSTRATIONS ·

·AND · READING ·

MATTER PERTAIN =

·INC-TO:ARCHITECT =

·VRE·AND·ALLIED ·
·ART'S ·

PVBLISHED WEDNESDAYS IN NY - FOVNDED 1876 - VOLVME C III FEBRUARY 19, 1913 NVMBER 1939 -





Daylighting

Sidewalks, Transoms, Skylights, Canopies — all

Luxfer Prism Products are conservatively stated to excel imitation systems in point of daylighting qualities, durability and economy.

Yes! The statement does seem strong at first glance. But no stronger than our proposition warrants.

It was this company that showed daylighting did not consist simply of installing prism glass. We showed it required expert analysis of each installation in order to prescribe what angle on the prism was necessary to produce results.

That was twenty-five years ago.

Now we install 90% of all Daylighting Systems and have upwards of 34,000 in use.

Play safe and specify Luxfer. Our experts will gladly help you solve whatever daylighting problems you may have—free and without obligation.

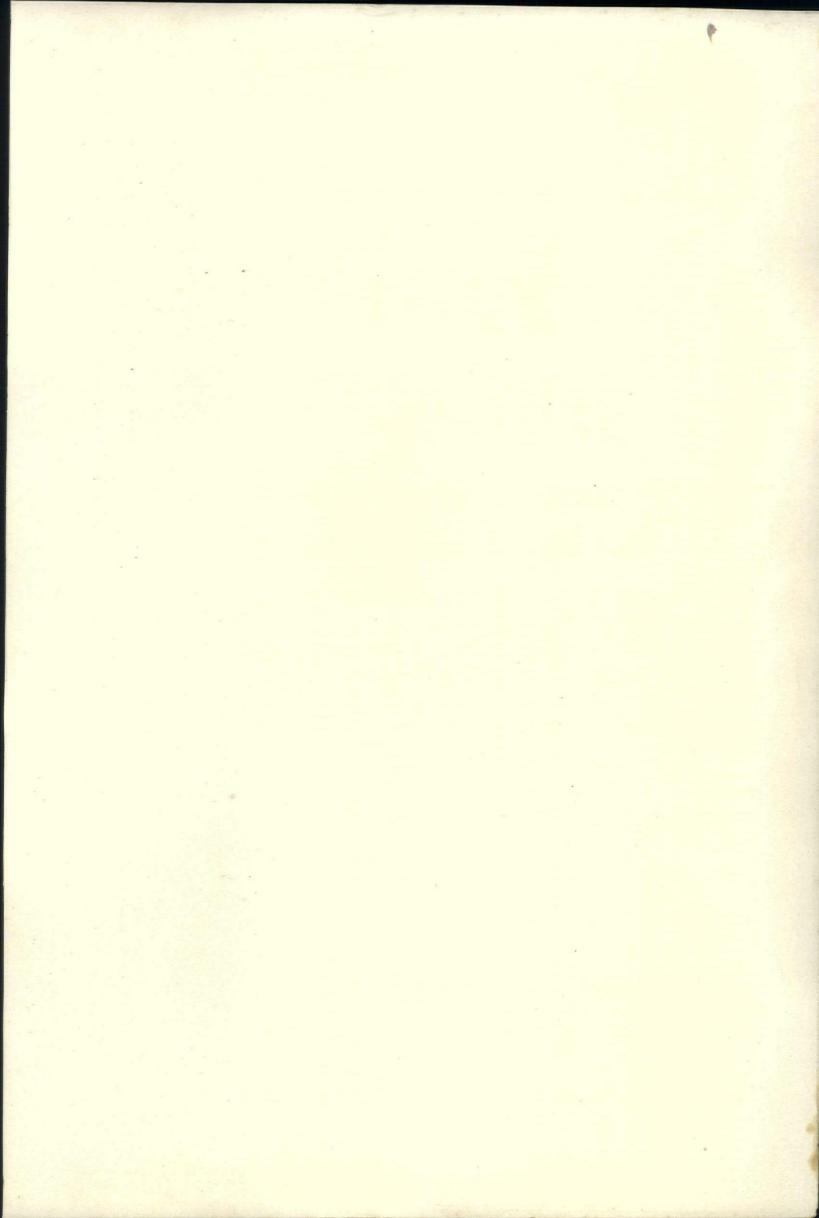
"Luxfer Daylighting" tells all. Ask for a copy.

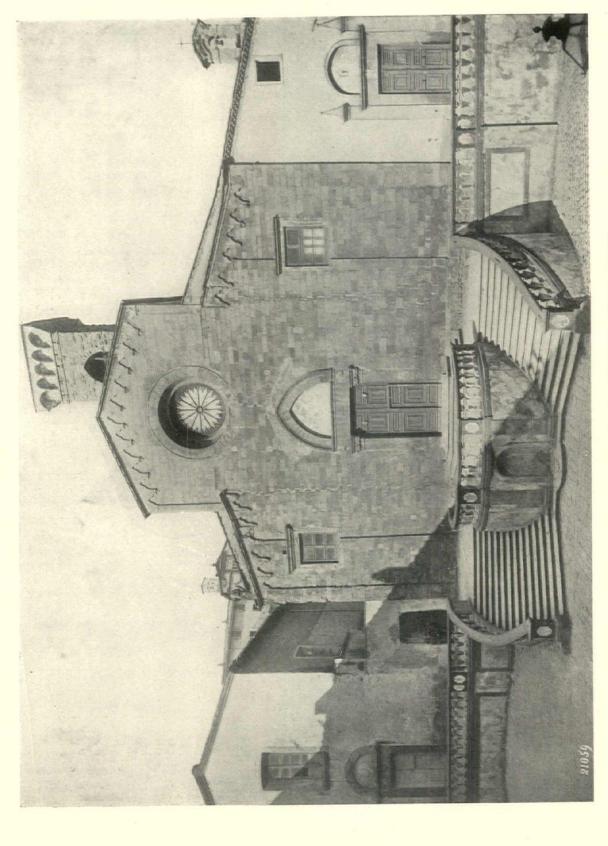
AMERICAN Juxfer Prism COMPANY

CHICAGO - - Heyworth Building
BOSTON - - - 49 Federal Street
CLEVELAND 419-20 Citizens' Building
DULUTH - - 106 W. Michigan Street
INDIANAPOLIS
KANSAS CITY - 948 N. Y. Life Building

MILWAUKEE - - - - Stroh Building NEW YORK - - - 507 W. Broadway NEW ORLEANS - 904 Hennen Building PHILADELPHIA - 411 Walnut Street ROCHESTER - - 38 Exchange Street

ST. PAUL - - - 615 Ryan Building
MINNEAPOLIS - 507 Andrus Building
DALLAS - - - Builders' Exchange
SAN FRANCISCO - 445-47 Turk Street
LOS ANGELES - 928 S. Main Street





CHURCH OF SS. STEPHEN AND NICOLAS, PESCIA, ITALY (Built A. D. 1193, restored A.D. 1748)

VOLUME CIII.

Wednesday, February 19, 1913

Number 1939



CHATEAU DE BLOIS

CONSISTENT BRICKWORK. PART III.

By GEORGE J. JERVIS



N reviewing the decorative schemes of ancient brickbuilders, one often notices the introduction of flints at certain points in the courses of brickwork and as far as the decorative effect was concerned these were no doubt introduced to give

some variety to the brick surface, and the use of this second material was due most probably to the restriction as to choice of colored materials, just as the Romans, in order to obtain the several color values

in their wonderful pavements, used different colored stone and even glass in their composition.

In these days with such innumerable shades of brick at our disposal there is no need or excuse to introduce into our design any material other than brick.

In a previous article of this series, attention was called to the numerous examples of old-time brick treatment with reference to its design. It may now be of interest to dwell upon a few of the many possibilities of brick design; with regard to the treatment of the brick field as well as the decorative details.

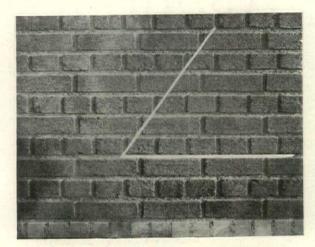
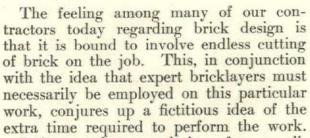


FIG. 1. ANGLE OF HEADERS, ENGLISH BOND



It is true that any design of a complicated or intricate nature must necessarily be placed for execution in the hands of a competent bricklayer; but in cases where the material is supplied by a first class manufacturer who is entirely conversant with the scheme desired, a great many if

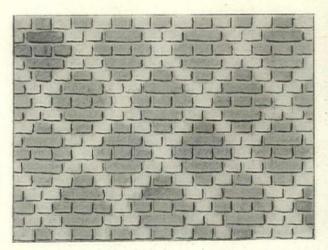


FIG. 3. DETAIL OF BRICKWORK, CHATEAU DE BLOIS, FRANCE

not all of the special pieces could be cut at the factory and arrive on the job ready to be placed in their respective positions as shown by the architects' drawings.

With reference to the bricklayer in general: it has often occurred to the writer that

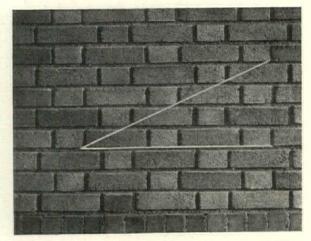


FIG. 2. ANGLE OF HEADERS, FLEMISH BOND

while carpenters, ironworkers and other members of the various building trades must, through the very nature of their craft, be required to execute many different forms of design in their several materials—yet the limit of the average bricklayer's art would seem to be the laying of brick in two or possibly three different styles of bond; while any call for a particular style of bond outside this radius or any attempt at the simplest form of brick decoration on the part of the architect calls forth a

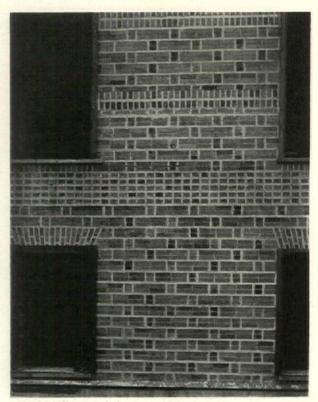


FIG. 4. AN EXAMPLE OF "DOUBLE BOND," MASONIC TEMPLE, BROOKLYN

MESSRS. LORD & HEWLETT, ARCHITECTS

vigorous protest from the contractor as requiring expert labor and a large additional expense.

tect demanding more than is reasonable?
Possibly part of the answer lies in the fact that until the present era, which is



DETAIL OF A ROW OF HOUSES IN BROOKLYN, N. Y.

AN EXAMPLE OF MODERN BRICKWORK IN ITALIAN STYLE
MESSRS. MANN & MACNEILLE, ARCHITECTS

Who is responsible for these existing conditions? The bricklayer, in not enlarging his sphere of usefulness; or the archi-

undoubtedly an era of brick architecture, our brick buildings have been in such a state of indigence as regards decorative



ANCIENT HOUSE IN THE RUE DE LILLE, YPRES, FRANCE

schemes that the bricklayer has had no chance to demonstrate his ability in anything but the simplest forms of brick construction.

The greatest attention should be given to the report of the Committee of Education of the American Institute of Architects which refers to the fact that "though we possess so many institutions and societies for the advancement of architectural education, there are practically no agencies for the education of the craftsman, the result of which must be and is, extremely injurious if not fatal to architecture itself." Furthermore, they very wisely point out that, as every architect knows, "the success or failure of his work depends largely upon the craftsmen who carry it out."

This is a matter which is absolutely vital

to the future of architecture in this country. Today is the day of Trade Unions, that claim, and very rightly too, "just wages" and "just hours"; but surely the architect and builder on their side should be in a position to demand "just work" from "careful" workmen.

The most artistic treatment of wall surface is obtained by laying the bricks in Dutch Bond; but where a more pronounced pattern is looked for it is usually obtained by lines of diagonal headers of a lighter or darker shade than the brick field, or in cases where the diagonal effect is to be very subdued, with headers of the same general shade as the rest of the field, but slightly projected from the regular surface. The angle of these headers is naturally dependent on the particular style of bond used. For instance, the angle of diagonal headers in either English or Dutch Bond differs considerably from the angle in Flemish Bond. See Figs. 1 and 2.

A good example of Diagonal pattern work is seen in Hampton Court Palace, the appearance of which is too well known to reproduce here.

In days when brick making had not reached the artistic possibilities which it possesses today, builders were much restricted as to the color values of the brick used and to obtain a clearly defined diagonal effect, use was made of vitrified headers.

In the Chateau de Blois, the diamond effect noticed in the brick field, seems at first glance to have been obtained by laying the brick in a special kind of bond; but on closer observation it will be noticed that in a general way it is ordinary English Bond with the exception that headers have been substituted for stretchers at certain places in the stretcher courses in order to preserve the diagonal line of the headers. See Fig. 3.

A special feature about the brick treatment of these old-time buildings seems to point to the fact that the architects thought

out their brick treatment first and arranged such details as windows, doors, etc., afterwards.

In many cases today we find architects specifying some special kind of bond to be used in a building, the field of which is often too confined to do justice or show to advantage anything other than plain running bond, or attempting to centre diagonal lines of headers over windows or between the piers of the building, in an elevation which has not in the first place, been laid out for a particular bond or with much study given to the sizes of the brick units to be used. The result is naturally an endless amount of trouble to the builder and a vast amount of cutting on the job.

A typical example of old-time Dutch brickwork is seen in an ancient house situated in the Rue de Lille at Ypres built about 1606.

It will be noticed that, allowing for slight discrepancies here and there, owing no doubt to the fact that the old handmade brick were bound to vary occasionally in dimensions, this building is laid in English Bond, the decorative features including the moulded arch brick over the windows which, although showing a light color in the photograph, in the original are no doubt dark and possibly vitrified brick.

An illustration is shown of a photograph

An illustration is shown of a photograph of a house at Kingston, N. Y., which is an excellent example of Dutch style of architecture built of a fairly rough textured brick in various and subdued shades of red, resembling in the general ensemble the old brickwork of Holland.

A particularly interesting detail of brickwork is to be noticed in the base of a fourstory building recently erected in Brooklyn, N. Y.

The general style of this building is typically Italian both as regards the brick field and the decorative details which were carried out in about six shades of gray rough

textured brick laid with gray mortar and raked joints.

Fig. 4 shows an example of where a more massive appearance being desired in the lower stories, it may be obtained by laying the brick in "double bond" forming the double unit by laying the duplicate stretchers and headers with blind joints.

The treatment of large field surfaces in brick is a subject which, though full of possibilities, seems in many cases to have had little thought expended upon it.

The side of a large building which is unrelieved by window openings, is a problem which it behooves the architect to give the most serious consideration.

Such buildings as the Cathedral of Sarragossa, Spain, and many of the old Persian Mosques, are standing examples of the artistic treatment of brick surfaces which, with certain modifications, might well be introduced into a modern architectural scheme.



WILTWICK INN, KINGSTON, N. Y. MR. M. S. TELLER, ARCHITECT

A case in point, although in this particular instance, the wall was not of particularly large area, is the clever treatment shown in the accompanying illustration (Fig. 5).

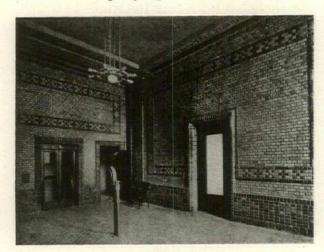


FIGURE 5

The field is composed of several shades of gray brick with darker shades for the edges of the border—the patternwork in the border itself being picked out with artistic shades of soft purple and artistic red brick—unobtrusive, decorative and a typical example of intelligent use of brick ornamentation.

THE CURRENT ARCHITEC-TURAL PRESS

RCHITECTURE for January, 1913, illustrates St. Thomas' Church, New York City, Messrs. Cram, Goodhue & Ferguson, Architects, and also the Woolworth Building, New York, Mr. While enter-Cass Gilbert, Architect. prise is always to be commended and there is a certain amount of satisfaction in being first in the field in any endeavor, yet we are uncertain as to whether the illustration of these two buildings before their completion does not in a sense necessitate a more thorough or complete presentation later on, if readers are to become thoroughly informed as to the buildings in question.

Other subjects illustrated are a house at Greenwich, Conn., Mr. J. E. R. Carpenter and Walter D. Blair, Associated Architects. This is a type of the formal country house, but in the present instance lacks in its exterior design much of the suggestiveness

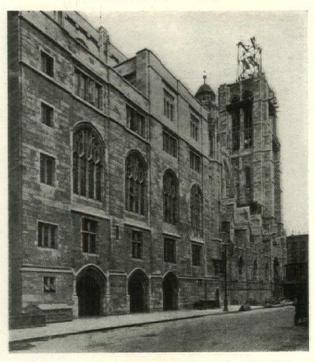
of domesticity that is the charm in country house design in America.

The Hospital for the Ruptured and Crippled, Messrs. York & Sawyer, Architects, and the Emmet Building on Madison Avenue, J. Stewart Barney and Stockton Beekman Colt, Architects, are also illustrated.

The text presents little of interest aside from a description of the material illustrated.

The January Western Architect is devoted entirely to the illustration and description of the work of Purcell, Feick and Elmslie, Architects. The issue is interesting because it has been practically edited and arranged by the architects whose work is illustrated, and the accompanying article on the "Statics and Dynamics of Architecture," is a statement of the background of their belief in the methods they have pursued in design. The thoughtful man is usually able to give a reason for his action. It is only the irresponsible one who

(FROM ARCHITECTURE)



ST. THOMAS' PARISH HOUSE AND CHURCH, NEW YORK MESSRS. CRAM, GOODHUE & FERGUSON, ARCHITECTS

cannot analyze his methods or give good ground for the arguments presented. Architects will, therefore, we believe, be interested in this article, even if they may not in every instance be prepared to extend approval of the work illustrated.

(FROM ARCHITECTURE)



WOOLWORTH BUILDING, NEW YORK MR. CASS GILBERT, ARCHITECT

The January issue of *The Architectural Record* shows the tendency of this publication towards presenting material of interest to the layman rather than to the architect.

The Spanish Church of Our Lady of Hope at Audubon Park, built a number of years ago and illustrated many times, is described and illustrated in detail, as is also the Studio Home of Mr. Frank Lloyd Wright, Architect, familiar to every reader of the architectural press and equally fa-

(FROM ARCHITECTURE)



A HOUSE AT GREENWICH, CONN.
MESSRS, CARPENTER & BLAIR, ARCHITECTS

miliar to every one visiting Chicago, who finds a series of photographs of this building forming part of attractive postcard sets.

Mr. Samuel Howe continues to propound the question, "Do Architects Read?"

Probably the most valuable article in the issue is one on "Sgraffito," by Mr. M. L. Friederang. This article is well written and very well illustrated and will be found interesting to architects.

"Lessons of the Chicago World's Fair," an interview with the late Daniel H. Burnham, also appears in this issue. Mr. Burnham's work in connection with this exposition is so well known and his opinion as to its value as an incentive to architecture in this country has been so

 $(FROM\ ARCHITECTURE)$

often expressed, that aside from the tribute



REAR VIEW, WOOLWORTH BUILDING, NEW YORK MR. CASS GILBERT, ARCHITECT

to the memory of an illustrious man, it is doubtful whether any lesson is taught, not heretofore thoroughly well learned by members of the profession.

The Brickbuilder for December, 1912, has for its leading article, "A Nantucket Pilgrimage," by Mr. Hubert G. Ripley. The article is illustrated by a series of

attractive drawings. Mr. Schweinfurth covered the same subject in the January 1st issue of The American Architect which appeared at the same time. The latter's article was of a more serious and practical

(FROM THE ARCHITECTURAL RECORD)



McALPIN HOTEL, NEW YORK
MESSRS. F. M. ANDREWS & CO., ARCHITECTS

character, and of correspondingly greater value to practicing architects.

Mr. Githens continues his series on "Re-

cent American Group Plans."

The illustrations comprise the Rice Institute at Houston, Texas, Messrs. Cram, Goodhue & Ferguson, Architects, shown in The American Architect of December 11, 1912, and a somewhat belated illustration of the Forest Hills Gardens, Mr. Grosvenor Atterbury and Associate Architects. The latter subject was very thoroughly presented in our issue of October 30, 1912, and while some of The Brickbuilder's illustrations are new and not heretofore shown, they add nothing to the architectural conception of the work.

The usual fund of information as to current art, both in this country and

Europe, is to be found in *The International Studio* for January. This issue is replete with good architectural suggestion.

Ten full pages in the December issue of *The Architectural Review* of Boston are devoted to the illustration of the Amoskeag Savings Bank and Office Building, Manchester, N. H., Messrs. Hutchins & French, Architects. The reader will be able to gain from this very complete illustration every detail of the design and construction of this building.

The rest of the issue is devoted to foreign subjects with the exception of a page of small plates of a residence at Columbus, Ohio, Mr. J. Upton Gribben, Architect.

Ohio, Mr. J. Upton Gribben, Architect. "The Log of the Dorian," is continued and the illustrations, as usual, are interesting.

 $(FROM\ ARCHITECTURE)$



EMMET BUILDING, NEW YORK J. STEWART BARNEY & STOCKTON BEEKMAN COLT, $ARCHITEC\,TS$

The usual criticism of Current Periodicals, proclaims that the point of view of our esteemed and jovial contemporary with reference to architecture in America is still continued and that there is "no health in us."

CAN DESIGN BE REDUCED TO RULE?

PART III*

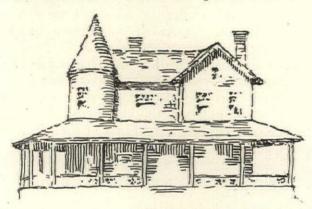
By JOHN BEVERLEY ROBINSON, Professor of Architecture, Washington University



would seem almost a platitude to say that similarity of shape in the various parts of a building is conducive to harmony in the general result. Architects in general observe this without thinking about it, at least in the more important

parts of their buildings; but examples are sometimes found, presumably by architects of the carpenter-and-architect sort, in which lack of similarity produces a painful effect.

Not far from me is a house designed on this motive. It is a composition of two



masses, and if these had been alike the appearance would have been so far satisfactory enough. As it stands, on one side is a flat gable, on the other a round tower or pavilion. If both had been gables or both pavilions it would have been a good foundation for an agreeable composition: but as it is nothing can make it acceptable.

But it is not only in the similarity of the major masses that harmony is found. Similarity of the minor parts also adds to the charm.

What I mean may be observed in Fig. 1, in which almost all the windows are topped by semicircular arches; and in Fig. 2, in which the lesser dormer gables are of a shape precisely similar to that of the main gables.

Contrast of shape may undoubtedly be

*This article concludes Prof. Robinson's series. The subject is treated at length in his work on "Architectural Composition."

used at times, and the situations where it can be agreeably used can be observed and catalogued; but it would seem that contrast is a risky thing to handle, while similarity can hardly fail to look well. Consider for instance the Vendramini palace at Venice, in which almost all the beauty springs from the repetition of the semicircular



FIGURE 1.

arches, and the circular tracery openings. Even the ornamental escutcheons between the openings are circular.

How generally this similarity of parts prevailed in the greater historical styles is well known but seldom remarked.

The Greek, for example, the Greek Doric especially—in a sense the only purely architectural style that has ever prevailed, in that it depended not at all upon embellishments but solely upon the modelling of each part in the most beautiful form

compatible with its function—the Greek Doric as a whole and in all its parts is a series of vertical lines included between horizontals. Thus the columns are a row of verticals, and each column is itself a row of vertical lines. The metopes above are of the same general conception, and the egg and tongue, the sole ornament, is a similar set of lines, but slightly diverted



FIGURE 2

from the vertical; while the Ionic dentil again is of perfectly straight vertical lines.

So in later times: While the semicircular arch of the Romanesque prevailed the shafts were semicircular in plan, as were the boltel mouldings of the arches, and the plan of the chancel itself was semicircular.

With the incoming of the pointed arch constructively, not only were all the openings pointed to match, but the section of the principal mouldings assumed the form of the Gothic arch, and the plan of the chancel became angular; and still later, with the ogee arch came the ogee section of moulding to correspond.

Observe how well the Gothic form of arch as used by the Moors suits with the dome of like form; and how the bulbous dome "goes with" the horseshoe arch. It is true that they were by no means always used logically in the same building, but in the cases where such juxtaposition occurs there is a manifest improvement in appearance.

Although, as I have said, architects generally observe this rule unconsciously, partly from the natural taste of the human mind, the same that leads the tailor to make the small buttons on the cuffs of the coat of the same design as the large ones on the front, partly also from the custom of de-

signing in historical styles, there are buildings which I could point out, but will not, in which divergence from the rule in minor parts detracts somewhat from the appearance. One building, in particular, is in my mind, a pretty building too, and by a clever designer, in which the main cornice has modillions, while the cornices of the two wings are without any, which always arouses a feeling of regret when I look at it.

Another building I know, also by a notably good architect, in which the pavilions of the front have rather heavy bracketed cornices, while the curtain walls—the links—between have only plain parapets.

Closely allied to the general similarity of parts is the question of proportion.

The word proportion is used for the most part with a delightful vagueness. A well proportioned building means a building that looks well. We continually hear people speak of a well proportioned door or window, although doors and windows are sometimes tall and narrow, sometimes broad and low.

Not in this way did the Greeks use the word; the Greek word ἀρμονία—harmony—which corresponds to our word proportion, was applied to the similarity of measurements of the various parts of their buildings.

Take the front of the Parthenon and measure the shaft and abacus. It will be



FIGURE 3

found that they are closely of the same relation. That is if the diameter of the column is taken as a unit the height will be about five and one-half; and if the height of the abacus be taken as a unit the width will be about six.

Above the columns, in the ends of the mutules the relation is doubled and they are one to eleven. Below the triglyph the

(Concluded on page 120)

Founded 1876

PUBLISHED EVERY WEDNESDAY BY

THE AMERICAN ARCHITECT (INC.)

