Southern Architect and Building News

DALTON | OCTOBER, 1922 | ATLANTA

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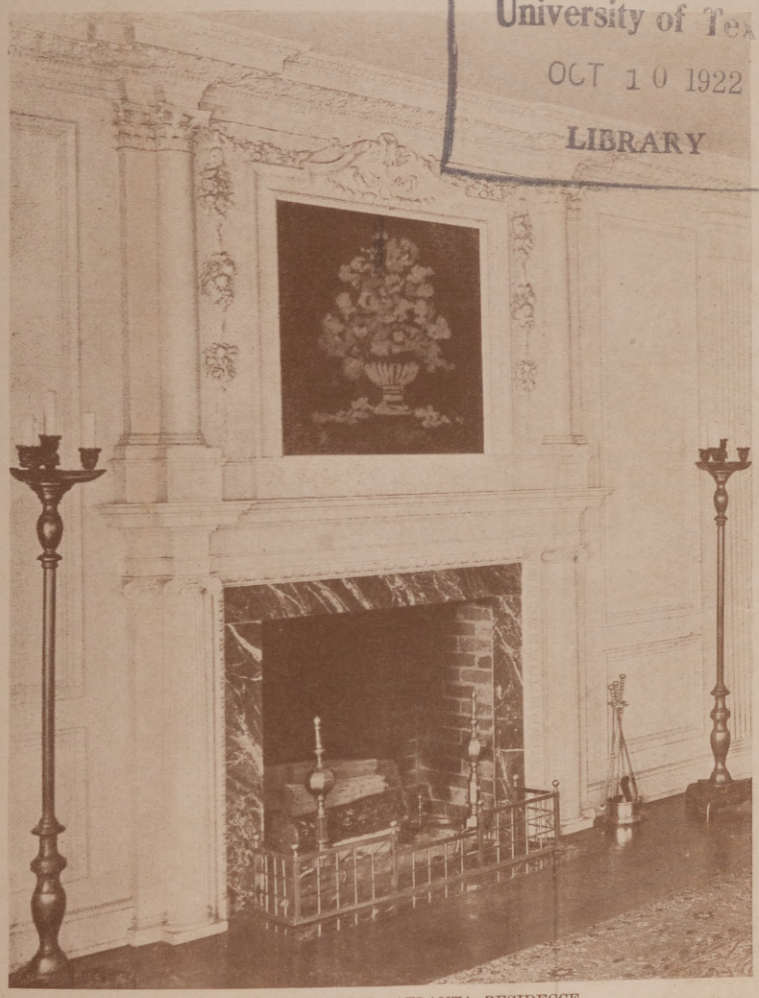
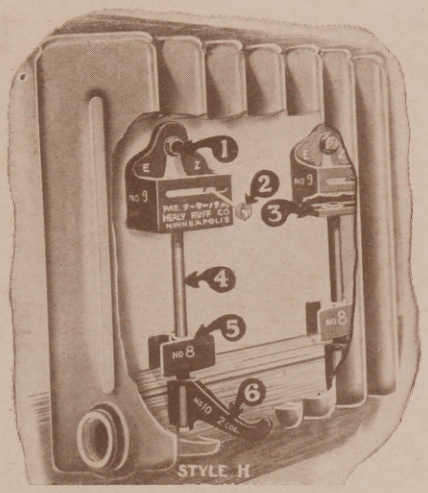


DETAIL OF MANTEL, ATLANTA RESIDECCE
Hentz, Reid & Adler, Architects — Photo, Fishbaugh & Lee

ESTABLISHED 1882—THE OLDEST TRADE PAPER IN THE SOUTH.



Style R

1. One Bolt.
2. Invisible Washer.
3. Horizontal Adjustment.
4. ½-inch Pipe.
5. ADJUSTABLE FOR BASE BOARD.
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Immediate shipment from large stock.

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MINNEAPOLIS, MINN.

Equip Your Building With

"Burlington"
Venetian Blinds

they

CONTROL THE LIGHT
ADMIT THE AIR
KEEP OUT THE SUN

better than shades and awnings, cost less and last longer. Investigate their merits and join the army of satisfied owners.

Made by

Burlington Venetian Blind Co.

646 Lake St. Burlington, Vermont
Catalogue Upon Request
We also manufacture Window and Door Screens.

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MORTAR COLORS

Made from Natural—non-Fading Ores.

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We guarantee UNIFORMITY—STRENGTH—DURABILITY

--Packed in 100-lb paper lined Cloth Bags or Barrels.

We make prompt shipments from either our **Nashville, Tenn.,** or **Tamms, Ill.,** mills, whichever takes the lowest freight rate.

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BUY DIRECT.

TAMMS SILICA CO.

CHICAGO

Mills: Nashville, Tenn., Tamms, Ill.

O'Brien Woven (Wood) Lath and O'Brien Thermo-Base

are bases for plaster and stucco that are attracting nation-wide favorable attention.

They excel in ease and rapidity of application to studding, of application to plaster or stucco and of enduring key.

They constitute the most economical bases on the market because of low initial cost, saving of labor and saving of plastic material.

They are based upon scientific principles and attract the architect and engineer as well as the builder and the man who pays the bills.

The Thermo-Base provides insulation and saves coal bills besides adding home comfort.

Write for detailed information.

O'BRIEN WOVEN LATH CO.

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$2.00 Per Year—MONTHLY

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Southern Architect and Building News

SIGNET FLOOR DRAIN

The quality of material, the superiority of design, the absolute safety and reliability of operation, recommends the Signet for all high-class work where permanent satisfaction is sought.

Write for circular

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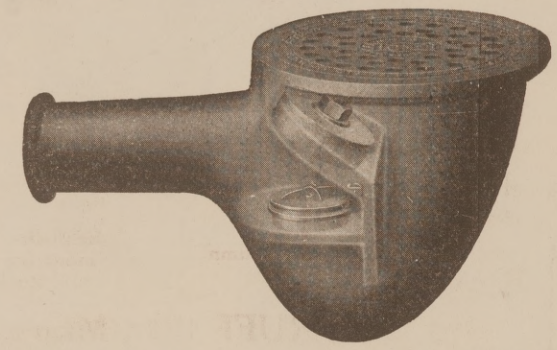
KANSAS CITY, MO.



THE BACK WATER TRAP DRAIN OF QUALITY

GURNEY BOILERS RADIATORS FOR STEAM AND HOT WATER GIVE COMPLETE SATISFACTION
GURNEY THE MARK OF HIGHEST QUALITY
SHOW ROOMS NEW YORK PHILADELPHIA WASHINGTON
GURNEY HEATER MF'G COMPANY
HOME OFFICE 188-200 FRANKLIN ST. BOSTON

SAMSON SPOT SASH CORD

SAMSON CORDAGE WORKS, BOSTON, MASS.

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MINERS, MAKERS AND SHIPPERS OF ALL STYLES AND COLORS ROOF SLATE SINCE 1869.
Write for prices.

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Branch Offices:—101 Park Ave., New York City; 4 Post Office Square, Boston, Mass. Office and Yard, 2554 W. Harrison St., Chicago, Ill.

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Manufacturers of
Architectural Terra Cotta
ALL COLORS
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STRUCTURAL STEEL
For Bridges and Buildings
Modern Shop Large Stock Prompt Delivery

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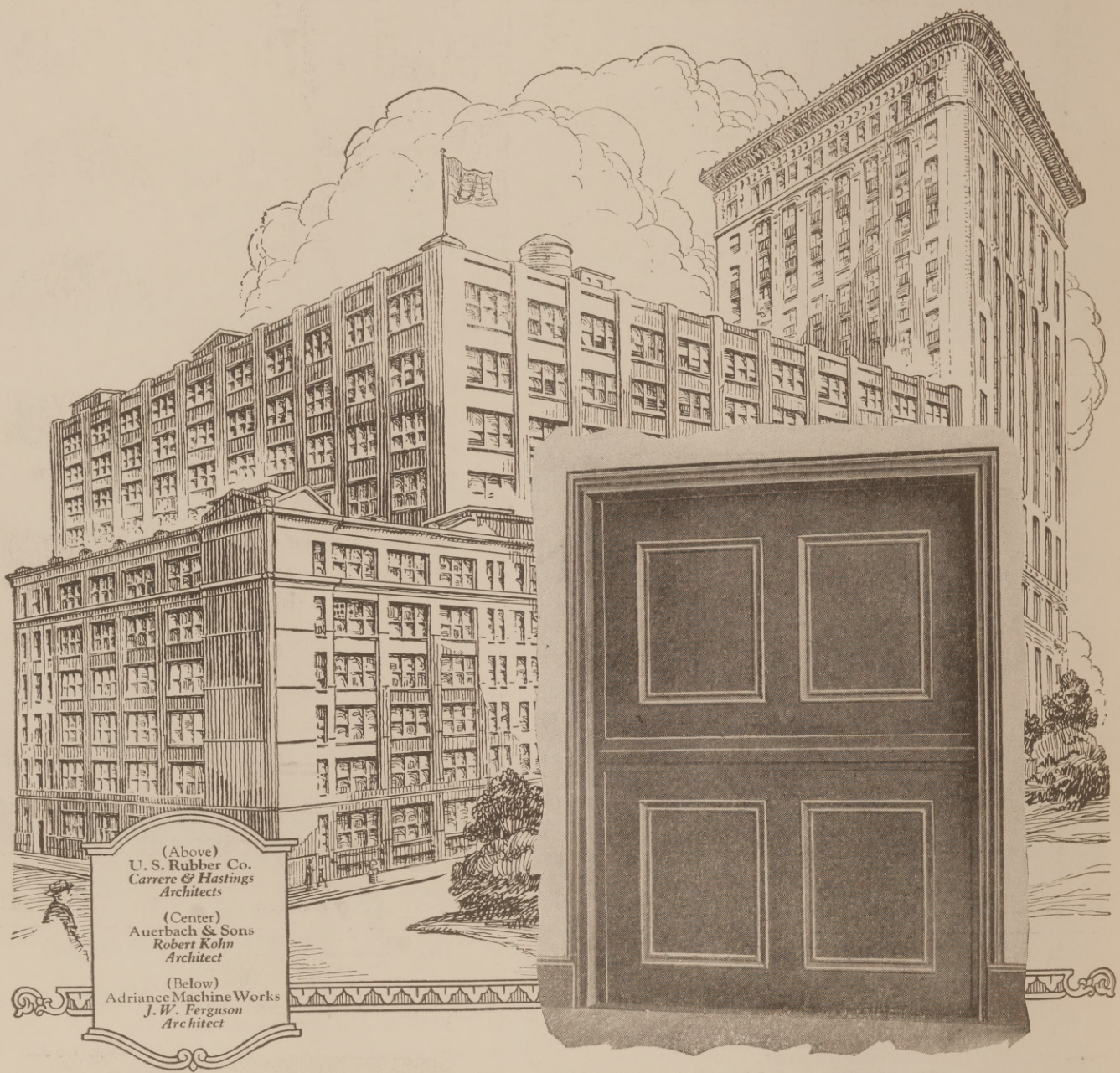
Builders of the Original Down-Draft Smokeless Furnace and the Hawley-Schwartz Metal Melting Furnaces.
Formerly of Chicago. Easton, Pa.

ATLANTA TERRA COTTA COMPANY
Manufacturers of
ATLANTA ARCHITECTURAL TERRA COTTA
1303 Third National Bank Building Factory at EAST POINT, GA.

AMERICAN ELEVATORS Built by AMERICAN ELEVATOR and MACHINE CO. INCORPORATED LOUISVILLE, KY.



Merit - not price - has sold firms who know

MERIT is the first consideration with most architects and builders. "How good, not how cheap" is their aim. They place efficiency, dependability and safety before price. Peelle Doors have more installations to their credit than other doors of their type in the world — despite cheaper elevator doors.

The exclusive truckable feature of Peelle Doors assures smooth passage from elevator to floor. Operates vertically, affording full clearance. Peelle Doors bear the Underwriter's label.

Let us help you on your next door problem. A copy of "Elevator Door Efficiency" will be sent gratis upon request. It describes Peelle Doors for every purpose.

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PEELLE Freight Elevator DOORS

Counterbalanced-Truckable

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CUTLER MAIL CHUTE CO.
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Offices: Cutler Building
Factory: Anderson Avenue

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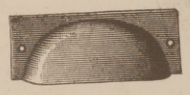
Drawer Pulls are one of the many lines of Builders Hardware manufactured by The "Shelby Spring Hinge Company."

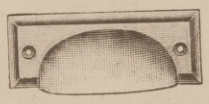
Our pulls are stamped from wrought steel, brass or bronze metal and finished to match all Builders Hardware Finishes.

Write *today* for catalogue describing this and other lines of Builders Hardware.

Crescent

Oval


Square Back

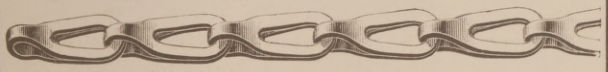

Beveled

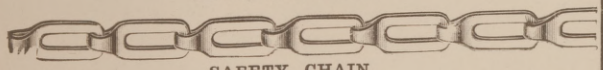
The Shelby Spring Hinge Co.
Shelby, Ohio, U. S. A.

CHAINS

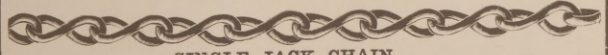
SASH CHAIN

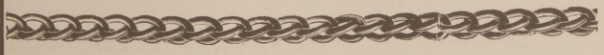
00 SASH CHAIN

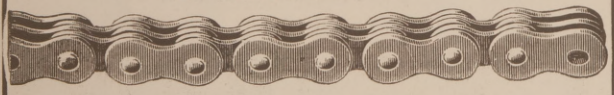

PLUMBERS CHAIN


SAFETY CHAIN

UNIVERSAL CHAIN


SINGLE JACK CHAIN


DOUBLE JACK CHAIN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THE SMITH & EGGE MFG. CO.
BRIDGEPORT, CONN.
ORIGINATORS OF SASH CHAINS

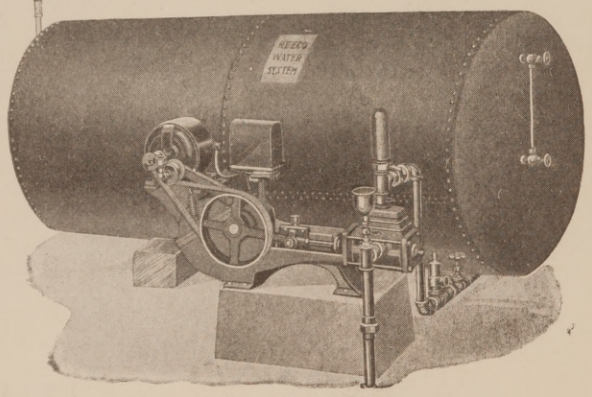
MAKING WATER RUN UP HILL

is easy when an up-to-date automatic

REECO WATER SUPPLY SYSTEM

is installed. With a pressure of 50 pounds in the Reeco pneumatic tank, the water will "run up hill" to an elevation of about 117 feet.

Larger outfits for higher pressures when needed.
The Reeco "Little Giant" pump, with electric motor, automatic control, and Reeco pneumatic tank—a complete pressure system.



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Electric, Gasoline and Kerosene Pumpers.
Deep Well and Suction Pumps.
Hot Air Pumping Engines.
Complete Pneumatic Tank Systems.

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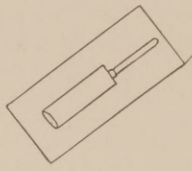
WALDEN, N. Y.
—Established 80 Years—
Active responsible sales representatives are desired.

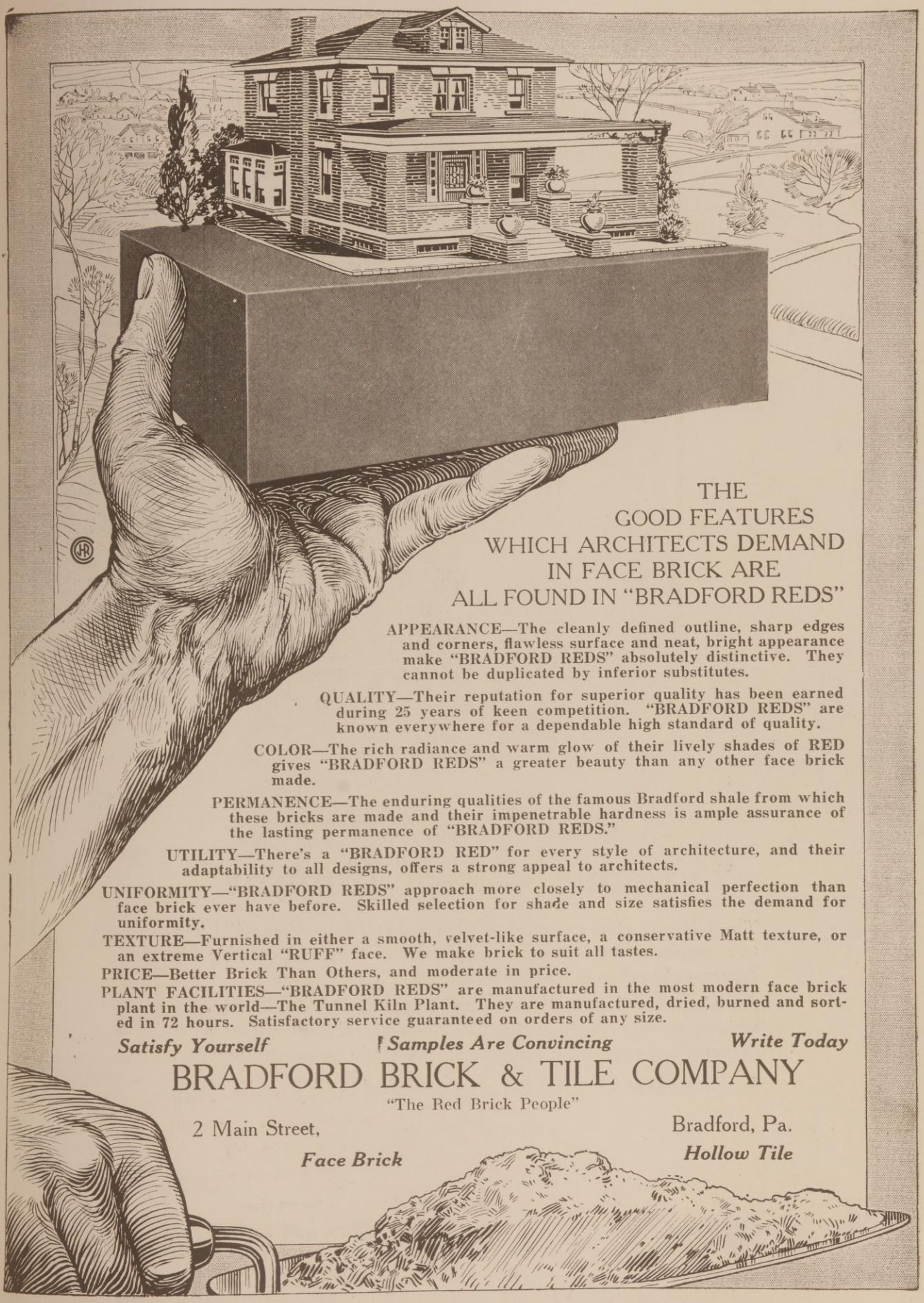


TIGER FINISH works so smoothly that plasterers can spread more in a day.

See Sweet's for full particulars about using Tiger Finish — the lime which *"Spreads like warm butter."*

The Kelley Island Lime & Transport Co.
World's Largest Producer of Lime
Leader-News Building
CLEVELAND

"Spreads like warm butter"



THE
GOOD FEATURES
WHICH ARCHITECTS DEMAND
IN FACE BRICK ARE
ALL FOUND IN "BRADFORD REDS"

APPEARANCE—The cleanly defined outline, sharp edges and corners, flawless surface and neat, bright appearance make "BRADFORD REDS" absolutely distinctive. They cannot be duplicated by inferior substitutes.

QUALITY—Their reputation for superior quality has been earned during 25 years of keen competition. "BRADFORD REDS" are known everywhere for a dependable high standard of quality.

COLOR—The rich radiance and warm glow of their lively shades of RED gives "BRADFORD REDS" a greater beauty than any other face brick made.

PERMANENCE—The enduring qualities of the famous Bradford shale from which these bricks are made and their impenetrable hardness is ample assurance of the lasting permanence of "BRADFORD REDS."

UTILITY—There's a "BRADFORD RED" for every style of architecture, and their adaptability to all designs, offers a strong appeal to architects.

UNIFORMITY—"BRADFORD REDS" approach more closely to mechanical perfection than face brick ever have before. Skilled selection for shade and size satisfies the demand for uniformity.

TEXTURE—Furnished in either a smooth, velvet-like surface, a conservative Matt texture, or an extreme Vertical "RUFF" face. We make brick to suit all tastes.

PRICE—Better Brick Than Others, and moderate in price.

PLANT FACILITIES—"BRADFORD REDS" are manufactured in the most modern face brick plant in the world—The Tunnel Kiln Plant. They are manufactured, dried, burned and sorted in 72 hours. Satisfactory service guaranteed on orders of any size.

Satisfy Yourself *Samples Are Convincing* *Write Today*

BRADFORD BRICK & TILE COMPANY

"The Red Brick People"

2 Main Street, Bradford, Pa.

Face Brick *Hollow Tile*

The New Equitable Life Insurance Building, Des Moines, Iowa. Proudfoot, Bird & Rawson, Architects. Served by Nine K & H Elevators.

Another Triumph for "Variable Voltage Control"

The following advantages of K&H "Variable Voltage Control" Elevators convinced the architects and owners of the new Equitable Life Insurance Building of Des Moines, Iowa:

Amazing smoothness of starting and stopping—ease and accuracy of making landings—higher rates of acceleration and deceleration—elimination of large contactor controller — savings in power consumption.

Kaestner & Hecht Co. · Founded 1863 · Chicago

Ask Your Architect

Kaestner & Hecht Elevators

DETROIT · BIRMINGHAM · MINNEAPOLIS · MILWAUKEE · INDIANAPOLIS · OMAHA
DALLAS · CLEVELAND · PITTSBURGH · PHILADELPHIA

A·F·B·A
USE FACE BRICK
—it Pays

Detail of House, Oyster Bay, N. Y., Carrere & Hastings, Architects

The architects have not been hampered for money in working out their designs for this noble structure, in which the very genius of brick, as the fired clay of the all-supporting earth, has been embodied. Unfortunately the half-tone does not reproduce the exquisite color blending of the brickwork.

Variety of Effects in the Face Brick Wall

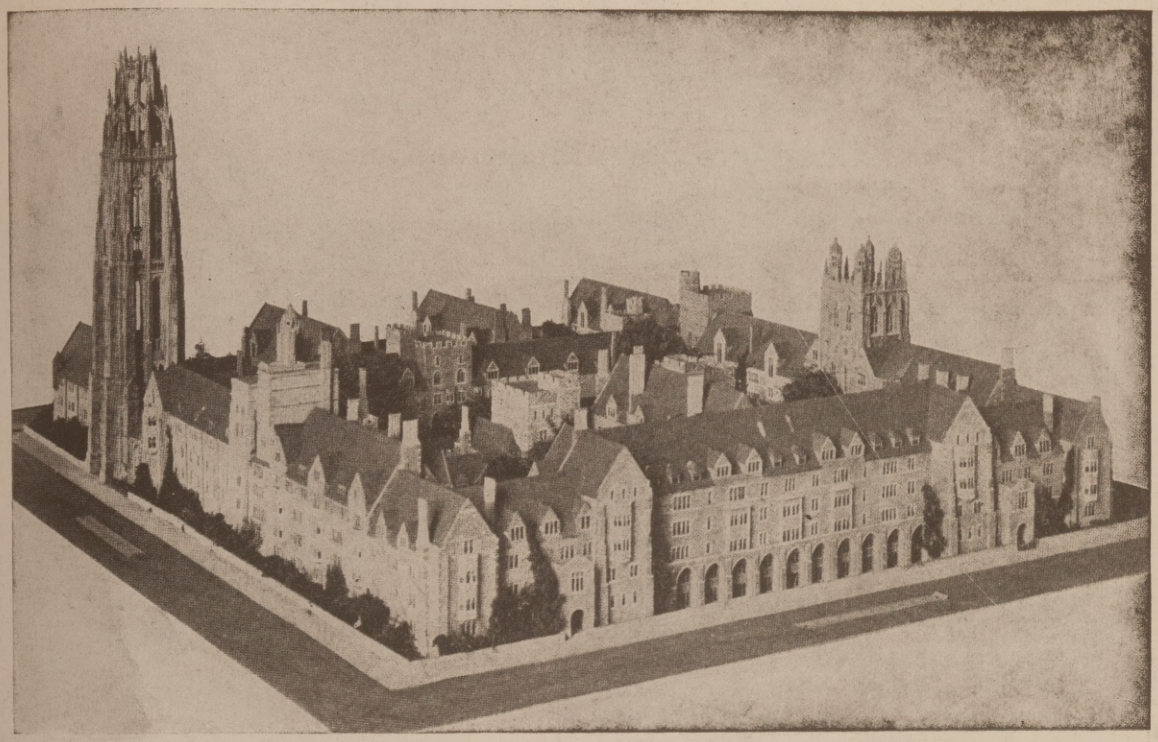
THE many beautiful Face Brick walls—in residences, in commercial, industrial and public buildings—that are built every year indicate the infinite variety of effects obtainable by the architect in the use of this plastic material. The great variety of color tones and textures in the material itself, the arrangement of the units in various bonds, the innumerable patterns obtainable by shifting the headers or stretches in successive courses back and forth, and the color, texture, and kind of mortar joint, all contribute to extend the artistic possibilities of the Face Brick wall.

The Portfolio of Architectural Details in Brickwork shows more than a hundred examples of beautiful brickwork—all in standard size brick. These de luxe half-tone plates are assembled in three series, each in an enclosed folder, with printed tab, ready for filing. A set of these folders will be sent to any architect requesting them on his office stationery.

AMERICAN FACE BRICK ASSOCIATION

1758 PEOPLES LIFE BUILDING · CHICAGO, ILLINOIS

At the Notman Showrooms
the architect and decorator will
find a collection of fine furniture
which should prove of inspirational
value for the treatment of interiors.
A. H. NOTMAN & COMPANY
Adaptations and Replicas of Historic Furniture
121-127 W. 27th Street, New York
Selling Agents for John Miller & Co.



YALE MEMORIAL QUADRANGLE BUILDINGS, NEW HAVEN, CONN.

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

In securing the Painting contract for the Yale Memorial Quadrangle Buildings, quality of service and workmanship was a big item.

Our organization was prepared to start this operation and finish it in the specified time. We have painted many of the prominent Hotels and Public Buildings throughout the United States.

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Painting and Decorating Public Buildings Is Our Specialty

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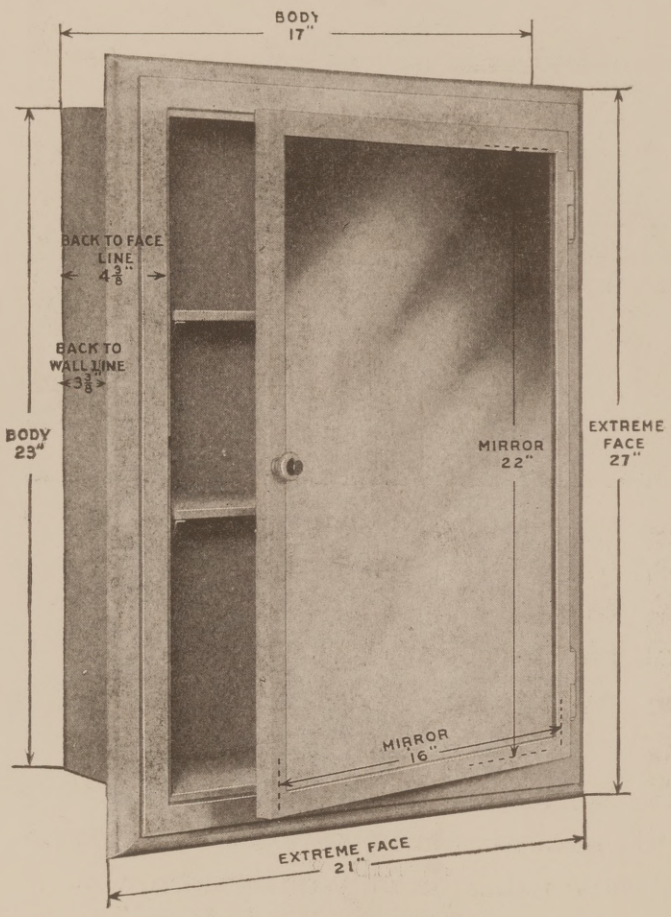
DETROIT

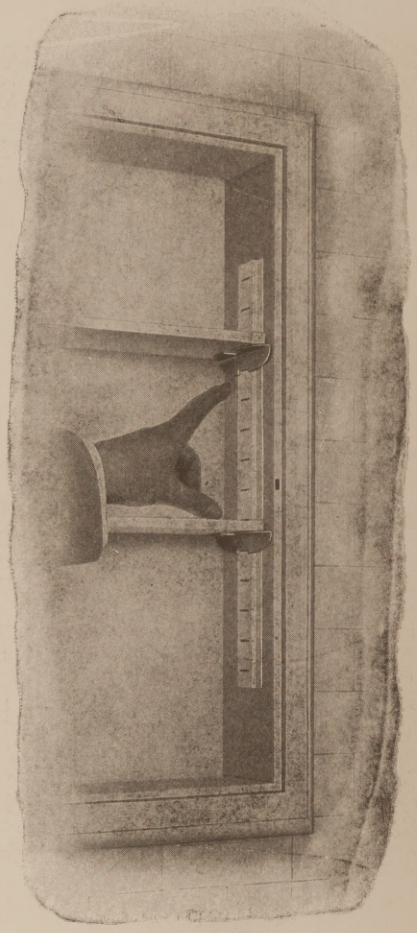
268 West 40th St.
NEW YORK

WHITE The Brasscrafters

One-Piece Steel Medicine Cabinets



GRAPHIC ILLUSTRATION



SECTIONAL CUT

Showing how shelves are fixed, but instantly adjustable.

Dimensions and roughing measurements.

Extreme of Moulded Edges	21 in. x 27 in.
Body	17 in. x 23 in.
Mirror, without Bevel	16 in. x 22 in.
Wall Line to Face	1 in.
Wall Line to Back	3⅜ in.
Opening required for installation	17¼ in.x23¼ in.x3⅜ in.

Some of the reasons why more and more architects are specifying WHITE The Brasscrafters cabinets

The cabinets are made entirely of steel secured from corrosion by application of a process approved by the U. S. Government.

The durable finish is the WHITE The Brasscrafters. The shelf rests are securely fixed, but instantly adjustable. (Note sectional cut.)

The two shelves are pure white Vitrolite glass, impervious to acids and chemicals.

The mirror door is plain French plate glass in seamless metal frame, with moisture pad, flush-fitting metal back, china knob in combination with spring catch, concealed hinge flanges, and loose pin for convenience in detaching the door.

The body and moulding are integral, or are made so by oxyacetylene welding, thus securing a cabinet without joints, seams or cracks.

The cabinets require no finishing, either inside or outside, at the building. They are delivered ready for immediate installations, which is completed by using two wood screws in holes provided in the middle of the vertical sides.

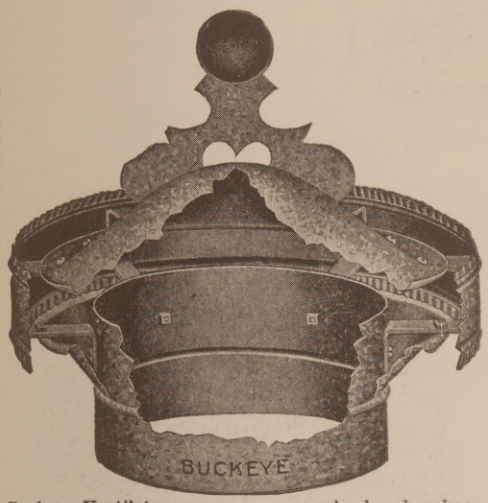
Guaranteed satisfaction.

The makers of these cabinets are the makers of the well-known line of WHITE The Brasscrafters Bathroom and Lavatory Accessories.

Send for Hand-Book

J. P. EUSTIS MANUFACTURING COMPANY

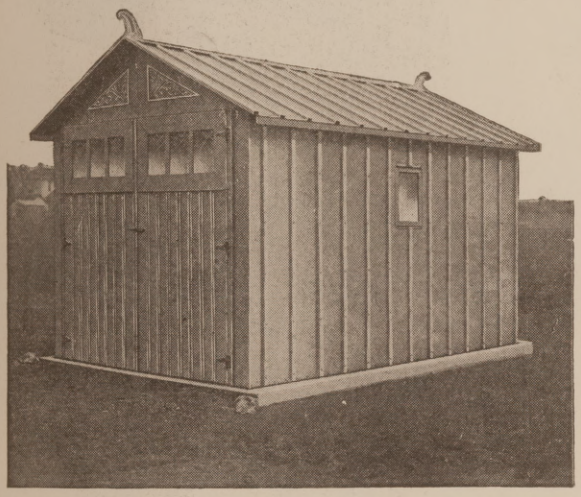
CAMBRIDGE "A" — TRADE MARK The Brasscrafters — (BOSTON) MASS.



Buckeye Ventilators for factories, schools, churches, barns, etc., are known everywhere. Scientifically constructed, practical and in big demand.

BUCKEYE
Metal Specialties

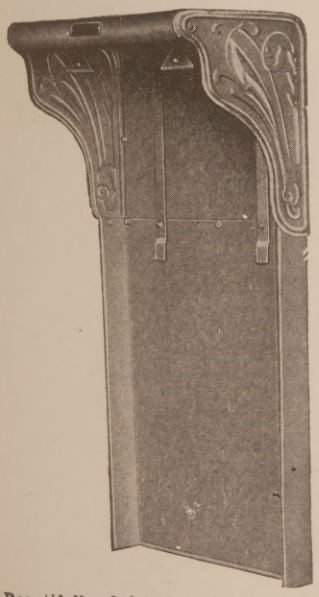
HERE'S a real opportunity to do some big business. It is right in your line—the demand is good—the profit-margin liberal.



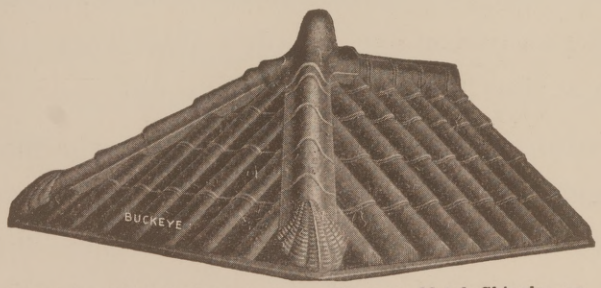
All-Metal, Sectional Garages, Warehouses and Industrial Buildings. Sturdily built, yet low in price, these buildings meet the universal need for speedy, inexpensive fireproof buildings.

Buckeye Sheet Metal Products comprise a line of practical, salable items that you can handle easily. Portable, Sectional Garages and Industrial Buildings, Ventilators, Metal Ornamental Shingles and House Radiator Shields are but a part of this line.

Write us today for details of a money-making proposition for representing us in your territory. Get the complete story of the possibilities in this big field.



Beautifully finished and of graceful lines these Buckeye Heat Radiator Shields are profit-makers wherever handled.



Many beautiful designs in either Buckeye Metal Shingles or Imitation Spanish Tile are available for roofing. Beauty and durability are features of the fire-proof Buckeye roof.

Trade Mark
ARMCO
Reg. U. S. Pat. Off.
Garages and other buildings furnished in rust-resisting
ARMCO IRON
if desired.

The Thomas & Armstrong Co.
Dept. M. W. LONDON, OHIO

What Architects and Contractors Say

Architects and Contractors in Australia, Cuba, France, Brazil, Canada and every part of this country have requested copies of the booklet pictured above, "A Job That Took a Million Years or the Tale of the Clam."

After reading it they have pronounced it the most interesting and practical story of Hydrated Finishing Lime ever told.

You'll say the same. Write today for your copy.

The Ohio Hydrate & Supply Co.

Woodville, Ohio

The Lime Center of the World

C. C. ELLIOTTE
PLAIN AND ORNAMENTAL PLASTERER
RICHMOND, VA.

Aug. 12, 1922.

Ohio Hydrate & Supply Co.,
Woodville, Ohio.

Gentlemen:

I received your catalogue entitled "The Tale of the Clam" which I read and enjoyed very much.

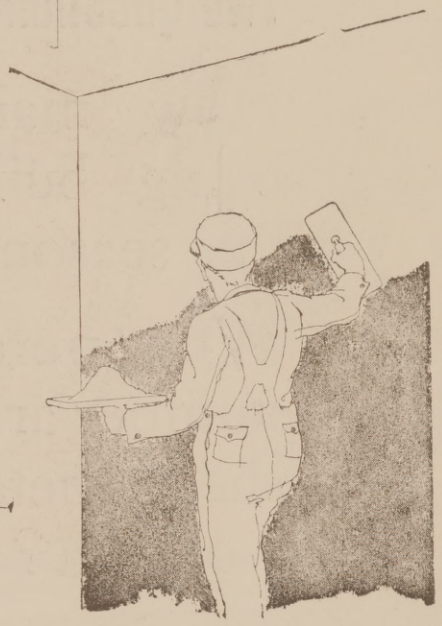
Although I have frequently used one of your brands of Hydrated Finishing Lime, I for one never knew the process it had to go through to become a finished product until I read your interesting story.

Thanking you for the information and when I use more of your material, "The Tale of the Clam" will be a pleasant rememberance.

Yours very truly,

C C Elliotte

Ohio White Finish
Woodville White Finish
Buckeye White Finish
Hawkspread White Finish



What a Plasterer Says

After all, the Plasterer is the best judge of a Finishing Hydrate. To meet his approval it must be easy to get, convenient to handle, uniformly dependable, so "fat" or plastic that it is easy to apply and always pure white. These qualities enable him to produce a smooth, snow-white wall with the least effort.

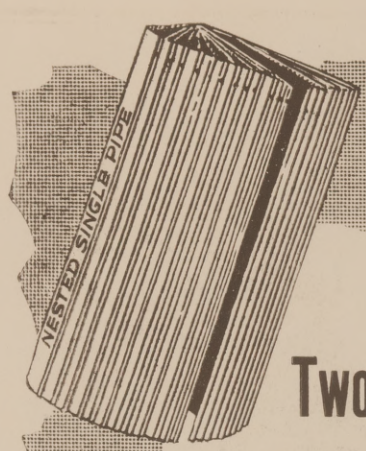
Read the letter above. Other Plasterers will enjoy "The Tale of the Clam" as did Mr. Elliotte. It will also help them to produce a better job for you.

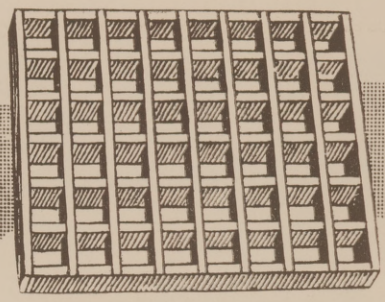
In writing for your copy, give us the name of your Plaster Contractor with a request that we mail him a copy, too. Or, if you already have a copy of the booklet, show it to a Plasterer that he may write for a copy and profit thereby, as did Mr. Elliotte.

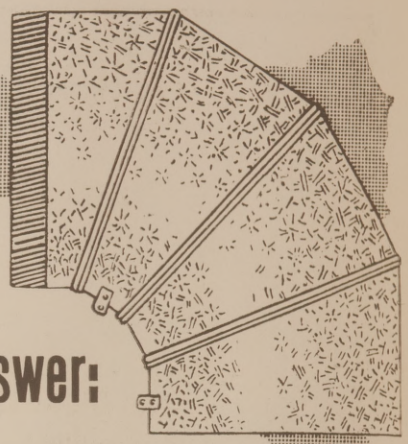
The Ohio Hydrate & Supply Co.

Woodville, Ohio

The Lime Center of the World



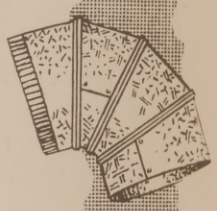


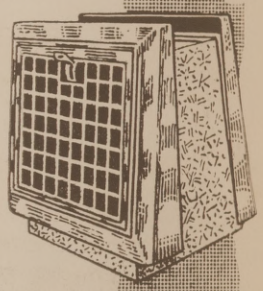


Two Questions for You to Answer:

How many homes are being built in your city this season?

What percentage of this number are you doing the sheet metal and furnace work on?





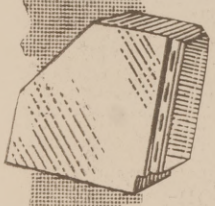
It's up to you to see that your answer to the last question is *Satisfactory.*

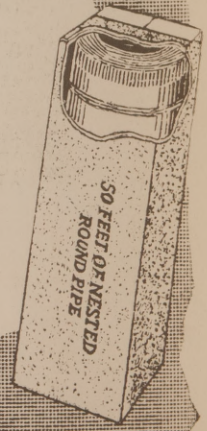
F. MEYER & BRO. CO., PEORIA, ILLINOIS.

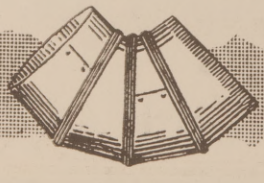
Mfg. of Handy Furnace Pipe

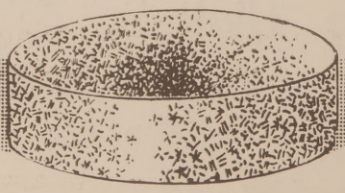
are ready to supply you with

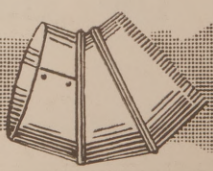
"Everything needed in the installation of Warm Air Furnaces."











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SMYSER-ROYER LAMP STANDARDS, LANTERNS AND BRACKETS adorn some of America's most beautiful buildings.

ALL ARCHITECTS should have our Catalogue H on file. This catalogue illustrates over 200 different designs of exterior Lighting fixtures, suitable for any possible need, such as banks, office buildings, hotels, apartment houses, churches, schools, etc.

SMYSER-ROYER fixtures are permanent assets.

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SMYSER-ROYER CO.

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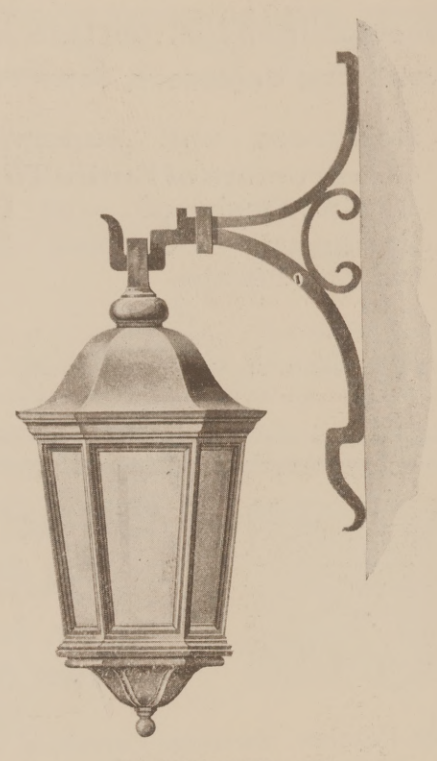
PHILADELPHIA OFFICE—1609 SANSOM STREET



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PROJECTION 12" TO CENTER.

W. L. Stoddart, 9 East 40 St., New York City, Architect.

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These are plastered throughout with Cherokee Cement Plaster. Sold by Agents everywhere in Georgia and throughout the Southern States.

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Designers and Supervising Constructors of Entire Towns. Banks Designed and Fully Equipped. Ice and Cold-storage Plants.

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FOR ALL BUILDING PURPOSES.

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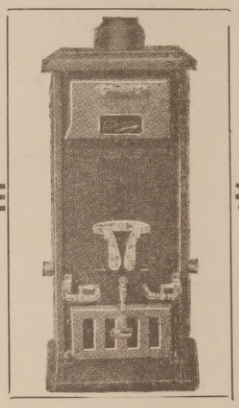
THE UNITED STATES ROOFING TILE CO.
PARKERSBURG, W. VA.



Every Rule of Health and Convenience calls for

The Incinerite
IT SOLVES THE PROBLEM

The ill-smelling, germ-breeding garbage container is a constant affront to Domestic Economy as well as to Medical Science. Every rule of health and comfortable living calls for its banishment. The Incinerite is the only efficient method of sanitary, economical refuse disposal. We shall be glad to co-operate with you in your needs.

Detailed information on this line may be obtained by reference to Page 1907 of the latest edition of Sweet's Catalogue.

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Manufacturers and Distributors
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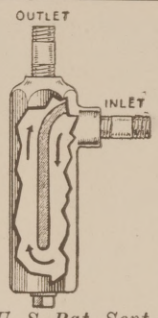

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in the fire box to deaden the fire. The

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CRESCENT WATER HEATER

will furnish hot water for a 30 or 60 gal. boiler. No. 2 heats from 60 to 180 gal. Can be used in any steam or hot water boiler or furnace.

Write for Prices.

Charles Dargent
360 Crescent Street,
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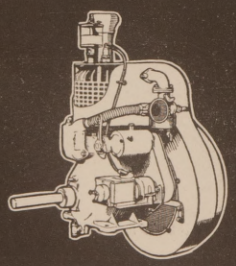
forget

Your old conception of a gasoline engine and consider only



The Air-Cooled, Multi-Purpose
"New-Way"
5 Engines in 1

COMPACT as an electric motor—flexible, dependable and light in weight. Especially designed to operate portable machinery, semi-portable, traction and stationary.

Operates by direct power or generator electric-motor driven units and tools in remote places.

Variable control, 2 to 5 horsepower. Weight, ready to mount on any equipment, 248 lbs. Write for Circular C-20.

Manufacturers and Users

Universalize your product with the "New-Way" Engine and sell to the world. Our engineering staff has had wide experience in the application of power to machinery of all kinds. They will be glad to help you.

The "New-Way" Motor Company
Lansing, Michigan, U. S. A.
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IN THE INTERESTS OF

SAFETY—EFFICIENCY—ECONOMY

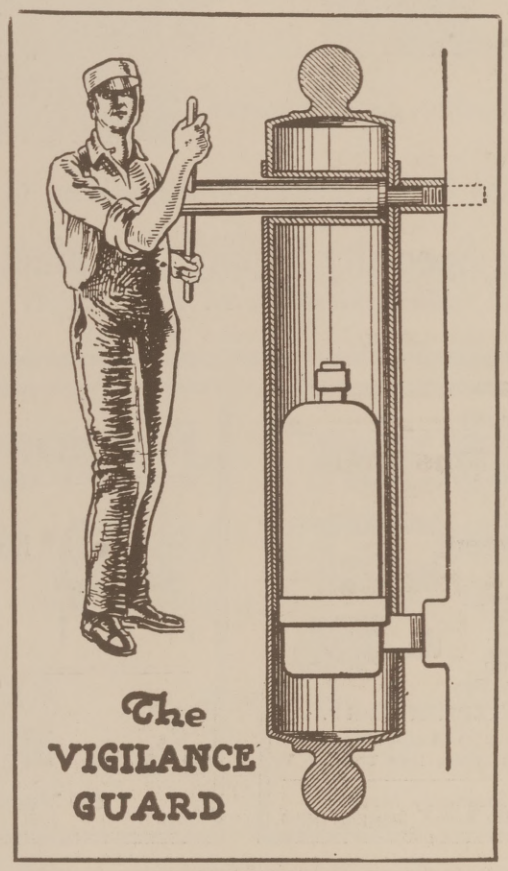
TRIM—COMPACT—STURDY—DEPENDABLE

Everything you could ask of any appliance, guaranteed to satisfy the most discriminate. The importance of the Rudy-Way Radiator Air Valve Protector, should urge the architect and builder to specify it, in every building programme.