No. 50 Union Square, New York (Fourth Avenue and 17th Street)

G. E. SLY, PRESIDENT E. J. ROSENCRANS, SECRETARY AND TREASURER

Address all communications to "THE AMERICAN ARCHITECT"

SUBSCRIBERS' RATES:

In the United States and Possessions (Porto Rico, Hawaii, Philippine Islands and Canal Zone), Mexico and Cuba

TEN DOLLARS PER YEAR, POSTAGE PAID ALL OTHER COUNTRIES . . . \$12.00 PER YEAR SINGLE COPIES (Regular Issues), 25 CENTS

Entered at the Post-office, New York, as Second-class Matter

VOL. CIII

FEBRUARY 19, 1913

No. 1939

THE FORTHCOMING CLAY PROD-UCTS EXPOSITION

MONG those architects who were so fortunate as to attend the Clay Products Exposition, held in Chicago a year ago, no doubt exists concerning the value to the profession of industrial exhibitions such as was there presented and which, it is stated, will be repeated on an even more comprehensive scale this year, beginning February 26th and ending March 8th. Such a presentation makes possible at a minimum expense of time and effort actual inspection under the most advantageous conditions, of the results achieved by the burnt clay industry in this country. It furnishes the technical visitor with a more intimate and exact knowledge of the materials and their possibilities than he could hope to gain by even the most careful study of catalogues and trade liter-The advances made in both processes of manufacture and the adaptations of the products of burnt clay are admittedly little short of marvelous. To keep abreast with them is not only desirable, but necessary, if the architect would render the fullest measure of service to his client; and we can scarcely imagine a method by which such preparation could be more efficiently and expeditiously gained than by

attending an exposition which will include among the exhibits practically every form in which burnt clay is used in the construc-

tion of modern buildings.

An industrial exhibition of the character of the Clay Show serves another and perhaps no less important purpose. It affords the layman as well as the technical man an opportunity of becoming to a certain extent informed concerning matters about which his knowledge is often sadly deficient. Of course it is realized that in accordance with modern practice the layman seldom either makes original selection or finally determines the materials to be used in construction, but after an intelligent examination of the various exhibits by a prospective builder, presented at an exposition of this character, it would obviously be less difficult for his architect to impress upon him the economic and desirable features possessed by permanent building materials.

Taken all in all, the money, time and effort being expended in holding expositions by what are in a sense "rival" industries in the building field, seem to be employed to good advantage. The results so far have been gratifying, but it is believed that even greater, more far-reaching results can be achieved if architects and engineers, in particular, would more generally appreciate the opportunities afforded for a study in situ, as it might be termed, of materials that they are using constantly in their practice but whose possibilities in many instances are only half realized.

THREATENED CONGESTION IN SUPERVISING ARCHITECT'S OFFICE

EPRESENTATIVE CLINE, of Indiana, advocated the repeal of the Tarsney Act in the report of a committee on the "Economy and Efficiency of the Treasury Department," of which he was chairman, in the following words: "We believe that the Supervising Architect's office, both from the viewpoint of efficiency and architectural beauty, is well able to make and is capable of making all designs and plans for all public buildings as well as of preparing specifications therefor." Apparently his conclusions were erroneous

for it is now reported in a Washington despatch to a Grand Rapids paper that Congress has appropriated money for public buildings faster than the Treasury Department can prepare plans for them.

If the facts are as stated, the country appears to be confronted with a condition which is likely to lead not only to confusion, but inevitably to inferior public buildings, both artistically and practically. Through the repeal of the Tarsney Act, it is no longer legal to secure additional architectural services by means of competitions among architects in general practice, and if the

present and threatened congestion of the Supervising Architect's office is as serious as represented, there seems little likelihood of its being able to competently undertake the preparation of plans for some 250 new buildings contemplated.

Judging from all reports, it does not seem improbable that the proposed law to take the place of the Tarsney Act is not only desirable from every point of view, but offers in fact the only logical and satisfactory solution of difficulties present and impending. It is to be hoped that such solution will be speedily forthcoming.

CAN DESIGN BE REDUCED TO RULE?

(Continued from page 118)

curious little block called the regula is also one to eleven, and the fillets of the triglyph have the same relative measurements; while its channels and cap return to the original one to five and one-half. Everything is built upon a system of rectangles of a certain ratio or of double that ratio.

None but a Greek could go as far as that in carrying a definite relation of measurement into minute details; and even in Greek work it is hard to trace anything definite beyond the Doric order. It is true that in the Ionic and Corinthian, in which the shafts are more slender the abaci are also thinner, but definite measurements I have been unable to find.

The true idea of proportion, however, is not that it can be asserted of a single part, but only of that part in its relation to other parts.

Thus if we want to design a table with a top two inches thick, we naturally make the legs perhaps three inches square; while if we want slender legs, the top must be thin also.

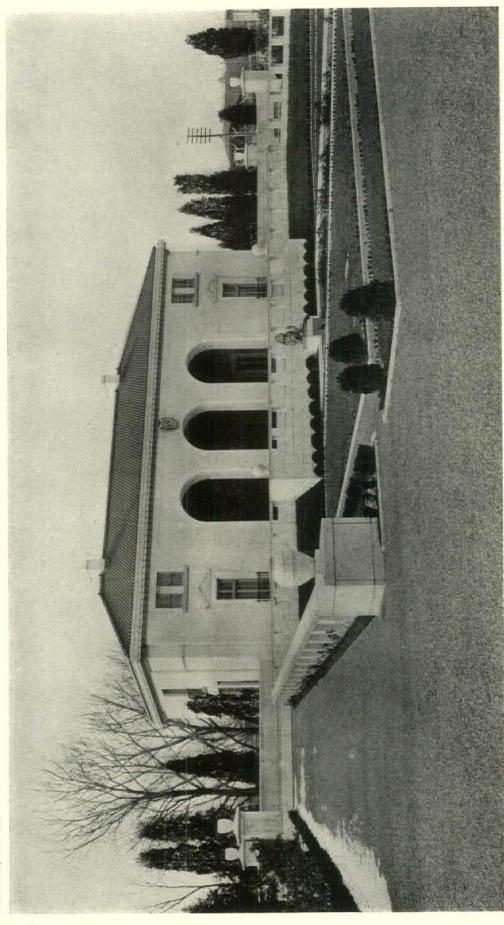
While we cannot expect to carry this as far as the Greeks did, the principle, as applied to the larger parts of buildings, will be found illuminating and profitable.

It is quite natural to put tall and narrow windows into a tall and narrow tower. In general, windows are made comparatively narrow, in comparison with their height, partly because we have been limited in width by the use of stone lintels. Nowadays, when steel and reinforced concrete permit the introduction of longer lintels, we find windows much wider than their height in buildings that themselves are broad and low, as in Fig. 3, and there are many of this type to be found, harmonizing best with a building that is broad and comparatively low to match.

The well-known front of the Villa Medici is a good example of a design based on the square. Both the main mass and the two flanking masses are square in general outline, the leading motive of the portico is nearly a square, and many of the windows and carved panels are squares also.

I have indicated a few of the deductions that may fairly be made by observation and comparison of existing buildings. When interest in such comparison is awakened there is a continual pleasure, as we walk along the streets, in noting the buildings that we pass, the number of their masses, and subordinate masses, the similarity or contrast in treatment, and the proportion or lack of it in their various features.

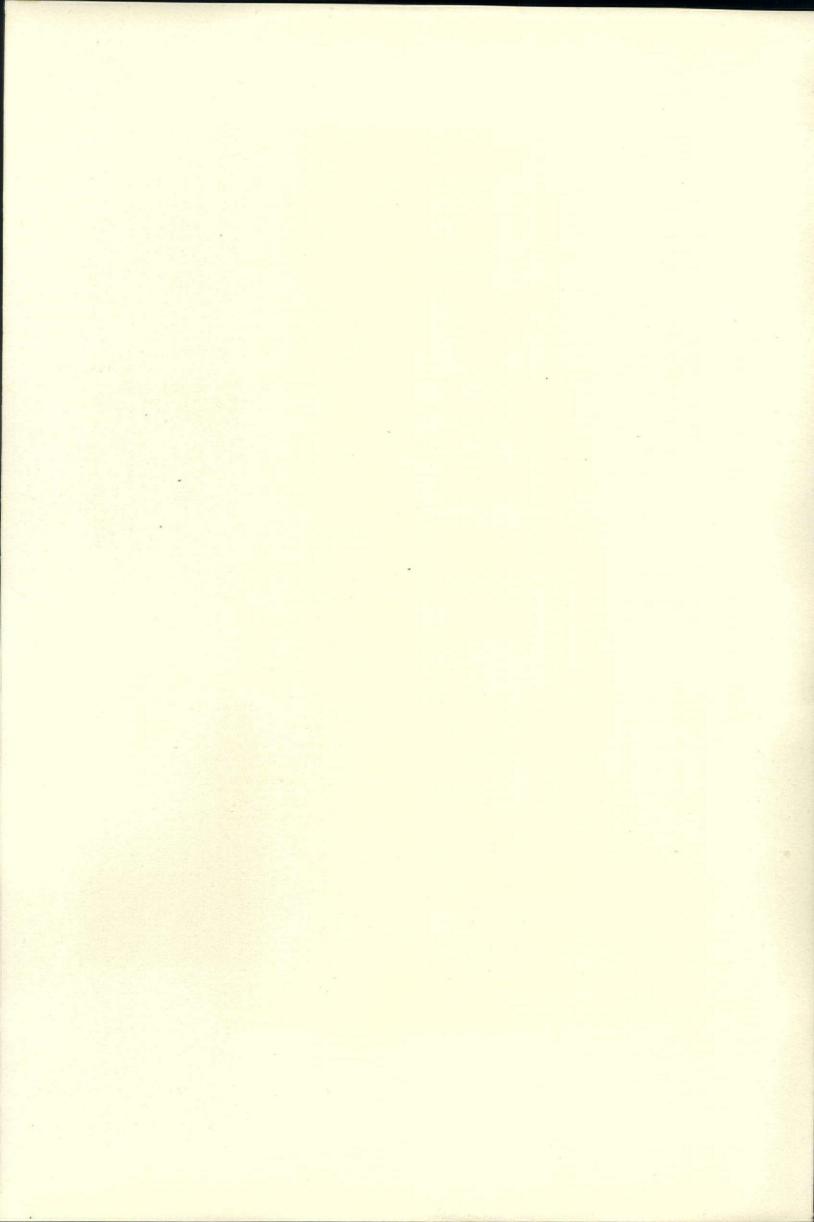


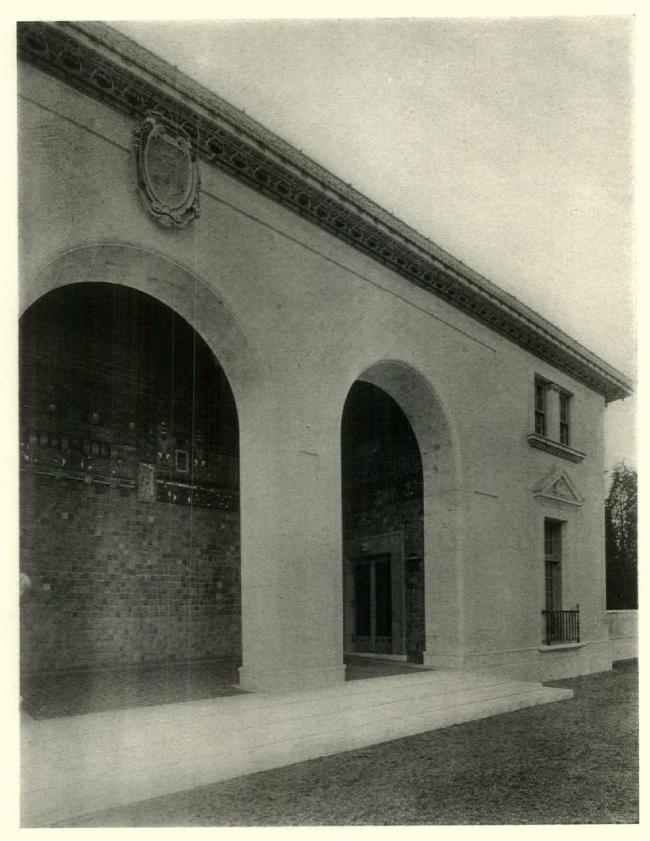


effect, not only in the designing and placing of these urns, but also in the well modeled polychrome cornice, the shield over the main entrance and the figure of the Indian over the fountain. This detail of the Indian is unusual, as it is cast in one piece and of a larger size than is ordinarily attempted in the making of ornamental terra cotta. The idea of color in burnt clay is continued on the interior with tile work of an interesting character, and even the pool is lined with The application of burnt clay in the ornamental treatment of this building has been effected with good judgment and artistic perception. While the structure in design is particularly South American in style, the introduction of the terra cotta ornament, particularly the large terra cotta urns, suggesting a classical motive, in no way appears incongruous, and adds to rather than detracts from, the effect of the ensemble. Architectural terra cotta has been used with good colored tiles.

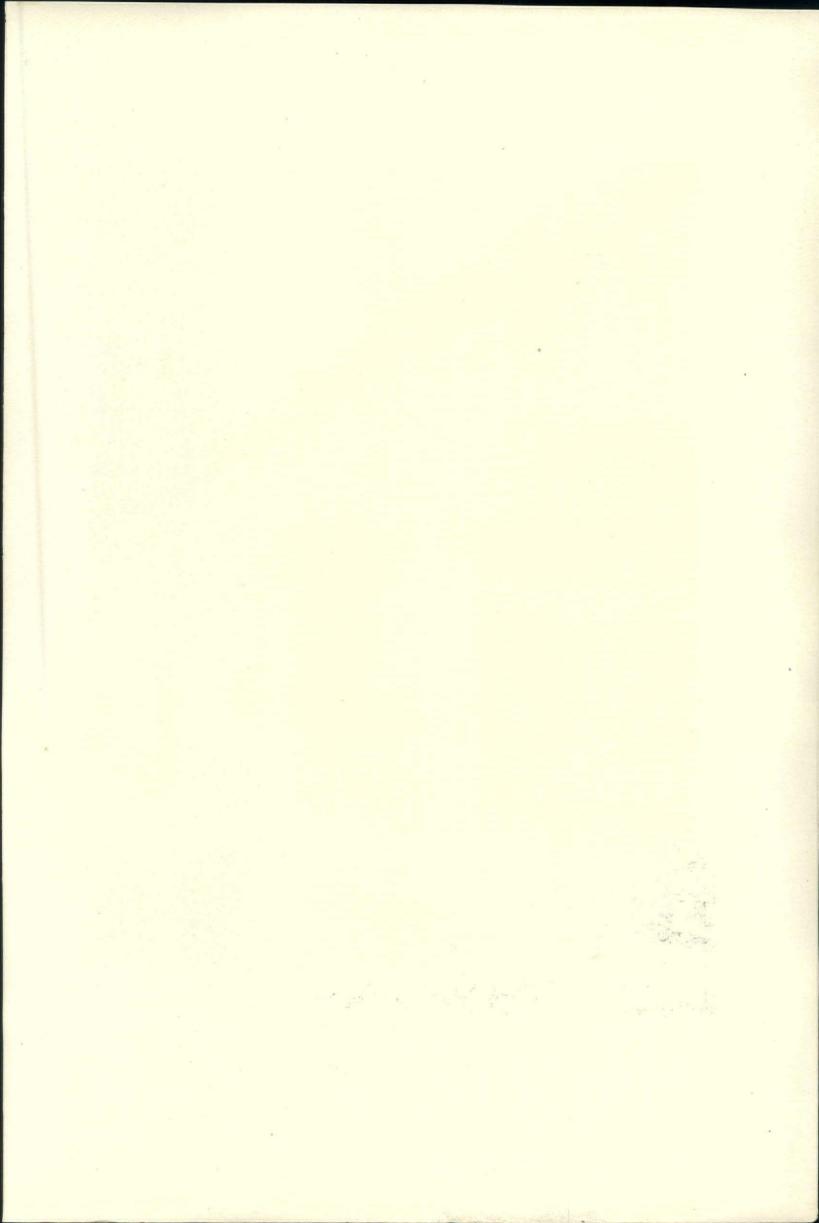
PAN-AMERICAN ANNEX, WASHINGTON, D. C.

MR. ALBERT KELSEY AND MR. PAUL CRET, ARCHITECTS



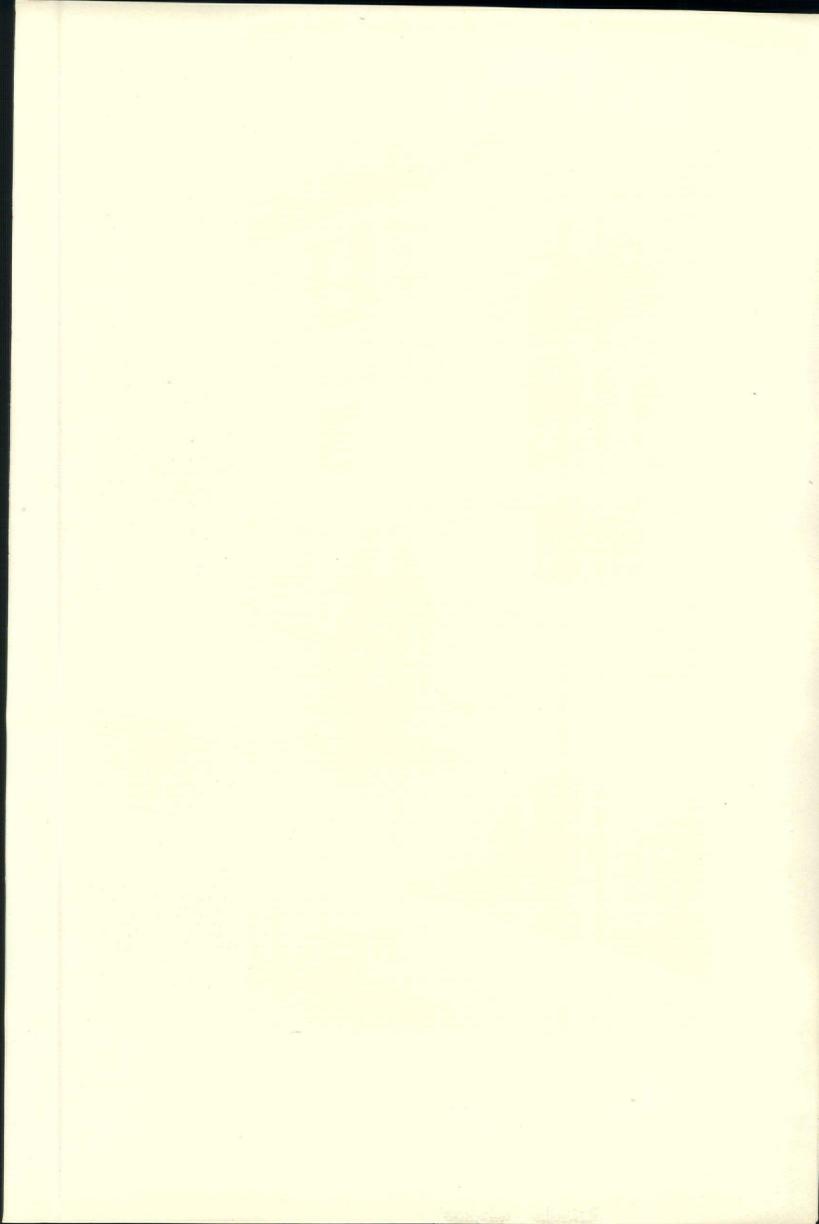


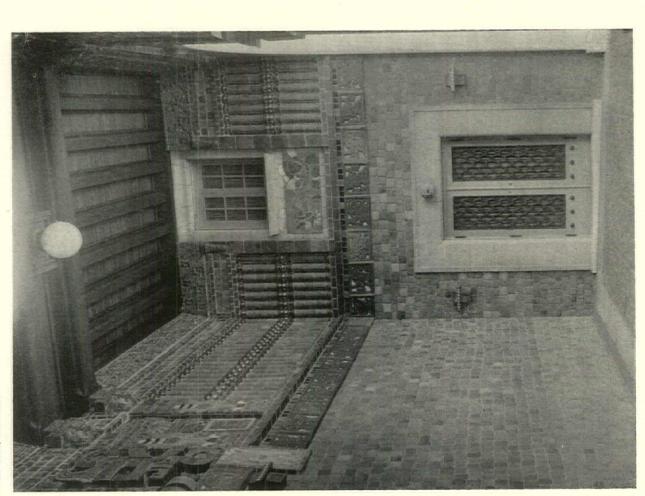
PAN-AMERICAN ANNEX, WASHINGTON, D. C. MR. ALBERT KELSEY AND MR. PAUL CRET ARCHITECTS

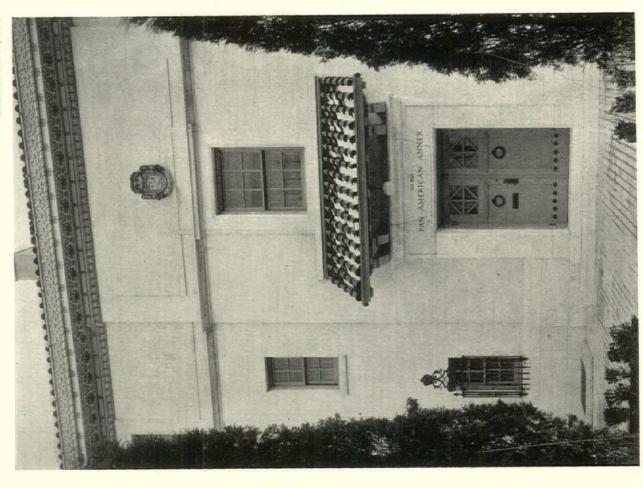




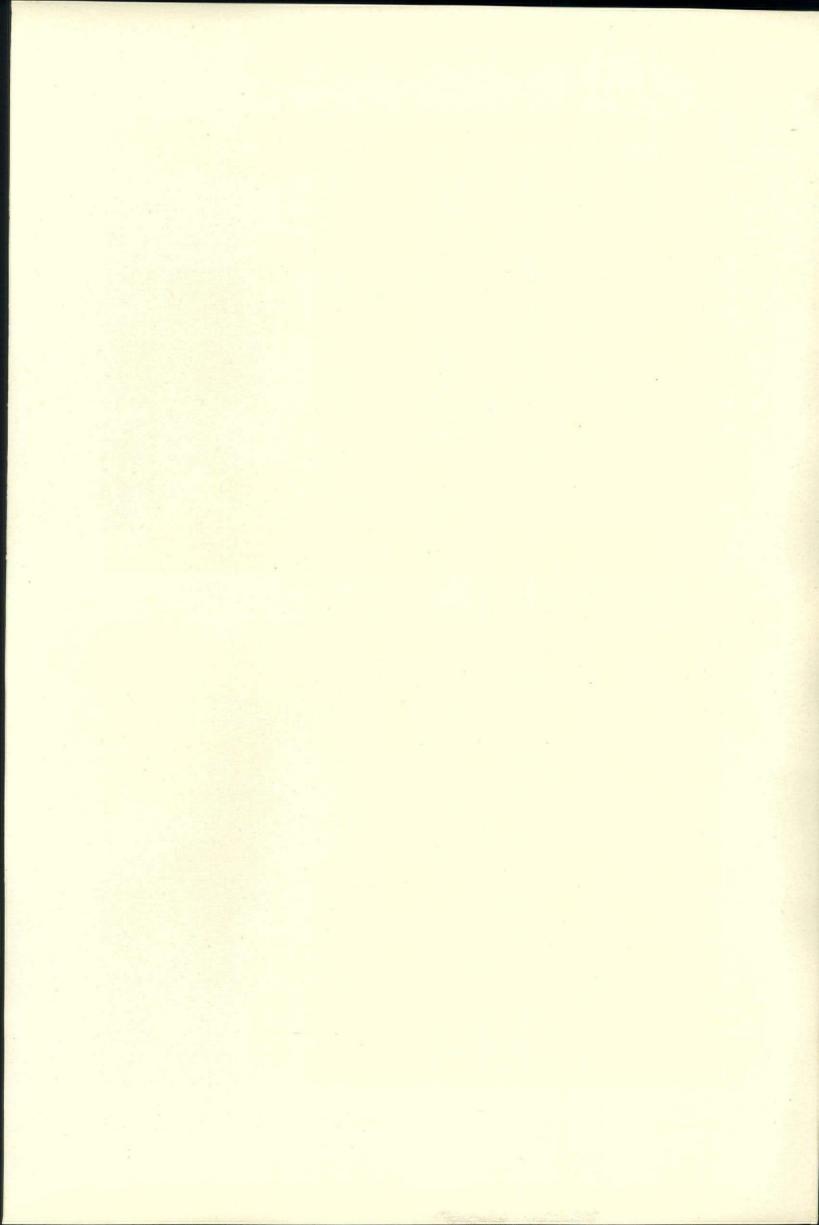
PAN-AMERICAN ANNEX, WASHINGTON, D. C. MR. ALBERT KELSEY AND MR. PAUL CRET, ARCHITECTS

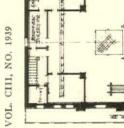


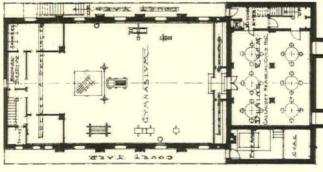




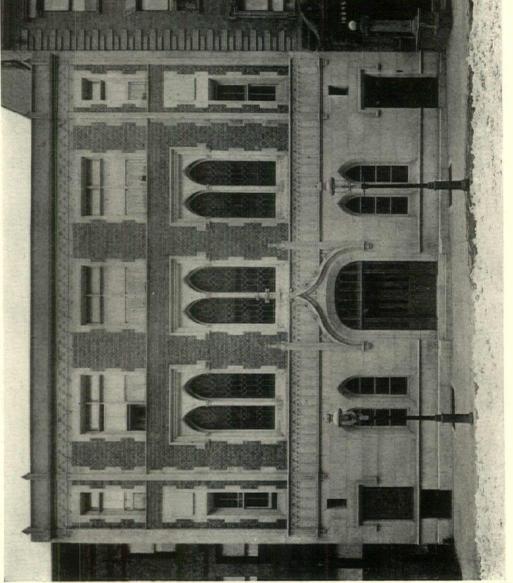
PAN-AMERICAN ANNEX, WASHINGTON, D C. MR. ALBERT KELSEY AND MR. PAUL CRET, ARCHITECTS



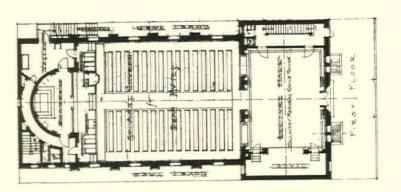


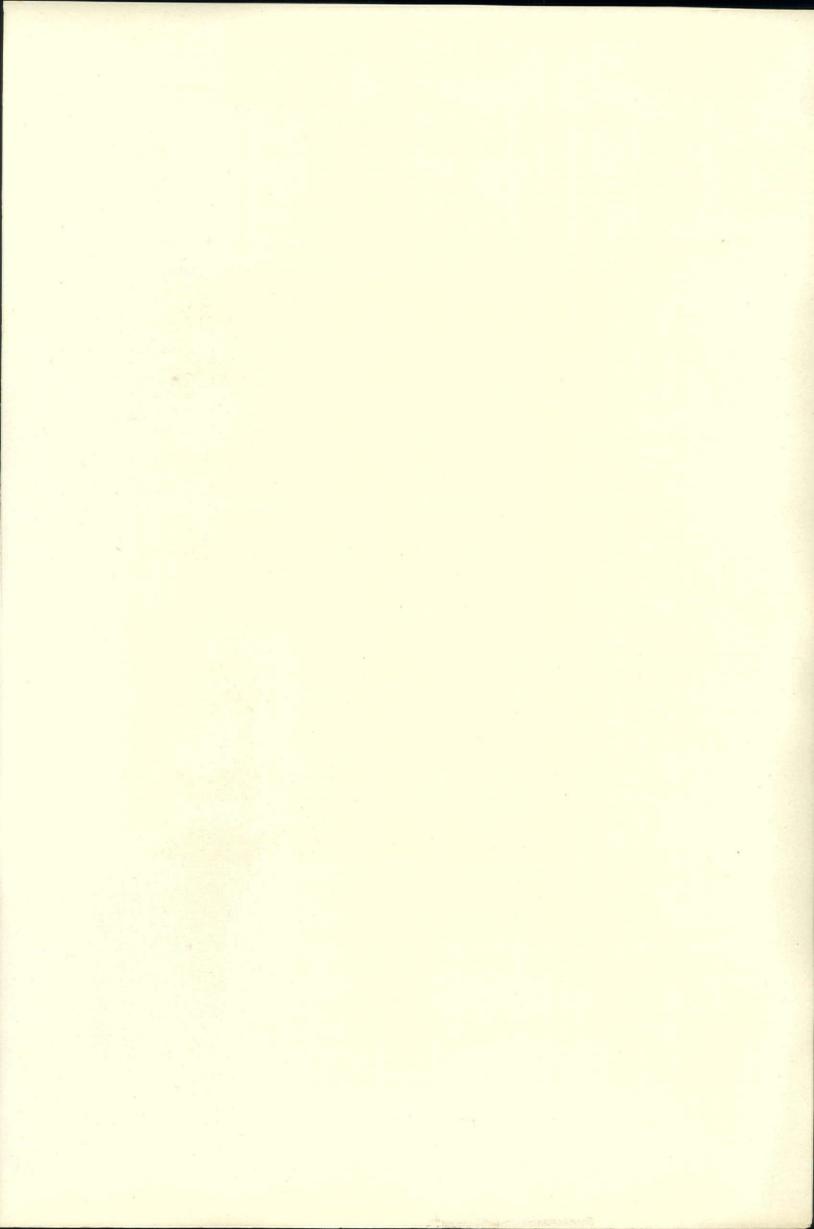


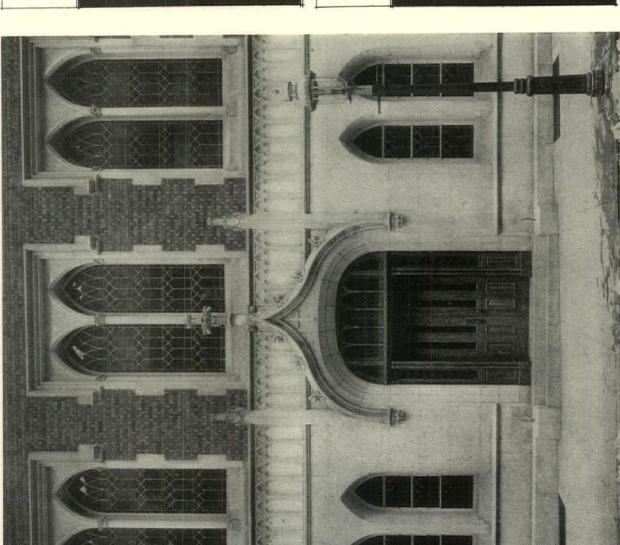
GALLAUDET MEMORIAL WEST 148TH STREET, NEW YORK

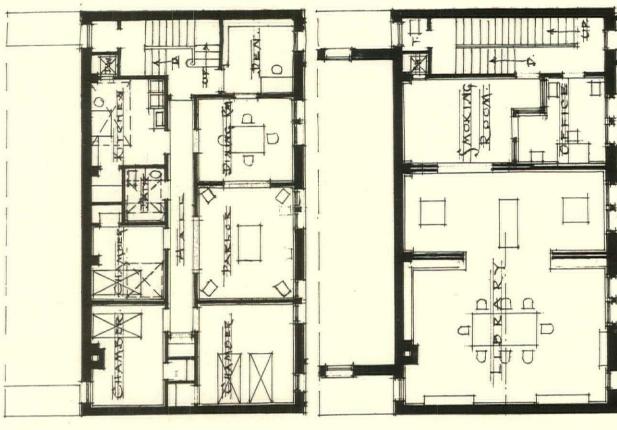


MESSRS. SATTERLEE & BOYD, ARCHITECTS

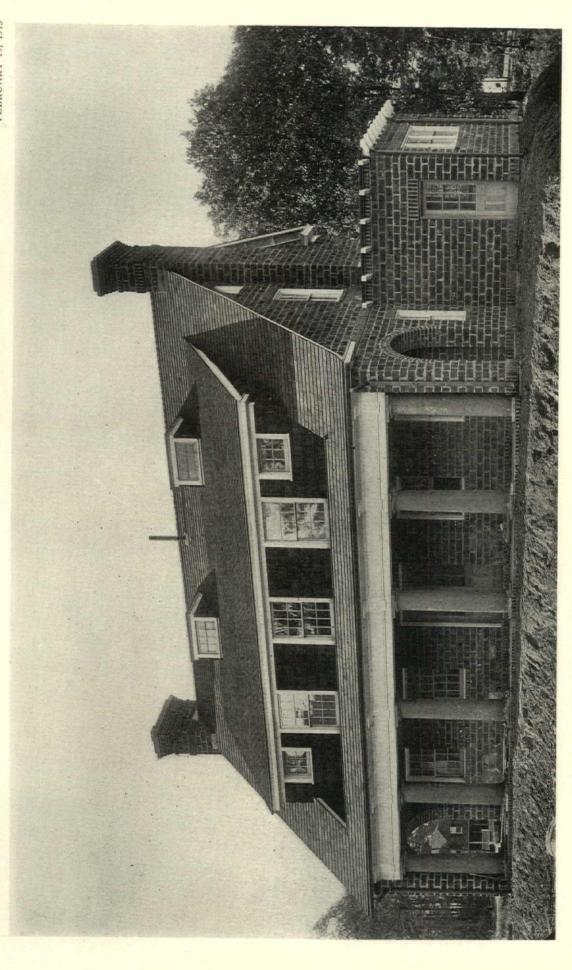








GALLAUDET MEMORIAL, WEST 148TH STREET, NEW YORK MESSRS. SATTERLEE & BOYD, ARCHITECTS



HOUSE AT NETHERWOOD, N. J., MR. FRANK SQUIRES, ARCHITECT





MONTCLAIR, N. J., STATION, D., L. & W. R. R. ENGINEERING DEPT., D. L. & W. R. R., ARCHITECTS



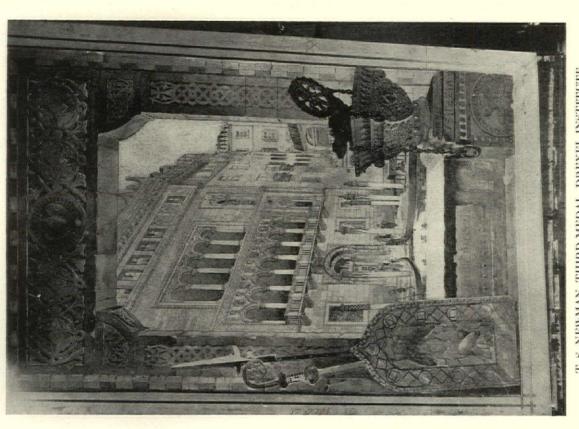




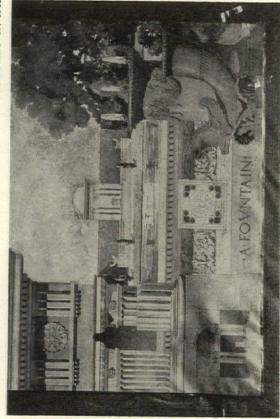


BARNARD SCHOOL, RIVERDALE, N. Y. MESSRS. MANN & McNEILLE, ARCHITECTS

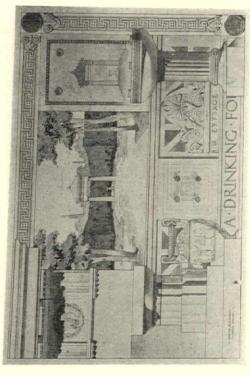




T. S. NEWMAN, THIRD MEDAL, DREXEL INSTITUTE
CLASS "A" & "B" ARCHAEOLOGY—II PROJET (PROBLEM
IN DESIGN), "A BYZANTINE BALCONY"

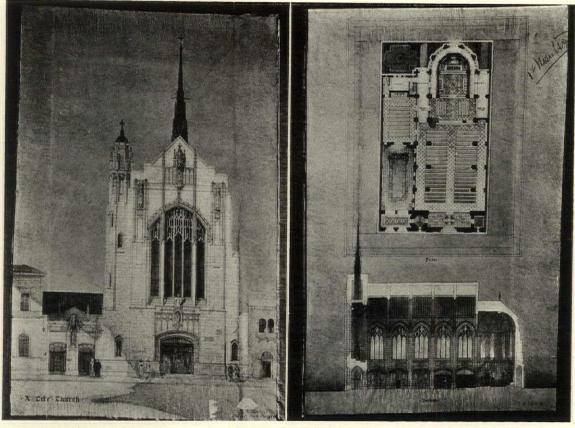


E. L. MORGAN, MENTION PLACED, BOSTON ARCHITECTURAL CLUB



J. H. McDONNELL, MENTION PLACED, COLUMBIA UNIVERSITY
CLASS "B"—II ANALYTIQUE (ORDER PROBLEM),
"A DRINKING FOUNTAIN"

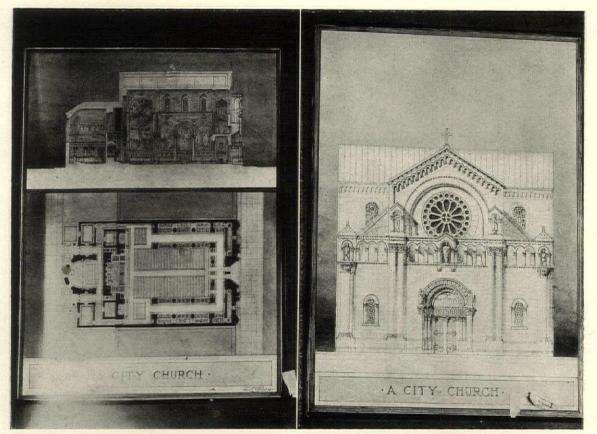




R. M. JOHNSON

FIRST MENTION

ATELIER WARE-WAGNER



A. CHENANIE

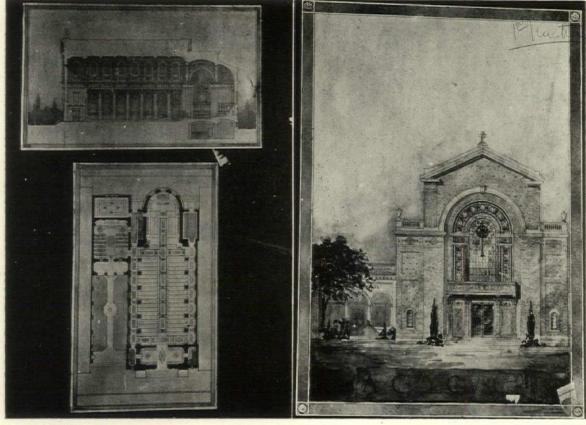
FIRST MENTION

ATELIER HORNBOSTEL

CLASS "B"—II PROJET (PROBLEM IN DESIGN), "A CITY CHURCH"

STUDENT WORK, SOCIETY OF BEAUX-ARTS ARCHITECTS



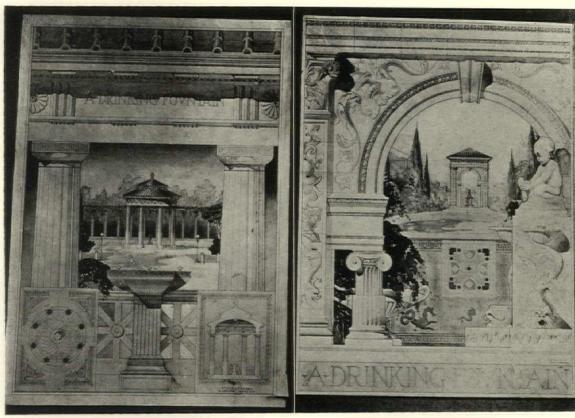


W. C. AGNEW, JR.

FIRST MENTION

COLUMBIA UNIVERSITY

CLASS "B"-II PROJET (PROBLEM IN DESIGN), "A CITY CHURCH"



K. SWENSON, MENTION PLACED COLUMBIA UNIVERSITY

A. H. DORNIN, MENTION PLACED COLUMBIA UNIVERSITY

CLASS "B"—II ANALYTIQUE (ORDER PROBLEM), "A DRINKING FOUNTAIN"

STUDENT WORK, SOCIETY OF BEAUX-ARTS ARCHITECTS



THE AMERICAN ARCHITECT



ERNEST FLAGG PRESIDENT 109 Broad St. 109 Broad St.
WILLIAM EMERSON
CHAIRMAN COMMITTEE ON EDUCATION
281 Fifth Avenue.
LLOYD WARREN
CHAIRMAN PARIS PRIZE COMMITTEE
3 E. 33d St.
HULLAN C. LEVI, TROUBLE

EVERETT V. MEEKS, Recording Secretary 225 Fifth Ave. MAURICE PREVOT Corresponding Secretary 115 E. 30th St. GEORGE S. CHAPPELL VICE PRESIDENT 345 Fifth Ave. JULIAN C. LEVI, Treasurer, 105 W. 40th Street.

CLASS "B"-II ANALYTIQUE (Order Problem) "A Drinking Fountain"

The jury wishes to compliment the students on the general average of the work presented in this problem. Great pains had evidently been taken with the shades and shadows and the drawing and proportions were correspondingly improved, as was evident by the large number of "mention placed" given.

Attention should again be called to the necessity of making all renderings in this class in monotone.

CLASS "B"—II PROJET (Problem in Design) "A CITY CHURCH"

The solutions submitted for this problem showed two essential defects-one a failure to appreciate the dimensions of the lot, and second, an ignorance of the proper arrangements of a church. When only 75 feet frontage was provided it seemed poor policy not to give the church the full benefit of the space. There was further a general lack of scale in the elevations resulting in a discrepancy between the plan and elevation.

The plans receiving "first mentions" showed in general either a successful avoidance of the above difficulties, or skill in solution in face of them.

CLASS "A" & "B" ARCHÆOLOGY—II PROJET (Problem in Design) "A BYZANTINE BALCONY"

The drawings of the Archæology Problem for a Byzantine Balcony were of very unequal merit.

The medals showed a thorough and intelligent knowledge of the style but the majority had evidently only a slight understanding of its distinctive characteristics.

More students should do work of this sort as there is no better way of becoming thoroughly familiar with the different styles of architecture.

PUPIN PRIZE COMPETITION

"SIGHT-SEEING BARGE FOR THE PANAMA CANAL"

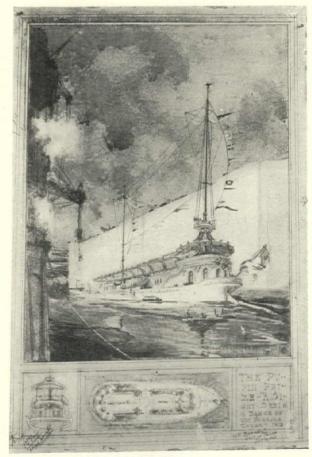
There was a greater evidence of imagination and skill than of serious thought in the drawings presented for the Pupin Prize. This resulted from a failure to appreciate the practical requirements of the problem. A large and protected seating space for the accommodation of distinguished guests and visitors was essential and drawings which were otherwise excellent entirely failed to meet this requirement.

OFFICIAL NOTIFICATION TO S. B. A. A. STUD-ENTS OF AWARDS MADE IN THE JUDG-MENT OF FEBRUARY 4TH, 1913

The Committee on Education in New York and its Local Committee in San Francisco received 351 Esquisses (Preliminary Sketches) and 212 Analytiques (Final Drawings) in the:

CLASS "B"—II ANALYTIQUE (Order Problem) "A Drinking Fountain"

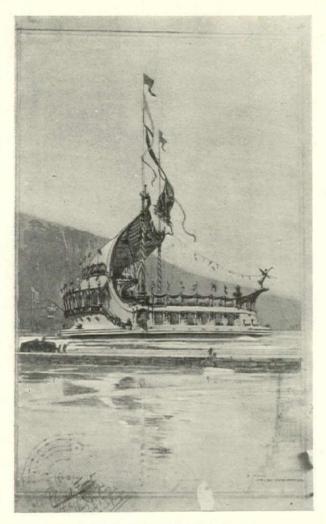
Award		Atelier	Citu
M. Pl.	Boston A	rehtl. Club.	Boston
11	**	**	44
- 44	Cincinnati	Archtl. Ch	abCincin'ti
- 66	Carnegie '	Tech. School	ols. Pittsb'oh
"	-4	66 66	"
	Columbia	University.	New York
"	"	"	4
44	44	"	u
	44	u	ec.
	66	u	u
"	Licht		
"	Ware-Was	gner	
	M. Pl.	M. Pl. Boston An " Cincinnati " Carnegie ' " Columbia " " " " " Licht	" Cincinnati Archtl. Che Carnegie Tech. Schoo " " Columbia University. " " " " " " " " " " " " " " " " " " "



W. P. BARNEY, UNIVERSITY OF PENNSYLVANIA First Prize. Placed Second A SIGHT-SEEING PUPIN PRIZE COMPETITION. BARGE FOR THE PANAMA CANAL

THE AMERICAN ARCHITECT

mann, H. Downton, J. Ferris, F. Venning; Cincinnati Archtl. Club, Cincinnati: J. Schneider, E. Cebernick, G. F. Frankenberger, O. Schwartz; Carnegie Technical Schools, Pittsburgh: C. A. Bate, E. A. Bailey, B. Bocchicchio, C. H. Boyd, H. D. Brown, W. F. Dichl, J. Gelman, T. L. Gleason, N. K. Kann, W. R. Weigler, R. E. L. Wildman; Columbia University, New York City: L. M. Giroux, K. B. Norton, A. C. Bitterman, H. V. Walsh, G. P. Greene, E. A. Salamonsky, L. Hirschfeld, A. C. Holden, E. J. Robin, J. H. Thiesen, B. B. Brown, F. J. Soper, E. E. Bartos, E. R. Thayer, S. J. Kodak, R. H. Bowden, H. W. Haefele, C. J. Gander, J. T. Egan, J. R. Greenberg, W. C. Weeks, R. G. Brackett, G. F. Cordner, M. J. Hartman, C. F. Houston, J. M. Gray, I. Pisciotta, A. A. Heim, W. F. Wilkinson, D. J. Cooke, H. V. Capel, G. F. Root, S. Hay; Atelier Corbett, New York City: A. W. Lewis, F. Bigelow; Cleveland Archtl. Club, Cleveland: H. A. Griff; Drexel Institute, Philacelphia: D. A. Guerriero, B. V. Gamber, H. E. Hall, S. Oppenheimer, J. B. Thomson, C. W. Zeigler, T. H. Voshell; Atelier Hirons, New York City: D. McLachlan, W. Sunderland, Jr.; Atelier Hornbostel, New York City: J. Wade; Kansas City Atelier, Kansas City: A. P. Goodwin; Atelier Masqueray, St. Paul: E. H. Lundie, A. O. Larson, J. P. Cowie, D. Carlson; Atelier Mathis, Atlantic City: W. S. Shull; c-o Greenley, New York City: F. Kronfeld; c-o Josselyn, New York City: J. Pendlebury, R. Nickel, 626 Third Ave., New York City; Philadelphia Atelier, U. of Pa., Philadelphia: C. E. Keyser, Jr., H. Raech; R. I. Sch. of Design, Providence: C. W. Swanson; Syracuse University, Syracuse: E. DeSoto, J. Mulranen, H. V. Trevenan; St. Louis Archtl. Club, St. Louis: R. P. Ranft, A. W. Klutho, E. Schuetz,



B. HOYT, ATELIER WARE-WAGNER

PUPIN PRIZE COMPETITION. A SIGHT-SEEING BARGE FOR THE PANAMA CANAL

Placed first. H. C. for prizes. Mr. Hoyt has previously won first and second prizes in this annual competition.

J. E. Wallace; Atelier Vance, Portland, Maine: F. H. Thorne; Atelier Ware-Wagner, New York City: H. E. Matz, A. Gustafson, F. A. Fuller, W. H. Fuhrer, L. A. Zitzmann; Atelier Wynkoop, New York City: A. Rusmussen, E. Conti; Washington Archtl. Club, Washington, D. C.: J. Burch, J. A. Cook, E. A. Lehti; Atelier Swales, Montreal; A. Mercil, E. E. Temple, S. F. Swales; Atelier Brown-S. F. A. C., San Francisco: A. Bien, J. C. Davidson, D. R. Gailey, L. H. Keyser, C. Payne; Atelier Baur-S. F. A. C., San Francisco: A. Harcos, W. A. Hubbert, C. Reinecker, H. Meess; Atelier Rixford-S. F. A. C., San Francisco: E. L. Boldemann, R. M. Carlyon, G. L. Rosebrook, W. C. Myall, A. Kuhn; Atelier Perry-S. F. A. C., San Francisco: W. A. Graham, A. R. Monroe; Los Angeles Archtl. Club, Los Angeles: R. M. Heggie, C. A. Hill, R. B. Parkes; Atelier David J. Myers, Seattle: D. M. Clippenger, A. M. Russell. Wayne Yates; Portland Archtl. Club, Portland, Oregon: J. K. Parker.

The Committee on Education in New York and its Local Committee in San Francisco received 262 Esquisses (Preliminary Sketches) and 102 Projets Rendus (Sets of Final Drawings) in the:

CLASS "B"-II PROJET (Problem in Design)

"A CITY CHURCH"

Author	Award	Atelier City
Kingston, J. L	1st M.	Boston Archtl. ClubBoston
Bergen, H. P	и	Columbia University New York
Agnew, W. C., Jr		ee 16 6
Jorgensen, V	"	Carnegie Tech. Schools. Pittsb'gh
Andrews, L. W	"	
Chananie, A	u	HornbostelNew York
Dagit, F. D	"	Phila. Atelier—U. of PPhila.
Scherr, L. V		66 66 66 66
Johnson P M	44	Ware-Wagner New York

The Committee on Education in New York and its Local Committee in San Francisco received 60 Esquisses (Preliminary Sketches) and 16 Projets Rendus (Final Drawings) in the:

CLASS "A" & "B" ARCHÆOLOGY—II PROJET (Problem in Design)

"A BYZANTINE BALCONY"

Author	Award	Atelier	City
Newman, T. S	3d Md.	Drexel InstituteP	hila.
Kelly, F. E		HornbostelN	
Hartzell, J. H	"	66	
Rothkugel, G. B		Philadelphia AtelierP	hila.

The following students received "Mentions":—Drexel Institute, Philadelphia: G. Fulton, Jr.; Carnegie Tech. Schools, Pittsburgh: F. C. Disque; Phila. Atelier-U. of P., Philadelphia: E. H. Wigham; Univ. of Penna.-Sch. of Archt., Philadelphia: T. E. Ash, D. C. Lange.

THE AMERICAN ARCHITECT

The Committee on Education in New York and its Local Committee in San Francisco received 3 Measured Drawings in the:

CLASS "A" & "B" ARCHÆOLOGY—II MEAS-URED DRAWINGS

Author	Award		Atelier		Citu
Franks, H. C	Men.	Carnegie	Tech.	Schools.	.Pittsb'gh
Einstein, O. P	"		"	"	- "
Mewhinney, P. S	и	46	"	46	a

The Committee on Education in New York received 49 Sketches in the:

PUPIN PRIZE COMPETITION

"SIGHT-SEEING BARGE FOR THE PANAMA CANAL"

Offered for ornamental treatment of some scientific appliance.

First Prize, \$50. Second Prize, \$25.

The prizes are the gift of Professor M. I. Pupin, of Columbia University.

CALL CALL			
Author	Award	Atelier	City
*Hoyt, B	Pl. 1st	(H.C.) Ware-Wagner	New York
Barney, W. P	Pl. 2nd	(1st Prize) Un. of P.,Sc	h.
		of Archt	Phila.
Hubel, R. W	Pl. 3d	(2nd Prize) Hornbostel	New York
Stanton, J. E	Pl. 4th	c-o Warren & Wetmore	e "
Braunstein, B	Pl. 5th	Bosworth	u
*Note—H. C. for	having v	von 1st and 2nd Prize p	reviously.