You Know, thousands of dollars are needlessly lost each year because of defective radiator air valves—made so by imperfections, improper adjustments and removal by the mechanically inclined.

The Rudy-Way **Protector** is bought with full assurance that it costs nothing to operate, less to keep and will over-come existing contingencies predominating each season. Absolutely guaranteed to give satisfaction or money cheerfully refunded.

Its ever-lasting economy urges immediate consideration.



PATENTED

The Rudy-Way radiator air valve **Protector** is constructed of brass, **beautifully** nickel **plated, and** furnished complete with spacing collar, screw and key. It is absolutely guaranteed for quality of material, workmanship and finish. Ornamental as well as useful. Shipped ten to a carton.

The Rudy-Way radiator air valve Protector by completely encasing the valve and securely locking both to the **radiator,** immediately eliminates the annoyance, time, labor, damage, worry and replacement expense, which totals up to **a tidy sum** during a season. It is absolutely impossible to tamper with, or remove the valve from the radiator, without the proper **key** to the situation. Can be installed in five minutes—**Lox-Tite.** Satisfies the most discriminate.

An inquiry will bring our plan for the Architect and Builder, which is interesting.

Manufactured by

RUDY-WAY MFG. CO., Inc.

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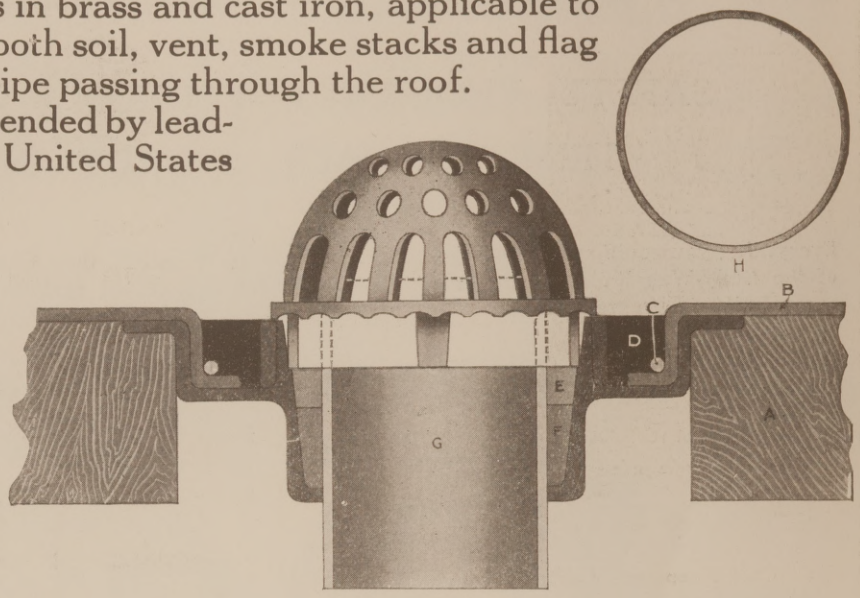
MODERN ROOF FLANGES

Made in all sizes in brass and cast iron, applicable to all pipe connections, both soil, vent, smoke stacks and flag poles or any type of pipe passing through the roof. Adopted and recommended by leading architects in the United States and Canada.

Special attention called to the expanding and bonding conditions above the roof. No complicated connections in attic or under ceilings. Attachments all made plain for operator.



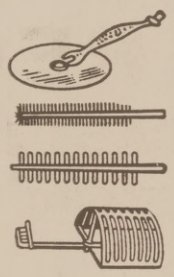
Write for Bulletin 29-A, descriptive of the full line, to the manufacturers

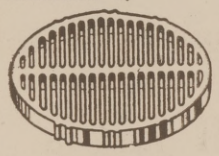
Mechanicsville Specialty Supply Manufacturing Company

Mechanicsville, N. Y., U. S. A.

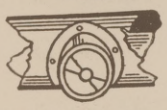
ORDER NOW Before the RUSH Begins! STOVES, RANGES, FURNACES, BOILERS, HEATERS AND REPAIRS

Repairs Furnished to fit any make of Stove, Range, Furnace, steam or hot water heater manufactured.





We also carry complete stock of all makes of Stoves, Ranges, Heaters, Boilers, Gas Ranges, Oil Stoves, Ovens, Etc.



STOVE REPAIR CORP.

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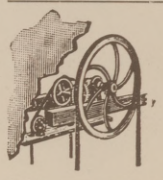
Cor. Beekman Street, New York, N. Y.

184 Mulberry Street
Near Lafayette Street, Newark, N. J.

Elevators and Dumbwaiters.



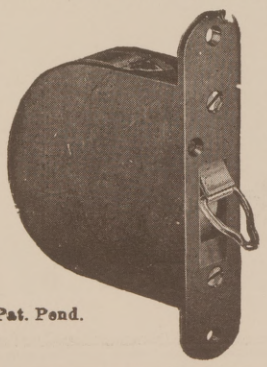
Invalid Lifts Sidewalk Lifts
Hand and Electric

Send for Bulletin 4-U—2

Storm Manufacturing Company

50 Vesey Street, Newark, N. J.

Caldwell Sash Balances Uniform Mortises



Pat. Pend.

For use in all classes of new work. Box frames unnecessary. Mortise cut at mill reduces cost of installing.
Counterbalance sashes perfectly unaffected by atmospheric conditions.
Cheapest method for modernizing old window, as alterations in sashes and frames are not necessary.

Have stood the test of service upwards of 33 years.

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CALDWELL MFG. CO.
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Be Sure You Handle Good Magnesite Stucco Manufactured by a Reputable Firm

Lately, there have been a great many people going around selling formulas to the dealers, which are supposed to be good formulas for making MAGNESITE STUCCO.
Beware of these, Mr. Dealer. Every contractor and architect knows good stucco and if he is "stung" once with his home made brand, he will, of course, turn his orders over to the dealer who handles a guaranteed stucco.
It takes years of experience, as well as a broad chemical knowledge to manufacture good MAGNESITE STUCCO.

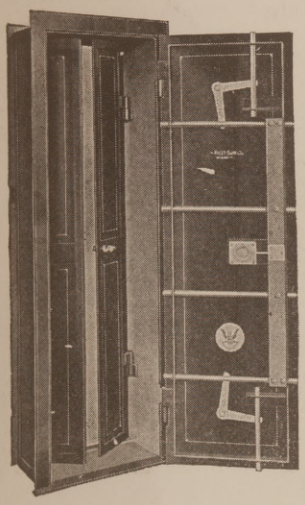
Watch your step Mr. Dealer.
"A word to the wise is sufficient"

F. E. SCHUNDLER

Magnesite for Stucco

JOLIET - ILLINOIS

The Hall's Safe Company



No. 1AA Fireproof Vault Door.
Wall Opening
79 High
32 Wide
20 Deep

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Vault Fronts — Vault Linings — Grills and Gates
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Fire Proof Safes—Burglar Proof Safes—Manganese
Safes with Hall's Key-Combination or Time Locks.
Finest Workmanship—Best Material and Finish

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This company maintains a department for co-operating with architects or clients in solving problems encountered in selecting and installing vaults.

Prices and estimates will be promptly furnished on application.

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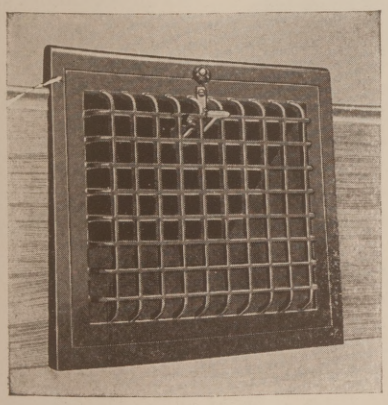
MADE OF CAST IRON

MORE DURABLE! WILL NOT RUST OUT! MORE SUBSTANTIAL!



Style B.

Walworth Registers will last a lifetime—will not rust or warp out of shape. Maximum capacity for a given size. A Register which will appeal to all who use it.

The Walworth Run Foundry Co.

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PARAMOUNT MORTAR COLORS
"WILL NEVER FADE"

IF given a square deal at mixing box. Use 100 lbs. per 1000 brick, and every job will be absolutely satisfactory.

Four colors—Chocolate, Buff, Black, Red.

The Lookout Paint Mfg. Co.
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STRUCTURAL IRON WORKS
FOUNDRY AND MACHINE SHOPS
GRAINGER & CO., Inc.
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Underground Garbage Receivers

The sanitary way to store garbage.

That filthy garbage pail shows up again this Spring. We have had fifteen years experience eliminating them. Thousands of satisfied customers appreciate the change.

Our truck will wheel your ash barrel up or down steps.

Our Spiral Truss Ash Barrel is lighter and stronger, a real investment.

Send for catalogue on each. Goods sold direct. Look for our Trade Marks.

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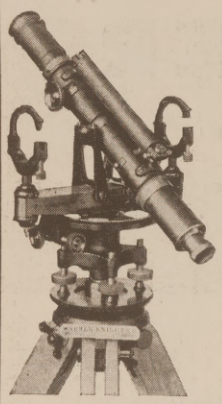

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Our new model No. 40
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is easily changed in ten seconds to the position shown. No detachable parts to get lost, no unsightly projections or obstructions preventing full view of level vial, and a vertical range of over 45°—a distinct step forward in instrument construction.

Direct from **Factory to You** means better service and value and but one profit.

Write **Today** for illustrated Folder S-2 with full description and details of our **Free Examination Offer** and Easy Payment Plan.

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Warren-Knight Co.
136 N. 12th St. Philadelphia

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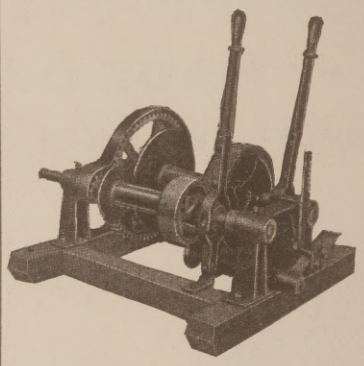
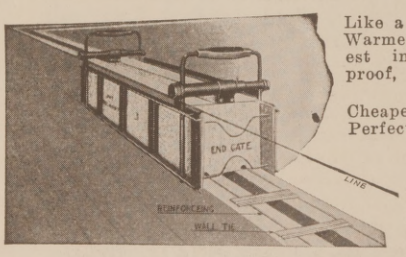


Nine different styles to choose from, including Single and Double Power Reversible. Capacity from 500 to 6,000 lbs. None superior, few equal our line.

Write for catalog and prices of Friction Clutch Pulleys or Friction Hoists.

The Brown Clutch Company
SANDUSKY, OHIO

Build the Hollow Wall Way



Like a thermos bottle—Warmest in winter, Coolest in summer, Fireproof, Everlasting.

Cheapest, best and most Perfect way known to the Building World.

The reason the most wall can be built for the least money with our forms is—because they are STRONGEST—LIGHTEST—SIMPLEST and most PERFECT and the price of a complete set can be saved on one small job.

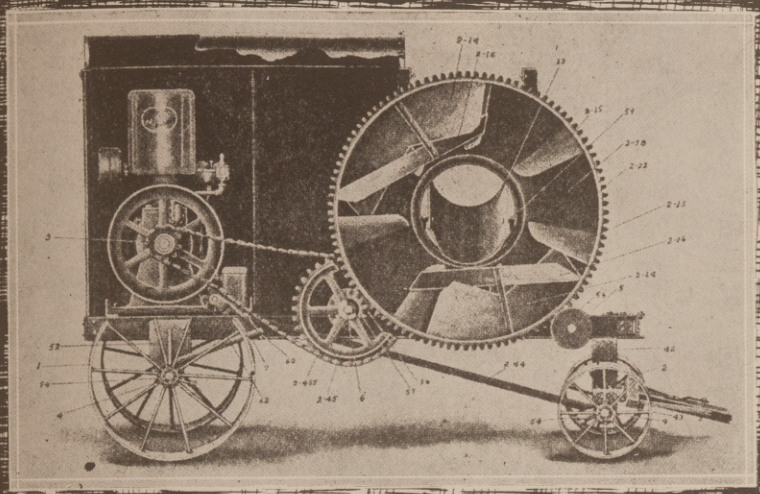
The Universal Cement Mold Co.
NORTH MILWAUKEE WISCONSIN

STRUCTURAL STEEL
ORNAMENTAL IRON
Snead Architectural Iron Works
LOUISVILLE, KY.
Plain or Fabricated Steel for Immediate Shipment.

Efficient Mixing
Plus Power Economy

Equals the

NEW WAY MIXER



You buy concrete mixers to mix concrete quicker and more thoroughly than you can in any other way. The New Way Mixing Action was designed to mix concrete thoroughly in the fastest possible time.

The Novo Engine is the most reliable and most widely used contractor's engine on the market. With a Novo your New Way will have continuous power with just reasonable care.

½ bag, 1 bag and 10 cu. ft. capacities.
The New Way comes equipped with all accessories. There are no extras to buy. Write for catalog and prices.

New Way Mfg. Co., Eau Claire, Wis.

Enameled Iron Water Closets

afford the plumbing trade a splendid opportunity for two different profits. At times sanitary improvements are delayed temporarily or forever by their seemingly high cost. In these cases suggest use of enameled iron hoppers and tanks for economical installations.

This method promotes the sale of Sanitary outfits to a big class of citizens who might feel unable at the time to pay for installation of higher grade fixtures.

Then when your customers have enjoyed these Sanitary conveniences you will be in splendid position to advance the sale of finer Sanitary appliances.

Jones Hollow Ware Co.
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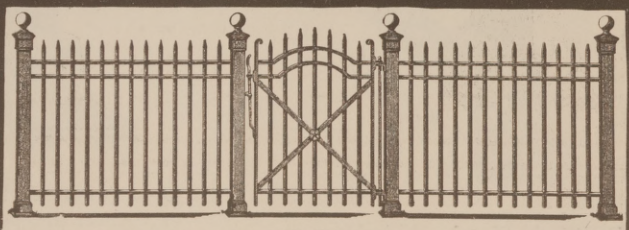
MEMBERS THE NATIONAL TRADE INFORMATION BUREAU OF THE PLUMBING AND HEATING INDUSTRY

Stewarts IRON FENCE

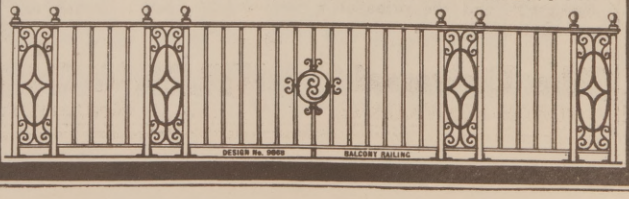
STANDARD OF THE WORLD



DESIGNS for every purpose—
town houses, suburban homes, country estates, cottages, cemeteries, cemetery lots, school grounds, factories and all other purposes where a neat and substantial fence is required. Send for catalogue.

We also manufacture Balcony Railing, Grilles, Wire and Iron Window Guards, Wire Partitions and Folding Gates.

The Stewart Iron Works Co., Inc.
241 Stewart Block, CINCINNATI, OHIO
"The World's Greatest Iron Fence Builders"



Fiberlic
WALL BOARD

The *material* from which it is made, the fact that the pulp is *chemically cleansed* and that the *fibre lengths* give the finished product that *natural reinforcement* that is lacking in ground wood boards, is in itself a guarantee of the superiority of Fiberlic for *strong, permanent* and *sanitary construction.*

ATLANTA JOBBERS
Crumley-Sharp Hardware Co.,
47-55 Walton Street. 26-28 Fairlie Street.

MANUFACTURERS
MacAndrews & Forbes Company
200 Fifth Avenue, New York City.
Mills: Camden, New Jersey.

A NEW SASH CORD FASTENER
Superlative Grip Coupler

Lower Cost—Better Job—Less Cord—No Knots—Neater—Easily Attached—Perfect Adjustment.

Approved by the leading architects and builders. No change in groove or boring on sash necessary. Replaces the knots and saves labor.

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31 Dartmouth St., Rochester, N. Y.
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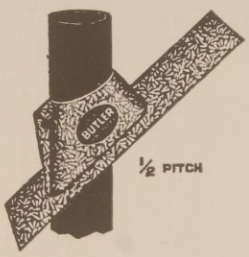

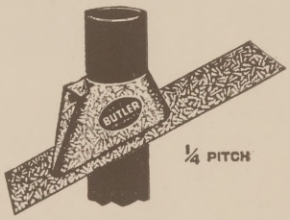

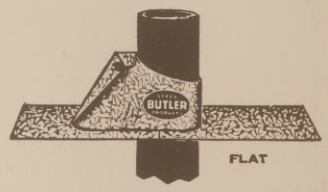

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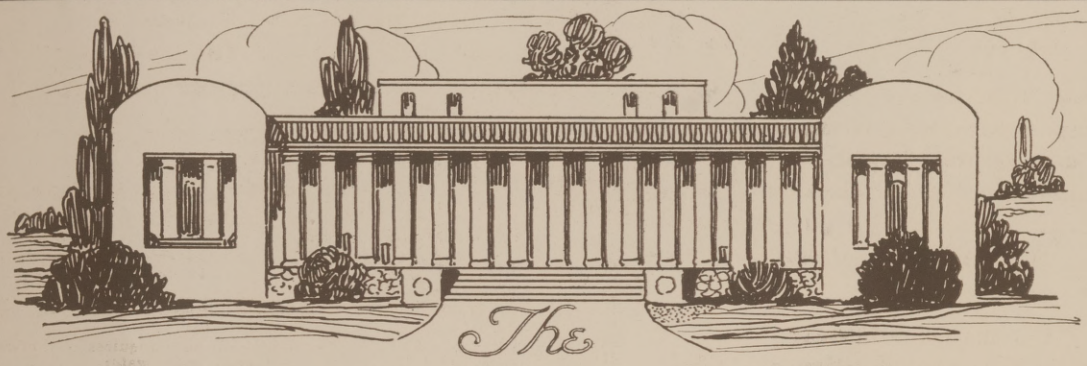

The SOVTHERN ARCHITECT AND BVILDING NEWS

Construction *Landscape*

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A Picturesque Garden of Classical Beauty.

SOVTHERN ARCHITECT & BVILDING NEWS

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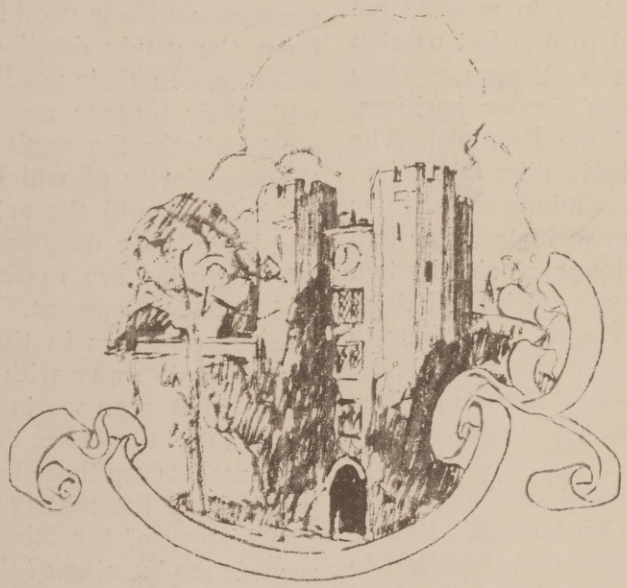


Church Building in England

Part I.

By William Ward Watkin, M. A. I. A.

WE would wander back inti the period particularly of the 13th and 14th centuries, when England was intensively active in church building, into a period of great progresssive art. The church building of the Gothic period in England is one of the richest fields of expression of the intimate artistic genius, finding abundant means to create significant and treasured form and fabric. Its simple, heavy rural churches seem to sleep amid the historic England of their church yards, while in every city, town and hamlet its towers and spires give to the England of today the artist's distinctive memorial of a civilization which grew to manhood in the shadows of Christian influence and effort.

Throughout eleven centuries, from the 4th to the 15th century, the architecture of Western Europe was almost in its entirety a Christian architecture, expressing itself in the building of the church. Gothic art, the culminating art of this period, was the slow and gradual development of these centuries of Christian effort. When in the 12th century, it burst from the meagerness and clumsiness of its earlier efforts an dfound its way, by rapid strides, to the marvelous development of the 13th century in France, it was after a course in which every stage of architectural development, from the meanest, had been tested, and the deep principals of building, step by step, mastered. The art of Rome has been assimilated and re-achieved in a spirit full of the character of the people of Western Europe, and in the spirit of Christianity.

In this period the elements of Gothic architecture are developed. Architecture must have for its problem, if it is to be great architecture, a purpose which is permanent. The idea of temporariness, the idea of passing fashion, or the loss of usefulness take from architecturt take zest and its inspiration to achieve, therefore

the age which is commercial, changing and restless develops a less vital art, for it has forsaken the altar fires of a truer worship, and passes into history poor in monuments for the guidance and emulation of posterity.

If we were to begin in the 13th century to explain Gothic form, we would find ourselves going back step by step to the 4th century. Therefore, let us build upward rather than to analyze the Gothic plan in its completed form. Let us step back to Rome and the Roman Forum. Here there are two distinct types of Roman basilicas, the civil gathering halls of the Romans. The first is best exemplified in the Basilica of Trajan, built in 114 A. D. It form was a long rectangular building, consisting of a central rectangular hall of great size and surrounded on each side by two aisles. These aisles were of two stories in height. The great central space was open from floor to roof. The roof was of wood, supported by trusses. It was from this type of Roman basilica that the early Christians adapted their earliest basilician churches in Rome.

The second type of Roman basilica is represented by the Basilica of Constantine. It consisted of a building of dimensions similar to those of the Basilica of Trajan, but here the great central space was covered with four part vault of masonry supported on enormous piers. This was essentially a permanent form, whereas the wooden roofed type was a temporary form. Right here in this distinction, we have the great structural problem of the period from the 4th to the 13th century, the real problem o fall medieval art, the slow, gradual growth of a construc tive ability, capable of covering of the basilica plan with permanent stone vaults for its roof.

In the year 313 A. D., Constantine, by an imperial edict, tolerated the Christian religion in the Roman Empire. Whereas, prior to this Christianity had no voice in the building of Rome, it now takes a place, which it occupied for centuries, of dictating the arts of building throughout all Italy. Within comparatively few years, we have the building of the tremendous early basilicas of St. Peters, St. Pauls without the walls, St. Johns and St. Clement. It was an age of decline in the Roman arts of building, yet still there remained sufficient workmanship to execute th arcades of the Christian basilicas in creditable Roman detail. In old St. Peters, we have a form similiar to the Trajan Basilica, the long rectangular space forming the central aisle becomes the nave. On either side of it two aisles, to the west end of the nave, an open cloistered court or apse, and in the front of which was the high altar. The vast church was covered throughout with plain roofs of wood on wooden trusses. It is entirely natural that the early Roman Christians, seeking places for their enormous congregations should chooose from existing types of Roman building, a form similiar in dimension, and most easily adaptable for the purpose of their gatherings. The early church in Rome is therefore, by a great similiarity to the Roman civil basilica, except that its exterior, because of moderate means, is of a simple and homlier expression, which is good in so far as it turns away from the gaudy detail of the late Roman civil building. In their need for large churches, and with their meager means, the early Christians omit entirely the vault of the Roman basilica, the superiority of which type apparently was not related until the arts and artisans of Rome had completely disappeared. The 6th, 7th and 8th centuries are marked with small progress and littlt development. The misfortune of these inactive centuries in the West was that it suggested to do away with the last traces of the guilds of Roman workmen. The Christian barbarians are, therefore, the builders of the church, their models are those buildings of anicent Rome, particularly the massive ruins of the Forum. The history of the 7th, 8th and 9th centuries records the burning of the wooden roofs of many of the early churches, therefore, by the 9th century Christian builders are striving to lead to the basilica having a stone roof, as in the old Basilica of Contsantine, in San Vitale at Ravenna, and in the luxuriant cathedral of Justinian at Byzantium. In their unlearned skill, their churches became crude, heavy and dark. Their walls were enormously thick, their roofs low barrels of stone. There are many types crudely built in these ages, but among the earliest to comprehend the Roman arts in any credible degree are the Lombard churches of Northern Italy in the 10th and 11th centuries. These churches, as in San Ambrogio in Milan are on the basilician plan; the nave with its single aisle on either side; the apsidal and the transepts in a reasonable development in the court of the atrium. On the interior the Roman vaults are low, and their dimensions are small as compared with the ancient Roman Basilica, but the art of vault building has been mastered to a considerable degree and a semblance of Roman dignity has been obtained. On its exterior, the Lobard Church is homely and lacking in inspiration. It is heavy, crude, and pierced with small round arched openings. The period in which these, and all of the periods from the 7th to the 12th century, are embraced in the Romanesque, so named because its art is after the manner of the Roman. It is an art of rude but sincere people trying to grsp the mastering of materials as that mastering had been known to the Romans. Throughout Northern Italy,

(Continued on page 70)

Moreland Courts, Cleveland—An Interesting Community Project

Work on the first Group, North Moreland Court or North Shaker Apartments, Now Under Way Involves Expenditure of About Three and a Half Million Dollars

An apartment house development of uncommon interest is now being undertaken in the city of Cleveland, Ohio. Through the kindness of Mr. J. L. Hunting, of the Hunting Construction Company of that city, we are able to give a brief account of the whole plan and to present the accompanying illustrations.

The project as a whole is a very ambitious one —nothing less than to erect groups of buildings as attractive dwelling places for a thousand families and to provide for these families such conveniences and luxuries as shops, market house, garages, theater and central plant for heating and refrigeration.

The land acquired for carrying out this plan lies between Moreland Circle and Coventry Road and affords aboupt a mile and a half of frontage, chiefly on Shaker Boulevard and South Moreland Boulevard. The property is well removed from the business part of the city and yet the Cleveland Public Square is near enough to reach within nineteen minutes' running rapid transit line. line.

The architect for the Morelands Courts development is Mr. Alfred W. Harris.

The drawings presented indicate well how the monotony that usually spoils the effect of any long continuous row of buildings has been avoided by the use of forecourts of unequal depth; by a broken skyline resulting from the different heights of the units and the forms of the roof; and by varying the architectural style and treatment of adjacent units.

Some difficulty is naturally to be anticipated as a result of using various styles, but so far as may be judged from the drawings available, the architect has succeeded in getting a certain unity of design by adopting what may be described in a general way as an American adaption of English Gothic and Tudor. Pains have been taken to differentiate the main entrances to the separate units as is well shown by the clever drawings reproduced.

The group of these buildings called North Shaker Apartments or North Moreland Court is now under construction. The steam shovel excavation work for the group has all been completed. Work on the reinforced concrete foundation walls is well advanced; in fact, is reported as accomplished for 60 per cent of the units. Steel frame erection began July 14 and is scheduled to be finished by November 1. The installation of the reinforced concrete floor system is planned for commencement before this month ends, and of the exterior stone and brick work for early Fall.

This group is to consist of eleven different buildings or units—two of eight stories, two of six stories and seven of four stories each.

The subdivision of these units will provide over two hundred suites of apartments—fifty of nine or ten rooms each, and the remainder of four and six rooms.

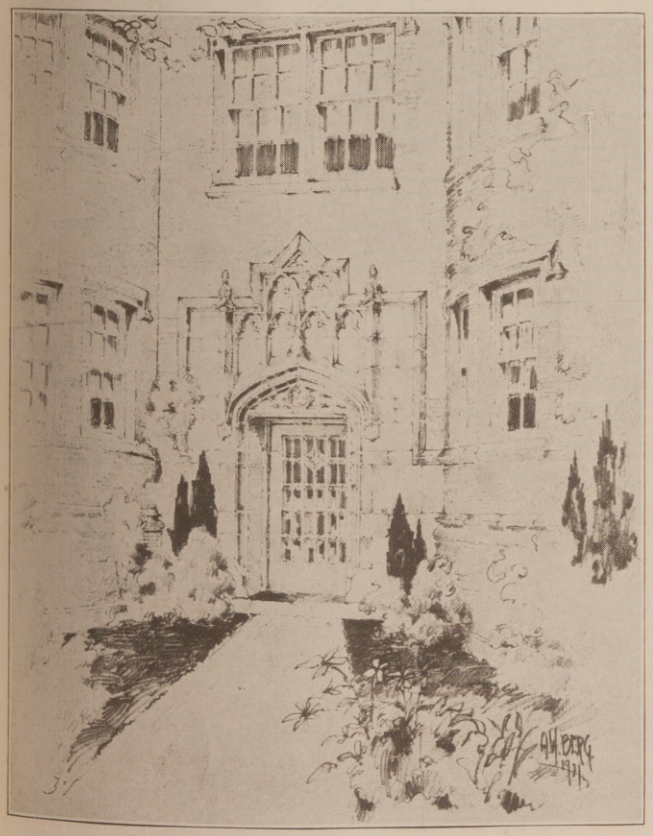
The building will be framed of steel, with foundations and exterior walls below grade of concrete. All steel work will be fireproofed with concrete. The floors will be reinforced concrete. The exterior walls above grade will be generally of Bokhara face brick with trimming in Indiana limestone. The roofs will be tile-covered.

The interior partitions will be of gypsum block, plastered. The interior trim is to be of wood. The living rooms will have wood floors, their plaster walls to be covered with canvas and painted. Toilet and bathroom floors and wainscoting will be of tile.

A central plant built at some distance away from the apartments will furnish steam for heating and provide refrigeration. Electric current for light and power will be purchased from an outside source.

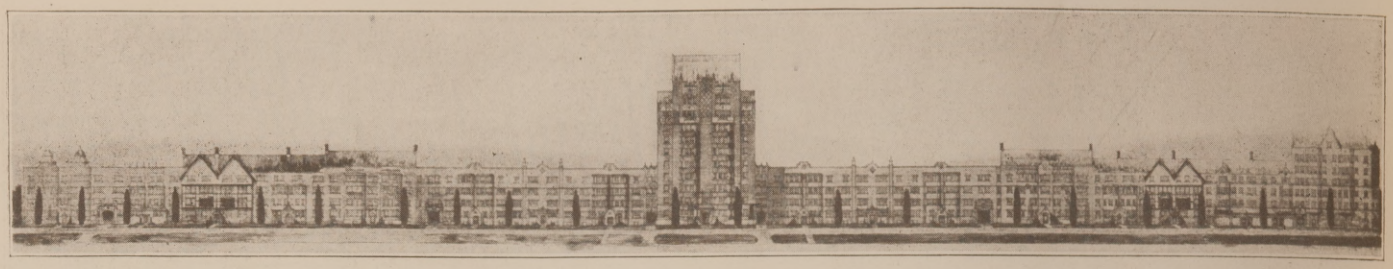
The taller buildings, those having six and eight stories, will each be equipped with elevators for passenger and freight service.

Perspective drawing of the ten-story apartment building that will be the central feature of South Moreland Court, construction of which is planned shortly to follow that of the north side building.



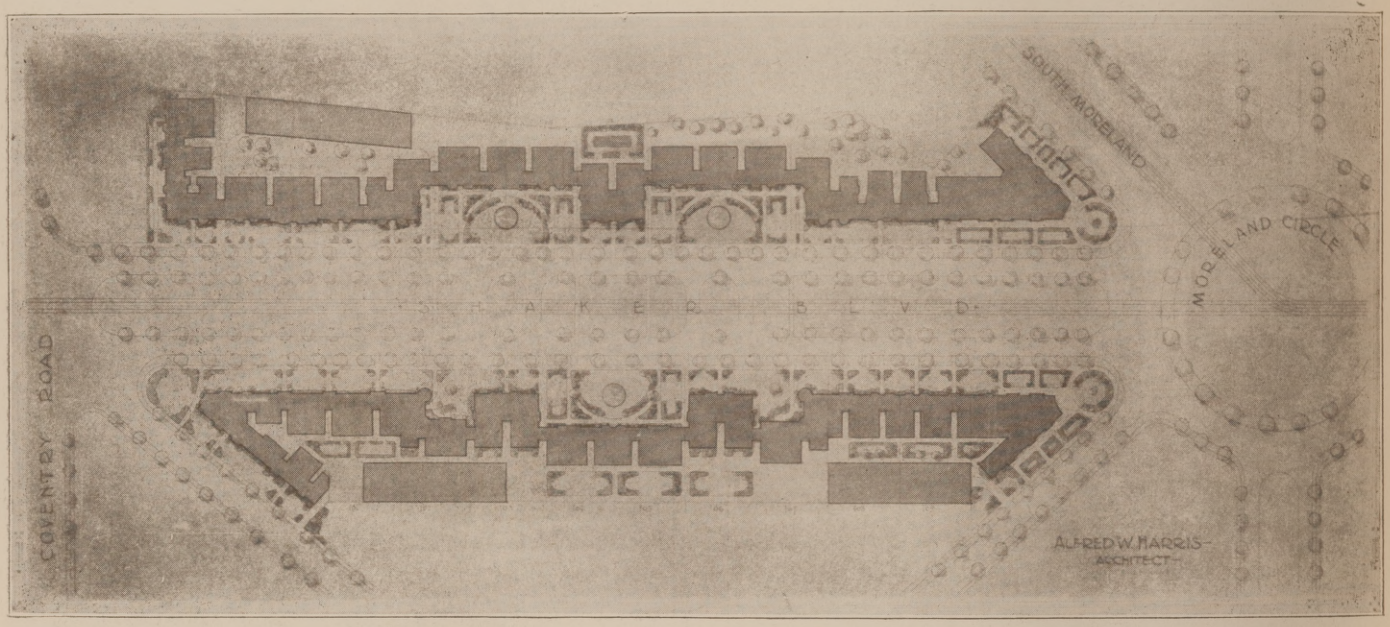
MORELAND COURTS, CLEVELAND, OHIO

Sketches illustrating the varied designs for the entrance doorways to the different buildings of the group.



ELEVATION OF SOUTH MORELAND COURT GROUP

The central building of this group is illustrated by the large scale perspective on page 28.



GENERAL PLAN OF MORELAND COURTS, CLEVELAND, OHIO

The plan is drawn with the south side uppermost. The lower group building, extending along the north side of Shaker Boulevard, is the one now being constructed. This is called North Moreland Court, or North Shaker Apartments. It is divided into elecen separate units—two of eight stories each, and two of six stories and seven of four stories. These are subdivided into over two hundred separate suites. The length of the foundations for the group approximate sthirteen hundred feet.

ELEVATION OF NORTH MORELAND COURT GROUP

One of the high buildings of this group is illustrated by the large scale perspective on page 31.

Perspecti-e drawing of one of the eight-story apartment bui ldings that form the most prominent feature of North Moreland Court, now under construction on the north side of Shaker Boulevard.

Cuts Courtesy Building and Building Management.

The Residence of
Mr. Jas. F. Hoey
Wilmington, Del.

The residence of Mr. James F. Hoey, in Wilmington, Delaware, in its outward appearance at least, represents a typically agreeable modern house. It is true a few Colonial features have been incorporated into the design, such as the semicircular hoods over the dormers and of the classic portico protecting the immediate approach to the front doorway.

The Residence of
Mr. James F. Hoey
Wilmington, Del.

But even these have been given an appropriately modern aspect in the general treatment. The building materials used are tapestry brick with marble insets and white enameled wood finish, upon a blocked stone foundation. This foundation extends out at the first floor line to form a wide marble edged terrace around three sides of the house. On the right side it is partly covered by a porch, the railed roof of which is supported at the four corners by square brick pillars with inner columns of the Colonial order.

The Colonial period, as adopted to present day standards and requirements, also

provides the dominant **motif** of the interior. It is conventionally introduced in the large entrance hall with its high wainscoting, substantial door frames and narrow cornices, all finished with bevelled hand work of customary Colonial simplicity. The same characteristic fidelity to period is classically visible in the stairway with its balustrade of slender white enameled spindles and mahogany hand rail forming a spiral around the newel post which is supported upon winding steps at the foot of the flight. Conforming effectively with the architectural finish is the old fashioned landscape wallpaper; the Colonial straight backed chairs; the lamp stand and the subduedly tinted Turkestan rugs upon the polished floor.

In the dining-room the contemporary era of the Italian renaissance is represented in the sumptuously carved massive claw footed furniture, the rich hues of the floor coverings, the Florentine urns that serve as flower pots and—above all—the Roman arch with its four sided bevelled columns, which frames the row of bay windows with lace like iron grille protecting the glass panels. As the house has been recently built, the grounds are still in a state of immaturity. As far as developed, however, they show a landscape design in delighful harmony with it. The high terrace, built up several feet above the street level for the site of the dwelling, is already an evensweep of velvety sod, interspersed with conventional shrubs and promising young shade trees. Guarding the paved walk leading from the front of the house over the terrace to the street is a double row of sturdy box bushes whose trimly clipped shapes provide the Colonial note in the essentially modern environment for connecting architectural and landscape designs into perfect union.

The Residence of
Mr. James F. Hoey
Wilmington, Del.

City Building; A New Art

By William S. Glenn, President of the Carolina National Bank of Spartanburg.

FAIRFAX HARRISON, President of the Southern Railway, and William S. Glenn, President of the Carolina National Bank, of Spantanburg, were the principal speakers recently at the regular luncohon of the Rotary Club.

Mr. Glenn, who is chairman of City Park Commission, spoke interestingly of city building, as a species of city boosting that is extremely worth while. He outlined some practical ideas that must be embodied in every practical scheme of converting an unattractive town into a town both beautiful and capable of taking care of continued expansion.

Taking as his subject "City Building: A New Art," Mr. Glenn said:

City planning is city boosting worth while. So much is said thoughtlessly and lightly spoken to inspire deeds that I may be excused on such short notice for using prepared notes.

I once heard a saying that was attributed to the great English poet, Alfred Tennyson. Whether he was really author of the sentiment or not I shall leave to my literary friend, Dr. Fike. I am concerned here only with the apparent truth of the saying and not with the question of who may be the author. It is this:

God made the country, and man made the town,
But the devil made the little country town.

That's poetry, Dr. Fike says; but there is more truth than poetry in it if we just get down to the bottom of it.

For isn't it a fact that most towns simply grow up according to the scraps and bickerings and tradings of the owners of the real estate in those towns? And are not these bickerings and schemings usually the work of the devil? That being the case, it is true that most of our towns have been made by the devil, and devilish monstrous things most of them are from the standpoint of either convenience or appearance.

But a new dispensation has come upon many cities of America in the matter of their growth and development. A number of our towns, some large and some small have decided to take the matter of their future development out of the hands of the devil and to place it in the hands of men—men who have made a study of the subject, and who are prepared to give intelligent and helpful direction to the normal growth of the American city. The most astonishing thing about this development in city building is that it has been so long delayed and the next most surprising thing about it is that many people oppose all efforts in this direction even at this late day.

Of course the ideal way to build a city is to lay it out from the beginning along those well defined lines which the experience of the past to those who have learned the lessons of that experience, has shown to be both practical and attractive. Only two cities in the United States have been built along such lines and I think George Washington's planning of the beautiful city which bears his name was not the least important service rendered by him to the American people. Certainly every one knows that Washington is our most beautiful city and its beauty lies altogether in its plan, for it is located on territory that is entirely without natural beauty. Savannah, though surrounded for miles by sand and swamps, stands as a monument to the vision of Oglethorpe, its planner.

The greatest city planner in the United States has said that for many years he longed for the opportunity that was given to Washington and Oglethorpe—the opportunity to lay out and plan an American city from its very beginnings, according to those ideas he has gathered from a life time study of city building. Until very recently, he scarcely hoped for such an opportunity actually to materialize, but it has really come to him. And, strange as it may seem to some of us, that opportunity has come to John Nolen because the haphazard growth of one of the leading cities of the United States has rendered vast property holdings in that city unprofitable, and the owners of this property have decided to establish a city along rational lines, not as a philanthropy or as a fad, but as an investment which they believe will yield them better returns than they have been receiving from their property in the heart of Cincinnati, where congested, crooked, crowded streets have reached the maximum of usefulness and yet can not be improved or extended. The general plan of this new city, Mariemont by name, covers a tract of about 365 acres, nine miles from Cincinnati and provides for a town with its village green, stores, railroads, school sites, playgrounds, parks churches and homes, all arranged in such a way that there is complete harmony of plan. The church, the garage, the filling station, the store, the motion picture house,

(*Continued on page* 82)

Architect: Henry Hornsbostel. Contractor: Arthur Tufts Co. Tile Contractor: Carmichael Co

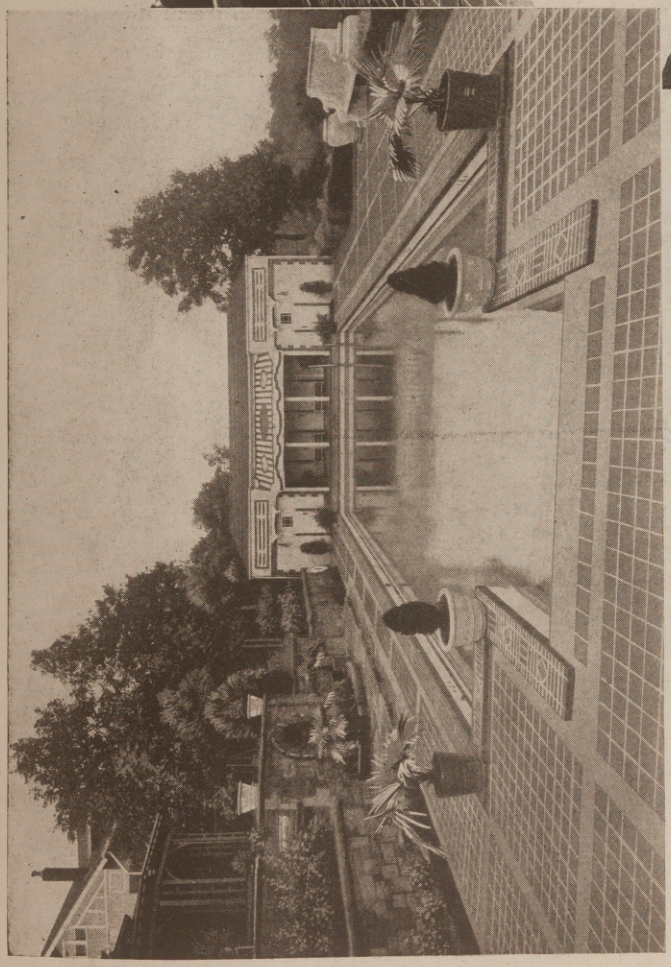
View of Beautiful Druid Hills Residence. Atlanta, Ga., showing the pleasing effect of the tile terrace.

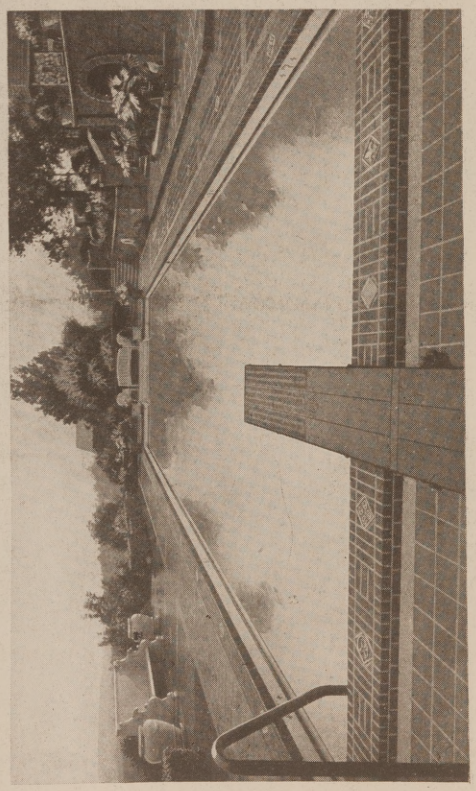
Architect: Henry Hornsbostel. Contractor: Arthur Tufts Co. Tile Contractor, Carmichael Co.

Views showing Sun Parlor, Terrace and Walk, demonstrating the effectiveness of tile in the architectural scheme.

Druid Hills Residence, Atlanta.

Architect R. S. Pringle. Contractors Donaldson & Pierson.

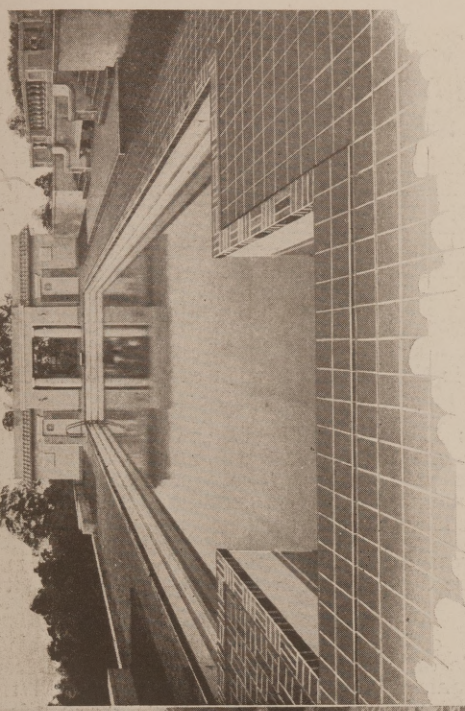




Architects: Warren, Knight & Davis.

Swimming Pool at Birmingham, Ala., Residence.

Cuts Courtesy B. Mifflin Hood Brick Co., Blosser-Williams Co.



Tile Contractor: Wimberly Thomas Hardware Co.

Swimming Pool at Birmingham, Ala., Residence.

The Residence of Miss Myra Hazard

Corinth, Mississippi

THE SOUL OF A HOUSE

By De Long Rice.

How true these wonderful words of Lamartine, the great analyst of the heart:

> "A sail on the sea, or a ruin on an acclivity make the whole picture.
> Earth is the scene; for the eye, thought—action—life, lie in the traces of men."

Every beautiful landscape charms the eye, and thrills the heart; but only when a fence embraces the meadow, or a bridge spans the stream, or a roof gleams in the grove, do the fields and the waters and the woods become things of life and purpose. In the uncut wilderness we feel a transporting ecstacy, and yet the charm is as mysterious as that which comes to us from the far off stars; but if we chance upon a cabin in some vast of trees, we thrill with the presence of the humble kinship of clay, and feel the warm clasp of the tie that binds like to like from angels to microbes.

A column of blue smoke ascending to meet the clouds is the finishing touch of the artist's dream; and the sound of a human footfall sets the solitude to music.

The dwelling-house, and not the office nor the shop, is the center of civilization. Where man eats his breakfast and lights his morning pipe—where woman carries the keys to the pantry, and where children are taught to pray, is the fountain of government, and the birth-place of law. The court house, the forum, the assembly hall and the pulpit are but the show places of the mental and moral products of the home, the true unit of Nations, from which all glory and all misery must be calculated.

A house, no less than a painting or a statue, may express character. Doors and windows may smile or frown; features of wood or stone may reflect the soul of the dweller, or even more—the very spirit of a civilization.

The mansion of the "Old South," white-columned, rose embowered—flanked with the melody and the humor and the tragedy of slave cabins, like the feudal castle of the old world, has disappeared from the earth, and, with the spacious lawn and broad veranda of that vanished era, as with the tower and the moat and the draw-bridge, have passed romance and sentiment and beauty upon which the literature of a thousand years may rest its pillars.