SUPPLEMENTARY JUDGMENT OF DECEMBER

		31st, 1912					
CLASS	"A"—II	PROJET	(Problem	in	Design)		
		"A Public	BATH"		0 /		
A in	thou	Annand	4. 7.		and the same of th		

SUPPLEMENTARY JUDGMENT OF DECEMBER 10th, 1912

CLASS "B"—I ANALYTIQUE (Order Problem)

"PORTE COCHERE IN A PUBLIC BUILDING"

Author Award Atelier City

Johnston, G. S. Ment. Swales Montreal
Serra, L. J. " " " "

Grosvenor, H. J. " " " "

Derrick, G. L. " " " "

CLASS "A" & "B" ARCHÆOLOGY—I PROJET (Problem in Design)

"A COURTYARD"

(In the Pompeiian Style)

Author Award Atelier City

Swales, S. F. Ment. Swales Montreal

CURRENT NEWS AND COMMENT

TOWN PLANNING ARTICLES

The series of articles on "Town Planning" by Mr. Frank Koester that are now appearing in the American Architect, will be found to constitute an authoritative and instructive discussion of a subject that is becoming increasingly important to architects.

Town Planning has very often been mistakenly considered as a theoretical exposition of a city's needs. Nothing could be further from the truth than this view of the matter. In fact, there is probably no field of effort presented to-day in which the architect may more legitimately interest himself or one offering greater possibilities.

Mr. Koester's researches in connection with the subject of Town Planning have been extended over a period of years and his articles are the result of study by a technically trained and eminently practical man.

ARCHITECTURAL LICENSE LAW IN UTAH

Changes in the laws relative to the practice of architecture in Utah are proposed in a bill recently introduced in the Utah Legislature by Mrs. Annie Wells Canon of Salt Lake City.

The changes contemplated provide that anyone practicing architecture in Utah without a license shall be liable to fine, or imprisonment, or both, and

gives the State Board of Architecture power to revoke the licenses of architects for violation of the law or the rules of the Board.

While it is commendable to surround the profession of architecture with safeguards from irresponsible and incompetent practitioners, it would also seem advisable that laws enacted should be uniform and not conflict with laws passed by other states. In fact, the American Institute of Architects can undertake no better work than to do whatever is possible to codify the laws with relation to the practice of architects as passed by various state legislatures and then secure the adoption of the code uniformly throughout the United States.

FIRE WASTE A LIVING EXPENSE

Mr. Franklin H. Wentworth, secretary of the National Fire Protection Association, in an address before an audience in Newark, N. J., stated that as a contributory cause for the high cost of living, the fire waste in this country represented one of the most potential factors. Radical measures were advocated by Mr. Wentworth and among them a provision similar to that enforced in many European countries where carelessness on the part of citizens responsible for the origin of fires is considered an offence against the public welfare and amenable to the law as such.

THE AMERICAN ARCHITECT

A CORRECTION

The illustration of the Alexander and the Knoedler buildings in our issue of February 12, reproduced from the Catalogue of the Architectural League of New York, and credited to Messrs. McKim, Mead & White, is an error. These two buildings were designed by Messrs. Carrère & Hastings. The mistake occurs in the league catalogue from which it was through inadvertence copied into the captions of our issue illustrating the Architectural League Exhibition.

LOUIS DE COPPET BERGH DEAD

Mr. Louis de Coppet Bergh, architect, died at his late residence in Washington on January 26. Mr. Bergh, owing to a complication of disorders has not been in practice for some time, but his death, though in a measure expected, will come as a shock to many of his friends. Mr. Bergh is survived by a widow and three children.

THE RHODE ISLAND CHAPTER OF THE A. I. A.

The monthly meetings of the Rhode Island Chapter are usually of interest and the January meeting was no exception. The subject of City Planning was very thoroughly discussed on that occasion and many of the errors that are now apparent in the plan of Providence, R. I., and in the tentative scheme for city improvement, were strongly criticized and their correction advocated. Consistency is always commendable. Adverse criticism is comparatively easy, but the critic should be prepared, as in the case of the Rhode Island Chapter, to suggest means to overcome civic conditions that are apparent to men eminently capable to discern them.

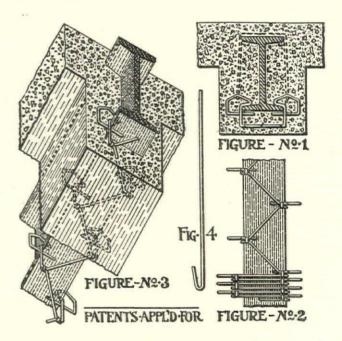
THE GEORGE WASHINGTON MEMORIAL HALL IN WASHINGTON, D. C.

Tentative plans have been prepared for a proposed George Washington Memorial Hall in Washington, D. C. The desirability of carrying forward this project is emphasized by the abandonment of the inaugural ball this year for lack of a proper building in which to hold it, and the necessity for disturbing the routine of an important public department, if it should have been held in the Pension Building, as heretofore.

The question of an adequate building for ceremonial purposes has been considered every four years during the last quarter century. As inauguration day has approached, the enthusiasm has grown and as the day has passed it has correspondingly waned and nothing has been accomplished. It is now hoped that the Government's demonstrated poverty of adequate buildings (at the National Capital) for ceremonial occasions will stimulate the present sentiment and result in some measure of accomplishment.

"STANDARDIZED METAL CAGING"

The Mitchell-Tappen Company, of 149 Broadway, New York City, have devised what they term a "standardized metal caging" for use in the construction of fireproof buildings. The device consists of a continuous clip with predetermined offset, its object being to hold concrete fireproofing to steel in such a manner that a known uniform result is obtained. It is claimed that this protection serves to actually fireproof the steel members constituting the skeleton frame of a building and when properly applied makes them fireproof beyond question. The difficulties encountered in attempts to secure concrete to steel are well known to architects and engi-



neers, and if the claims of the manufacturers of "standardized metal caging" are fully substantiated in extended practice, the material will undoubtedly find a large demand.

The caging is constructed of galvanized steel wire, electrically welded and made in sizes to fit various depths of beams, from 4 to 24 inches, single or double. It is also used on columns, girders, etc. In fact, it is applicable to all steel shapes and can even be readily used in conjunction with terra cotta floor arches.

The manufacturers will gladly furnish further particulars or samples of material to those interested.

The photographs of the Pan-American Annex, illustrated in this issue, were supplied to us by The Atlantic Terra Cotta Co., whose product was used in the building. We are also indebted to The National Fire Proofing Co. for photographs of many examples also illustrated, showing the use of "Natco" tile in construction.



Piping ROCK CIED.

CHY LUTBELL ATCHITECT HOSTON

Cabot's Creosote Stains, Waterproof Cement and Brick Stains, "Quilt," Conservo Wood Preservative, Damp-proofing, Protective Paints, Waterproofings, etc.

Another Famous Club-house finished with

Cabot's Old Virginia White

A soft, brilliant, cool white that has won the instant approval of architects.

As beautiful as new whitewash, with none of its defects; as durable as paint (and cheaper), with no painty coating. Samples furnished on request.

SAMUEL CABOT, INC., Mfg. Chemists, Boston, Mass.
1133 Broadway. New York 350 Dearborn Avenue, Chicago

The Comfort and Satisfaction of Your Client are Assured when You Specify

THE STANDARD SYSTEM

of Automatic Temperature and Humidity Control

HOT WATER

DRY ROOM CONTROL DAMPER

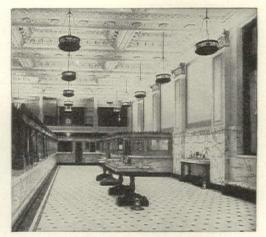
PRESSURE

THREE-WAY SWITCH CONTROL

STANDARD REGULATOR COMPANY

NEW YORK-PHILADELPHIA

Once the Lighting System of the Future Now the Lighting System of the Present



Union Savings & Trust Co., Seattle. Bebb & Mendel, Archts.

NATIONAL X-RAY REFLECTOR CO.

Chicago 235 W. Jackson Blvd. New York 505 Fifth Ave. We believe that practically every Architect and Lighting Engineer has long appreciated the fact that our EYE COMFORT LIGHTING System is the sensible, reasonable and feasible method of illumination of both residence and public buildings.

That was to be expected.

We are most grateful to every Architect and Lighting Engineer who, because of his devotion to his profession, explained and recommended our system because of its simple, sound principle.

We are glad that today the layman understands and wants

The Eye Comfort Lighting System

As we have so often stated, "It is all in the X-RAY reflector." You, as an Architect, Designer, Sculptor or Engineer, have in our system one which you may harmonize with your own ideas for fixtures. The EYE COMFORT LIGHTING System overcomes all the oldtime difficulties and crudities in lighting. It adds to the artistic results of your own inspiration and effort. It is scientific, practical, beautiful and appeals to the house owner because of its economy and perfection.

Write for our special literature which goes fully into details

NDEX TO CURRENT ARCHI-TECTURAL LITERATURE

TEXT.

AMERICAN CITY PLANNING. PART II. By Frank Koester. The American Architect, December 11, 1912.

AMERICAN GROUP-PLANS, RECENT. By Alfred Morton Githens. The Brickbuilder, December, 1912.

AMERICAN INSTITUTE OF ARCHITECTS, FORTY-SIXTH AN-NUAL CONVENTION OF THE. First Day's Proceedings. The American Architect, December 25, 1912.

Anglo-Mania in Architectural Journalism Rebuked by AN ENGLISH CONTEMPORARY. The American Archi-

tect, December 4, 1912. Architects Read, Do? Part II. By Samuel Howe. The Architectural Record, January, 1913.

ARCHITECTURAL CRITICISM. Architecture, January, 1913.
ARCHITECTURAL PRESS, THE CURRENT. The American Architect, December 11, 1912.

ARTS AND CRAFTS, A VIENNESE EXHIBITION OF. The International Studio, January, 1913.

AVIATION, STRUCTURES OF THE FUTURE IN RELATION TO. Paper read by Horace Cubitt. Architecture, January, 1913.

BOSTON ARCHITECTURAL CLUB EXHIBITION. The American

Architect, December 4, 1912.
BURNHAM, DANIEL H. AN INTERVIEW WITH THE LATE. Lessons of the Chicago World's Fair. The Architectural Record, January, 1913.

CIVIC DECORATIONS OF BOMBAY, THE. The Architectural Review, December, 1912.

CURRENT PERIODICALS. The Architectural Review, December, 1912.

Design Be Reduced to Rule, Can? Part II. By Prof. John Beverley Robinson. The American Architect,

December 18, 1912.

Doorways of an Old Whaling Village. By Grace Nor-

ton Rose. The Architectural Record, January, 1913.

EMMET BUILDING, NEW YORK CITY. J. Stewart Barney and Stockton B. Colt, Architects. The Brickbuilder, December, 1912.

Forest Hill Gardens, Long Island. By Grosvenor Atterbury, Architect. The Brickbuilder, December, 1912. Building Construction, by W. F. Anderson.

Home of an Artist, M. Fernand Khnopff's Villa at Brussels. By Helene Laillet. The International

Studio, January, 1913.

Japanese Painting, The Old and New Schools of. The International Studio, January, 1913.

KNIGHT, HAROLD AND LAURA, THE ART OF. By Norman Garstin. The International Studio, January, 1913.

LANDSCAPE WORK, PREPARING TO START THE. Charles W. Leavitt, Jr. Architecture, January, 1913.

LEGAL DECISIONS, RECENT. The American Architect, De-

cember 11, 1912. December 18, 1912.
"Log of the Dorian," Extracts from. Part VI. By Joseph T. Clarke and Francis H. Bacon. The Architectural Review, December, 1912.

NANTUCKET PILGRIMAGE, A. By Hubert G. Ripley. The

Brickbuilder, December, 1912.
RICE, WILLIAM M. INSTITUTE, HOUSTON, TEXAS. Cram,
Goodhue & Ferguson, Architects. The American Architect, December 11, 1912. The Brickbuilder, December, 1912.

SCANDINAVIAN PAINTING, THE PROGRESSIVE SPIRIT IN. By Christian Brinton. The International Studio,

January, 1913.
"Sgraffito," An Ancient Art Revived, An Account of By Maximilian F. Friederang. The Architectural

Record. January, 1913.
SKINNER MEMORIAL CHAPTER, HOLYOKE, MASS. Allen & Collens, Architects. The American Architect, December 18, 1912.

Spanish Church in New York City, "Our Lady of Hope." By L. R. McCabe. The Architectural Record, January, 1913.

STATICS AND DYNAMICS OF ARCHITECTURE, THE. The Western Architect, January, 1913. STUDENT WORK, SOCIETY OF BEAUX ARTS ARCHITECTS. The

American Architect, December 4, 1912.

TAPESTRIES, FROM THE ARCHITECTURAL POINT OF VIEW.

By George Leland Hunter. Part I. The Architectural Record, January, 1913.

ILLUSTRATIONS

Amoskeag Savins Bank and Office Building, Man-CHESTER, N. H. Hutchins & French, Architects. The Architectural Review, December, 1912.

APARTMENT HOUSE, FIFTH AVENUE AND 81ST STREET, NEW YORK. McKim, Mead & White, Architects. Architectural Record, January, 1913.

Babson Brothers Building, Chicago, Ill. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

BUILDING FOR THE UNITED STATES RUBBER COMPANY, NEW YORK CITY. Carrere & Hastings, Architects. The Architectural Record, January, 1913.

BUNGALOW, CRANE ESTATE, WOODS HOLE, MASS. Purcell, Feick & Elmslie, Architects. The Western Architect,

January, 1913.
Church of St. Augustine, Pendlebury, England. The late G. F. Bodley, Architect. The Architectural Review, December, 1912.

COUNTRY DWELLING FOR E. W. DECKER, LAKE MINNE-TONKA. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

COUNTRY HOUSE, MISS LAURA ROBINSON, GREENWICH, CONN. J. E. R. Carpenter and Walter D. Blair, Asso-

ciated Architects. Architecture, January, 1913.

Dental Offices, Bridgeport, Conn. Skinner & Walker,
Architects. The Architectural Record, January, 1913. DWELLING FOR P. E. BYRNE, BISMARCK, N. D. Purcell,

Feick & Elmslie, Architects. The Western Architect, January, 1913. DWELLING FOR HAROLD E. HINELINE, MINNEAPOLIS, MINN.

Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913. DWELLING OF OSCAR OWRE, M. D., MINNEAPOLIS, MINN.

Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

DWELLING FOR CHARLES A. PURCELL, RIVER FOREST, ILL.

Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913. Dwelling for Charles W. Sexton, Lake Minnetonka.

Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

Dwelling for Chas. W. Stricker, Minneapolis, Minn.

Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

EMMET BUILDING, MADISON AVE., NEW YORK. J. Stewart Barney and Stockton Beekman Colt, Architects. Architecture, January, 1913. The Brickbuilder, December, 1912. The Architectural Record, January, 1913.

EXCHANGE STATE BANK, GRAND MEADOW, MINN. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

FIRST CHURCH, CHESTNUT HILL, MASS. J. Lovell Little, Jr., Architect. The American Architect, December 18, 1912.

FIRST NATIONAL BANK, RHINELANDER, WIS. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

FOREST HILLS GARDENS, FOREST HILLS, L. I. Grosvenor Atterbury, Architect. The Brickbuilder, December, 1012.

GARDEN AND TERRACES AT THE HILL, HAMPSTEAD HEATH. The International Studio. January, 1913.

GARDEN HALL WITH WALL FACINGS OF ARTIFICIAL STONE. Designed by W. Orley, Architect. The International Studio, January, 1913.

GEORGIAN RESTAURANT, SKETCH, BOSTON. C. H. Blackall, Architect. The American Architect, December 4, 1912.





A Question and an Answer

"Barrett Manufacturing Co. I Jersey City, Feb. 27, 1912.

I have at last become tired of painting and repairing the tin roof on the apartment which I own, and have decided to put on the building the best roof that can be had, so for this reason I ask you to kindly send to me a specification that will be sure to fill my needs. I do not wish to remove the tin if this is practicable.

How can I be sure of securing 'Barrett' goods?

JOHN ARMSTRONG."

"Thousands of owners have reached the same conclusions you have, namely, that all roofings that need periodical painting, like tin and ready roofings, are unduly expensive to maintain. The way to avoid this is to give a copy of the Barrett Specification to your roofing contractor and secure prices on that basis.

The Barrett Specification is simply a formula requiring certain grades and quantities of material and specifying how the roof shall be laid. The Specification further states how the roof may be inspected to ascertain whether you have secured the required five plies of felt with continuous intervening layers of pitch.

If you order a Barrett Specification Roof and insist that the Specification be followed *absolutely*, you are certain of what you are getting. Your Barrett Specification Roof will never need painting and should give good service for twenty years or more without leaks and without a cent of maintenance expense."

Copy of the Barrett Specification with tracing ready for incorporation into your building plans sent free on request. Address nearest office.

BARRETT MANUFACTURING COMPANY

New York Chicago Philadelphia Boston St. Louis Kansas City Cleveland Cincinnati
Minneapolis Pittsburgh Seattle Corey, Ala.

THE PATERSON MFG. CO., Ltd.: Montreal, Toronto, Winnipeg, Vancouver, St. John, N. B.; Halifax, N. S.

Special Note

We advise incorporating in plans the full wording of The Barrett Specification, in order to avoid any misunderstanding.

If any abbreviated form is desired however the following is suggested:

ROOFING—Shall be a Barrett Specification Roof laid as directed in printed Specification, revised August 15, 1911, using the materials specified, and subject to the inspection requirement.



HOSPITAL FOR THE RUPTURED AND CRIPPLED, NEW YORK. York & Sawyer, Architects. Architecture, January, 1013.

HOUSE OF MRS. P. H. LOMBARD, CHESTNUT HILL, BROOK-LINE, MASS. James Purdon, Architect. The American

Architect, December 25, 1912.

House of Mrs. F. L. W. Richardson, Stairway In. Richardson, Barott & Richardson, Architects. American Architect, December 4, 1912.

McAlpin Hotel, New York City, F. M. Andrews & Company, Architects. The Architectural Record, January, 1913.

MERCHANTS BANK, WINONA, MINN. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

MINOT BUILDING, BOSTON, MASS. Parker, Thomas & Rice, Architects. The American Architect, December 4, IOI2.

OCTAGON HOUSE, SKETCHES OF, AND PLANS OF PROPOSED DEVELOPMENT OF THE PROPERTY OWNED BY THE AMER-ICAN INSTITUTE OF ARCHITECTS, WASHINGTON, D. C. Glenn Brown and Bedford Brown, Architects. The American Architect, December 25, 1912.

PARISH CHURCH AT HERTFORD, ENGLAND. Austin & Paley, The Architectural Review, December, Architects. 1912.

PIPING ROCK CLUB, LOCUST VALLEY, L. I., NEW YORK. Guy Lowell, Architect. The American Architect, December 25, 1912.

RESIDENCE OF C. A. GALE, CLEVELAND, OHIO. Bohnard & Parsson, Architects. The Architectural Review,

December, 1912.

RESIDENCE OF Mr. E. L. POWERS, MINNEAPOLIS. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

RESIDENCE OF PROF. H. C. PRICE, COLUMBUS, OHIO. J.

Upton Gribben, Architect. The Architectural Review, December, 1912.

RICE INSTITUTE, ADMINISTRATION BUILDING OF THE, HOUS-TON, TEXAS. Cram, Goodhue & Ferguson, Architects. Brickbuilder, December, 1912. The American Architect, December 11, 1912.

St. Gile's Church, Dorset, England. The late G. F. Bodley, Architect. The Architectural Review, December, 1912.

St. THOMAS CHURCH, NEW YORK. Cram, Goodhue &

Ferguson, Architects. Architecture, January, 1913. SKINNER MEMORIAL CHAPEL, HOLYOKE, MASS. Allen & Collens, Architects. The American Architect, December 18, 1012.

STUDENT WORK, SOCIETY OF BEAUX-ARTS ARCHITECTS. The American Architect, December 4, 1912. December 25, 1012.

STUDIO AND DRAUGHTING ROOM FOR PAUL L. MUELLER, LANDSCAPE ARCHITECT, MINNEAPOLIS, MINN. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.

STUDIO HOME OF FRANK LLOYD WRIGHT, WISCONSIN, ARCHITECT. The Architectural Record, January, 1913.

SUNDAY SCHOOL KINDERGARTEN, WESTMINSTER CHURCH, MINNEAPOLIS. Purcell, Feick & Elmslie, Architects. The Western Architect, January, 1913.
Temple in Garden of the Hon. Larz Anderson, Brook-

LINE, MASS. Little & Brown, Architects. The Amer-

ican Architect, December 4, 1912. Tower of Perkins Institute, Watertown, Mass., Sketch R. Clipson Sturgis, Architect. The American Architect, December 4, 1912.

VILLA LATOMIA, EASTERN POINT, GLOUCESTER, MASS. Little & Brown, Architects. The American Architect, December 4, 1912.

Woolworth Building, New York. Cass Gilbert, Architect. Architecture, January, 1913.



Colonial Details

Consisting principally of measured drawings. Compiled by W. R. Ware. Taken from "The Georgian Period."

One hundred pages of illustrations, among which are included working drawings of some of the best examples of "Colonial" Architecture. The elevations and interiors of houses, churches and other buildings of this period are shown.

An excellent collection of plates from which one may study the details of doorways, staircases, mantels, cornices, pulpits, organ cases, etc., each drawn to large scale.

The illustrated text consists of twenty-four pages devoted to a critical discussion of "so-called Colonial Architecture of the United States," directing attention to its main characteristics.

Price in Portfolio (express prepaid) \$15.00

"ADDRESS: BOOK DEPARTMENT" THE AMERICAN ARCHITECT

50 Union Square

New York City

Theater Walls is with Pee Gee Flatkoatt

Theaters, like all public gathering places, suffer much from the carelessness and irresponsibility of people in the mass. Their upkeep is an accordingly important item, which the architect's foresight may minimize in some of its features.

Pee Gee Flatkoatt reduces the cost of maintaining clean, fresh interior walls from the expense (and confusion) of frequent redecoration to the simple attention of occasional washing with soap and water; and its hardness and durability resist wear and tear.

In appearance Pee Gee Flatkoatt is soft and very pleasing, and responsive to every form of treatment, original or conventional. A splendid back-ground for pictorial decoration.

The sanitary advantages of Pee Gee Flatkoatt recommend it highly for use in all public places.

Peaslee-Gaulbert Company

407 West Main Street

LOUISVILLE, KY.

BUILDING NEWS

To be of value this matter must be printed in the number immediately following its receipt, which makes it impossible for us to verify it all. Our sources of information are believed to be reliable, but we cannot guarantee the correctness of all items. Parties in charge of proposed work are requested to send us information concerning it as early as possible; also corrections of any errors discovered.

ALABAMA

BIRMINGHAM.—Final arrangements have been made by Gen. Louis V. Clark to build a modern apartment hotel facing Capitol Park on a site at corner Twentieth St. and Park Ave.

CALIFORNIA

FAIRFIELD.—The Trustees of Armijo Union High School District, comprising ten elementary school districts in this locality, have taken the preliminary steps for the erection of a new school building. An architect has been instructed to draw up plans for a building to cost about \$60,000 or \$70,000.

Pasadena.—Henry E. Huntington will complete the Wentworth Hotel at Oak Knoll, Pasadena, during the coming summer. It has been announced that the work has progressed so far that the specifications are prepared and a number of the bids for the work have been received. Cost about \$1,300,000.

SACRAMENTO.—Tentative plans for the remodeling of Pythian Castle, Ninth and I Sts., Sacramento, at a cost of \$15,000, are considered by the lodge.

SAN FRANCISCO.—The Haynes Auto Sales Company has announced plans for its new building, to be located at Turk and Polk Sts. It is to be a 2-story structure.

Architect E. H. Denke, Humboldt Bank Bldg., is pre-

Architect E. H. Denke, Humboldt Bank Bldg., is preparing plans for a 3-story apartment house to be erected for Max Kolander. Cost, \$30,000.

Plans are being prepared by Architect Henry C. Smith, Humboldt Bank Bldg., for a 3-story apartment house to be erected on Washington St., near Taylor, for Mr. Hunter. Cost, \$20,000.

WOODLAND.—It is said that the Masonic Lodge of Woodland is considering erection of substantial \$60,000 business and lodge building.

CONNECTICUT

Bridgeport.—Architect A. S. Meloy has completed the plans for a block on East Main St. for Nathan Engleman, and estimates will be called for very soon. The building will be 3 stories high.

The Blue Ribbon Auto & Carriage Company, now at Cannon St., is making arrangements to erect a new plant at the junction of Fairfield Ave. and State St. The plans for the building are now being drawn by Architect F. A. Cooper, 1217 Main St.

From plans drawn by Architect T. F. Kelley, 107 Wall St., work will shortly be started on a three-family house

on Grand St. for Grosso Bros.

Manchester.—The Rev. P. J. O. Cornell, pastor of the Swedish Lutheran Church, is preparing plans for a new church that the congregation is planning to erect.

WATERBURY.—The board of directors of the Boys Club is planning the erection of an addition to gymnasium to cost about \$12,000.

DISTRICT OF COLUMBIA

Washington.—Plans are being prepared by Architect Nathan Wyeth, 1517 H St. N. W., for erection of hospital building on New York Ave. for the Central Dispensary and the Emergency Hospital. Dr. A. R. Shands is chairman of the building committee.

The General Synod of the Evangelical Lutheran Church is planning to erect new building on Queens Chapel Rd. to be the National Lutheran Home for the Aged.

FLORIDA

JACKSONVILLE.—The Jacksonville Brewing Company has acquired property on Grand Blvd., and will shortly erect large brewery. Henry Free is vice-president of the organization.

St. Petersburg.—The Woman's Town Improvement Association will advertise immediately for bids for the erection of a ball and rest room on First Ave. North. Plans for the building have been drawn by Architect M. E. Benjamin.

Tampa.—Bids are wanted for the construction of the club building for Centro Asturiano Club. Plans can be had by applying to Architects Bonfoey & Elliott, Tampa, Fla. Bids must be delivered sealed to J. Lopez, president, 2301 Nebraska Ave., on or before Feb. 25, 8 p. m.

ILLINOIS

Aurora.—Trustees of the Loyal Order of Moose have voted to establish a \$1,000,000 industrial and educational institution near Aurora. Plans contemplate the establishment of a post office on the grounds, to be known as "Moose Heart, Chicago."

CHICAGO.—Architects Marshall & Fox, 164 Dearborn St., are preparing plans for a high-class apartment hotel to be erected on North Side of Chicago by the Drake Hotel Company; cost, \$2,000,000.

CHICAGO.—James W. Sheridan has leased property at corner of South State and 39th St. and will erect a 4-story mercantile building to cost \$50,000.