The Soul of a House

By De Long Rice

The Residence of Miss Myra Hazard

Corinth, Miss.

The house here pictured, while of a later and more progressive and practical era, stands in the very heart of the South of romantic and picturesque memories—on the edge of the thriving city of Corinth, Miss. Indeed, the spirit of that vanished South still lingers within the gates and doors of this mansion of the age of gold; and its whole expression reflects the finer and less frivolous hospitality of a day that is gone.

The oaks that shade its lawn have fought and whipped the storms of a century, and history, tradition and legend have woven their stories of fact and fancy and fable around and over its plat of ground.

The Mound Builders of five hundred years ago must have passed under the oak grandfathers of these trees, on their journey to the nearby Tennessee River Country, where stand, in silent mystery, their unlettered, eternal monuments of earth.

Incidentally, though unidentified, the spot here shown is in every great library of the world, for Corinth is the gateway to the battle field of Shiloh, and the dim spring shadows of this grove, nearly sixty years ago, fell, in turn, upon the gray host of Albert Sidney Johnston and the blue legions of Grant.

The Soul of a House

By De Long Rice

This home is the property of Miss Myra Hazard, one of the most cultured and widely traveled young women of her State. Like her modern house, with its grand air of long gone habitues, though she is of the life and progress and youthfulness of today, hers are the gentle ways and the broad hospitality handed down from another and less sordid age.

Perhaps no home in all the Southland has retained more delightfully the soul of the past, than is sheltered in this house. The wierd melodies of the slave cabin are gone from its environs, but the mockingbird keeps atune his leafy lair with unreconstructed song.

In the commodious garage is, of course, an automobile, the great essential of the new day —power without muscle. and speed without limb or wing or breath of life—cold and silent in repose; yet ever ready for the electric touch of energy. But stabled under the same roof with this unromantic organism of iron, is a saddle-horse, as proud-headed and graceful and spirited as the steeds now cantering away on the phantom roads of song and story—those bay and sorrel aristocrats of the blue-grass hills, that carried the belles and beaux of Dixie over the sweet-scented lanes of the long ago.

The facts as to how Miss Hazard came to be the mistress of this mansion involve a beautiful story of brotherly love and devotion. She was born to the companionship of a wonderful brother. If George A. Hazard, Vice President of the First National Bank of Corinth, Miss. had chosen to cast his lot in some great financial center of the country, he could have been a money king, for his is the golden touch. He does not possess that kind of genius which seeks the small advantage and capitalizes misery. His vision is broad and clear, and he knows the ephemeral habits of opportunity. His thought and his labors have been given to the welfare of his business, and to the happiness of his sister.

Since the days of her childhood when she was bereft of the loving care and protection of mother and father, this busy brother had humored her lonely whims, and sought to gratify her every wish; so when she expressed a desire for this palatial home, it was the same to him as when, in the years gone by, she had asked him for some painted toy. On a Christmas morning not many years ago, he played the super-Santa Claus, with a "Deed of Conveyance," and this grand estate became the property of the "said Myra Hazard, to have and to hold forever, with all the appurtenances and hereditaments thereunto belonging."

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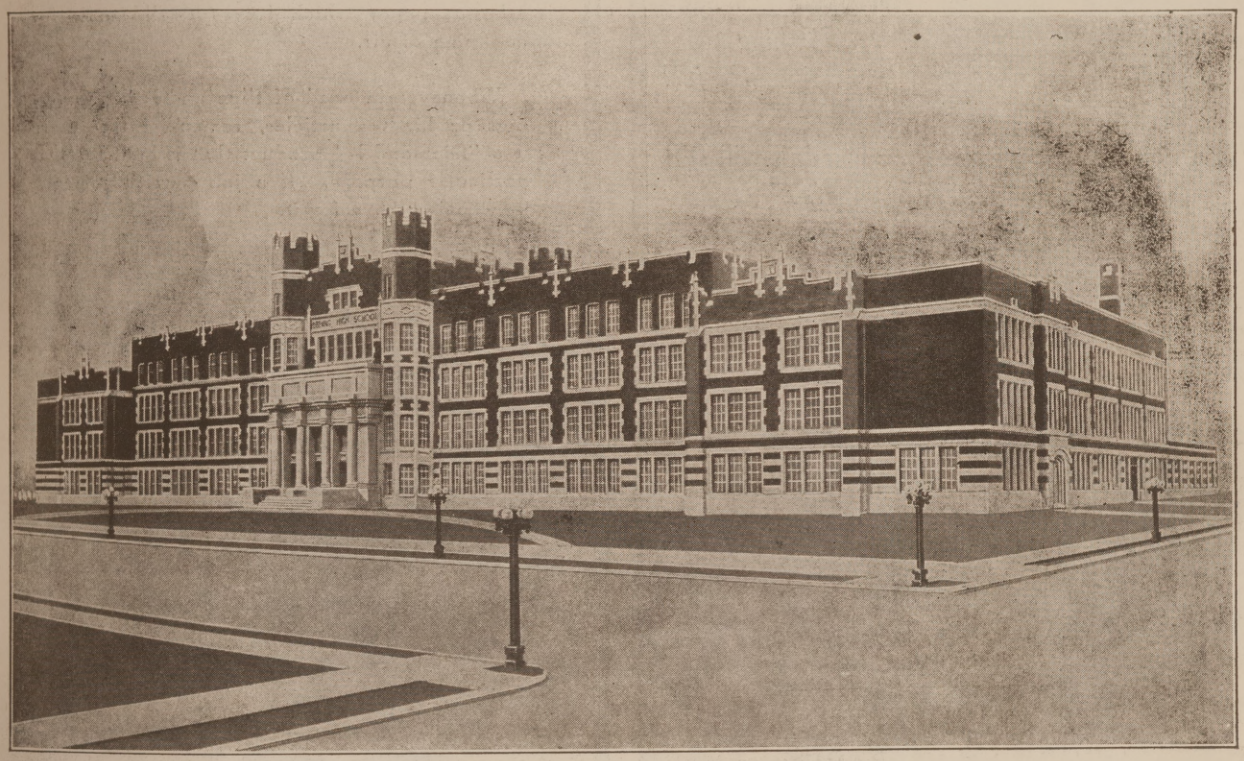

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Mahomet High School, Mahomet, Ill.
Kewatin High School, Kewatin, Minn.
New Castle High School, New Castle, Pa.
Ward Grade School, Ranger, Tex.
Sandwich High School, Sandwich, Ill.
Christian College, Columbia, Ma.
Broadview Grade School, Garfield Hts., O.
Mobridge High School, Mobridge, S. D.
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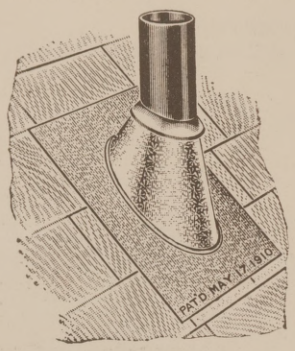

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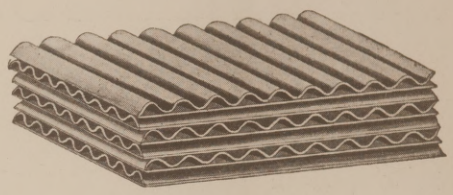

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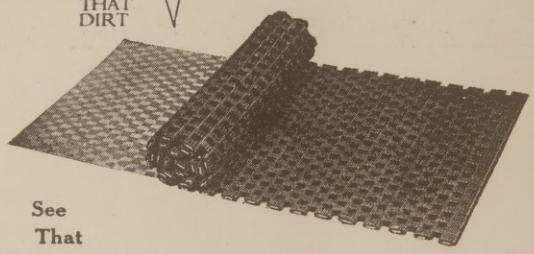

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Editorial Comment

The Southern Architect and Building News

Southern Architect and Contractor, Atlanta, Ga., and Southern Building News, Memphis, Tenn., and Southern Building Record, Nashville, Tenn., Consolidated.

Entered as second-class matter May 27th, 1911, at the Post Office at Dalton, Ga., under the act of March 3d, 1879.

This paper is issued and mailed from our printing house at Dalton, Ga. Business office, Atlanta, Ga. All letters should be addressed to the Atlanta office.

Price $2.00 Per Year.

TO OUR ADVERTISERS

Our advertisers are requested to have copy and cuts for changes for advertisements in this office not later than the 5th, preceding the month of publication.

☛ *We cannot be responsible for changes not made, when copy and cuts are received later, or submit proof.*

International Chamber of Commerce.

The Second General Meeting of the International Chamber of Commerce will be held in Rome, Italy, March 18-24, inclusive, 1923.

The present indications are that there will be from two to three hundred American business men in attendance at this meeting. This is significant.

The American Section of the International Chamber is desirous of creating a broader interest in international affairs and to this end invitations have been extended to chambers of commerce and trade organizations in the United States to participate in the Rome meeting. Invitations have also been sent to a large number of business men throughout the country.

There are today many international problems of vital importance to business men of the United States. Although the program for the Rome Meeting has not yet been announced, the more pressing of these will find a place on the addenda.

In line with the desire of the American Section to broaden interest in international affairs, plans have been made whereby those who attend the Rome Meeting may have an opportunity to study commercial and economic conditions in the Mediterrannean countries, the Near East, and Western Europe. Information regarding this cruise and tour you may have by writing Mr. Lacey C. Zapf, Secretary American Section, Mills Bldg., Washington, D. C.

Architects who would keep abreast with present conditions as to adequacy of wiring, should learn just what those conditions are, impress them on their clients and urge the importance of adequate wiring. Not so many years ago, the lighting load alone was considered and many present codes are based on old practice.

As an instance of new conditions arising from the introduction by tenants of many electrical accessories, a recent survey of a modern apartment house is a case in point. Of the larger utilities,

ANNOUNCEMENT

In the November issue we will deviate from our regular editorial policy in order to publish what we think will be one of the most interesting features ever published in this magazine.

The November issue will contain a review of the Semi-Annual Survey of building and construction in the South. This Survey has been issued by the G. L. Miller Co., of Atlanta.

We sincerely hope that you will find this information of interest as well as of value.

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such as portable vacuum cleaners, electrical stoves and flat irons, there was a total of 157, and in addition to this, each family had installed the many different varieties of dining table and toilet electrical appliances.

In the bill rendered for electrical current, the appliance load was 37.2 per cent., the power load 34.4 per cent. and the lighting load only 28.4 per cent. of the total. As will be seen, the lighting load was but a small fraction in excess of one-quarter of the total, while the appliance load was almost two-fifths of the entire load.

TO VISUALIZE PREVENTION.

One of the biggest features of National Fire Prevention Week will be National Fire Prevention Exposition to be held beginning October 2 in New York. This exposition, endorsed by the National Association of Insurance Agents, the National Board of Fire Underwriters and other associations interested in educating the public to the comon hazards and their elimination and in fire-retarding and fire-fighting devices and fire resistive materials, has also been endorsed by Mr. W. W. Orr, assistant secretary of the National Association of Credit Men and who is in charge of that big organization.

Immediately following the meeting of the conferees on fire prevention in Washington, July 12, there was held a meeting of various organizations at which meeting Mr. E. A. MacKinnon, vice-president of the General Expositions Company, which will put on the exposition, explained its purpose and scope.

The great possibilities of the exposition, both as an educational feature and as a means of obtaining national fire prevention publicity, were seen by the men attending this meeting and their endorsement was unanimous.

There will be displays of modern fire apparatus, of fire extinguishers of all kinds, of safety devices, fire-safe building materials and other appliances of interest to factory superintendents, managers and executives; business men; fire department officials; municipal authorities, and the public generally.

Plans are also being laid to have outdoor demonstrations, fire drills by children, tests of fire apparatus, contests between modern and old fire engines and other spectacular features.

It is conceded by those who have discussed the exposition that it should be productive of great good, especially if different days be set aside for special events, such as Children's Day, Governors' Day, Industrial Day, etc.

At the exposition will also be started a movement to form a National Junior Fire Brigade of boys who will aid in every way they can in suppressing and preventing fires.

"ARCHITECTURE APPEALING TO YOUNG MEN," SAYS INTERNATIONAL EXPERT.

"The people of the United States have never been quite as ready to listen to the architect as they are today. This is particularly true of industrial America. Industry has grown out of its swaddling clothes, and thinks seriously of attractive premises as a business asset. Mere bulk no longer satisfies the ambition of commercial enterprise."

This is the view of Frank J. Helme, noted international architect, who expresses the opinion that architecture never offered so desirable a career to the young man who is planning his future as it does today. He says:

"The youth of the country are finding architecture an attractive profession. The architect has come to be quite as much a building expert and contractor as he is an architect. He must posess an ability to serve industry that is quite as well grounded as his knowledge of architecture.

"The young man with a good architectural ground, and that includes a good knowledge of

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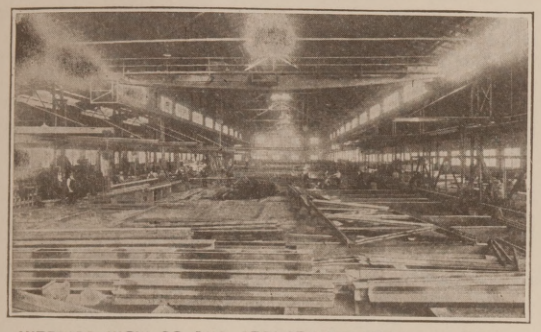

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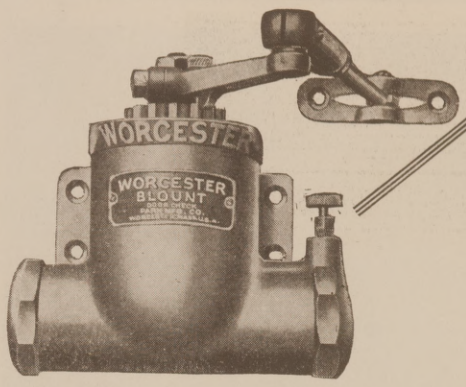

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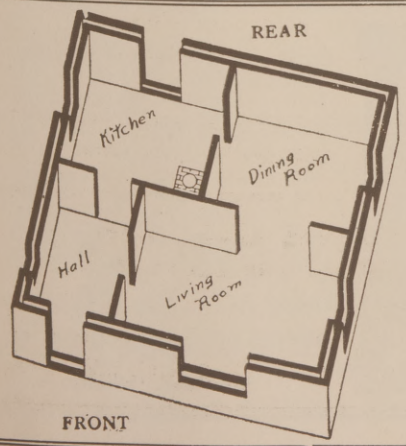

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classical architecture, will find today a wide range for his individuality. The young architect must have not only a knowledge of mathematics, of stresses and strains, of design, but of history as well, for we can trace the emigrations of different races and peoples by the architecture they have carried with them.

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"The progress of American architecture is reflected by the attitude of arcihtects abroad who now recognize a distant American type. This is particularly noticeable in the architecture of our industrial plants, our business and factory structures. We are beginning to adapt this new form, if I may call it such, to commercial buildings."

Cleveland to Have Apartment for Women.

An apartment to cost upward of $500,0000 is planned for erection by A. B. Smythe and associates at the northwest corner of Euclid avenue and ast 117th street, Cleveland, to be designed especially for business and professional women occupants only.

A. M. Allen & Company, architects for the building, have drawn plans for a four-story structure of tapestry brick with stone trim, which will have 130 rooms, in addition to suites for physicians, electric baths and for beauty parlor. There will be one, two and three-room suites, with portal beds and dressing room with natural light in which will be a chest of drawers and running water.

A large living room will be in the basement, together with six kitchen compartments with electric ranges, and a large electric refrigerator with lockable compartments for tenants. On the roof one-half of the space will be a garden and the other half screened off for sleeping porches.

The building will be 118 feet square and construction work was started June 15.

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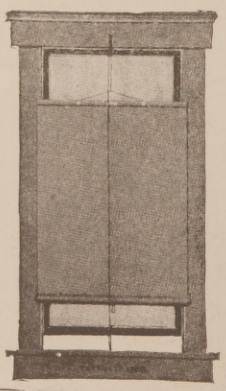

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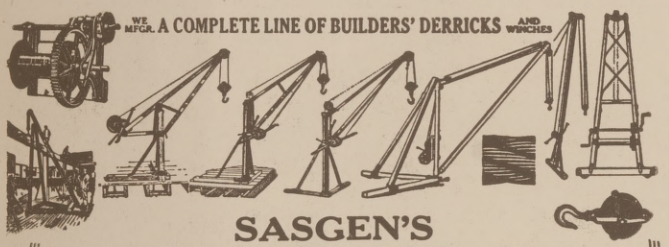

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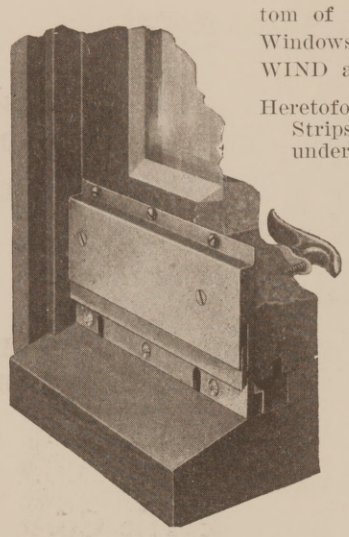

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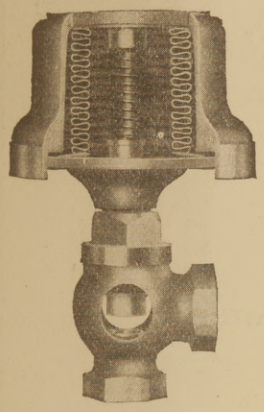

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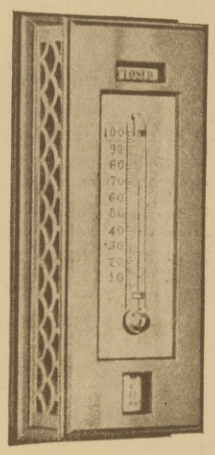

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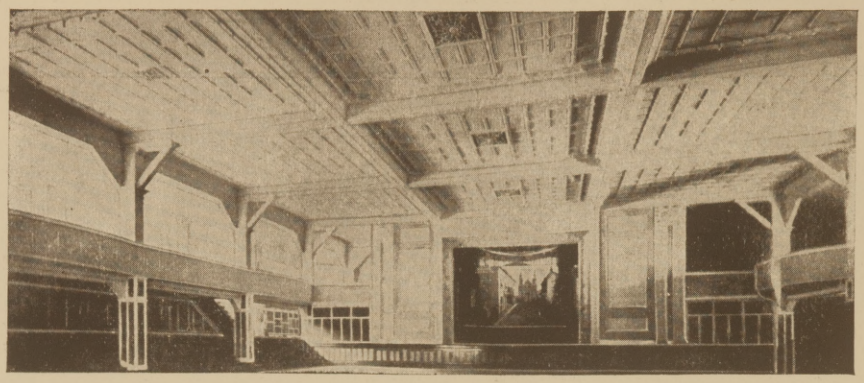

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Roof Leader Connection

All brass ferrules, bolts and screws are eliminated.

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A flexible lead connection of convoluted folds between the bowl and conduit admits of expansion and contraction. It relieves the roof drain from any strain caused by settling of the leader line. This flexible lead joint is protected by an inner discharge tube, forming an air chamber to collect warm air and gases lodging in the leader line, and thus minimize condensation and freezing. Can be used in any style of roof deck.

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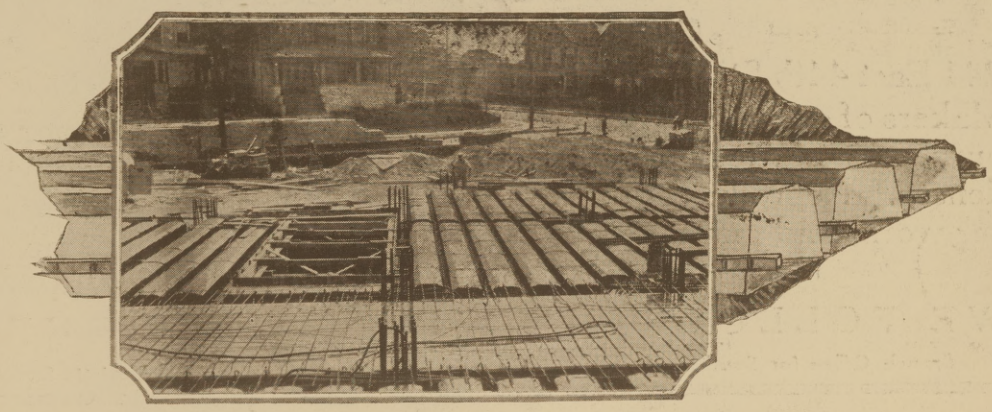

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A special patented method of forming concrete joists with No. 16 gauge removable metal forms combined with a very simple and economical method of wood framing for supporting the concrete joists and metal forms. A metal lath ceiling can be applied after removal of forms to 10 d. nails imbedded in the concrete joists about six inches on centers. The D. & R. System requires less labor to erect the wood framing (as it has only one-third the number of pieces of lumber to handle that competitive systems have) and less labor to erect the lath ceiling than any other system on the market.

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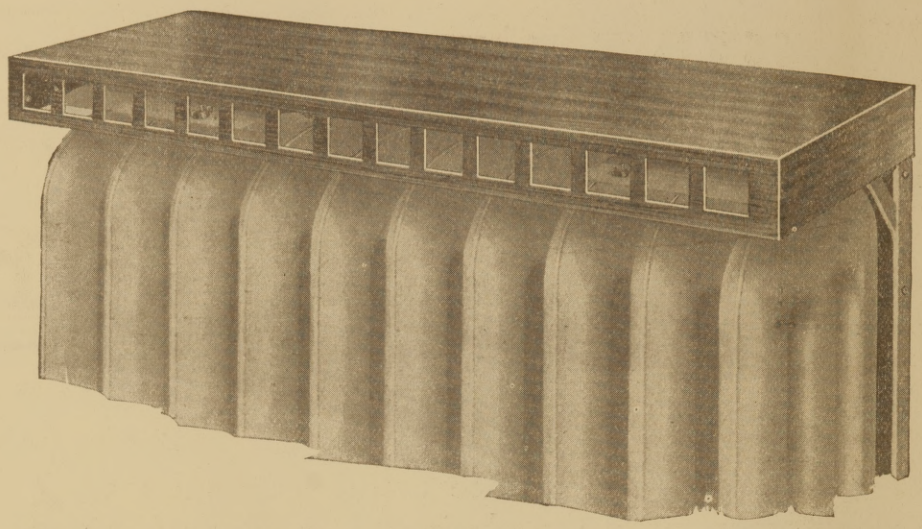

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All-steel radiator covers are modern devices built as an essential part of steam, hot water or vapor radiators. With their addition, walls, ceilings and drapes are protected from dirt and radiators beautified—their efficiency is not impaired.

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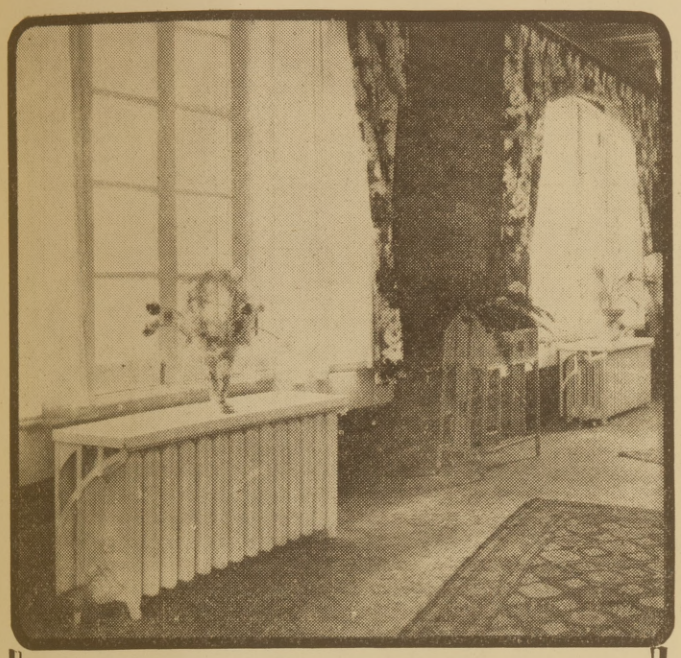

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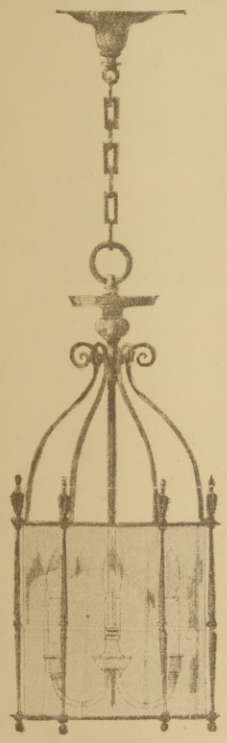

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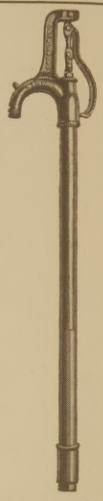

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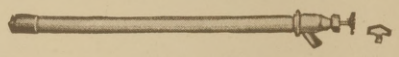

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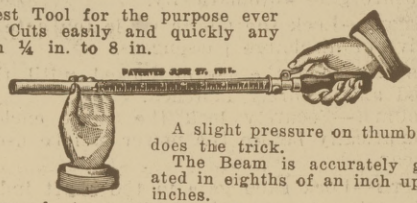

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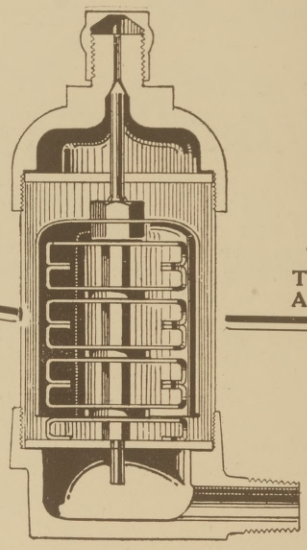

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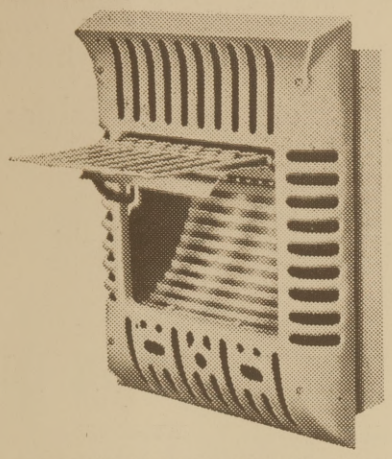

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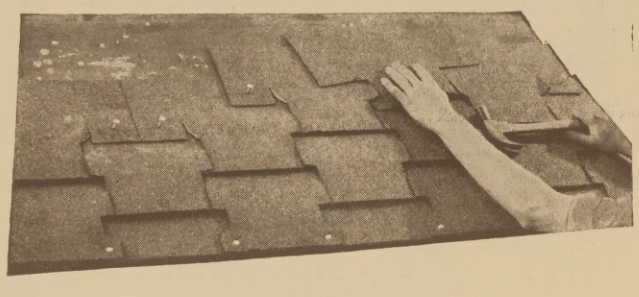

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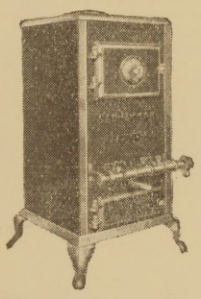

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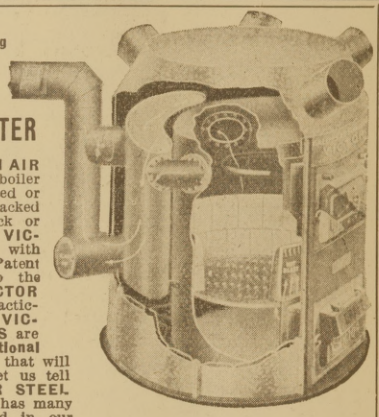

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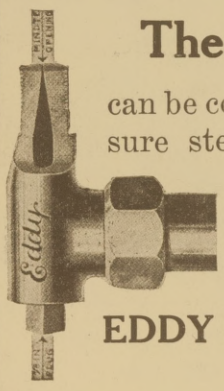

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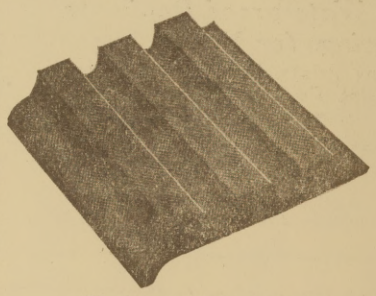

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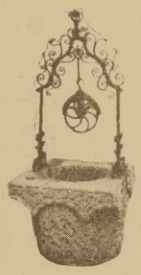

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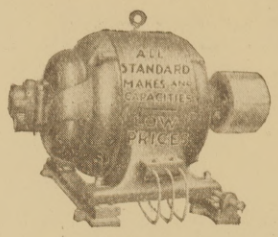

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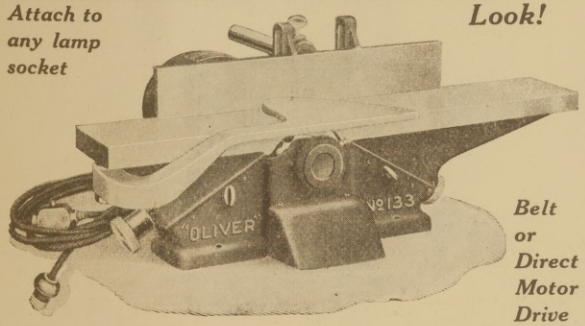

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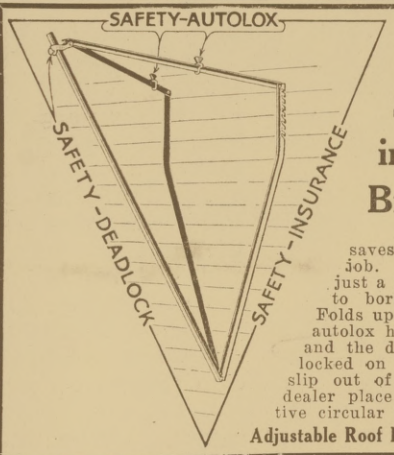

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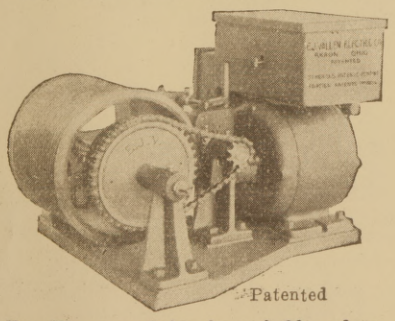

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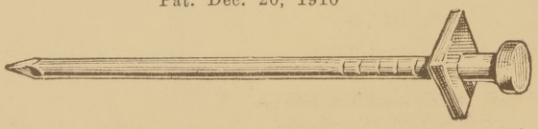

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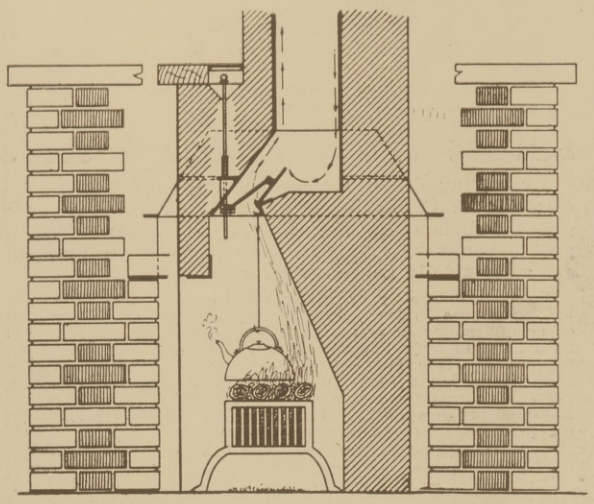

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$7.80 per dozen—$90 per gross

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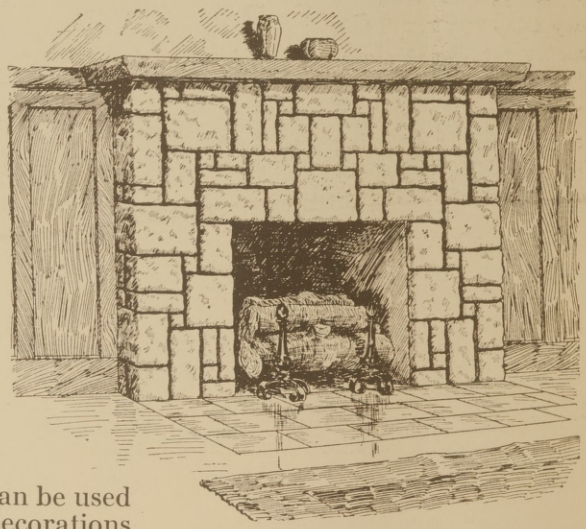

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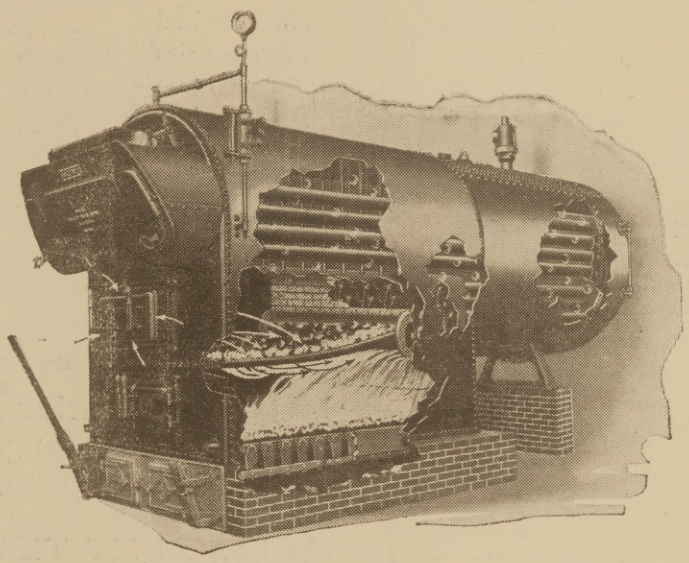

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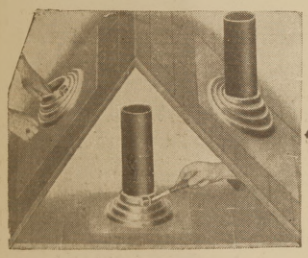

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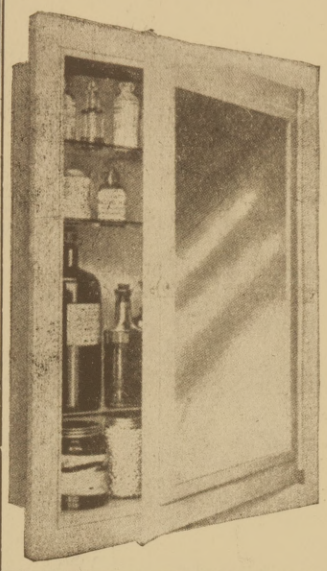

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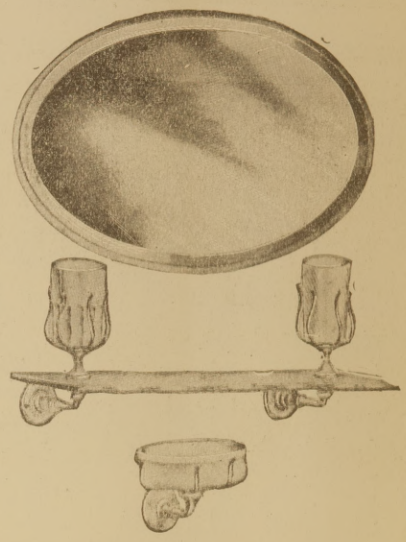

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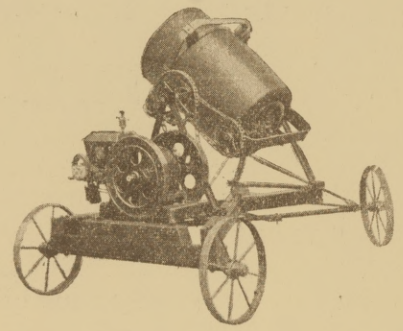

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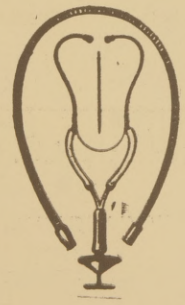

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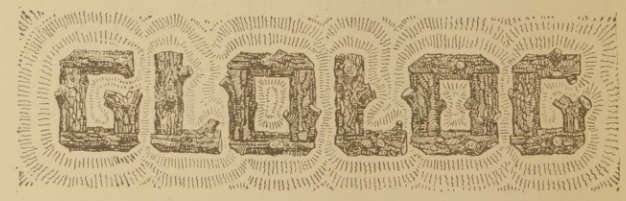

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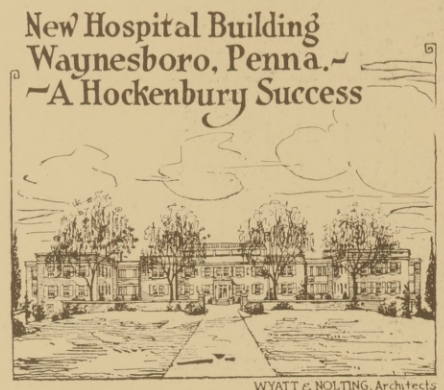

Raising Funds for Community Projects

The function of this organization is the raising of funds for worthy community, or group-interest projects: hospitals, hotels, college and fraternity houses, fraternal buildings, American Legion Homes, etc.

And after this organization has completed its program, SOME architect gets a contract for the planning of the structure.

Our program represents the soundest of business principles and the service is such that those with whom we have co-operated are our strongest boosters. There's a long list of endorsers —big men in every field of business and professional life. We'd be glad to give you the list, Mr. Architect, letting them tell you our story. It's contained in our booklet, "Turning Prospects into Contracts." Your copy is waiting.

Established 1911
Incorporated 1920

The Hockenbury System Inc.

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This kind of Stucco Dash will be very popular this year. It is glazed and non-porous and will not hold dirt. Made in 15 to 18 different colors. Will not cut the hands in handling as the sharp edges are smoothed in crushing and fracturing. Sticks better than stone and covers more space.

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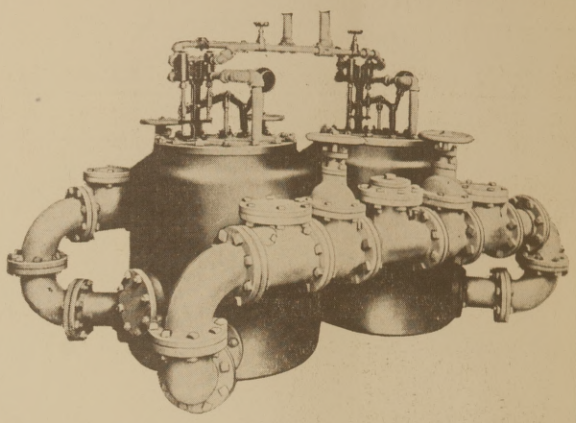

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Solid **BRONZE**, positive action, valves.

Send for free sample ink remover for your tracings.

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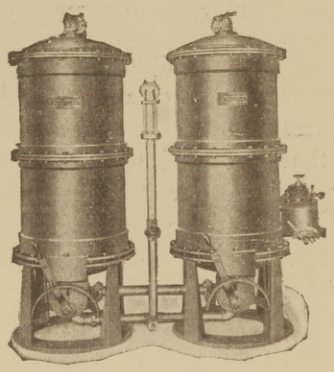

The Value of Filtered Water

In the large number of fine buildings and homes equipped with Loomis-Manning Filters similar to the above cut, the experience has been that the filtered water is attractive for all uses, protects and keeps clean plumbing fixtures, piping, tanks, and boilers, and is a safeguard for health because the water is safe for drinking.

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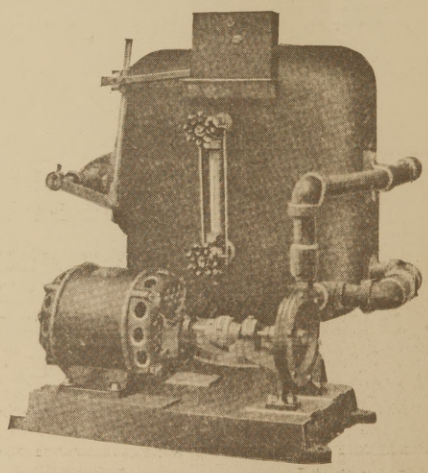
Established 1880

WESTERN AUTOMATIC ELECTRIC CONDENSATION PUMP and RECEIVERS



RELIABLE SIMPLE

A single stage pump suitable for high or low pressure ranging from 10 lbs. to 100 lbs.

The unit is very compact, mounted on cast iron base, only two pipe connections necessary when installing. The receiver is made in two sizes, of heavy cast iron. An enclosed butt contact switch is used on all pumps.

Write for Bulletin No. 220

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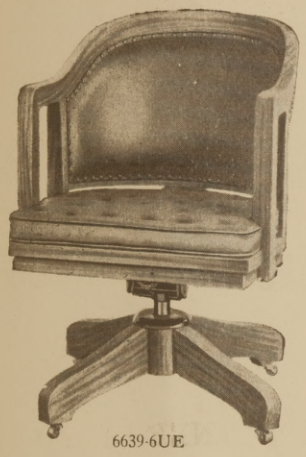
A chair for every purpose



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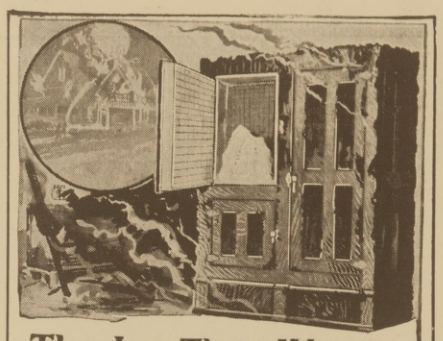

The Ice That Went Through Fire

An Iowa building recently burned to the ground. Two days later a charred Herrick Refrigerator was dug out of the ruins. It still contained ice, and the food contents were in perfect condition—**Saved by Herrick 5-Point Mineral Wool Insulation.**

HERRICK DRY AIR SYSTEM REFRIGERATOR

A refrigerator that can defy a raging fire can protect ice and food against any weather conditions. Ask for full details about Herrick insulation and 26 other extra-value features. Name of dealer and booklet free.

The Herrick Refrigerator Company
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Foley Traction-Rims deliver cement tile

"We have used your traction-rims eighteen months on a Republic Number 12, two ton truck. We are very much pleased with the service given and would not think of trying to get along without them. I have recommended them very highly. Our work consists of delivering tile from railroad stations to ditches and distributing same where possible to go with trucks, meaning much field work and short going."

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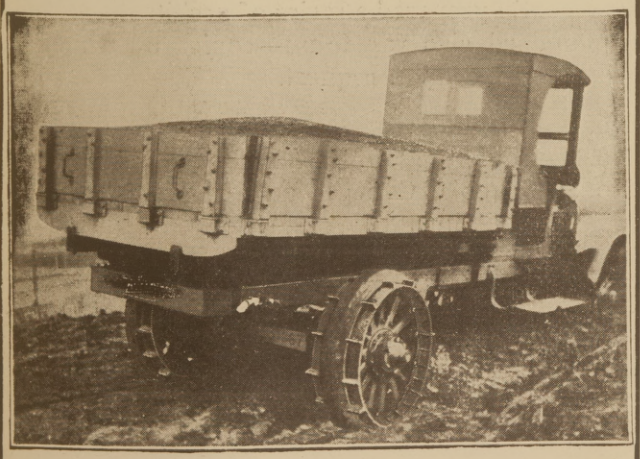

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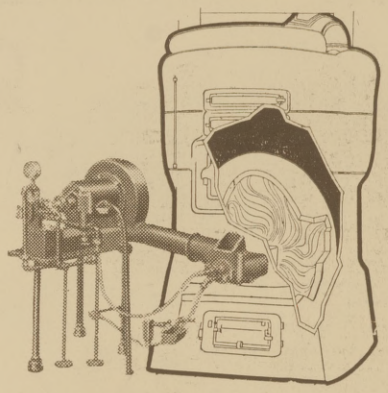

The coal situation probably will remain bad for an indefinite time.

Improved home heating is certain through the quiet and economical

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It is a decided success because: safe, clean, compact and durable.

Are YOU prepared to meet the demand for this economical modern method of heating? Write today for dealer proposal and illustrated booklet.

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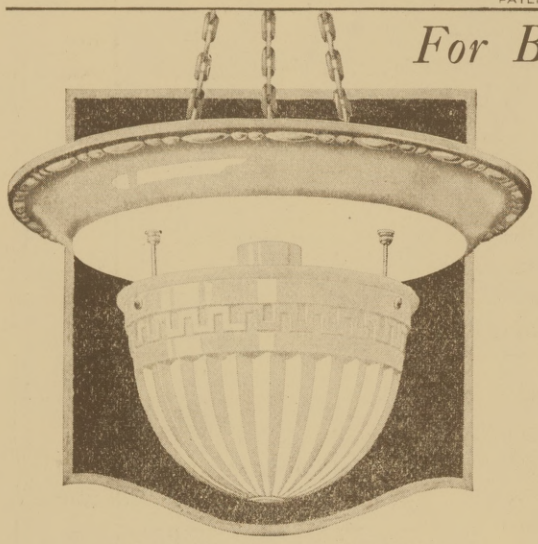

900 of these 3-chain suspension Brascolites installed in Texas Company Building, Houston, Texas. Fixture has white glazed porcelain enameled reflector with ceiling band finished in leather bronze.

Texas Company Building, Houston, Texas. Original fixtures removed and Brascolite installed by the Brown-Woods Electrical Company of Houston.

Here's Strong Testimony—Texas Company Changes to Brascolite

The Texas Company, Houston, Texas, recently went to considerable expense in taking out the entire original equipment of 900 lighting fixtures, installed in its general office building about a year ago, in order to install Brascolite.

A stronger testimony of Brascolite efficiency could hardly be desired. This and thousands of other Brascolite installations are daily demonstrating Brascolite's supremacy both in the quality and quantity of light delivered and in directing that light to the useful working plane.

To know the Brascolite principle of illumination—diffusion plus reflection at the source of light—is to know the primary reason for Brascolite's wonderful success—the largest selling lighting fixture in the world.

We have recently prepared a series of architectural booklets—of Standard size for filing—copies of which we will be glad to send upon request.

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Contractors Department

Using Removable Steel Forms

Explanation of Concrete Beam and Joist Floor Construction with Aid of Removable Forms.

REMOVABLE steel doors for flat slab floor construction are no longer a new thing. This type

Removable steel forms for flat slab floor construction are no longer a new thing. This type of equipment has been used and is being used on many jobs throughout the country, and is proving to be very successful.

However, a type of form which can be removed in the construction of beams on moderate spans is a comparatively new idea. In the past it has been customary to form the arches or slabs between the joists with a permanent steel pan which is left in place and becomes part of the completed floor structure. This, without doubt, is a waste of steel, as it performs no function as to the strength of the floor slab. It is merely a substitution of material.

How One Company's Forms Are Constructed.

The permanent steel pan is made of very light gauge material, most generally 26 gauge. This has proven to be so extremely light that the operations which were necessary to perform after these pans were put in place, battered them in many cases to such an extent that patching and replacing of pans before concreting was done was made necessary. All this is eliminated by the use of a removable pan.