IOWA

Sioux City.—R. E. Betz will erect an \$18,000 brick veneer apartment house, plans for which have been approved.

KENTUCKY

LOUISVILLE.—The Levi-Tyler Land Co. will erect new theater on north side of Jefferson St., near 4th. It has been leased to the Jefferson Amusement Co.

LOUISIANA

New Orleans.—George H. Davis, president of the American Cities, has purchased a square of land bounded by Wall, Esther and Walnut Sts. and is planning to erect handsome residence.

MARYLAND

Baltimore.—Edward H. McKeon has commissioned Charles Barton Keene, a Philadelphia architect, to prepare plans for extensive alterations to Willoughby Hall, which was recently bought by Mr. McKeon.

Announcement was made that D. B. Martin & Co. would erect a 3-story building as an addition to the Union Abattoir, at Wilkens Ave. and Brunswick St. C. B. Comstock, of New York, is given as the architect.

MASSACHUSETTS

Boston.—The Bethlehem Steel Company is to have erected at Binney and Sixth Sts., Cambridge, a 1-story brick and concrete warehouse for storage purposes. It will cost about \$20,000.

On Putnam Ave. and River St., Cambridge, twenty 3-story 5-apartment brick and stone houses are to be erected by John Mangus & Company, at estimated cost of about \$150,000.

ORNAMENTAL BRONZE AND WROUGHT IRON



THE JOHN PAUL JONES SARCOPHAGUS ANNAPOLIS, MD.

MESSRS. WARREN & WETMORE, ARCHITECTS

THE OPPORTUNITY IS SOLICITED OF CONSULTING ARCHITECTS ON THEIR PLANS FOR ORNAMENTAL BRONZE, WROUGHT IRON, SPECIAL LIGHTING FIXTURES, INTERIOR DECORATIONS, FURNISHINGS, LEADED GLASS AND TIFFANY FAVRILE GLASS MOSAIC WORK FOR BANKS, RESIDENCES, PUBLIC BUILDINGS AND CHURCHES.



Plans have been completed by Architect A. H. Bowditch, 7 Water St., for the new store and office building that is to replace the old Bromfield Street Church. The new structure will be 8 stories high. It is planned to complete the building by Oct. 1, at a cost not to exceed \$700,000.

Boston.—A six-story brick and stone building, to be known as the Beal Nurses' Home, is to be erected at Charlesgate West and Newbury Sts., Back Bay, by Snider & Druker. It will cost about \$250,000 and have accommodations for 250 nurses.

On Huntington Ave. and Ruggles St., Roxbury, a trade school building of brick construction to cost about \$36,000, is to be erected for Patrick Meehan.

At Harvard and Shailer Sts., Brookline, Boyd & Berry contemplate the erection of a three-story brick and stone apartment house to cost about \$40,000.

A three-story, nine-apartment brick block, to cost about \$40,000, is to be erected at 104 and 106 Pleasant St. and 97 Browne St., Brookline, for Philip Glazer.

At the corner of Browne and Pearl Sts., Brookline, five three-story, three-apartment brick houses, to cost about \$30,000, are to be erected by Snider & Druker.

FALL RIVER.—Plans are under way for the construction of a new brewery in Fall River. It will be located on Rodman St. and will have the capacity of 40,000 barrels. The treasurer of the new company is George W. Gracie.

The treasurer of the new company is George W. Gracie.

HAVERHILL.—Ernest N. Gilman, of Carter, Russell & Company, and John H. Tilton, of Krankle & Tilton, have purchased site on Locust St. and are planning the erection of an 8-story shoe factory.

HOLYOKE.—The G. Haarman & Co., iron workers, of Commercial St., are planning some expensive changes in their business with a view of adding to the present capacity of the plant. The plans for enlarging the plant call for the erection of a new building on Commercial St.

Wakefield.—Wakefield is facing the problem of spending \$300,000 or more this year for school accommodations. The most important step will be the erection of a new high school on the Wakefield estate. A building to cost upward of \$200,000 is planned.

MICHIGAN

BATTLE CREEK.—Six business buildings are to be erected on Main St. in the spring by Howard T. Sherman, president of the Sherman Manufacturing Company.

MINNESOTA

DULUTH.—Duluth voters have authorized the Board of Education to issue bonds of \$200,000 for the erection of the Robert E. Denfeld High School at West Duluth and the first unit of the Roger S. Munger School at 12th Ave. E., and 8th St.

DULUTH.—The executive board of the Finnish Working People's College at Smithville has voted to enlarge the institution during the summer vacation. About \$15,000 will be spent on improvements and additions.

Erection of home for the aged is being planned by the Scandinavians of St. Louis County. It is planned to purchase 10 acres of land along the St. Louis River. The idea was first taken up by the Vasa Order, No. 170, Swedish United Sons of America; estimated cost, \$40,000.

MINNEAPOLIS.—Architect O. K. Westphal, Northwestern Bldg., has prepared plans for a 3-story apartment building for 18 families to be built at Stevens Ave. and 17th St. by C. L. Morey, proprietor of the Elite Laundry, 1904 Washington Ave., N. Cost, \$45,000; plans out for figures.

Plans have been prepared by Architects Kees & Colburn, Donaldson Bldg., Donaldson block, for a plant for the Co-operative Laundry Co., at 731-737 E. 14th St., 1-story building and a 2-story building, to cost \$35,000.

A 4-story building to cost about \$75,000 will be erected by the Minneapolis Brewing Co. at 1st Ave., N., and 6th St.

St. Paul.—Plans are being prepared by Architect A. L. Garlough, Rosen Bldg., for an addition to the Joesting & Schilling factory on E. Water St., West Side. The owner is taking figures.

The plans for the new chemistry building at the university, prepared by Architect C. H. Johnston, Capital Bank Bldg., have been completed and submitted to the Regents. Plans will shortly be out for figuring.

MISSOURI

St. Louis.—The Terminal Board has approved plans submitted by President McChesney for the new passenger terminal of the electric lines at Eads Bridge entrance facing on Bridge Sq. and Washington Ave. The president has been authorized to advertise for bids and it is expected that work will commence in the early spring.

St. Louis.—A clubhouse and convention building will be erected by the combined electrical and engineering interests of St. Louis, if plans are followed out which have been discussed by the St. Louis Electrical Interests, Jovian Chapter. The proposed new building would cost about \$100,000.

MONTANA

Lewistown.—Plans for the joint building for the First National Bank and the Lewistown Electric & Power Company have been awarded to Wasmansdoff & Eastman, Architects and Engineers, Lewistown. Cost, \$125,000.

NEBRASKA

OMAHA.—Thomas Cash, of Missouri Valley, and Mrs. Anna Donahue will build a 5 or 6-story apartment house, with 40 or 50 suites, on 25th Ave. and Douglas, to cost about \$60,000.

Hastings & Heyden Real Estate Co. will erect a \$20,000 apartment house to contain seven 5-room apartments on 26th near Douglas.

NEW JERSEY

ELIZABETH.—Plans are being made by Charles C. Koenig, of Main St., to erect a substantial 2-story brick building in place of the old dwelling house adjoining his property on Main St.

ENGLEWOOD CLIFFS.—Dr. Frederic Mortimer Lawrence, of Philadelphia, has purchased a tract of 3 acres at Englewood Cliffs. He expects to erect a mansion, which promises to be one of the show places of the Hudson. Plans are already completed for a house that will cost \$50,000.

JERSEY CITY.—The combined congregations of Beth Abraham and Agudas Sholom, of Jewish faith, have voted to purchase a site on Bergen Ave. and to start erection of \$50,000 synagogue.

LITTLE FALLS—Plans are being considered for erection of auditorium by Town Council to cost about \$20,000.

NEWARK.—Ground will be broken at 44 and 46 Broad St. as soon as possible for the erection of an apartment building for the Joseph H. Mayzel Company. Architect Edward V. Warren, 22 Clinton St., has drawn the plans and the cost will be about \$50,000.

Plans have been completed by Architect Arthur Connelly, 92 Market St., for a 4-story brick building, which Max Vasa contemplates erecting at Prince and Court Sts. The structure is estimated to cost in the neighborhood of \$25,000.

Architect Donato R. Rizzolo, 800 Broad St., has prepared plans for a 4-story brick building to be erected at 52 Delancey St. for Pasquale Pagliuca. Pecci, Noviello & Pannullo have the general contract for the structure, at a cost of \$10,300.

PATERSON.—Architect William T. Fanning, Colt Bldg., will have his plans and specifications of the public comfort station in the city hall ready shortly.



THE PERGOLA-NEW YORK OFFICE.

On the top floor of the Arena Building, No. 40 West 32nd Street, New York City, is the new home of "Tapestry" Brick.

Here, in five large rooms (three with skylights), has been installed the most comprehensive and artistic exhibition of brickwork in existence.

Each room is finished in brickwork of a different color, in order that each may tell its own story without the confusion of the ordinary multicolored "brick shop."

All standard and many special bonds and a great variety of mortar joints are here exemplified, while there is a wealth of decorative patternwork, tiling for the terrace and interior floor, and a whole room devoted to the use of brick and tile in fireplace construction.

One of the rooms contains the Pergola illustrated above.

Architects and their clients are cordially invited to visit this unique exhibition.

FISKE @ COMPANY, Inc.

Sole Manufacturers of "Tapestry" Brick

25 Arch St., Boston

Arena Bldg., New York

PATERSON.—David Stein, of Graham Ave., will erect apartment house on lower Van Houten St. early in spring.

Plans are being prepared in the offices of Architect Slate for the erection of a hall of modern structure for conventions, etc., on lower Van Houten St., for "Billy" Watson.

PATERSON.—The Globe Carpet, Oilcloth & Bedding Co., at 142 and 144 Main St., will erect immediately new store at 142 and 144 Main St., at cost of \$75,000.

Springfield.—Plans for the proposed City Hall have been submitted by Architect Horatio W. Olcott, of Wyoming, to committee; estimated cost, \$18,000 to \$20,000.

NEW MEXICO

Deming.—The Bank of Deming has purchased a site adjoining its present building. The bank will erect a 1-story building there to take the place of the one recently burned.

NEW YORK

Brooklyn.—Architects Shampan & Shampan, 772 Broadway, are preparing plans for two apartment buildings to be erected on the west side of Senator St., south of Fourth Ave., for the Boyd Realty Company of Brooklyn, owners, to cost \$00,000.

Architects Shampan & Shampan, 772 Broadway, are preparing plans for two apartment houses to be erected on the west side of Senator St., south of Fourth Ave. The buildings will cost \$90,000. The Boyd Realty Co., of Brooklyn, is the owner.

The McKnight Realty Company has sold on the Estate of Great Neck to Albert Hagstedt of Great Neck a site on Gateway Drive. It is the intention of Mr. Hagstedt to erect a residence from plans drawn by Architect George J. Hardway, 347 Fifth Ave., the cost to be approximately \$18,000.

BROOKLYN.—The Flatbush Christian Church (Disciples), of which the Rev. Dr. Frederick Marsh Gordon is the pastor, is planning to erect a new house of worship, situated at Dorchester and Marlborough roads.

Buffalo.—Plans have been completed for the new Zion House, for which ground will be broken in a few weeks on Jefferson St., near William. The building will cost \$41,000.

Buffalo.—Bids for the erection of a 2-story frame administration building, a 2-story frame superintendent's residence and for making sundry alterations in the 2-story brick main hospital building and nurses' home, in connection with the present Municipal Hospital, located on the north side of East Ferry St., will be received by the Commissioner of Public Works at his office, Room 5, Municipal Building, until 11 o'clock a. m., Feb. 20, 1913.

BUFFALO.—Bids for remodeling the municipal hospital on East Ferry St. and building tuberculosis pavilions and other buildings will be opened in the department of public works on February 20. It is estimated the work will cost about \$40,000.

Donald McGillivray of Port Colborne, Ont., who recently bought the Law Exchange Bldg. on Niagara St., is said to be completing plans for a new 20-story office building on the site.

CORNWALL.—The plans for the parochial school have been approved in New York and now estimates will be received from the different contractors.

FULTON.—Taxpayers have voted to appropriate \$22,000 for erection of school building at Fourth and Academy Sts.

Newburgh.—George Hughes, who has purchased the Hamilton apartment property on South Hamilton St., states that he expects to go ahead with the construction of a large apartment house at an early date to cost almost \$75,000. It will be a four-story structure.

\$75,000. It will be a four-story structure.

NEW YORK CITY.—Architect Harry T. Howell, Third

Ave. and 149th St., has filed plans for two brick apartments to be erected on Woodycrest Ave., corner of 165th

St., for Thomas D. Malcolm, 3651 Third Ave.; cost, \$120,000.

The Kreymborg Architect Company, 163d St. and Southern Blvd., has filed plans for a 5-story brick apartment to be erected on 175th St. for W. A. J. Building Company (W. A. Janota, 852 East 220th St., president); cost, \$50,000.

NEW YORK CITY.—Architects H. C. Ingalls and F. B. Hoffman, Jr., 527 5th Ave., have filed plans for a 3-story theater to be erected on Grand St. for the Terrain Realty Co., 05 Liberty St.: cost. \$80,000.

Co., 95 Liberty St.; cost, \$80,000.

Plans have been filed by Architects F. G. Joannes, 25
E. 26th St., for a 6-story store and loft to be erected on 39th St. for G. G. Kip, Morristown, N. J.; cost, \$30,000.

Plans have been filed by Architect D. Barber, 25 E. 26th St., for alterations to a 4-story dwelling on 52nd St. for H. T. Proctor, 27 Pine St.; cost, \$50,000.

Architects Sommerfield & Steckler, 31 Union Sq., have filed plans for alterations to two 5-story apartments on 106th St. for A. & T. Granatelli, 220 East 105th St.; cost, \$7,000.

It is expected that about July 1, 1913, the work of erecting the new pathological building of Mount Sinai Hospital will begin. It will probably be placed at Fifth Ave. and Ninety-ninth St. The cost will be about \$200,000. It is the gift of Adolph Lewisohn. Arnold W. Brunner, 320 Fifth Ave., will be the architect.

New York City.—Architect C. True, 107 West 88th St., has filed plans for two-story store and offices to be erected on Broadway, corner of 146th St., for M. I. Cunningham, 46 Hamilton Place: cost \$15,000

46 Hamilton Place; cost, \$15,000.

Plans have been filed by Architect T. Hastings, 225
Fifth Ave., for a one and two-story and tower church to
be erected on Wadsworth Ave., corner of 174th St., for
West Park Presbyterian Church of New York City, 165
Broadway; cost, \$150,000.

Architect Charles B. Meyers, I Union Square West, has filed plans for a six-story brick apartment to be erected on 167th St. for Sophia Gruenstein, 230 Grand St.; cost, \$55,000

Plans have been filed by Architect Maximilian Zipkes, 220 Fifth Ave., for a five-story brick apartment to be erected on 178th St. for Middle Bronx Realty & Construction Co. (Leonard B. Kaufman, 287 Division Ave., Brooklyn, president); cost, \$45,000.

The Technology Club of 17 Gramercy Park West is said to have secured options on a site in the vicinity of 42d St. for a new club house.

New York City.—Willard D. Straight, of the firm of J. P. Morgan & Co., has purchased site at corner of Fifth Ave. and 94th St., and will erect residence.

Architect W. H. Hoffman, 39 W. 38th St., has filed plans for alterations to a 5-story theater and office building on 41st St., for Broadway & Forty-first St. Company, Philadelphia. Cost. \$10,000.

Architect F. Straub, 25 W. 42d St., has filed plans for alterations to a 3-story dwelling on 103d St. for Congregation Joshevar Toras Chain of Harlem, 62 E. 104th St. Cost. \$12,000.

Plans have been filed by Architect C. Gens, Jr., 165 E. Eighty-eighth St., for alterations to a 4-story dwelling on Fifty-third St. for Dr. H. K. Miller; cost, \$12,000.

Plans have been filed by Architect H. G. Steinmetz, 1007 E. 180th St., for a 5-story brick apartment to be erected on 179th St. for the O'Bark Realty Company (Charles O. Krabo, 983 E. 181st St., owner); cost, \$46,-000

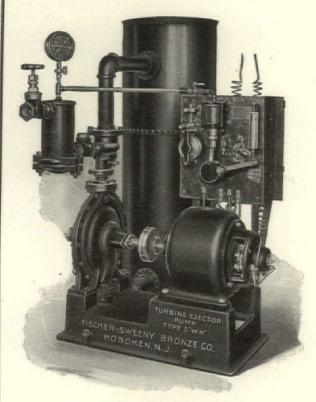
SYRACUSE.—The Central Trades and Labor Assembly have decided to erect a labor temple to cost about \$200,000.

OHIO

DAYTON.—The Dayton Savings & Trust Co. will erect a \$350,000 building on site north of new court house.

Insure a Dependable Vacuum Heating System by Specifying

The Turbine Ejector Pump



Turbine Ejector Pump. (Pats. Pending.)

It is applicable to both return and air line vacuum systems.

The elimination of pistons, valves, springs, belts, gears, and pinions, make the Turbine Ejector Pump practically noiseless and wearproof. No packing is required and dirt and scale cannot affect its efficiency.

A further investigation of The Turbine Ejector Pump, before deciding on your next vacuum pump, will materially aid you. Write us now.

FISCHER-SWEENY BRONZE CO.

1302-04-06 Clinton Street Hoboken, N. J.

KEWANEE SMOKELESS FIRE BOX BOILERS

Every Kewanee Smokeless Firebox Boiler is built with two grates-one above the other. The fuel is fed onto the top grate. The draft, which is down, draws the heat giving

gases down through SAVE FUEL the fire on the up-

per grate; then on down and over the hot coals on the lower grate. This burns ALL the carbon from the gases before they can be condensed into smoke. All the heat then passes through and around the boiler. Rigid tests made by Robert W. Hunt & Co., Chicago,

KEWANEE

KEWANEE

PROVE that Kewanee Smokeless Firebox boilers use from 14 to 31 per cent. more of the heat giving elements of coal than ordinary boilers.

Chicago, Saint Louis, Louisville Grand Rapids, Kansas City, Des Moines, Toledo all have rigid smoke

ARE OKED BY SMOKE INSPECTORS Kewanee Smoke-

ordinances. In all of these cities less Firebox Boil-

ers have been installed—Bituminous Coal is being used in them—and Smoke Inspectors have put their stamp of approval on them.

KEWANEE SMOKELESS FIRE BOX BOILERS

have been installed in the following schools:

have been installed in the following schools:
Washington, D. C., Georgetown University Law School
Ottawa, Ont., Canada, Slater School
Pekin, Illinois, Garfield School
Rockford, Ill., Catholic High School
Joliet, Ill., St. Francis Convent
Indianapolis, Ind., No. 15 School
Dubuque, Iowa, Marshall School
Vaile, Iowa, St. Ann School
Kansas City, Mo., National Training College for Methodist
Deaconess
Kansas City, Mo., Van Dorn School
Sedalia, Mo., Broadway School
St. Louis, Mo., Rubican College Bldg
Crookston, Minn., St. Joseph's Academy
University Place, Nebr., University Place School
Casselton, N. D., High School
Casselton, N. D., High School
Britton, S. D., School
Salt Lake City, Utah, Plymouth School
Salt Lake City, Utah, Blaine School
Eureka, Utah, School
Salt Lake City, Utah, Granite High School
Dunn, Indiana, School

We want every architect to know all about KEWANEE SMOKELESS FIRE-BOX BOILERS. Most likely one, or more, is already installed in your city. A postal will get you full information.

KEWANEE BOILER COMPANY

KEWANEE, ILLINOIS

Steel Power & Heating Boilers, Garbage Burners & Radiators

Branches:—Chicago, New York, St. Louis, Kansas City, Salt Lake City

W. P. Jenkins, the druggist, has received plans from Architect Robert Dexter, Canby Bldg., for an 8-story iron and concrete building to be erected at corner of 5th and Ludlow Sts.; cost, \$75,000.

HAMILTON.-The County Commissioners have passed a resolution employing George Barkman as architect to prepare plans for the renovation and repair of the old emergency hospital now located on the top of the infirmary hill.

Toledo.—Committee has been authorized by Walter F. Brown, president of the Toledo Humane Society, to secure from local architects plans for a \$75,000 structure.

Toledo.-An architect will shortly be engaged to prepare plans for new city hall, bonds for which in sum of \$750,000 wil be sold on March 5.

WARREN.-The directors of the Second National Bank have voted unanimously to erect a 6-story modern office building on the site of the present block at the corner of Market and Main Sts.

Youngstown.—Bids will be received at the office of the Clerk of the Board of Education of Coitsville township school district or the architect for the board until 12 o'clock noon, February 28, 1913, for erection of a brick school building to be located in East Youngstown, Ohio. Plans can be seen at the office of C. F. Owsley, architect, 522 Dollar Bank Bldg., Youngstown, Ohio.

PENNSYLVANIA

ABINGTON.—Trustees of the Abington General Hospital have decided to ask builders' bids for erection of modern hospital on the old York road, opposite Woodland Ave.

COATESVILLE.—The board of education of Coatesville will build a sixteen-room grammar school building. Henry L. Reinhold, Jr., is the architect.

ERIE.—The Erie Forge Company is considering the

erection of a modern all-steel structure.

Architect Cody, Downing Bldg., is preparing plans for three-story brick and steel building to be erected on 11th and 12th Sts. for the Standard Manufacturing Co. of Pittsburgh.

PHILADELPHIA,—Charles L. Leisen has purchased site on the north side of Glenwood Ave., east of Pacific St. The purchaser is a wool dealer, and it is understood that the land will be improved by the erection of a factory.

PHILADELPHIA.—Architects Magaziner and Potter, 137 South Fifth St., are preparing plans for a one-story synagogue, at 892 North Fortieth St., for the Tifereth Israel Congregation of West Philadelphia. The building will be designed in the Byzantine style of architecture. Architect Carl P. Berger, Penn. Sq. Bldg., has plans

nearing completion for an all-stone church in the English Gothic style, at the corner of Seventeenth and Tioga Sts., for the Evangelical Church of the Nativity. Adjoining the church a three-story rectory will also be erected. The two buildings will cost \$40,000.

F. C. Michaelsen is about to begin the erection of a group of apartment buildings at the southeast corner of Forty-seventh and Walnut Sts., which will require an outlay of \$115,000.

Architect Oliver Randolph Parry, 1723 Chestnut St., is preparing plans and specifications for a large dairy building for the Wills-Jones-McEwen Company, on Twenty-sixth St., north of Jefferson.

PHILADELPHIA.—The Roesch Packing Company, whose plant is at 834-838 North Second St., has purchased the five dwellings in the rear at the southeast corner of Poplar and American Sts. In the near future a refrigerating plant will be erected there.

Architect Oliver Randolph Parry, 1723 Chestnut St., preparing plans for a three-story dairy building on 26th St., north of Jefferson, for the Wills-Jones-McEwan Co.

Revised plans-have been finished by Architects Mills & Van Kirk, 614 Harrison Bldg., and bids are being taken on a three-story residence at northeast corner of 22d and Delancey Sts.

Architect Horace Trumbauer, Land Title Bldg., has finished revised plans for a colored Y. M. C. A. building, at 1720-26 Christian St. It will be a four-story brick and stone structure, costing about \$100,000.

Architects Ballinger & Perrot, 1211 Arch St., are preparing plans for a four-story brick addition to the building of the Little Sisters of the Poor, on Church Lane, east of Musgrave St.

PHILADELPHIA.—Settlement has been made for the property at the southeast corner of 19th St. and Rittenhouse Sq., which has been transferred to Samuel P. Wetherill, who will hold title for a syndicate that proposes to erect on the site a 15-story apartment house. Work on the demolition of the present building has been started and builders have been asked to submit bids for the proposed apartment house.

PHILADELPHIA.—The first step toward the erection of the skyscraping office building for the Finance Company of Pennsylvania on the site of the Standard Cab Stables, at Nos. 1420 to 1426 South Penn Square, has been taken by James G. Doak & Co., who has invited estimates on the construction of a building which will require an outlay of close to \$1,000,000. The plans by M. Henry Hoffman, Architect, provide for a 20-story structure.

Architect E. Allen Wilson, Land Title Bldg., is preparing plans for an operation of 132 2-story dwellings at Ninth St. and Hunting Park Ave., for Thomas J. Ward. The cost will be \$225,000.

PITTSTOWN.-Directors of the Pittstown National Bank have commissioned Walsh, Sturdevant & Poggi, architects, Coal Ex. Bldg., to draw plans for a new banking house to be erected on S. Main St. It will cost in the neighborhood of \$75,000.

TENNESSEE

CHATTANOOGA.—The Odd Fellows in Hamilton County are planning to erect a new 5-story temple on 10th St.; estimated cost, \$50,000.

NASHVILLE.—The officers of the Cumberland Telephone & Telegraph Company have authorized the erection of a ten-story office building.

VIRGINIA

ALEXANDRIA.—The Collinwood Club is discussing plans for the erection of new clubhouse on the Potomac. A committee has been appointed, composed of J. De Silva, E. S. Smith and G. E. Pyemont.

WASHINGTON

SEATTLE.—Architects Gaggin & Gaggin, Syraeuse, N. Y., have prepared plans for a 42-story office building to be erected on Second Ave. and Gesler Way for B. L. Smith; cost \$1,350,000.

Plans have been prepared by Architect J. Graham for a 6-story building, to be erected on Pike St. and Fourth Ave. for Joshua Green; cost \$200,000.

Architects Bebb & Mendel, Denny Bldg., have pared plans for a 4-story building to be erected on Third St., near Pike St., for G. W. Fisher; cost \$75,000.

Plans have been prepared by Architects Kingsley & Eastman, Empire Bldg., for erection of manufacturing plant for the Pacific Tin Plate Company; cost \$3,000,000.

WISCONSIN

Algoma.—The Bank of Algoma has had plans prepared by Architect W. E. Reynolds, Green Bay, Wis., for the erection of a 2-story bank building, to cost \$17,000.

PESHTIGO.—Final plans have been prepared by Arichtect Derrick Hubert, of Menominee, Mich., for the new \$20,000 poorhouse to be erected by Marinette County. Bids will be advertised for at once.

Alphabetical List of Advertisers

Ads. marked E. O. W. appear every other week.

Ads. marked O. A. M. appear once a month.

Ads. marked O. A	A. M.	appear once a month.	
American Blower Co	27 21 52 21 34 25	Kelly Island Lime & Transport Co. Kelly, Thos., & Bros. (e.o.w.) Kennedy, David, Inc. (e.o.w.) Kewanee Boiler Co. Kimball Co., W. W. (e.o.w.)	17
Artesian Well & Supply Co. (e.o.w.) Atlantic Terra Cotta Co. (e.o.w.) Atlas Portland Cement Co. (e.o.w.) Automatic Refrigerating Co.	21 43	Lee Marble Works (o.a.m.) Loomis-Manning Filter Co Lufkin Rule Co Lupton's, David, Sons Co	38 22 21 40
Barrett Mfg. Co	0	MCray Refrigerator Co	21 26 27 26 28 23
C Cabot, Samuel, Inc. Cahill Iron Works. Campbell, Walter M. Carpenter, Geo. B., & Co. Carter White Lead Co. Chelsea Elevator Co. (e.o.w.). Clow, James B., & Sons (e.o.w.)	7 28 20 28	National Fire Proofing Co National Lead Co National Roofing Tile Co National Tube Co National X-Ray Reflector Co (e.o.w.)	41 22 22
	30	New York Architectural Terra- Cotta Co	25
Colonial Supply Co Concealed Transom Lift Co Condron Co Corbin, P. & F. (e.o.w.). Corrugated Bar Co. (e.o.w.). Crittall Casement Co. (e.o.w.).	37	Niksah Snow Guard Co Northern Pine Mfrs. Assn. (e.o.w.)	
Cutler Mail Chute Co	21 21	(e.o.w.) Northwestern Expanded Metal Co. Northwestern Terra Cotta Co	27 25
Darby, Edw., & Sons Co., Inc. (e.o.w.)		Okonite Co. (e.o.w.) Otis Elevator Co. (e.o.w.)	
Derby Desk Co. Detroit Show Case Co. (o.a.m.). Detroit Steel Products Co. Dexter Bros. Co. Dixon Crucible Co., Jos. Drake, Frederick J., & Co.	21 24 22	Peaslee-Gaulbert Co Pfau Manufacturing Co., The	11
(o. a. m.) Drouvé, G., Co. (e.o.w.) Dunning, W. D.	33 22	Pierce, Butler & Pierce Mfg. Co. (e.o.w.). Pomeroy, S. H., Co., Inc. (o.a.m.) Pratt & Lambert. Prescott, J. B., & Son.	29 22 36
E Elevator Supply and Repair Co Emery, Wm. S	52 23 21	R Richards-Wilcox Mfg. Co. (e.o.w.) Royal Ventilator Co. (e.o.w.) Russell & Erwin Mfg. Co. (o.a.m.)	23
F		Samson Cordage Works	52
Facile Window Co., The, Inc. (e.o.w.)	20 24	Sargent & Company (e.o.w.) Schreiber & Sons Co., The L Silver Lake Co. (e.o.w.)	21
Fischer-Sweeny Bronze Co. (e.o.w.) Fiske & Co. French & Co., Samuel H.	17 15 23	Simonds Heating & Specialty Co. Smith, H. B., Co. (o.a.m.) Society of Beaux-Arts Architects Speakman Supply & Pipe Co Sprague, Douglas, and Associate	22 20 36
General Electric Co. (e.o.w.) General Pireproofing Co Gillespie & Son, Chas. H. (e.o.w.)	51	(e.o.w.) Standard Regulator Co. Standard Varnish Works (e.o.w.) Stanley & Patterson. Stanley Works, The (e.o.w.). Stuctarout Co. B. R.	28 7 35 45
Gillis & Geoghegan (e.o.w.) Globe Ventilator Co. Gorham Co. (o.a.m.). Granger Co., A. D.	25 24 21	Sturtevant Co., B. F	20
Great Western Pottery Co Gurney Heater Mfg. Co H	22 23	Thompson, Lewis & Co., Inc Thorp Fire Proof Door Co. Tiffany Studios Trenton Potteries Co	31 22 13 32
Hardtmuth, L. & C. (o.a.m.) Hart & Hegeman Mfg. Co., The. Heaton, Butler & Bayne Heinicke, H. R., Inc. (e.o.w.) Hess Warming & Ventilating Co.	29 27	Trussed Concrete Steel Co49- Turner, C. A. P. (e.o.w.)	-50 23
(e.o.w.) Higgins & Co., Chas. M. (e.o.w.) Hubbell, Harvey, Inc Hunt, Robert W., & Co Hydraulic-Press Brick Co 46	52 -47	U. S. Gypsum Co. U. S. Mineral Wool Co. U. S. Radiator Corporation. University of Michigan. University of Pennsylvania.	22 20 20
Hydrex Felt and Engineering Co. I Imperial Brass Mfg. Co Industrial Engineering Co	22 21	v Vaile & Youngw	21
J	26	Wadsworth, Howland & Co., Inc.	
Jacobson & Co. (e.a.m.) Jenkins Bros. Johns-Manville Co., H. W. 31-33 Johnston Paint Co., R. F. (e.o.w.)	52 -35	(o.a.m.). Washington University. Weisz, G. A. Western Electric Co. (e.o.w.). White Co., David (e.o.w.).	20 20
Kahn System of Reinforced Con-	110	White Fireproof Construction Co. Winkle Terra Cotta Co. (o.a.m.) Wolff, L., Mfg. Co	23
crete. 49- Kawneer Mfg, Co	-50 39 19 26	Y Yellow Pine Mfrs. Ass'n (e.o.w.)	44



Kawaiahao Girls' School, Mid-Pacific Institute, Honolulu, Hawaiian Islands. Roofed with Asbestos "Century" Shingles by H. L. Kerr, Architect, and Lewers & Cooke, Contractors—both of Honolulu. Reproduced from an Artist's Drawing.

Asbestos "Century" Shingles

"The Roof that Outlives the Building"

When you want an Asbestos "Century" Shingle roof—consult the most progressive roofer or building contractor in your section.

We are careful to have Asbestos "Century" Shingles represented only by men whose experience fits them to lay these Shingles in a professional manner—a permanent fire-proof roof.

Write for the names of these roofers — and Booklet, "Roofing: A Practical Talk."

Keasbey & Mattison Co.

Ambler, Pennsylvania

Branch Offices in Principal Cities of the United States

This advertisement appears in February Magazines read by owners and tenants of the better class of buildings. Write our nearest Branch Office for trade prices and terms, and Booklet "Mattison, 1913."

University of Pennsylvania Courses in Architecture

- A four-year course, leading to the degree of B.S. in Arch. An option in architectural engineering may be elected.
- Graduate courses of one year permit-ting specialization in design, construc-tion or history; leading to the degree of M.S. in Arch.
- A Special two-year course for qualified draftsmen with options in design or construction. Leading to a professional certificate.
- For catalogue giving complete information regarding requirements of admission, advanced standing, summer school and atelier work, fellowships and scholarships, and for illustrated year book, etc., address DEAN OF THE COLLEGE, University of Pennsylvania, Philadelphia, Pa.

COLLEGE OF FINE ARTS

SYRACUSE UNIVERSITY

Department of Architecture

Four year course in Architecture leading to the degree of B.Ar. Special two-year course for students who have had two or more years of office experience. For bulletin and information, address Syracuse University, Syracuse, N. Y.

A Free Course in Architectural Design

conducted by

The Society of Beaux Arts Architects

The Society of Beaux Arts Architects

Seventeenth Season—Aug. to July, inclusive
The Course is open to draughtsmen and
students of architectural schools in any
city of the United States or Canada, modeled on the principles of instruction at the
Ecole des Beaux Arts in Paris. It consists of thirty-five (35) competitions divided into two classes supplemented by
prize competitions, to enter any of which
an annual Registration Fee of \$2.00 is required. Address applications for circulars
of information and calendars for season
1911-12 to:
William Emerson, Chairman,
Committee on Education,
281 Fifth Avenue, New York City.

University of Michigan

DEPARTMENT OF ARCHITECTURE

Four-year courses in Architecture and Architectural Engineering. Two-year course for special students. For information, address Department of Architecture, University of Michigan, Ann Arbor, Michigan.

Perspectives Rendered In Pen and Ink and Water Color WALTER M. CAMPBELL

8 Beacon Street.

BOSTON, MASS.

Rendering of Perspectives in any Medium

Drawing of Perspectives

G. A. Weisz, 1123 Broadway, N.Y.

Telephone, Madison Sq. 8633

Washington University ST. LOUIS, MISSOURI SCHOOL OF ARCHITECTURE

Four-year course in Architecture with degree of B.S. Two-year course in Design with certificate. Course in Architectural Engineering. Special students received. For further information address JOHN BEVER-LEY ROBINSON, Professor of Architecture.

THE AMERICAN ARCHITECT BOOK DEPARTMENT

will furnish any architectural work, at the lowest prices, on the shortest notice. Write for book lists.

THE AMERICAN ARCHITECT 50 Union Square, New York

Draughtsmen's Blouses

\$1.50 Sent prepaid on receipt of \$1.50 State Height and Weight

E. Falkenhainer, 25 W. 42d St., New York

RATES for Classified Advertising

Positions Wanted, 50 cents for 50 words or less; Help Wanted, Special Notices, Competitions, Proposals, Etc., 20 cents a line, minimum four lines. Copy received until 12 m. Monday. Remittance should accompany copy.

POSITIONS WANTED

SUCCESSFUL PRACTISING ARCHITECT, ten years in large city, textbook writer, good designer, water and oil colorer, specification writer, aged thirty-nine, wishes to get house of general practice. Would consider instructorship in design and water color, staff of architectural magazine or similar position or designer for architect. Communications addressed to 37H, care The American Architect. (1938-39)

A THOROUGHLY competent architectural draughtsman, good at working drawings, general details and perspectives, wants position at once in or outside New York city. Address 38D, care The American Architect. (1938-39)

YOUNG MAN, 19 years of age, graduate of "Mechanics' Institute," New York, in architectural drafting, desires position with architect or building firm. Can submit samples of work if desired. Address 38F, care The American Architect. (1938-39)

EXPERIENCED ARCHITECT desires engagement in good Southern city as partner or head draftsman. Competent to take entire charge of practice. Address 39B, care The American Architect. (1939-40)

P OSITION WANTED by a high-class superintendent of construction who has had draughting room training. Good executive, sixteen years' experience, principally on large work. Address 39A, care The American Architect. (1939)

DRAFTSMAN wants position in architect's or building contractor's office. References. Address 39F, care The American Architect. (1939)

ARCHITECTURAL DESIGNER—Proficient in all branches pertaining to the profession, is desirous of obtaining a position with architect or firm of architects which will lead to a working interest. Twelve years' experience in all classes of buildings and in some of the best offices of the country; thirty years old; and considered very fast. At present in charge of a large office employing thirty men, can show photographs and sketches of executed work, also give references to ability and character. Address 39G, care The American Architect.

(1939-40)

HELP WANTED

A RCHITECTURAL and Ornamental Iron Draughtsmen needed constantly; salaries \$18 to \$35 per week. The Engineering Agency, Inc., Monadnock Block, Chicago.

WANTED— Draftsman. Must be A1 man, good at design and fully experienced and reliable. Applicants should state their experience fully, also age and salary expected. Must be capable of undertaking important work. W. T. Williams, Architect, Medicine Hat, Alberta, Canada. (1938-39)

A RCHITECT—An established engineering and contracting corporation with main offices in Pittsburgh, Pa., offers a solid, good future to a smart young architect. Applicant must

be capable of taking full charge of inside and outside work, and manage the architectural department independently. Salary and interest in business guaranteed. \$1,000 investment and highest references required. Location, Branch Office, Chicago. Write 39C, care The American Architect. (1939-40-41-42)

WANTED—Two competent architectural draughtsmen. Reply, stating experience and salary expected. Stewart & Witton, Architects, Hamilton, Ont. (1939)

WANTED—On the first of March, an architectural draftsman. Must be able to design and carry out full working plans. A man having experience in church work and perspective with some ability in rendering preferred. Position of chief draftsman open. State age, ability, experience and salary expected. Address Edward L. Scholl, Archt., 31 N. 6th St., Reading, Pa. (1939-40)

WANTED—First-class architectural draftsman for general work. State ability, experience and salary expected. Address Wasmansdorff & Eastman, Lewistown, Mont. (1939-40)

SPECIAL NOTICE

O FFICE TO SUBLET—Very desirable studio offices with exceptional light for architects; approximately 2,250 sq. ft. to lease from May first at low rental, two months free. Willauer, Shape & Bready, 156 Fifth Ave. (1937-38-39)

A RCHITECT'S OFFICES TO LEASE—Suite is arranged and fitted for architect's purposes, 950 sq. ft. with additional space if required. To lease from May 1st, 1913. Address Ludlow & Peabody, 12th floor, 12 West 31st St., City. (1938-39-40-41)

PARTNERSHIP WANTED—Partnership or limited association, preferably in Pittsburg or Middle West, is desired by an architect of some attainments and exceptional training and ability. Beaux Arts and university education and extensive experience divided between positions of responsibility in New York and private practice. Address 38E, care The American Architect. (1938-39-10)

ESTABLISHED high-class architectural practice, fully equipped office: wealthy Eastern Pennsylvania city, for sale very reasonable. Best reasons for selling. Will retain part interest if desirable. Fine opportunity for right man. Address 39E, care The American Architect. (1939)

PROPOSALS

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 3, 1913.—Sealed Proposals will be received in this office until 3 o'clock p. m., on the 17th day of March, 1913, and then opened, for the construction complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring, interior lighting fixtures, and approaches) of the United States Post Office at Denison, Iowa.

The building is one story and basement and has a ground area of approximately 4,200 square feet; fireproof first floflor; stone and brick facing and tin and tile roof. Drawings and specifications may be obtained from the custodian of site at Denison, Iowa, or at this office, at the discretion of the Supervising Architect.

O. WENDEROTH, Supervising Architect. (1939-40)



Put into the White House by the U.S. Government

F. E. CUDELL'S Patent Sewer-Gas and Backwater Trap

For Wash Bowls, Sinks, Bath and Wash Tubs

CLEVELAND OHIO





OSWEGO INTERNALLY FIRED WATERTUBE BOILERS

Occupy smallest space per horse-pow-er. Self-contained. No brickwork. Max-imum efficiency and economy. New bul-letin upon request.

A. D. GRANGER CO. 90 West St. NEW NEW YORK



A DRILLED WELL

Is the ideal source of water supply for country residences. Architects should get in touch with

Artesian Well & Supply Co. PROVIDENCE, R. I.



For Stairs, Wood, Iron, Marble or Cement New or Old "Stanwood" Treads and Steps

HUNDREDS OF THOUSANDS IN USE

American Mason Safety Tread Co.,

Boston

CUTLER MAIL CHUTES

"The Cheapest Modern Improvement."

CUTLER MAIL CHUTE CO. ROCHESTER, N. Y.

PATENTED





Measuring Tapes and Rules

THE JUFKIN RULE CO. Saginaw, Mich.

No. 106 LAFAYETTE STREET, NEW YORK



Solid Steel Window Sash In Standard Sizes

Daylight and Fresh Air for workmen mean in-creased output and profit for you. New book free. Address

Daylight for Factories, Detroit Steel Products Co. Dept 9 Dept 9 Detroit, Mich.



VAILE & YOUNG'S Patent Metallic Skylights

Without Putty

Construction adapted to all forms and styles of Skylights.
Thousands of feet in use have proved its super-

Skylights.
Thousands of feet in use have proved its super-iority. Particularly adapted for Depots, Mills, Factories, etc., where large and continuous lights are required. Send for Illustrated Catalogue.

214 N. Calvert St., Baltimore, Md.

INDUSTRIAL ENGINEERING CO.

Engineers and Contractors

Reinforced Concrete and General Building Construction

HUDSON TERMINAL BUILDING
ST (Telephone, 7815 Cortlandt) NEW YORK 30 CHURCH ST Branch Offices: 100 State St., Albany, N. Y. Grant Bldg., Atlanta, Ga.

THE NAME "McCRAY"

on a refrigerator means satisfaction and health to the owner, and helps give the architect a reputation for care in specifying the things which count for comfort and convenience. Send for catalog No. AH.

McCray Refrigerator Co. 507 Lake Street Kendallville, Ind.



Made from high grade COPPER BEARING OPEN HEARTH STEEL—the material you should always specify. Carefully manufactured-fireproof-durable. Write for full information. AMERICAN SHEET AND TIN PLATE COMPANY, Pittsburgh, Pa., U. S. A.



40 POUNDS COATING A.S. & T. P. CO.

- THE L.SCHREIBER & SONS CO. -

STRUCTURAL STEEL CINCINNATI CORNAMENTAL IRON BRANCH OFFICES NEW YORK CHICAGO . PITTSBURG ATLANTA . NEW ORLEANS . SAN FRANCISCO . RICHMOND

VT.

ESTEY ORGAN COMPANY

BRATTLEBORO, . .

Builders of Organs for churches and private residences.

> SPECIFICATIONS, ETC., FUR-NISHED ON APPLICATION.

DIXON'S SILICA-GRAPHITE PAINT

The Most Tenacious Protector

for all structural steel or other metal work. Eminent architects and engineers all over the world have specified its use on buildings, bridges, etc., because they knew its value. Made in ONE GRADE only. Our Paint Department will cheerfully send long service records and appropriate paint literature, if requested.

JOSEPH DIXON CRUCIBLE CO., Jersey City, N. J.

FOR STEAM AND HOT WATER

HOME OFFICE 188-200 FRANKLIN ST. BOSTON

COMPLETE SATISFACTION

NY. BRANCH
12 EAST 42 ST.
NEW YORK

BOSTON MASS

FIRE, SOUND and VERMIN PROOF INSULATOR SAMPLES AND CIRCULARS FREE U. S. MINERALWOOL CO. 140 Cedar St.

It Will Pay You to Investigate the

INGHAM SHOWER MIXER

Maximum Comfort, Safety and Economy. Write for free illustrated descriptive booklet "A Good Mixer."

IMPERIAL BRASS MANUFACTURING COMPANY Dept. 174, 1222 W. Harrison Street, Chicago

L. WOLFF M'F'G CO.

Plumbing Goods Exclusively

CHICAGO DENVER TRENTON

See Our Full Page Advertisement in Next Issue

FILTERS LOOMIS

Improved System

Established 1880 Simple and Effective

LOOMIS-MANNING DISTRIBUTING FILTER CO.

Main Office: 828 Land Title Building, Broad and Chestnut Streets, Philadelphia

Boston Buffalo New York Baltimore Washington Chicago

Principles and Practice of Plumbing

By J. J. COSGROVE

Of great value to the Architect, as an exact and systematic statement of the underlying principles in Plumbing Practice. 278 pages, 169 original illustrations, 69 tables. Price \$3.00.

Well worth your serious consideration.

BOOK DEPARTMENT THE AMERICAN ARCHITECT 50 Union Square, New York



Dutch Boy Painter Specification

Copies sent free to any architect writing to our near-est branch. This specification covers all forms of

NATIONAL LEAD COMPANY

New York Boston Buffalo Cincinnati Cleveland St. Louis Chicago San Franisco

(John T. Lewis & Bros. Co., Philadelphia) (National Lead & Oil Co., Pittsburgh)

TO BE SATISFACTORY

A Roof must, first of all, be weather-proof. That goes without saying. Tile, Slate or any other material not meeting this requirement is a failure.

National Interlocking Roofing Tile absolutely weather-proof when properly laid and does not depend on the underlying felt.

American architects, contractors and prospective builders are invited write us for Catalogues. Samples and Prices on Natural Reds and reen Glazes.

The National Rooting Tile Co., Lima, Ohio



THORP

FIREPROOF DOORS

See our full page advertisement in this paper last week or next, or write to

THORP FIREPROOF DOOR CO. : : : : : : MINNEAPOLIS

Integro EXPULSO DEVORO

Ejecto WAVELINE

The Great Western Pottery Co., Tiffin, O. Kokomo, Ind.

These Trade Marks on any Water Closet Bowl or Tank are a guarantee of

This is the age of making one thing better than anyone else.

The SIMONDS VACUUM VALVE

has Superior Qualities that are Distinct Advantages over other kinds. Investigate.

THE SIMONDS HEATING AND SPECIALTY CO., Grand Rapids, Michigan



The Broughton

Direct Discharge Especially for PULP PLASTER, PATENT FLOORING, PAINTS, ETC.

ASK FOR CATALOGUE

WILLIAM D. DUNNING

231 WEST WATER STREET SYRACUSE, N. Y.



For Perfect Ventilation Install ROYAL VENTILATORS



They provide an ever changing supply of fresh air and have proven equal to every require-

The "Royal" is superior to all others for Efficiency, Durability and Quality of Workmanship.

Absolutely Storm Proof. Made with Metal or Glass Top. Catalogue on request

Royal Ventilator Company 414 Locust Street, Philadelphia

Also Manufacturers of the Royal Exhaust Head.

TURNER

Construction Company

11 Broadway, New York City and 312 Prudential Bldg., Buffalo, N. Y.

Reinforced Concrete Contractors and Engineers

FRENCH'S "Quality First" CEMENT COLORS

SUPERIOR-STRONG-SAFE Dry Colors for Coloring all cement mixes.

BLACK - RED - BLUE - BROWN-YELLOW Permanent-Easy to Work

Write for samples and prices

Manufactured only by

SAMUEL H. FRENCH & CO. Established 1844 PHILADELPHIA, PA.

Sheet Metal Statuary of Rare Artistic Worth

TTHIN THE last quarter of a century there have been reproduced at the Mullins Factory. Salem, Ohio, statues of Sheet Bronze and Copper that are nothing short of marvelous. Many of them were made from the models of famous sculptors, to their entire satisfaction.

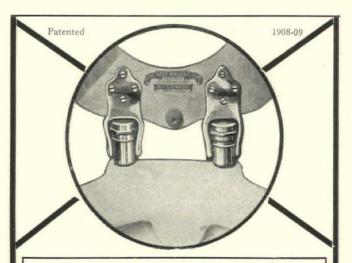
We are prepared to reproduce in minute detail the most delicate lines of any model. It is this faithful portrayal which helps to account for the world-wide fame of Mullins Sheet Metal Statuary Diana on the top of Madison Square Garden, the group on the New York Life Building, the Statue of Progress, Chicago, are among our earlier achievements.

We also make Fireproof Metal Windows, Skylights, Cornices Finials, Metal Tile Roofing, and Sheet Metal Ornamental Work of every description.

Tell us what you're interested in and we'll send the proper catalogues at once. Estimates promptly submitted on architects' drawings. Attractive prices. Quick, satisfactory service. Discounts to the trade on application.

The W. H. Mullins Co. 206 Franklin Street Salem, Ohio





If You Are Planning a Building Specify **EMERY SELF RAISING SEAT**

It is the only closet seat that is absolutely sanitary, furnished with automatic multiple spring hinges, which do not get out of order, and are guaranteed for five

years. This seat permits close roughing, and eliminates all possibility of damage to walls or closet bowls by unsightly iron balls or weights heretofore in use. In limited spaces a separate urinal fixture may often be dispensed with if these seats are used in connection with the closet bowls, for obvious reasons. IMPORTANT: This seat can be furnished by any Specialty or Supply House as a part of any combination which you may choose to specify from their catalogue, or I can furnish the seat directly, if preferred.

if preferred.
Write for a sample. Further information or demonstration at your convenience.

WILLIAM S. EMERY, 76 Cliff Street NEW YORK CITY Telephone 4950 Beekman



When planning spring building, figure on using

exters English shingle BROTHERS Stains

Preserve and beautify

Special preservative oils protect from the elements and prevent dry and wet rot, yet bring out all the beauty of the texture and grain of the wood. Best English ground pigments used—colors cannot fade. Better than paint, cost less than half.

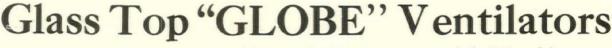
Recommended and specified by leading architects. Write for stained miniature shingles and Booklet A.

DEXTER BROTHERS CO., 120 BROAD ST., BOSTON Branch: 1133 Broadway, New York

Also makers of Petrifax Coating.

H. M. Hooker & Co., Chicago; F. H. McDonald, Gr northern Brick & Supply Co., St. Paul; F. T. Crowe & Coma, Spokane. Washington, and Portland, Ore; R. McC & Co., Richmond; A. R. Hale, 818 Hennon Bldg., Neoffschlaeger Co., Honolulu; and DEALERS.







Combine an absolutely storm proof skylight with an entirely efficient ventilator.

They are made of heavy galvanized iron or copper, with wire glass tops, are strongly built, practically unbreakable and always effective.

Globe Ventilator Company, Troy, N. Y.

Number 6

FRICTION IS WEAR

LEADING SHEAVES CAUSE FRICTION WHEELS OF FULL DIAMETER REDUCE FRICTION

When the weight rope passes over one wheel from the centre of car to centre of counterweight THE WHEELS ARE OF FULL DIAMETER BETWEEN CENTRES

More than 20 years ago we manufactured Dumbwaiters. At that time manufacturers made the wheels, and the frame to hold the wheels, of wood. Today we have an Iron Frame that is PATENTED and use iron wheels.

With this Patent Iron Frame we can use a weight wheel of any size and keep FULL DIAMETERS, and use no leading sheaves.

As you may direct we will ship the machine or all the material with Plan and Instructions for erection or we will furnish the outfit complete and erect it. Send at once for Catalog "B" which shows many hand power arrangements.

Chelsea Elevator Co., 332 West 26th Street, New York

Number 7



CANVAS ROOFING

ROOF AND DECK

To satisfy you of its wearing qualities we will send you enough to cover a busy spot in your office.

Paint It Once-Only Once!

JOHN BOYLE & CO., INC.

112-114 Duane Street NEW YORK 70-72 Reade Street 202-204 Market Street, ST. LOUIS

"50 years' experience back of it"

Terra Cotta Federal ompany

Trinity Building

Factory Woodbridge, N. J.

Manufacturers of a Superior Grade of

ARCHITECTURAL TERRA COTTA

in all standard and polychrome colors, semiglaze, matt glaze and full glaze finish.

2-Story Stack State Library Hartford.

Conn.