The most important feature of this removable pan construction is that it is standardized. This feature enables the manufacturer to supply the equipment to the contractor at a minimum cost. The form, as manufactured by the Blaw-Knox Company, consists of standard steel channels of certain length to be used for the soffits with an equal amount of steel pans made of 14 guage steel plate with detachable headers and a corresponding amount of stretchers and cover plates.

The channels are standard six inch channels, made in standard length of six and eight feet, and these lengths, combined with the stretchers, will cover any fractional variation of span. Holes for wires or bolts for hanging the ceiling are punched on the center line of channel 12 inches apart.

The pans, as stated above, are die pressed from 14 gauge steel plate and are six, eight, ten and twelve inches deep, as the case may require, and in standard length of six and eight feet to match the channels. These pans, in connection with covers, will also meet any variation of span. The headers are essentially a part of the pans and practically the same number are required.

The cover plates are also die pressed from 14 gauge steel and large enough to fit tightly over the outside of the pans. The length is 30 inches and with a depth to match the pans.

The stretchers are die pressed from 14 gauge steel and the same length as the covers, and the two work together to form the sliding members which adapt the system to any variation of spans.

In contrast to statements relative to the permanent pans, mentioned in the first paragraph, it will be noted that the removable pan material is made heavy enough to withstand the ordinary rough handling in the field and naturally will last indefinitely.

In connection with these forms, the spreader is used for a two fold purpose; first, in locking the forms together, and secondly, to space the reinforcing bars in the proper position and also acts as a chair for the bars. The spreaders are supplied and are buried in the concrete when poured. They are really the key to the forms and are made of one piece and placed in the forms with one movement. They replace numerous items of material anl labor required by many other systems, and, therefore, provide for a natural saving in labor.

What Shoring Is Necessary.

All the lumber necessary for the erection of the steel pans consists of shores or posts and stringers have been removed. This operation ing of standard sizes, 90 per cent of these can be salvaged and used on various jobs until the life of the lumber is destroyed. The shores are 4x4 scantling with a 4x4 cross piece braced at the top. The outside stringers are 2x8 of stock length and never cut, as they are allowed to lap, which is an important point. The middle stringer is 3x8 and supports the floor after the outside stringers have been removed . This operation will be explained later.

In using the permanent pans, where the pan is left in place as part of the floor construction, the shoring and the framing for placing the pans and stretching the wire lath for plastering, is quite an expensive operation in comparison with the method employed with a removable form. The frame work and shoring is practically lined up

the same as if the floor construction would be of the flat slab type. This is necessary for properly stretching the wire lath because this operation must be done before the plans are laid. There is also necessary a wooden strip for forming the bottom of the beam. There is considerable nailing to be done on this operation which runs up the cost considerably. The lumber must be cut to the various lengths to properly fit and build up the necssary forming which also reduces the salvage value of the lumber and increases labor cost. On the other hand, as mentioned above, where the removable pan is used, the lumber need not be cut but can be used in standard lengths, thereby eliminating the labor cost for cutting and fitting and keeping up the value of the lumber.

How Pans Are Erected.

The erection of the pan is a very simple operation. The shores are first built to the proper heights which standardizes this feature of the job and completes the first operation. These posts are set on five feet to eight feet centers, as required, with double wedges under foot. Then the stringers are placed in position on double wedges bearing on the cross pieces of the posts, 3x8 stringers in the center with 2x8 stringers on either side. After the posts and stringers have been placed the channels are laid in position. The pans are then merely dropped into position over the channels. No accuracy is required in the end spacing of either channels or pans. The stretchers and covers take care of that. Next the spreaders are placed into position and automatically held in place.

Placing the Spreaders.

Placing the stretchers is a very simple matter. One man picks up an armful and drops them into position as he walks along. The placing of the covers is also a one man job. They are die pressed to the proper shape and fit snugly into position. The stretchers and coverpans rest on the 3x8 stringer. The forms are now complete and ready for placing reinforcement.

It is an interesting fact that the cost of placing and fastening the reinforcing rods is about 50 per cent of that ordinarily allowed. This is due to the automatic support afforded by the spreaders which take the place of chairs, and are fixed in position, also to the complete elimination of wire and wiring, as wires are not necessary for holding the reinforcement in view of the character of the spreaders. Everything is now ready for concrete.

After forty-eight hours and upward, depending upon the weather, the 2x8 stringers are removed by slacking the wedges under them.

The whole weight of the floor or roof is now carried on the middle 3x8 inch stringers, and neither they nor the posts under them are disturbed until the concrete has hardened and is ready to take the full load of the full span. There is no strain on the green concrete and no reshoring.

The channels, pans and 2x8 stringers, the major part of the equipment, are therefore released in forty-eight hours and upwards. The second shift requires only another set of posts, 3x8 stringers, stretchers and covers. The early stripping of the forms and consequent exposition of the green concrete to the air, is favorable to rapid hardening.

When the concrete is safe the wedges under the posts are slacked and the posts, together with the 3x8 stringers, are removed intact. This releases the covers and stretchers.

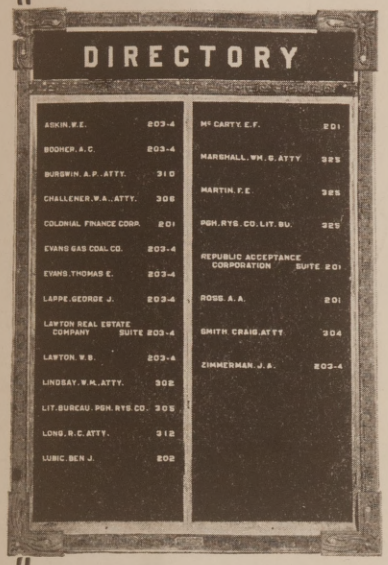
The forms are stiff enough to carry any weight of barrows and men that can be placed on them. No precautions whatever have to be taken to prevent collapse or accidents. Runways are simply laid down on the forms wherever most convenient, and are shifted from time to time as required.

After the forms are stripped the wire lath is simply stretched from beam to beam, being tied in position by the wires in the usual manner. This method assures the proper tension in the wire lath, eliminating the possibilities of the lath dropping and causing a split ceiling after the plaster is placed.

Another very important point which favors a removable pan, is the fact that it eliminates to a great extent the possibilitiy of rust stains on the finished ceiling due to water seeping through the concrete and coming in contact with the permanent pan which is left in place.

In conclusion, the most important reason for the removable pan system is that when the permanent pans are being used with the wire lath in place before pouring concrete, the expansion and contraction which takes place after the plaster has been completed affects the concrete beams to one extent and the wire lath to another. Because of the wire lath being part of the beams, this action continues after the plaster has been placed, causing cracks to form at the soffit points, weheras when the removable pans are used the wire lath is placed on pencil rods after the concrete beams have been set. This allows the wire lath to expand and contract independently from the concrete beam, eliminating the possibility of a fracture or crack in the finished plastered ceiling.—"American Contractor"

Small Office Buildings



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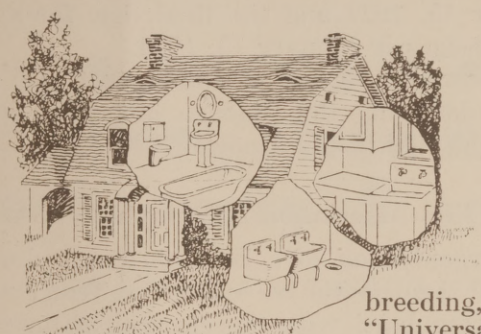

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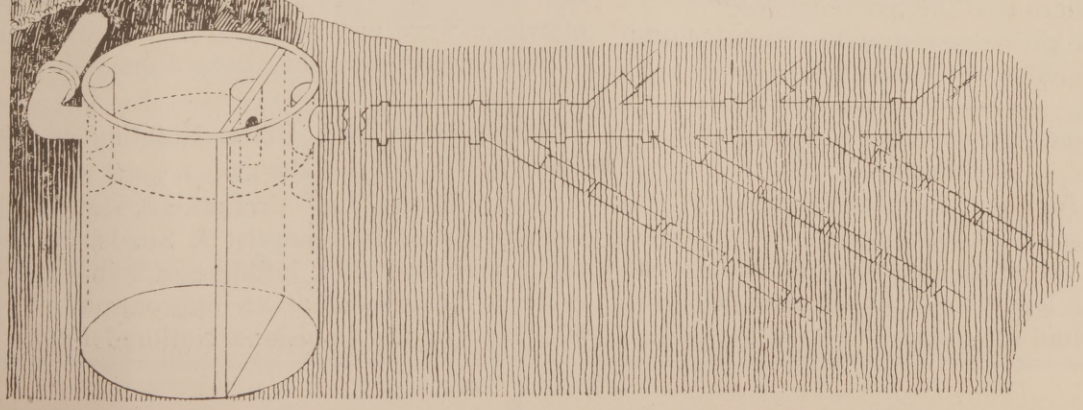

(*Continued from page* 26.)

France, and Saxon England, we have monuments innumerable after the Romanesque style. By the 11th century, it had accomplished a reasonable freedom in the building of round arches and four part vaults. In its expression, the art of the later Romanesque showed a liking for crude by delightful forms of architectural sculpture to a degree of homliness but richly decorated, and represented the influence coming into the Lombard church from Byzantium style. The Romanesque church of France extended this quality to a rich detail of architectural symbolism, which finally gives us such great historical design as these portals of the west front of a church in Arles. This design is extraordinary. It shows splendid richness in the sculptural qualities, and is better balanced in its proportions, and holds that superb restraint which gives great architectural significance. Beyond this, it is important because it portrays the richness of treatment with which the Romanesque builders developed Western front of their churches, a treatment adapted and further developed in the Gothic period.

A further element, richly romantic, is brought into Romanesque architecture with the coming of the Norman. The Norman seems to have taken hold of church building at the point where the Lombard and Romanesque had developed, by the close of the 10th century. There is a tendency to lift it from the smallness and homliness of its beginning into a granduer of conception equal to the period of Gothic art. I cannot degress far enough to tell you what Gothic architecture was in detail to Norman builders, for their magnificent conception of the abbey church, for their development of broader and loftier naves, for their development of six part vaulting, for their flying buttresses, and stately towers and spires. In writing of Norman art, Mr. Henry Adams has said of this genius of variety and power of conception that "No art, Greek or Byzantium, Italian or Moslem, has ever created two types so beautiful, so serious or impressive, and yet so different as Mont St. Michel looking down over its Northern Ocean, and Monreali looking down over the forests of lemon and orange, on Palero and the Sycilian Seas."

Such is the development of the church building in the beginning of the 12th century

---

Contest Aims at Improvement In Small Hospital Architecture.

To obtain for the typical small community in America a hospital building which is at the same time efficient in arrangement and creditable in architecture, a leading journal in that field, **The Modern Hospital,** has recently issued the formal program of a prize competition, open to all architects.

Prizes amounting to $1,000 are to be given to successful contestants, and although certain definite requirements are set forth in the program, the avowed intention of the competition is to bring out new thought in hospital construction.

The Illinois Chapter of the American Institute of Architects, to which the general program of the competition was submitted, has approved it as to form and method of procedure. Richard E. Schmidt of the firm, Richard E. Schmidt, Garden & Martin of Chicago, is the architectural adviser. The jury of award is to be composed of two architects, two hospital superintendents and a graduate nurse who has had experience as superintendent of a small general hospital.

Official announcement of the competition was made at the recent annual conference of the American Hospital Association held in Atlantic City, N. J., September 25-28. Three cash awards of $500, $300 and $200 and two honorable mentions are to be given. The prize-winning drawings, according to the rules o fthe contest, become the property of the publishing company, but the author is not prohibited from making any individual use of his designs.

The competition calls for a set of plans of a general hospital of from 30 to 40 beds. Registration for the contest must take place on or before November 15, 1922 and the final date for submitting designs is January 15, 1923.

The general program of the contest may be had by addressing the Chicago office of the Modern Hospital, 22 E. Ontario St.

New Association in Memphis.

The organization of a Building Owners' and Managers' Association at Memphis, Tenn., was recently completed with the election of the following officers: George Randolph, president; C. G. Smith, vice-president; and S. J. Latta, secretary and treasurer.

The new association has a membership of 12, representing 10 buildings, and according to President Randolph its affairs are progressing famously. Several meetings have been held, all of which were well attended and many subjects of vital importance have been discussed.

$750,000 Bank and Office Building at Baton Rouge.

Baton Rouge, La.—Preliminary sketches have been prepared by Sanquist & Staats, architects, for a bank and office building of reinforced concrete to be erected at an approximate cost of $750,000 for the Louisiana National Bank.

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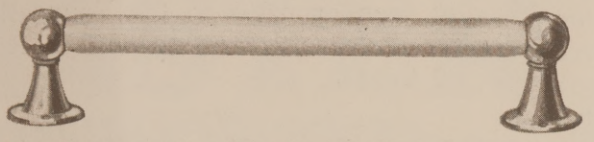

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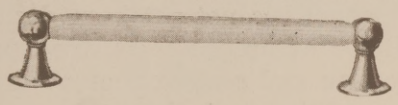

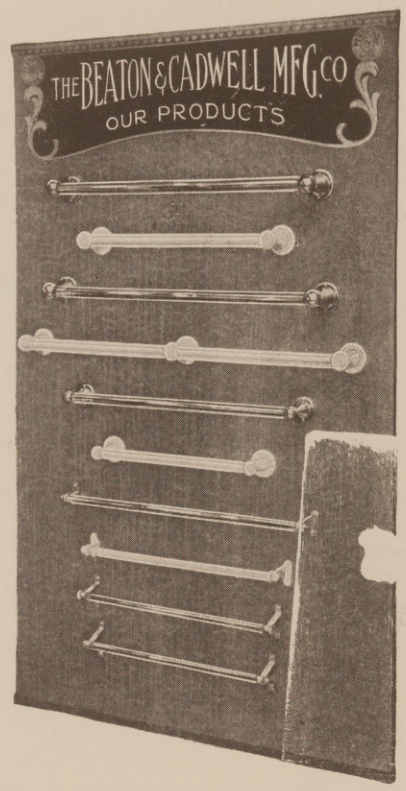

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$250,000 Masonic Temple for Houston.

Houston, Tex.—Plans for New Masonic Temple builing for Gray Lodge 329 and Temple Lodge 4 which will cost about $250,000 are being rushed to completion so that actual construction work can begin in October, according to Alfred C. Finn the architect. Preliminary plans have already been accepted, and the details and final specifications are now being worked out. Two lodge rooms with separate banquet halls, reception rooms, libraries, secretary's office, committee room and general club facilities comprise the main features. Store space will be located on the first floor. Fire proof material will be used with stone exterior.

$1,250,000 Dwelling and Apartment Development.

Richmond, Va.—Plans have been announced here for a building project costing approximately $1,250,000 whereby Max E. Ruehrmund will erect 10 apartment houses and 150 residences at Belmont and Roseneath Road in the West End section of the city. The plans call for apartments and detached and semi-detached dwellings, and the completed structures will accommodate over 300 families. The entire project is to be finished by September 1, 1923.

Contract Let for $225,000 Apartment House.

Jacksonville, Fla.—An apartment house costing $225,000 is to be erected here by Dr. T. S. Roberts. The new structure will contain 36 apartments, and will be of brick, 3 stories on a 240x100 foot lot. Contract has been awarded to J. F. Adamson.

$4,000,000 Building Program at Springfield.

Springfield, Mo.—A construction program involving the expenditure of approximately $4,000,000 is in sight in this city. Among the buildings now in process of construction or that will be started in the near future are the following: Southwest Teachers' College, $263,000; three junior high schools, $600,000; Shriners' Mosque, $300,000; Masonic hall, $50,000; Frisco hospital, $800,000; Methodist Church, $135,000; Presbyterian Church, $25,000; addition to Knights of Pythias home, $75,000; and Presbyterian Church, $25,000. In addition many business houses and residential properties are now being erected. Much street work will also be carried forward in the near future. The building revival is the greatest the section has experienced in many years.

$300,000 Theatre to Go Up Rapidly.

West Palm Beach, Fla.—A theatre costing $300,000 will be erected here by the Bijou Amusement Company, Carl Kettler, President. The new structure will have a seating capacity of 1250, and is expected to be completed by the end of the year. G. L. Miller & Company of Atlanta are handling the financial details, the contract having been awarded to the Foundation Company. The architects are G. Lloyd Preacher & Co. of Atlanta.

$700,000 Baltimore Hospital Contract Awarded.

Bids were opened last week on the new Municipal Hospital for the City of Baltimore, and contract for construction has now been awarded to the Price Construction Company of Baltimore as the lowest bidder at $674,500. There will be a group of 9 buildings, the exterior architecture of which has not yet been decided upon. They will be of fireproof construction of terra cotta, the slag and cement roof with mastic tile, oak, composition and cement floors and electric elevators. The architect is E. H. Glidden of Baltimore.

$2,000,000 Building Program at Wheeling.

Wheeling, W. Va.—The building program of this city calls for an expenditure of about $2,000,000 within the next few months. Three new business buildings are to be completed in the near future at a cost of about $350,000. The firm of Stone & Thomas is building a $100,000 addition to its large department store. This will afford the firm 24,000 additional feet of floor space. The Quarters Saving & Trust Company is building an addition to its present building at the corner of Sixteenth and Market streets which will make it equal in size to any of the larger bank buildings of Wheeling. The addition to the Fort Henry Club is to cost approximately $200,000. Permits have been issued for approximately 400 new dwellings. There is a prospect that the building of homes will be on even a more extensive scale than the erection of business structures.

Hotel Contract at Winchester Involves $250,000.

Winchester, Va.—The Wise Granite and Construction Co., Richmond, Va., have the contract for the erection of the hotel for the George Washington Hotel Corporation at a cost of $250,000. It will be 125x105 feet, five stories and a basement, of steel, concrete, brick and stone. Clarence L. Harding, 729 Fifteenth St., Washington, D. C., is the architect.

Contract Awarded for $225,000 Hospital.

Little Rock, Ark.—Stewart-McGehee Construction Co., have been awarded the contract for completion of the new city hospital at a cost of approximately $227,000. It will be five stories high and of concrete construction. John P. Almand, Boyle Bldg., is the architect.

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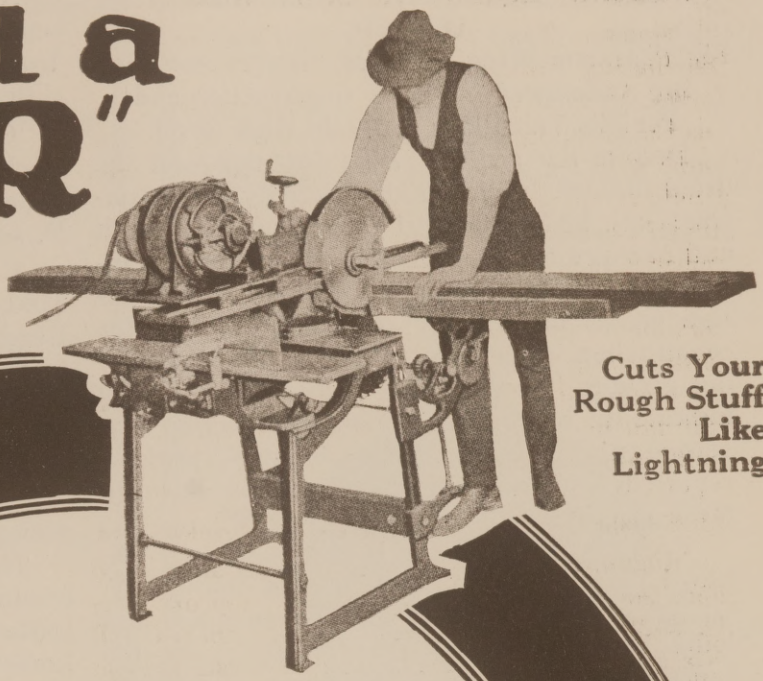

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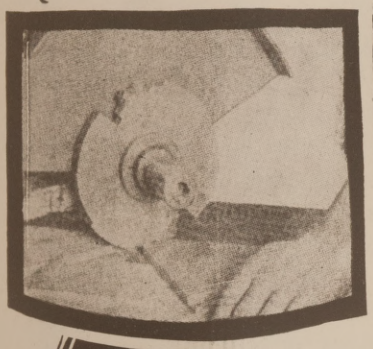

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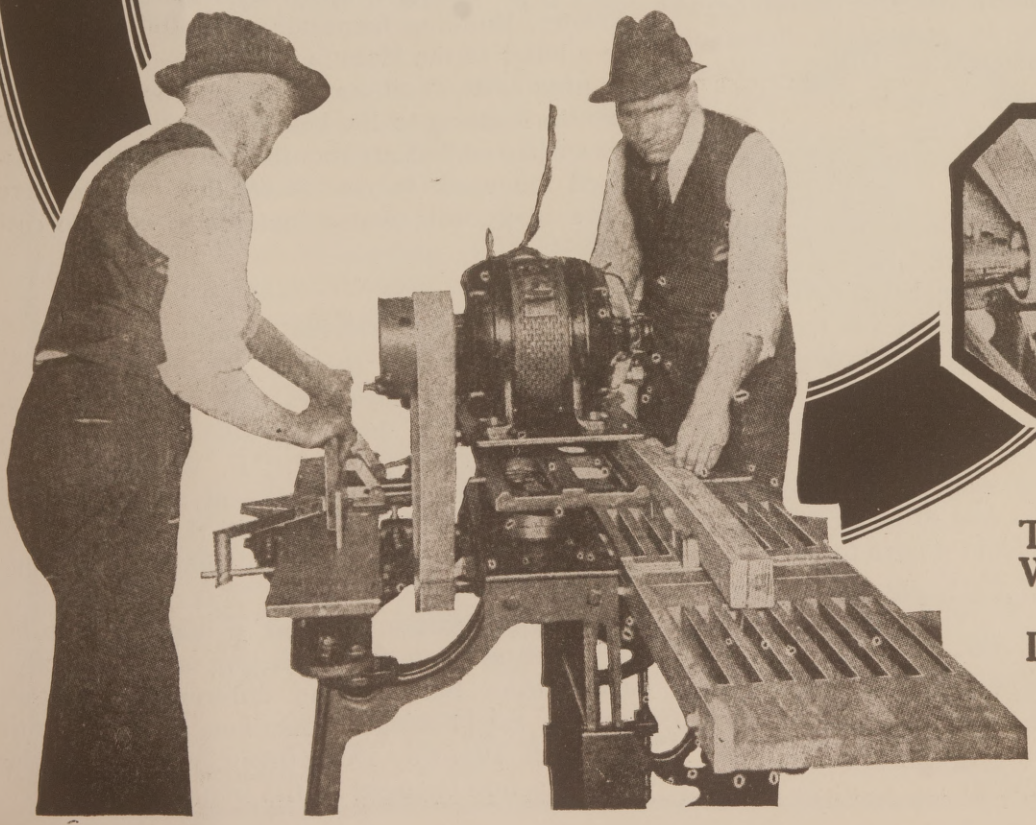

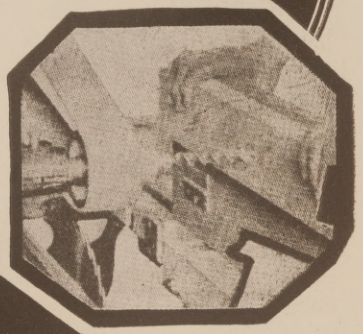

Two Men Can Work at Once Without Inconvenience

BUILDING IN SOUTH CONTINUES UNABATED.

Big Contracts Being Awarded, New Projects Being Announced for Early Construction and Permits Valuations Maintain High Level.

Despite the general strike situation and the usual summer lull in building activity many contracts are being awarded throughout the South and new projects involving in the aggregate millions of dollars are announced daily. In addition scores of projects are being planned for construction in the late summer and fall. Building permits issued in the various cities clearly indicate the big volume of new construction now getting under way. Among the new projects reported from all over the Sout hare included those briefly listed herewith.