Library Interiors

are possible without sacrificing beauty of design or ornamental effect. The State Library at Hartford, Conn., is a splendid example. Critics pronounce it a distinct achievement. Book stacks, galleries, wainscoting and all interior trim is

Art Metal Steel and Bronze

Architects are invited to make use of our highly specialized experience and unequaled man-ufacturing facilities.

We operate the largest and best-equipped Metal Furniture plant in the world.

Art Metal Construction Company

Jamestown, N. Y.

BRANCHES: New York, Chi-cago Philadelphia, Boston, Washington, Baltimore, St. Louis, Pittsburgh, Kansas City.



More of these Seats

sold in 1912 than any four other makes.

The reason—bolted joints. Guaranteed for five years. The seat that they demand.

The NEVER SPLIT SEAT CO.

Evansville, Ind. Write to-day for "A Sample Seat"



Our New Catalogs

Our New Catalogs are just off the press. Handsomely illustrated. Four books: "Libraries." "Public Buildings," "Commercial and Ins. Offices." Send for books wanted.







Hoist in Operation

G. & G. TELESCOPIC-HOIST (PATENTED)

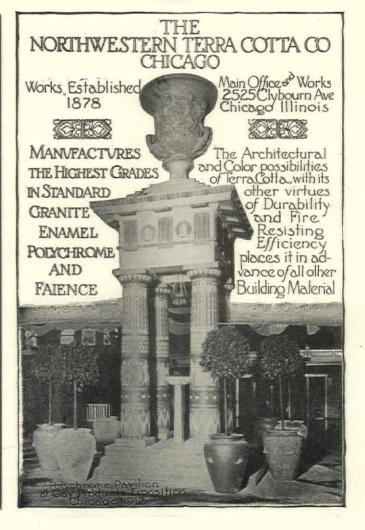
With Compound Gear and Brake Attachment— Made of strong and durable material For Hoisting and Lowering Ash Cans, Kegs, Barrels, Etc.

Takes up less room than other hoists; the opening in the sidewalk need be little larger than necessary to permit passage of can. It is telescopic—no part showing above sidewalk when not in use. A powerful brake attachment permits the lowering of heavy load without trouble.

Its compactness makes hoist very easy to erect—a great advantage when shipped f.o.b. cars.

Specified by the leading architects

Price, erected complete, New York City, \$125. Gillis & Geoghegan, 545 W. Broadway, New York





The M. & M. Outlet For Stationary Vacuum Cleaners

The switch controls the motor of a stationary vacuum cleaner on floors from any part of a building. The at-

of a building. The attendant simply pushes the button to start or stop the motor.

The glow of the cutglass jewel indicates that the motor is still running and is a warning to disconnect the current if cleaner is not in service.

The device consists of a steel wall case, having mounted in it a

having mounted in it a remote control momentary contact switch, which is used to turn on and off the motor driven vacuum cleaning machine.

Furnished either for concealed or open work.

A postal will bring a catalog showing various styles of vacuum cleaner outlets. Send

MACHEN & MAYER ELECTRICAL MANUFACTURING CO.

PHILADELPHIA, PA.



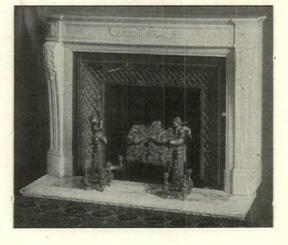


The only stationary vacuum cleaning plant approved by Electric Light Companies for operation on ordinary lighting circuits. Operated by 1/4-h.p. motor. 40,000 Santos in use.

Booklet gives details.

Keller Mfg Co

2048 Allegheny Avenue Philadelphia



Wm. H. Jackson Company

MARBLE MANTELS,
WOOD MANTELS,
ANDIRONS, TILES,
ORNAMENTAL IRON AND
BRONZE WORK
ARTISANS IN ALL METALS

2 West 47th Street NEW YORK CITY 902 South Michigan Boulevard, CHICAGO

HIGHEST EFFICIENCY OBTAINED

By use of Model "B"

"STAR"

Fire Retarding

VENTILATORS

(Patented and Trade Marked)





They combine skylight, quick exhaust with an automatic damper controlled by fusible link. In event of fire, link parts and damper closes by gravity, stopping all draft but not affecting the light.



MERCHANT & EVANS CO.

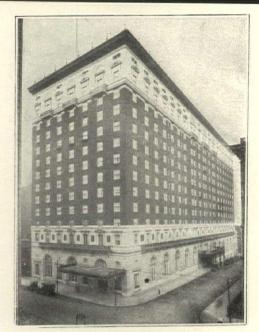
(The Premier Metal House in America)
Sole Manufacturers. Also High-Grade
Roofing and Bright Tin Plate.

PHILADELPHIA

NEW YORK BALTIMORE BROOKLYN WHEELING CHICAGO CLEVELAND

KANSAS CITY

DENVER



Cleveland's Big New Hotel-The Statler-in which are installed 19



HEATING and VENTILATING FANS

Write us for Series "A" of our Catalogue and Bulletins

AMERICAN BLOWER COMPANY
DETROIT, MICH.
U. S. A.
Canadian Sirocco Company, Limited, Windsor, Ontario. Manufacturers for Canada.



Side cut away to show mechanism

Protected from Plaster and Dust

Every H & H Push Button Switch is shipped with a fibre plate securely fastened over the top of the switch, so as to effectively prevent plaster and dust and paint from getting into the interior of the switch and on the mechanism or contacts, after the switch is installed in a new building and before the flush plate is screwed on to the switch.

The switch is installed before the plastering is done, but this snug fitting, fibre cap entirely protects the switch from all foreign substance and yet does not interfere with the installing and wiring up of the device.

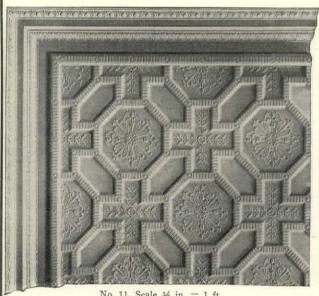
Of course H & H Switches bear the Underwriters' approval label.

Ask any practicing electrical engineer or contractor about the reputation of H & H Switches.

Listed in Sweet's Index.

The Hart & Hegeman Mfg. Co., 344 Capitol Ave., Hartford, Conn.





No. 11. Scale 3/8 in. = 1 ft.

We have a number of new patterns in

Steel

After the English, Tudor and Jacobean

Our patterns are not all lined through with "beads"

Beam Ceilings in Sheet Steel

Northrop, Coburn & Dodge Co.

40 Cherry Street, New York

"CAN'T BE DONE"



Plate G-206 "Tennessee" Sink (Patented) Made in Three Sizes

"You cannot improve 'Tennessee Sinks'," was the verdict of our trade. We couldn't improve the sink but we improved the legs and mat. The cut shows the legs. The mat is made of wood slats, finish in white. Handsome and durable.

The Cahill Iron Works, Chattanooga, Tenn.

New York Office and Display Rooms, 1161 Broadway, Thos. H. Hutchinson, Manager. Philadelphia Office, 5604 N. 4th St., Russell D. Knight, Sales Agent. Portland Office and Warehouse, 550 Sherlock Bldg., H. A. Heppner & Co., Sales Agents. San Francisco Office and Display Rooms, 1749 Sacramento St., C. H. Stanyan, Sales Agent. Havana, Cuba, Office, San Ignacio No. 50, Cagigas & Quesada, Sales Agents.

DOUGLAS SPRAGUE & ASSOCIATES

Consulting Engineers
39 Cortlandt Street New York

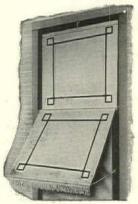
CHESTER A. SLOCUM, M.E. Associate

Latest methods and up-to-date practise in designing Power Plants, Heating and Ventilating Apparatus, Electrical and Sanitary Plants.

Personal Supervision given to Designing and Installation

It Works from the Inside

Carpenter Spring Shade



For

Residence, Office, Factory or Public Building.

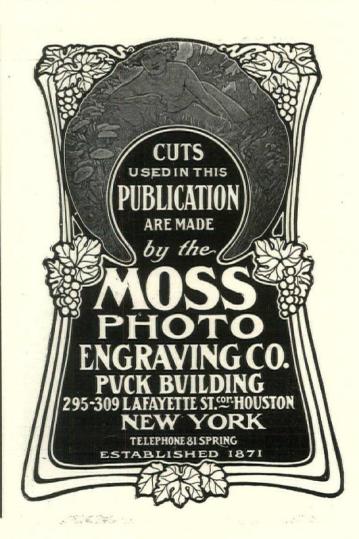
Easier to Operate and Cheaper to Maintain than
the Old Style Awning

You can operate your "Spring Shade" from the inside of the room, without raising your window or your screen. Fully extended the "Spring Shade" gives the maximum protection from the sun—rolled up, it is practically invisible. Ask your Awning Maker or your House Furnisher about the "Spring Shade" and also send for one of our illustrated "Spring Shade" booklets giving further information.

GEO.B. CARPENTER & CO

430-440 Wells Street

CHICAGO



"KOH-I-NOOR"

MEANS STANDARD



Just as "Koh-i-noor" Pencils are unequalled—one outlasting six ordinary pencils, so "Koh-i-noor" Tracing Cloth is unequalled, being extra transparent, perfectly ink resistant, uniform in shade, practically pinhole-free and retaining a dry surface.

You should use "Koh-i-noor" Pencils and Tracing Cloth and know what real "Koh-i-noor" satisfaction is. Architects and draughtsmen everywhere are enthusiastic about them.

> "Koh-i-noor" Pencils Made in 17 degrees and Copying.

"Koh-i-noor" Tracing Cloth 24-Yard Rolls 30, 36, 40, 42, 48 and 54-in. wide.

HARDTMUTH

Makers

London, Eng., and 34 East 23d St., New York City



Oak Harbor High School, Oak Harbor, Ohio.

Berger's Metalfumber

Construction

Takes the place of wood structural material. Fireproof, indestructible and economical. Write for catalog and prices.

The Berger Mfg. Co., Canton, Ohio
For the best service address nearest branch.
New York
Philadelphia
St. Louis
Mindeapolis
Boston
Also manufacturers of Prong Lock Studs and Furring, Rib-Trus,
Ferro-Lithic and Multiplex Reinforcing Plates, Metal Cellings,
Expanded Metal Lath, Sidewalk Forms, Raydiant Sidewalk Lights,
etc.



Kimball Pipe Organs Have been built in hundreds of churches, among which are the following:

First Congregational Church, Oakland, Cal., Shadyside Presbyterian, Pittsburg, Pa. First M. E. Church, Litchfield, Conn., M. E. Churchs of Niagara Falls, Elmira, Syracuse, N. Y., St. Jerome R. C. Church, New York City, St. John's Eva. Luth, Albany, N. Y., Grace Episcopal Church, Chicago, First Baptist Church, Patterson.

Correspondence solicited.

W. W. KIMBALL CO., Pipe Organ Builders New York Office: 150 Fifth Ave. Chicago: 300-310 S. Wabash Ave.

VOIGTMANN

HOLLOW METAL FIREPROOF WINDOWS

tested and approved by the National Board of Fire Underwriters Laboratories.

Manufactured by

S. H. POMEROY CO., Inc.

Successors to

VOIGTMANN & CO. OF NEW YORK 427 W. 13th St., New York City

NEPONSET!

In the building product world that word means

WATERPROOF



F. W. Bird & Son, Est. 1795, East Walpole, Mass., New York, Chicago, Washington, San Francisco, Hamilton, Ont.



The "SILENTANK"

Perfection of quiet water closet construction—for use where quiet and simplicity is not only desired, but required.

The Silentank is the latest improved type of water closet construction, free from splashing, vibration, singing, hammering and refill noises

with decided improvement for Flushing Valve control.

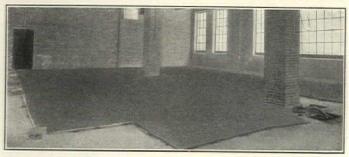
Large supply pipe is not needed. Roughs in at 9 inches. Deep water seal. Large water surface. No tank annoyances.

It is simple in construction, sanitary and neat in design. It fulfills all requirements for the ever growing demand for a quiet type water closet. It is made of vitreous porcelain with tank and Syphon Jet bowl integral. It has other improved features.

WRITE FOR OUR BOOKLET No. 4

THE COLONIAL SUPPLY CO. WHEELING, W. VA.

J-M Mastic makes floors practically proof against acids, water and wear.



Floor in warehouse of D. Auerbach & Sons, New York. J-M Mastic being applied.

This flooring is all mineral, having a natural asphalt for its base. Water and acids have abso-This flooring is all mineral, having a natural asphalt for its base. Water and acids have absolutely no effect on it. It is practically indestructible. Will outwear any other type of floor.

Being waterproof, J-M Mastic floors can be quickly and thoroughly cleaned by the simple process of flushing. It dries immediately. Absolutely sanitary—will not originate or hold dust. Slipping is impossible on a J-M Mastic floor on account of its peculiar "holding" quality. Although dense, J-M Mastic has a resiliency which adds to the comfort and efficiency of those who are compelled to stand while at work, and it does not cause foot soreness and fatigue like concrete and other hard non-yielding floor surfaces. J-M Mastic can't be equalled for factory use. It is the cheanest-per-year floor.

It is the cheapest-per-year floor. Write our nearest branch for full particulars.

H. W. JOHNS-MANVILLE CO.

Albany Baltimore Toronto

Buffalo Chicago Cincinnati

Indianapolis Louisville New Orleans Kansas City Milwaukee New York Los Angeles Minneapolis Omaha For Canada:—THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED. Montreal Winnipeg

Philadelphia Seattle Pittsburgh St. Louis San Francisco Syracuse



Old English Oak

This photograph illustrates one of the Handsomest interiors, being the Directors' Room of the First National Bank, Philadelphia, Penna.

The Architect specified OLD ENGLISH OAK imported by Lewis Thompson & Company, Inc., and the tree from which it was cut was estimated to be fifteen hundred (1500) Years old. Only the wood of these very old trees, which are becoming scarcer every day, imparts rich brown tones.

As a specimen of rare English Oak, this wood is unsurpassed for use in the finish of Bank Buildings, Dining Rooms, Halls and Libraries, or in these locations where rich panelling and well proportioned wainscoting is introduced.

Architects who desire to secure these effects in the decorative treatment of interiors and who specify English Oak for the work should address,

Lewis Thompson & Company, Inc.

Philadelphia, Penna.



Attractive, Permanent Bathrooms are most easily obtained with The Trenton Potteries Company designed sanitary pottery plumbing.

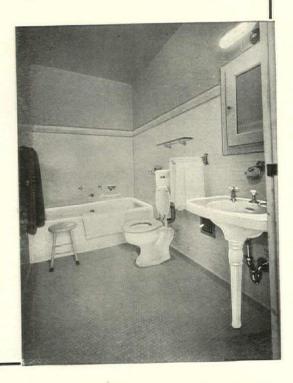


These are two of the bathrooms in the McAlpin Hotel, New York City (F. M. Andrews & Co., Architects). A visit there will cause any Architect to appreciate that our claims for superiority in manufacture and design of pottery plumbing is well founded.

THE TRENTON POTTERIES CO.

Trenton, New Jersey, U. S. A.

The World's Largest Manufacturers of Sanitary Pottery.



Control of Quality in every Process

READY FOR YOU

"The Control of Quality in Every Process"

is the title of a 50 page catalog just issued and is ready to mail to every architect interested in Wrought Iron Pipe. It describes and illustrates the vital importance of the right principles and methods in the making of Byers Wrought Iron Pipe, from the first step to the finished product.

Upon each specific subject it will prove interesting, as it gives valuable assistance to a sufficiently comprehensive understanding of how Wrought Iron Pipe is manufactured, and its wonderful possibilities.

Just fill out the coupon for a copy of our catalog "The Control of Quality in Every Process." Send it today, right now.

BYERS CO.,

PITTSBURGH, PA.

A. M. BYERS CO.

Established 1864 PITTSBURGH, PA. Please send your catalog "The Control of Quality in Every Process" without charge to

Address

STATE

One-Piece Stone Roofing

J-M Built-up Asbestos Roofing is literally a sheet of pliable stone—with the fireproof and lasting qualities of stone.

It is built up on the roof of several layers of Asbestos Felt securely cemented together and coated with Trinidad Lake Asphalt—both practically indestructible minerals.

Built-Up Asbestos Roofing



Teckemeyer Bros.' Block, Madison, Wis. Covered with J-M Built-Up Asbestos Roofing

ency were impor-

The use of the

Has no joints or seams to open up and cause leaks. And all nails and other fastening materials are completely imbedded and covered with the asbestos and asphalt.

This roofing weighs less than one-third as much as other built-up roofings, so lighter and less expensive construction will support it.

Write nearest Branch to-day for samples and illustrated catalog

H. W. JOHNS-MANVILLE CO.

AND MAGNESIA PRODUCTS.

ASBESTOS ROOFINGS, PACKINGS, ELECTRICAL SUPPLIES, ETC.

Albany Bartimore

Toronto

Chicago Cincinnati Cleveland Dallas

Milwaukee Minneapolis New Orleans

New York Omaha Philadelphia Pittsburgh San Francisco Seattle St. Louis Syracuse

1771

For Canada:—THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED Montreal Winnipeg Vancouver

Rochester, N. Y. specified and used. G. W. KITTREDGE, Hipped Chief Engineer. Type this passenger

N. Y. C. & H. R.R. Co. Passenger Station

Anti-Pluvius puttyless skylights

In selecting the skylights used in the construction of

station, quality, durability and permantant factors for consideration.

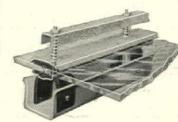
Anti-Pluvius maintains the high stan-

dard sought, and the illustrations above give a general idea of the neatness and effectiveness of the skylights. This construction is fully described in our new catalog. May we send you a copy.

Puttyless Skylights

The G. Drouve Company, Bridgeport, Conn.

180 N. Dearborn St., Chicago, Ill.



American Steel & Wire Company Triangle Mesh Concrete

Union Central Life Insurance Building, Cincinnati, Ohio.

N this modern building about 100,000 square feet of Triangle Mesh Concrete Reinforcement was used.

Triangle Mesh Concrete Reinforcement is made from Cold Drawn Steel Wire. Tensile strength 85,000 pounds per square inch. Furnished in rolls of 150, 200 and 300 feet long.

Cleveland

Pittsburgh

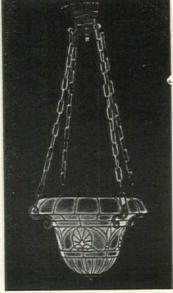
Patented Trade Mark



Bayley AND

Sons

Makers of



Equalite Semi-Indirect Fixture No. 4351; length 36"; diameter, 17". Suitable for library, hall or dining room.

Lighting **Fixtures**

105-109 Vanderveer St. BROOKLYN N. Y.

"Equalite" is a direct system of lighting that absorbs and deflects enough light to equalize the direct light with the indirect reflection from the ceiling, thereby gaining the good effects of The result is a soft diffusive glow, restful to the eye, and without shadows.

In light efficiency, eye comfort and beauty of design, "Equalite" glass is the nearest to perfection so far obtained in equal lighting effects.

Special attention to special designs.

For diffusive and efficient lighting For semi-indirect lighting For cornice, cove or hidden source of lighting

Bayley & Sons "Equalite" Glass



Why Architects and **Owners Prefer** - M Sanitor Seats

Sanitary

J-M Sanitor Seats are moulded in one piece under heavy hydraulic pressure. No joints or cracks; no bolts, screws or nails. Cannot collect germs. Not affected by moisture, heat or urine. Can be washed and kept as clean as glass.

Durable

Being of one-piece construction, they cannot possibly warp or split and are really indestructible.

Attractive

They are furnished in natural oak, golden oak, mahogany, white enamel or other finish as desired. By using special varnish and treatment a high lustre is obtained. In grain and color we can match perfectly any natural wood.

Economical

J-M Sanitor Seats, despite their manifold advantages, cost no more than other seats which do not possess these features. As they cost practically nothing to maintain, and are extremely durable, they are the most economical of all sanitary fixtures.

Write our nearest Branch for Booklet

H. W. JOHNS-MANVILLE CO.

AND MAGNESIA PRODUCTS.

ASSESTOS ASSESTOS ROOFINGS, PACKINGS, ELECTRICAL SUPPLIES, ETC. Louisville Milwaukee New

San Francisco Omaha Philadelphia Seattle St. Louis Pittsburgh

Buffalo

Albany Baltimore

Chicago Cincinnati Cleveland Dallas

Indianapolis Kansas City Los Angeles

Minneapolis New Orleans For Canada:—THE CANADIAN H. W. JOHNS-MANVILLE CO., LIMITED.

St. Lou-Syracuse 1568

Toronto

Montreal

Winnipeg

Beauty Immaculate

The Perfect White Enamel

Beauty Practical Elastica No. 2

Interior Varnish





These STANDARD products will be found in every section of the country, in thousands of homes, giving 100% satisfaction. Folks are most cheerful in the atmosphere which they create. Their refining influence is as valuable to the home as any other attribute with which a capable architect can endow it. SATINETTE and ELASTICA are not affected by atmospheric changes or climatic conditions. To substitute for them any other enamels or varnishes is a poor investment.



PYROFUSE Type G

Garbage Destroyers

Installed in the Kitchen

The PYROFUSE was designed with two special features in mind; first, absolute destruction of garbage; second, utmost efficiency.

The PYROFUSE is both a receptacle and a destroyer, and will be of complete benefit only when it is installed IN THE KITCHEN.

The Wall Type is neatly finished in black enamel with a nickel-plated border, and blue prints will be furnished to any Architect, showing the method of connection to the chimney flue.

J. B. Prescott & Son, Mfrs.

Factory and Main Office Webster, Mass.

38 West 32nd St.

Branches in all large cities





Fig. 995 Shower.

Where SPEAKMAN Showers Have Proved Their Merit

I N the finest private residences, in simple homes, and in the greatest hotels and most prominent of public institutions, Speakman Showers have been selected because of their perfect satisfaction and absolute suitability to conditions.

That they are the first choice of Architects, Builders and Owners is proved by the following partial list of prominent installations:

Universities

Harvard University Syracuse University Cornell University Amherst College

Hotels

Hotel Utica, Utica, N. Y. Hotel DuPont, Wilmington, Del. Andrews Hotel, Minneapolis, Minn. Ritz-Carlton Hotel, Montreal New Oregon Hotel, Portland

Baltrosol Country Club Chevy Chase Club Atlantic City Country Club Philmont Country Club

Y. M.
Philadelphia, Pa.
Wilmington, Del.
Honolulu
Greensboro, N. C.
Tarrytown, N. Y.
New York City
Uttea, N. Y.
Washington, D. C.

Miscellaneous

Public Baths, Richmond, Va.
Public Baths, Baltimore, Md.
Municipal Baths, Syracuse, N. Y.
Government Recruiting Stations, Fort
Meyer
Fort Slocum
and many other well known places

For full information about the Speakman Shower that will best suit your needs, write us to-day explaining what you require. We will send you our interesting illustrated Catalog promptly.

Speakman Supply and Pipe Co. Wilmington, Del.

Pacific Coast Representative W. E. GILCHRIST Monadnock Bldg., San Francisco, Cal. V York Representative ALBERT G. WEBER 156 Fifth Avenue







DARTMOUTH COLLEGE

HANOVER, N. H.

Corbin Hardware is used upon thirty of the buildings shown, built at different times. Conclusive evidence of the continued satisfaction given by the use of the Corbin line.

P. & F. CORBIN

Division

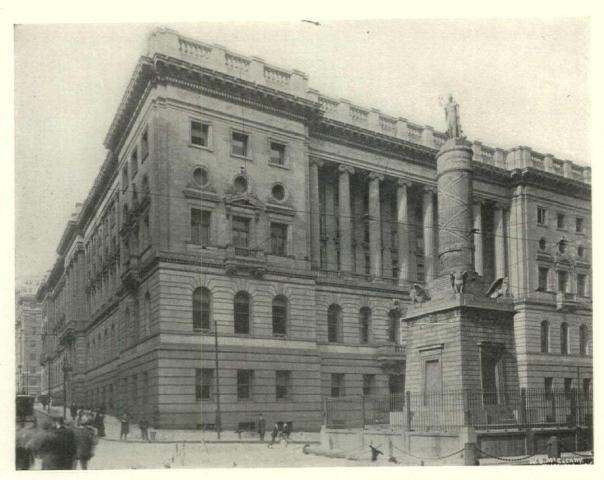
The American Hardware Corporation

NEW BRITAIN, CONNECTICUT

P. & F. Corbin of Chicago

P. & F. Corbin of New York

P. & F. Corbin Division, Philadelphia



Court House Baltimore, Md.

Messrs. Wyatt & Nolting Architects

Permanency has been the key-note in the selection of all the building material and equipment for this attractive building.

In line with this idea the architects specified MY MARBLE on account of its whiteness, uniformity and quality.

Wherever MY MARBLE is used its beauty and richness adds to the architectural lines of any type of building construction.

MY MARBLE is reliable and permanent, and is being specified by thousands of architects and extensively used by builders throughout the country.

WRITE FOR FURTHER INFORMATION

LEE MARBLE WORKS, Lee, Massachusetts

W. H. GROSS, Proprietor

WE INSTALL STORE FRONTS

Not Just Store Fronts But

Rawneer Store Fronts

Kawneer

No matter where your jobs are located, we can take care of them. The manufacture and installation of complete KAWNEER

STORE FRONTS is our business. We're organized to handle the Store Front business of the country—our branches dot the map—our three factories (Niles, Michigan, San Francisco, California, and Toronto, Canada) enable us to make a rush shipment of your job.

6,500
Kawneer Store Fronts

and iron Fronts, and as long as we've established a new standard, we're going to hold to it. If our profit in 1913 exceeds that of 1912 it will only be because our

chirects' Booklet

During the past rear we made another big jump — 6,500 KAWAP TONES that were installed put 6,500 Merchants in a position to do a higger business and those 6,500 Fronts enabled the Architects to carry out individual ideas and designs. The wonderful growth of KAWNEER has been made simply because it fills the Architects' requirements.

Heavy Gauge Metal

Take the face pieces of all KAWNEER glass-bearing bars and sash. We use No. 16 B. & S. gauge — .050" thickness. One square foot of that gauge copper weighs 35 ounces. Is it any wonder that KAWNEER stands up? We could use a lighter gauge metal and in some cases it would apparently be just as satisfactory and at the same time it would mean a "saving" of thousands of dollars each year, but as long as we originated KAWNEER to take the place of the old, unsuccessful wood

It's printed for you—to show you by full-size drawings (which you can easily trace) the actual construction of KAW-NEER—the history-making Store Front. It shows many photographs of the country's most efficient and attractive Store Fronts. We want to send you a copy of it—drop a card today—it won't obligate you in the least.

KAWNEER KANNEER KANNEE

Francis J. Plym, President

1201 N. Front St., NILES, MICHIGAN



We have a branch near you

Factories

Niles, Mich. San Francisco, Cal. Toronto, Can.

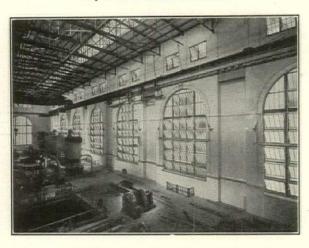
For Maximum Efficiency—Specify



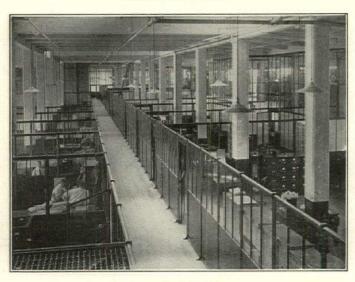
Lupton Steel Sash, Standard Construction.



Pond Continuous Sash in Sawtooths. Lupton Steel Sash in Side Walls.



Lupton Steel Sash, Power House Type, Sash in the Six Openings Are Controlled from One Power by Pond Operating Device.



Lupton Steel Partitions

Lupton Products

each of which is highly developed in every detail and is constructed for strength, simplicity and permanency.

Behind the Lupton Products is Lupton Service—expert advice on matters pertaining to daylighting and natural ventilation of all kinds of buildings, always freely at your service.

Lupton Steel Sash are made of solid rolled steel members with storm and draft-proof ventilators. In addition to our standard construction we manufacture sash of special construction to meet various requirements, such as Lupton Steel Sash, Power House Type, a unit sash 100% ventilating; Counterbalanced Type, particularly adapted for Forge Shops and Foundries; Projected Ventilator Type, which swings out and does not interfere with use of screens or shades; special sash with circular or camber heads or other ornamental features.

Pond Continuous Sash, made of solid rolled steel members, with all joints welded, gives unequal results in monitor and sawtooth construction because it is weathertight open or closed and permits ventilation at all times without exposing the interior of the building.

Pond Operating Device entirely different in mechanical principle from any other sash operating device. Power is transmitted by tension without loss from friction. Gears are immersed in Albany grease; hinged connections have phosphor bronze bearings. Working conditions are permanent; vibration or settling of building do not affect the device.

These and other Lupton Products are illustrated and described in our catalogue, a copy of which should be in your files.

David Lupton's Sons Co.

Trenton Ave. and Allegheny Ave.
Philadelphia

Sales Offices: Chicago-New York-Pittsburgh

Canadian Manufacturers:
A. B. Ormsby, Ltd., Toronto



SCHOOL BUILDING, EVANSTON, ILLINOIS Architects: Raeder & Wood

NATCO · HOLLOW · TILE

—the successful solution of the completely fireproof school question

This structure provides an excellent example of the ready adaptability of NATCO Hollow Tile to fireproofing where the requirements are unusually exacting: Safety, Hygiene, Serviceability and Rapid Construction cost and maintenance.

The Evanston school is a fireproof building in the full sense of the word, from roof to cellar. The basement walls consist of 8-inch NATCO Hollow Tile with a 4-inch brick veneer. For the 1st and 2nd story walls, 12-inch "NATCO" has been used. The columns, girders, floors and roof are also fireproofed with hollow tile.

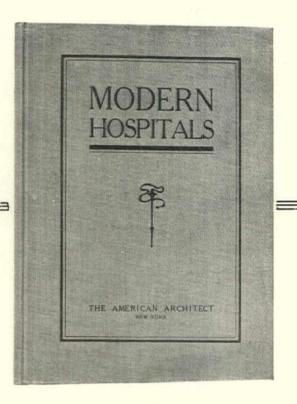
More than any other form of fireproof construction, NATCO Hollow Tile lends itself to diverse architectural treatments.

Upon receipt of the necessary data this Company will gladly submit a solution of any problem of fire proofing.

NATIONAL FIRE PRODFING COMPANY

PITTSBURGH, PENNSYLVANIA

TWENTY-SIX FACTORIES IN THE UNITED STATES



A VALUABLE BOOK ON "MODERN HOSPITALS"

To Architects who are interested in the construction of Modern Hospitals and their proper equipment, we offer this book.

Its text reflects the latest word in each department treated, and the statements set forth may be taken as based on the best practice.

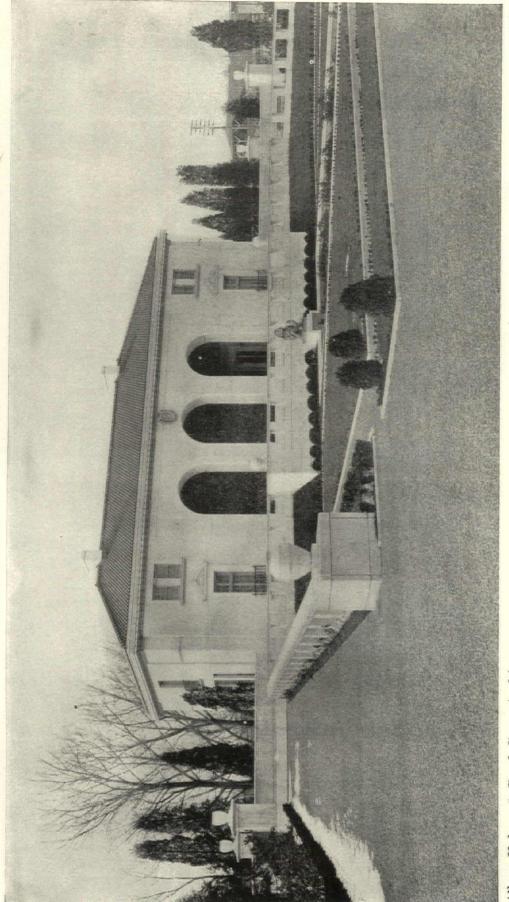
The illustrations throughout the book are collections of well-designed hospitals that will be helpful and valuable to everyone engaged in the field of hospital construction.

PRICE \$5.00

ADDRESS BOOK DEPARTMENT

THE AMERICAN ARCHITECT

50 UNION SQUARE, NEW YORK



Albert Kelsey & Paul Cret, Architects

Norcross Bros. Co., Builders

The Pan-American Annex at Washington illustrates an effective use of Atlantic Terra Cotta to give definite character to a small building.

Only the polychrome frieze and shield, the Indian figure in grey over the fountain, and the large urns in white are Atlantic Terra Cotta, but they are the three distinguishing characteristics of the plan.

Booklet on request

Atlantic Terra Cotta Company

Woodbury Gray Granite



CHICAGO CITY HALL AND COOK COUNTY COURT HOUSE
Messrs. Holabird & Roche, Architects

Granite for Public Buildings

The Chicago City Hall and Cook County Court House are of Woodbury Gray Granite, quarried, cut, carved, delivered and set by us, ON TIME.

There are 500,000 cubic feet of Woodbury Gray Granite in this building—42,500 tons of stone—and our organization and equipment handled it ON TIME.

For massive construction Woodbury Gray Granite is unsurpassed. Its light gray color and uniformity of mixture make it suitable for the highest grade of work; and our facilities are such that we can furnish you this stone ON TIME.

It is good business to build in granite, the stone that endures, and to deal with a company equipped to quarry, cut, carve, deliver and set its work ON TIME. Our experience is at your service.

WOODBURY GRANITE COMPANY

HARDWICK, VERMONT

GEORGE H. BICKFORD, General Manager

Detached Dwellings

PART II. Country and Suburban

ARCHITECTS engaged in, or even interested (as practically all architects are) in domestic work, will find much in this volume to claim their attention.

IT CONTAINS

200 illustrations of Country and Suburban Houses and surroundings—the latest and best work. Some are reprinted from THE AMERICAN ARCHITECT, while a number have never before been published.

Also articles on the following:

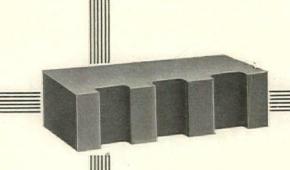
GARDEN and LANDSCAPE environment, DECORATIVE FORMS. TREATMENT, in accordance with English traditions, of SMALL AMERICAN DWELLINGS. THE ARCHITECT of a Country Home, and his CLIENT. The latter is a clear and interesting monograph on professional relationship. It is worth reading.

140 Pages. Size, 9 inches x 12 inches. Cloth Binding. PRICE, \$5.00 postpaid.

ADDRESS BOOK DEPARTMENT

THE AMERICAN ARCHITECT

50 Union Square - - - - New York

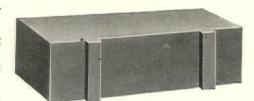


Just A Minute!-Let

IF we were not entirely convinced that, given an opportunity, Bradford Reds and Bradford Ruffs would meet the rigid requirements and withstand the thorough tests both physical and artistic which the architect is sure to apply before he adopts any product of like character, does it seem reasonable to assume that we would spend considerable money in an attempt to simply interest architects to the point of looking into the merits of our goods?

These are other and less exacting markets, and if there was any doubt in our minds concerning the quality of **Bradford Reds** and **Bradford Ruffs**, viewed from either the practical or artistic

standpoint, it is perfectly logical to suppose that we would confine our efforts and our product to them.

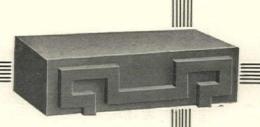


BRADFORD PRESSED

THE RED

Bradford,

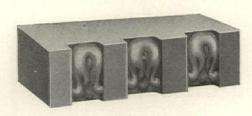
"Bradford



Us Reason Together

THEN we by our course are demonstrating the faith that is in us. Does it not inspire faith in you, the architect about to select a face brick for some building, sufficient to send for samples and quotations? We are content to abide by your decision if only you will investigate thoroughly before rendering it.

Each day's experience strengthens our conviction that in the hands of architects who understand the value and use of bond, pattern and mortar joint, no more artistic effects in brickwork



can be produced than those obtainable by the use of **Bradford Reds** and **Bradford Ruffs**.

BRICK COMPANY

BRICK PEOPLE

Penna.

Pressed Brick"

Registered U. S. Pat. Office

AN OPPORTUNITY FOR ARCHITECTS

to secure in beautiful and permanent form valuable and up-to-the-minute information on a 20th century architectural problem.

GARAGES

The Garage has become an artistic and practical addition to modern homes, country and suburban. The problems presented, and their solution, are completely handled in this remarkable work. There are authoritative articles, many photographs of the most beautiful country and suburban garages, together with plans and illustrations of details, mechanical and artistic.

If you see this work, you will add it to your library. Have a copy sent you on approval. Cloth, 9×12 inches, 96 pages, \$4.00 postpaid.

Book Department

THE AMERICAN ARCHITECT

50 Union Square, New York City

TERSON BATTERY SETS



STEEL CABINET, MODEL "BMC-36," MULTIPLE-SERVICE PATTERSON BATTERY SET (6 VOLTS-75 AMPERES)

MULTIPLE-SERVICE PATTERSON BATTERY SETS of the type shown in above cut, will GIVE A SERVICE-LIFE RECORD OF FROM 2 to 3 YEARS, under severe conditions where the old-style battery installation has only lasted a couple of months!

Model BMC-36 shown in above cut, has a capacity of 75 Amperes, and will give eight (8) times as long service as the old style battery set under heavy service conditions

Model BMC-46, having a capacity of 100 Amperes will give ten (10) times as long service as the old style battery set under heavy service conditions.

Model BMC-66, which is a 150 Ampere set—double the size of the one shown in above cut—will give sixteen (16) times as long service as the old style battery set under heavy service conditions.

IN ALL PATTERSON BATTERY SETS THE RENEWAL OF A CELL IS AS EASY AS THE RENEWAL OF AN INCANDESCENT LAMP-AND THOUGH DONE QUICKLY-BY THE MOST INEXPERIENCED PERSON, WITHOUT TOOLS OR TECHNICAL KNOWLEDGE OF ANY SORT, CAN BE DONE ONLY IN ONE WAY, AND THAT THE RIGHT WAY!

STANLEY & PATTERSON,



Sole Manufacturers

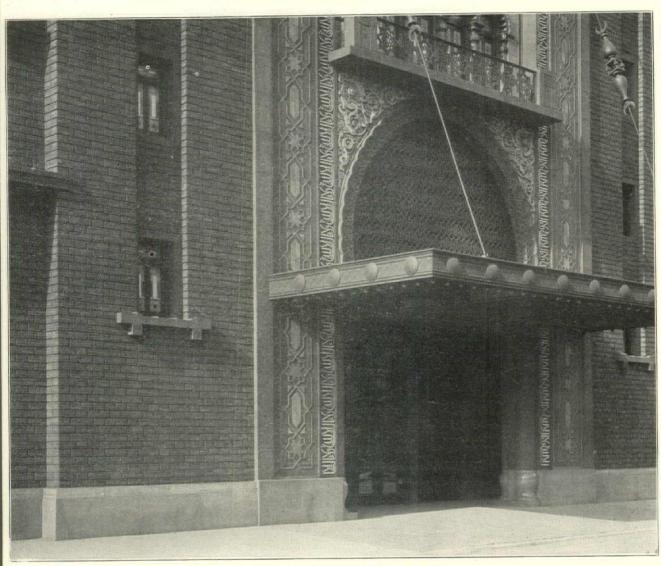
San Francisco: JOHN R. COLE CO., Williams Bldg. Seattle: H. G. BEHNEMAN, 316 James St.

Montreal, Halifax, Toronto, Winnipeg, Vancouver, Regina, Calgary, Edmonton NEW YORK, U.S.A.

Los Angeles: JOHN R. COLE CO., 1727 Lenox Ave.

We'll gladly forward copy of Catalog 157, describing in detail full line of Patterson Battery Sets.

46



DETAIL OF MEDINAH TEMPLE, CHICAGO Showing Quadruple Flemish Band

LOOK at this bond closely. At first glance it looks like a straight Flemish, but examine it again and you'll see that each unit of the ordinary Flemish bond is, in this building, four times standard size. The stretchers are four standard size bricks, with invisible joints, and the headers similarly consist of two standard stretchers.

Thus the units are kept in harmony with the stone most employed in the Orient and in pleasing proportion to the size of this huge building,—218 feet front by 150 feet deep. This Quadruple Flemish Bond in the Medinah Temple shows still another proof that the architect's most beautiful and plastic medium is

Hy-tex Brick



Huehl, Schmid and Holmes, Architects

MEDINAH TEMPLE, MYSTIC SHRINE, Ohio, Ontario and Cass Sts., Chicago.

Hy-tex Golden Rod Matts

HERE is one of the finest examples of the possibilities of face brick in the Central West, if not in the whole country. Of course it's Hy-tex Brick—Hy-tex Golden-Rod Matts—laid in a half inch raked joint of buff mortar.

To express the pure Arabesque architecture of this building, the architects investigated every kind of brick and other facing material. It was only in the Hy-tex line that the Oriental yellows and blues were found which make the Medinah Temple such a beautiful and consistent piece of color-work.

No matter what your problem, somewhere in the Hy-tex line there is just the brick you want.

HYDRAULIC-PRESS BRICK COMPANY

ST. LOUIS, MISSOURI

BALTIMORE, MD., II East Lexington St. CHICAGO, ILL., Chamber of Commerce Bldg. CLEVELAND, O., Schofield Bldg. INDIANAPOLIS, IND., Board of Trade Bldg. KANSAS CITY, MO., Rialto Bldg.

MINNEAPOLIS, MINN., 211 S. Fourth St. NEW YORK CITY, 381 Fourth Ave. OMAHA, NEB., Woodmen of the World Bldg. PHILADELPHIA, PA., Real Estate Trust Bldg. TOLEDO, O., Ohio Bldg.

WASHINGTON, D. C., Colorado Bldg.

AUTOMATIC REFRIGERATION THAT IS AUTOMATIC



Summer Home of Mr. Charles Whittemore, Falmouth, Mass.

Mr. H. M. Stevenson, Architect Equipped with Automatic Refrigerating Plant.

Our Plants are absolutely controlled by thermostat and, day or night, automatically start when temperature rises above and stop when temperature falls to predetermined point.

Expansion of gas in coils and flow of condensing water in condenser also automatically controlled.

Cost of operation much less than is possible with any hand-controlled plant as "personal equation" is eliminated.

Automatic safety devices to protect motor and prevent damage from failure of water supply.

Our plants require almost no attention. We furnish only highclass plants. We are specialists in Mechanical Refrigeration and always glad to assist Architects in the working out of refrigeration problems and the preparation of specifications. Hundreds of plants of capacities ranging from 1000 lbs. to 30 tons per day in successful operation. Let us help you please your clients.

THE AUTOMATIC REFRIGERATING COMPANY

Main Office and Works: HARTFORD, CONNECTICUT

We are the ONLY builders of AUTOMATIC Refrigerating plants and are thoroughly protected by Patents



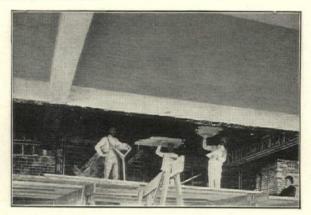
HY-RIB

For New Buildings or Remodeling Interiors or Exteriors

Every building operation has a place for HY-RIB, where it will give a more economical and permanent construction. HY-RIB PARTITIONS save space and are easily and quickly erected. HY-RIB, the unit of steel lath and channels provides a more rigid reinforcement and saves labor and time of wiring lath to studs. HY-RIB CEILINGS are easy to plaster—do not crack or streak. HY-RIB does away with the small stiffening channels required with metal lath, saving expense of wiring and simplifying construction.



HY-RIB Partition (no studs required)—note grounds for baseboard and chair-rail.



HY-RIB Ceilings (before and after plastering)— HOTEL TULLER, Detroit, Mich.

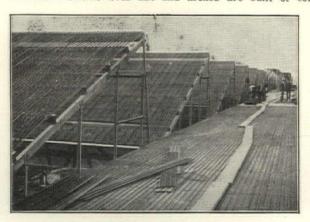
HY-RIB-Concrete Roofs, Floors, Walls and Sidings Without Forms—Low Cost—Fireproof—Permanent

HY-RIB is a steel sheathing with deep stiffening ribs; a concrete reinforcement which does away with forms.

HY-RIB ROOFS—light in weight—save on supports—built without forms—low in cost. Simply lay the HY-RIB over the supports, pour on the concrete and plaster underside.

HY-RIB WALLS & SIDINGS cost half as much as brick—better than corrugated iron or wood—no forms required—simple and rapid in erection.

HY-RIB FLOORS both flat and arched are built of concrete without forms—very economical.



HY-RIB Roofs, flat and sloping (no forms used)— OLIVER CHILLED PLOW CO., Hamilton, Ont.



HY-RIB Concrete Sidings (built without forms)— MARK MFG. CO., Evanston, III. UNITED SASH used in all windows.

VALUABLE BUILDING BOOK—FREE!—Our large HY-RIB Hand Book containing many useful ideas on construction and complete specifications for concreting and plastering. Write to-day.

KAHN Building Products

TRUSSED CONCRETE STEEL CO.

DETROIT, MICHIGAN

Reinforced Concrete Hy-Rib and Lath, Steel Sash, Waterproofings, Finishes, Building Specialties





More Light—Greater Ventilation Exceptional Strength—Highest Quality



UNITED SASH provide Maximum Daylight for interiors as there is practically no obstruction to the light at muntins, mullions, lintels, or joints.

Exceptional Strength and Rigidity; permits any amount of ventilation, anywhere. Unweakened by cutting or punching.

Superior Workmanship and Appearance; clean-cut lines and mitered joints. The Steel Sash of Quality.

Shut Out Drafts and Storms. All joints are carefully designed and fit perfectly; opening joints have double contacts to shut out weather

UNITED SASH are made of solid steel sections united under a powerful press into a perfect unit. Each blow comes down with a pressure equal to the weight of four locomotives.

UNITED SASH is manufactured in all types to meet every condition of lighting and ventilation and size of opening.

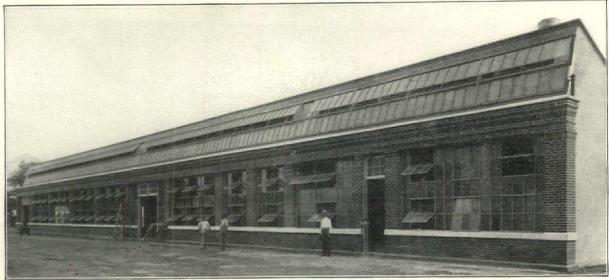
Write for UNITED SASH Hand Book—FREE! Contains complete details, illustrations, tables, etc. It will help you to select the best Sash to meet your requirements.

Trussed Concrete Steel Co.

768 Trussed Concrete Building, Detroit, Mich.

Reinforced Concrete, Hy-Rib and Lath, Steel Sash Waterproofings, Finishes, Building Specialties





HESS-BRIGHT CO., Philadelphia, Pa. UNITED SASH used in all windows; Pivoted Sash below, Continuous Sash above. Note great amount of ventilation with UNITED SASH.

G-E Standard Panel Boards

G-E Standard Panel Boards are designed by experienced engineers to meet the most rigid requirements.

In the construction of G-E Panel Boards only the highest grade material and skilled labor is employed; every step in the assembly is closely inspected.

G-E Standard Panel Boards are furnished in several types and in thousands of combinations.

Many of the largest buildings in the world are equipped with G-E Panel Boards exclusively.

All G-E Panel Boards are National Electrical Code Standard.

Make the installation one to be proud of—one to be sure of—specify the reliable, well-constructed G-E Panel Board.

We invite correspondence and furnish expert advice on any panel board proposition.

General Electric Company

Atlanta, Ga.
Baltimore, Md.
Barmingham, Ala.
Boise, Idaho
Boston, Mass.
Buffalo, N. Y.
Butte, Mont.
Charleston, W. Va.
Charlotte, N. C.
Chattanooga, Tenn.
Chicago, Ill.

Cincinnati, Ohio Cleveland, Ohio Columbus, Ohio Davenport, Iowa Dayton, Ohio Denver, Colo. Detroit, Mich. (Office of Agent) Elmira, N. Y. Erie, Pa.

Largest Electrical Manufacturer in the World General Office: Schenectady, N. Y. ADDRESSNEARESTOFFICE

Jacksonville, Fla.
Joplin, Mo.
Kansas City, Mo.
Keokuk, Iowa
Knoxville, Tenn.
Los Angeles, Cal.



Louisville, Ky.
Mattoon, Ill.
Memphis, Tenn.
Milwaukee, Wis.
Minneapolis, Minn
Nashville, Tenn.

New Haven, Conn.
New York, N. Y.
Omaha, Neb.
Philadelphia, Pa.
Pittsburg, Pa.
Portland, Ore.
Providence, R. I.
Richmond, Va.
Rochester, N. Y.
Salt Lake City, Utah

San Francisco, Cal. St. Louis, Mo. Schenectady, N. Y. Scattle, Wash. Spokane, Wash. Springfield, Mass. Syracuse, N. Y. Toledo, Ohio Washington, D. C. Youngstown, Ohio

For Texas and Oklahoma business refer to Southwest General Electric Company (formerly Hobson Electric Co.)—Dallas, El Paso, Houston and Oklahoma City. For Canadian business refer to Canadian General Electric Company, Ltd., Toronto, Ont.

3995

VENTO Values

The highest possible testimony to the superior merits of VENTO Cast-Iron Hot-Blast Heaters is found in their steadily increasing use, by architects, engineers and contractors, to meet the most exacting requirements for blower heating and ventilating. The wonderful record of these Heaters-now represented by over 1,200 noteworthy installations—is founded upon excellent mechanical values, backed by complete, authoritative data compiled from actual tests under widely varying conditions.



Chicago & Northwestern Railway Terminal, Chicago. Heated and Ventilated with VENTO Heaters, American Peerless Radiators and Rococo Wall Radiators.

VENTO Cast-Iron Hot-Blast Heaters

are modeled upon an unique construction which forces air currents into the closest contact with all heating surfaces, and they possess exceptional steam circulating features which insure the highest efficiency from all these surfaces. As compared with pipe coils they take up far less space, and represent material savings in fitter's labor. Being made up in stacks they are far easier to handle than coils, and with many less parts and joints to a given amount of heating surface. They can be easily changed in size should occasion require, and, being made of the best cast-iron, cannot rust out or corrode. VENTO Heaters are time-tried and proven. They are durable, economical and efficient.

Our booklet, "Engineers' Data on Vento Heaters," contains definite, comprehensive statements of VENTO values, and many pages of authoritative data on blower heating. It is yours on request.

Philadelphia, Baltimore, Buffalo, Washington, Pittsburgh, Cleveland, Cincinnati, Detroit, Atlanta. lis, Milwaukee, Omaha, Minneapolis, St. Paul, St. Louis, Kansas City, Denver, San Francisco, Los kane, Toronto, Brantford (Ont.), London, Brussels, Paris, Berlin, Duesseldorf, Vienna, Milan.





ROBERT W. HUNT JNO. J. CONE JAS. C. BALLSTED D. W. McNAUGHER

ROBERT W. HUNT & CO., Engineers

TION TESTS AND CONSULTATION Structural Steel, Cement, Reinforcing Steel, Chemical and Physical Laboratories

Chicago Pittaburgh London St. Louis San Fra

Samson Spot Sash Cord



Reg. U. S. Pat. Off.



Metallic devices or hard fibres are not adapted to the friction and bending incident to running over pulleys. Abrasion between the surfaces quickly cuts them in two.

Properly made braided cotton cord has been proved by both tests and long experience to outwear any other material for this purpose.

Samson Spot Cord is more durable and more economical than common cord, because it is made of extra quality stock, is carefully inspected and is guaranteed free from all imperfections of braid or finish. The colored spots are our trademark. Look for them and beware of imitations. Samples and full information gladly sent.

Samson Cordage Works Boston, Mass.