Preliminary plans are being made by G. Lloyd Preacher & Co., architects of Raleigh, N. C., Atlanta and Augusta Ga., for an office and lodge building to cost about $250,000 for the Independent Order of Odd Fellows at Raleigh. John D. Berry is grand secretary. Bids will probably be requested in 60 days.

John B. Orr, of Miami, Fla., has been awarded the contract for construction of a $250,000 lodge building for the Scottish Rite Cathedral Association at Miami. It will be 140 by 190 feet after plans by Kiehnel & Elliott, of Pittsburgh, Pa., and Miami.

T. S. Roberts of Jacksonville, Fla. is interested in the erection of an apartment house, 100 by 240 feet, to cost about $100,000.

The North-Eastern Construction Co., Lexington Bldg., Baltimore has the contract for a department store to be erected at Pocomoke, Md., at a cost of $130,000 for Milton L. Veasey. It will be 196 feet long, from 45 to 77 feet wide, and two and three stories high, plans having been prepared by Rivens & Sisco, architects, Baltimore.

Geo. G. Glover, 103 Whitney Bldg., New Orleans, La., has been awarded the contract for a chapel to cost $140,000 for Ursuline Convent at New Orleans. It will be 50 by 140 feet, of brick and concrete. Burton & Bendernagel are the architects.

The Lost River Hotel Co., Bowling Green, Ky., contemplates construction of a hotel-apartment building to contain 100 single rooms and 20 three-room apartments, at a cost of about $250,000. It is planned to use air from a cave for cooling and ventilating. Malcolm H. Crump, consulting engineer, Elks Bldg., is secretary of the company.

Hengin Chambers Co., Dallas, Texas, are erecting for the School Board of Hillsboro, Texas, a high school to cost about $110,000. J. O. Galbraith, with T. J. Galbraith, and J. P. Hubble, are the architelts.

A city and county jail to cost $200,000 are being built for Shreveport, La. The Central Contracting Co., has the general contract. The architect is E. F. Neild of that city.

Contract for a $125,000 school building for Rock Hill, S. C., has been awarded the Southeastern Construction Co., of Charlotte, N. C. A. D. Gilchrist of Rock Hill is the architect.

J. H. Orr is supervising the erection of a $160,-000 hotel being constructed by Tallevast & Regar at Tallahassee, Fla. It will be 100 by 111 feet, concrete frame will hollow tile curtain walls.

C. Howard Crane, is the architect for a theatre and office building to be erected by the Cosmos Theatre Co., Washington, D. C. It will occupy a site, 153 by 114 feet.

The contract will shortly be awarded for a reinforced concrete warehouse to be erected at Dallas, Texas, by Raymond P. Caruth and St. Louis interests at a cost of $500,000. Bertram C. Hill is the architect. It will be 250 by 191 feet, five stories high with basement giving a total of 250,000 square feet floor space.

William Goldsmith, of Greenville, S. C., has just announced that work will proceed soon on a 12-story hotel after plans by William L. Stoddard, New York City. It will contain 215 guest rooms with baths, and so built that 100 rooms can be added later. Another hotel will be built at about the same time by the City Hotel Co., and will be 8 stories high.

"The month of July has exceeded the same month of all previous years," states Frank C. Walter, Building Inspector of Tulsa, Oklahoma, in a letter to the Manufacturers Record, and continuing adds, "and our prospects for the present month leads us to the belief that all records will be surpassed." Last month 189 permits were issued for work to cost $1,685,600. There were only 38 permits issued for repair work to cost $30,645.

Officers Florida Association.

At a meeting of the recently organized Associated General Contractors of Florida, Jas. Yeats, Port Tampa, was elected president; J. F. Morgan, Jacksonville, vice-president; F. W. Long, Jacksonville, treasurer; G. D. Auchter, Jacksonville, secretary. The directors are R. B. Murdock, Orlando; P. G. Cowan and B. Mickler, of Jacksonville.

This association will be in a position to be of great assistance in bringing about effective cooperation between the different contractors and in establishing harmonious relations with the State Highway Department, and with the other factors engaged in the industry.

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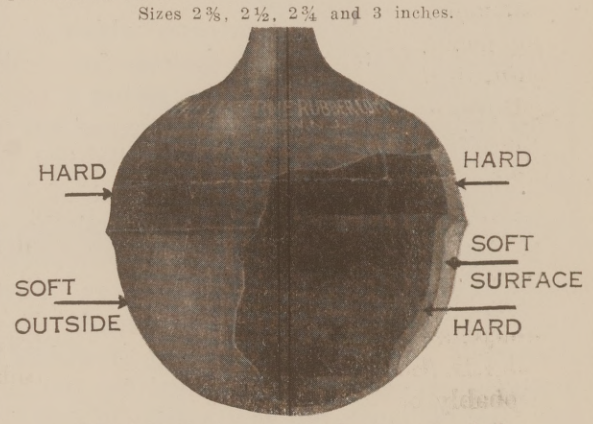

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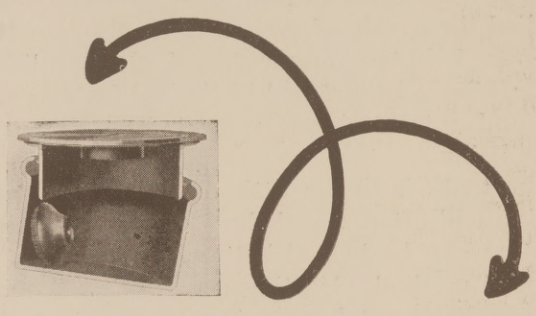

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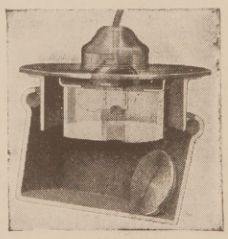

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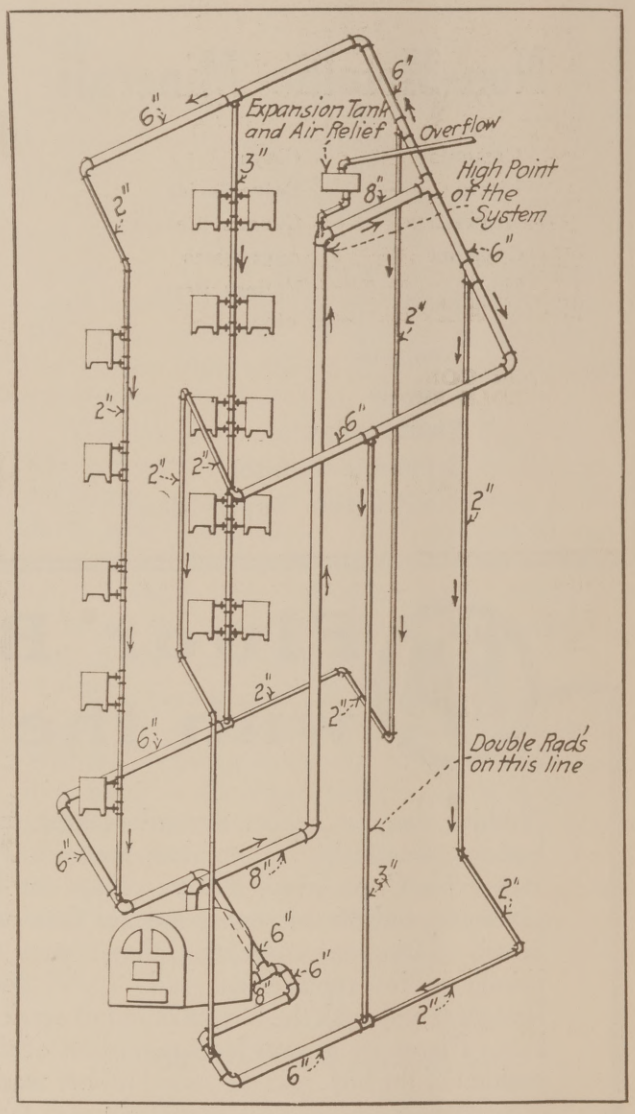
Overhead System of Hot Water Heating Becoming More Popular

By Frank Steele.

The nation-wide advertising which is being given to hot-water heating systems for moderate sized dwellings appears to be giving a new impetus to the use of overhead system of hot water heating. There cannot be the slightest doubt that national adverising on the part of leading heating goods manufacturers has had the effect of bringing this style of heating system conspicuously to the attention of home owners. Furthermore, the installations are being made by the thousands. This type of heating plant has been generally designated as intended for the bungalow type of home; but as a matter of fact, it can be employed in any moderate sized dwelling.

It is only a few years since the bungalow type of overhead heating began to receive its wide publicity. Thousands of heating men immediately fell in with the opportunity, with the result that they naturally employed the piping system recommended. They soon found, or at least were reassured as to, the good circulating qualities of this type of hot water work. The result has been that from what might be called the acquisition of a habit, the same heating men have frequently installed the overhead system in dwellings where the boiler is in the basement, and which ordinarily would have been piped in the old fashion with flow and return risers connected to the usual mains below.

The truth is that a little study of the layout of a job will often reveal the fact that a group of radiators can be heated better by the use of an overhead method. Heating men during the past 10 years have not been using this method very much, with the result that they came to forget it, more or less, or perhaps to regard it with disfavor because it did not appear to be the mode. In short, they would frequently struggle with something of a problem in the laying out of the usual mains and risers, just because that appeared to be the accepted form; weheras, if they had been in the habit of using more flexible methods, they more frequently would have adapted the overhead method to many jobs, either in whole or in part. The truth is that in many jobs it is possible to use both methods in combination, heating certain radiators with the old method of mains and risers and others with a circuit laid out on the overhead plan.



Isometric View of Overhead Piping for Hot-Water Job in an Apartment Hotel Five Stories High.

Extensive Use of Overhead System.

The fact that overhead systems are being widely used was brought quite forcibly to the writer's attention during the past summer and fall. In visiting a number of jobs, he found that his friends among the heating men were frequently using the overhead plan, while these same men several years ago rarely used it at all. Then again there were many occasions when the use of a small overhead hot water installation seemed to suggest to a master the most economical and efficient way of handling certain work.

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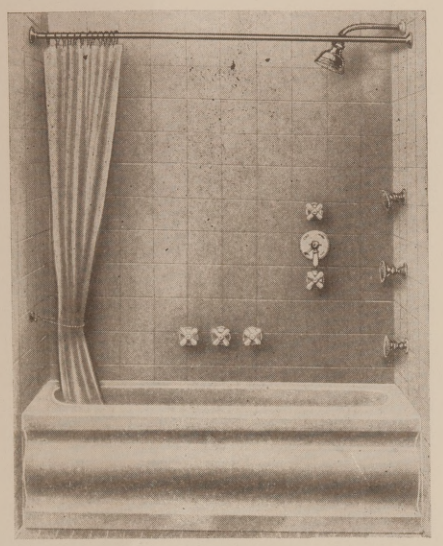

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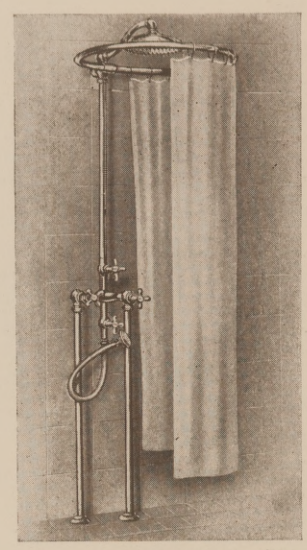

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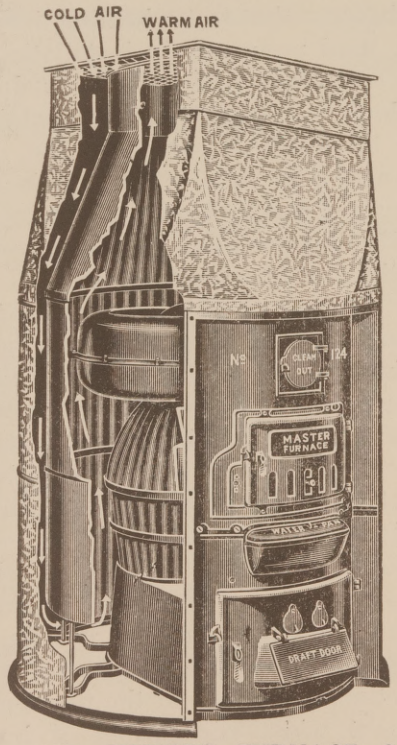

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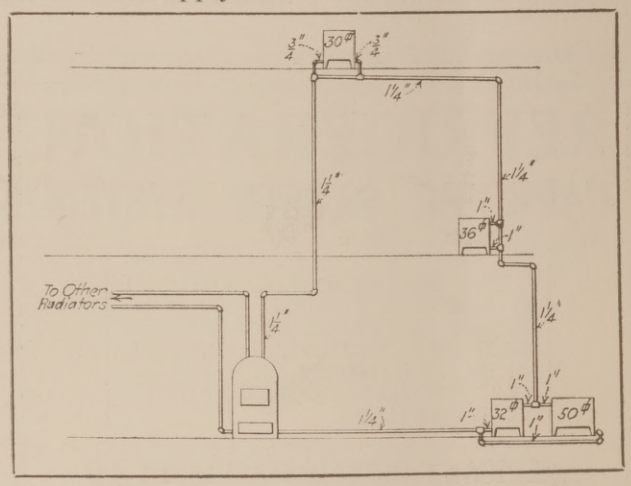
For example, the writer recently found overhead hot water systems installed in a girls' club and community building, several stores, several garages and in a boat house. In most of these jobs there would have been a serious attempt to pipe the work according to the usual method of mains and risers, had not the more recent vogue of overhead work seemed to settle the master's mind at once in favor of the latter system.

In one job, for example, a certain hotel built a dining room extension on the first floor. The main building was piped for a vapor steam heating job, and the new dining room had its floor below the water line of the boiler. When the heating man was asked to look at his part of the work and estimate on it, his first thought was that this part o fthe building would necessarily be connected up to the present heating plant, with the returns from the radiator drained back into a receiving tank and the condensation pumped back into the boiler. This was, indeed, the expectation of the owner of the hotel, as well as that of the architect. Yet, on second thought the heating man immediately recommended that this dining room be heated by water, using an overhead flow main and a little heater practically on the level with the radiators. This meant an extra small fire to be attended to, yet the initial cost of the work showed an immediate saving, and in several other respects the proposed method seemed highly desirable. It was installed according to the heating man's recommendation and has given thorough satisfaction throughout this winter.

This overhead type of hot water heating, however, is generally used now only in installations of comparatively small size. It is unquestionably ideal for bungalows, cottages and mountain camps. It seems to suit the exact needs, too, of many stores, garages and small offices, such as the offices used by real estate dealers. In installing the work in dwellings or other buildings considerably larger than what would be called a modest dwelling, the main and riser method is still the usual practice. And since hot water becomes a little unwieldy in structures of a still larger size, the custom is to use steam or vapor. A little steam pressure will send the heat to all parts of a building, while on buildings of the larger size the hot water circulation is generally regarded as being uneven.

Buildings of larger size, however, can be well heated by hot water when an overhead system is used. This syle of heating was much in vogue 15 or 20 years ago, and seems to have gone out of fashion. A pertinent question of the moment is: Will the present wider recognition of hot water overhead systems bring back the custom of installing this type of plant in the larger buildings, as well as in the present small ones?

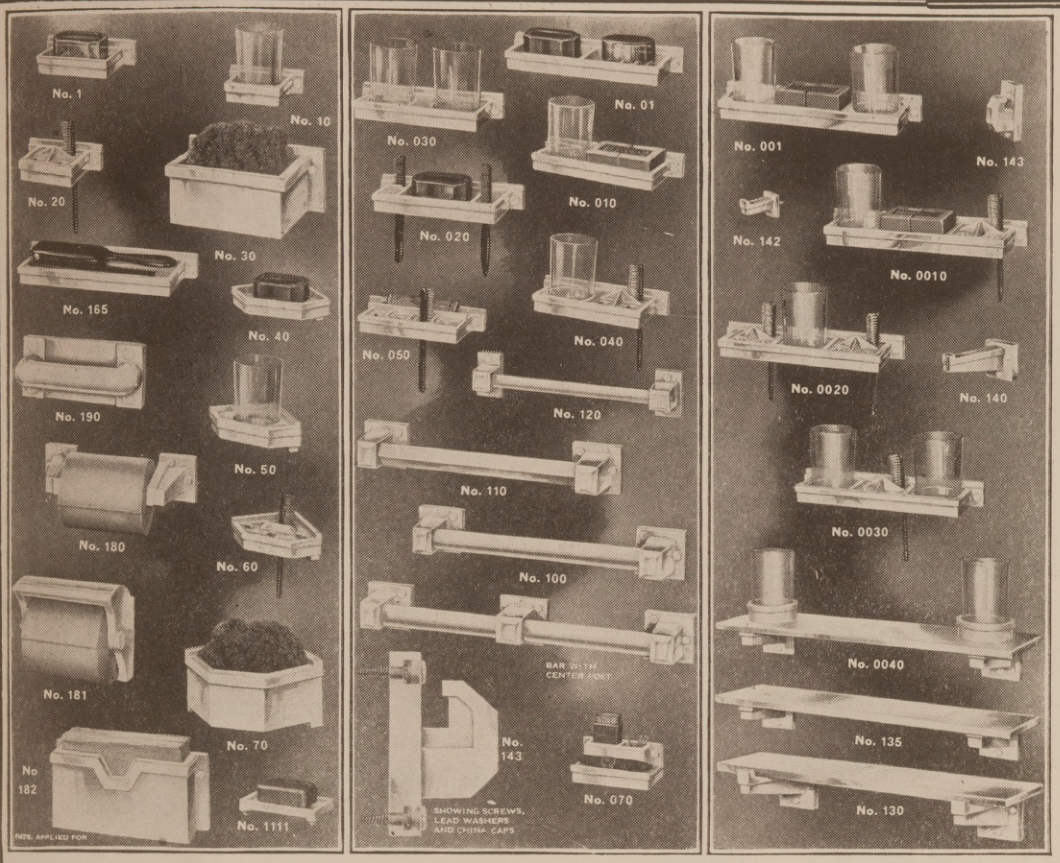
The writer has in mind a good sized apartment hotel, five stories in height, that has an overhead hot water system installed in it, which has been in successful operation for 9 years. This hotel is situated in a rigorous winter climate. There are six small apartments on each floor and all are heated with hot water radiators from a down-flow in the risers. The hotel, furthermore, is located in the region where vapor heating has, during the past few years, come into wide use. Yet this hotel is satisfactorily and economically heated, and the owners do not think of changing. The piping layout is simple enough. An 8-in. riser runs straight up from the boiler to the hanging ceiling of the top floor. And an air relief and expansion tank are installed at the top of this riser. The 8-in. riser is run near to one outside wall and there divides into two 6-in. lines which are run in a circuit around the four walls. From these 6-in. branches the risers are dropped straight down into a return header in the basement. Most of these drop into a return header in the basement. Most of these drop risers are 2-in., but two of them are 3 in. The 2-in. risers feed single radiators on the way down, while the 3-in. risers supply a series of double radiators.



Four Radiators Connected on One Circuit with a Considerable Saving in Piping.

Radiator Sizes and Connections.

Since the hot water in this building flows at once to the top floor and then spreads around the distributing header, the top floor radiators are heated first and are apt to be hotter than those in the rest of the house. For this reason the very top radiators are made a few sections smaller than the room measurements would require normally, and then all radiators below are gradually increased in size so as to compensate for the cooling of the water on its way down. All the radiators are connected to the risers, top and bottom same end, with inlets of at least 1¼ in. and without valves. Incidentally there are no air valves used on the radiators because all air finds



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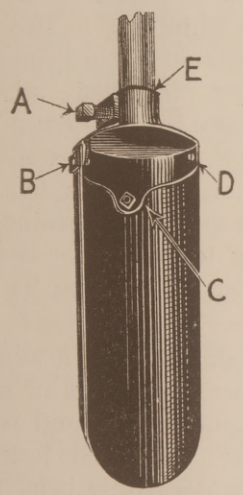

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its way up the risers and out through the air relief at the top of the 8-in. main flow.

With proper firing and a good boiler, such a system is kept almost equitably hot. One of its great advantages is that after the fire is stoked at night there is always at least a moderate heat kept in the system until the fire is again attended to in the morning.

It should always be borne in mind that on many jobs it is advisable in regard to certain groups of radiators to pipe them according to the overhead plan. Frequently six or eight radiators can be placed on a single circuit, whereas the same radiators, if heated from below with mains and risers, would require almost double the piping and would still be likely to be uneven in their heating. It seems to the writer, therefore, that it is well for hot water work that the overhead method is once more being widely used. He has found in his own practice that he could greatly improve many jobs by using the overhead method. Like all other steam fitters, the writer frequently felt restricted because the custom of the day seemed to be all in favor of the main and riser method. He found, for example, that journeymen fitters seemed ill at ease when they were asked to do an overhead job, and they therefore had to have the work explained to them in full detail. The simple fact was that they had got the habit of the main and riser method, and therefore they were not familiar with the other.

The outstanding point of the present, however, is that hot water work has become more adaptable for many heating needs. There was no reason why the overhead work should ever have fallen into disuse, but there seems to be no gainsaying that trades do have their syles, traditions, and vogues. In hot water heating there is unquestionably a growing vogue today of the overhead method, which is another way of saying that there is nothing new under the sun, or that new styles, like those in women's dress, are frequently but a new birth of something that was in fashion many years ago.—"Sanitary and Heating Engineer."

A SCHOOL FOR APPRENTICE PLUMBERS.

By William P. Goss,

President, Master Plumbers' Association of San Francisco.

Acting in hearty cooperation, the Industrial Association and the Master Plumbers' Association of San Francisco have established a school to train apprentice-plumbers. As President of the Master Plumbers' Association, I have taken the keenest interest in this school, and have devoted a considerable portion of my time to supervising its students. Consequently, I feel that I am in a position to judge the school and have no hesitancy in stating that it is a complete success in every hespect.

This opinion is shared by the leading plumbing contractors of San Francisco, who base their judgment upon their individual experience with the boys which the school has turned out. At the present time, there are about sixty of these who are all working efficiently for Master Plumbers, and who return regularly after each four weeks on the job for further instruction in the school.

In the school, which they attend for two weeks out of every six, they are taught how to read plans, how to take measurements, how to caulk joints, how to ream and cut pipes, and the names and uses of all the different materials and tools connected with the plumbing industry. to supplement this practical instruction, we have made arrangements with the public school department whereby these students attend evening classes and are taught mechanical drawing, mathematics, hydraulics and sanitation.

When the students go out to actual jobs, they remain under the supervision of an apprenticeship committee appointed by the Master Plumbers' Association, and are handled on a merit system. In other words, it rests with the boy himself as to the progress he makes, the committee offering him the opportunity of taking an examination for advancement as often as he believes himself entitled thereto.

As to concrete results, a group of fourteen students from the school were taken by me and put to work installing the plumbing in two new houses in the residential district of San Francisco. Under my supervision they installed all the plumbing in these two houses in three days. This included the running of soil pipe, the installation of vent pipes, water pipes, and gas pipes, together with the caulking of joints and the threading and cutting of pipes necessary to be used. Besides being done in this brief period of time the job was done perfectly.

This particular feat is only one of a number of a similiar nature performed by this or other groups of students from the school and is described merely to prove that competent journeymen can be made in a comparatively brief time provided that intensive methods of training are pursued. By a careful selection of students for this school and by continuing its intensive course of instruction and practical training, we expect to be able within a reasonably brief time to turn out sufficient competent journeymen plumbers to meet the actual demands of the community.

The luxury and convenience of built-in accessories

FAIRFACTS Accessories provide convenience and economy in bathroom fixtures that can be obtained in no other way. Their initial cost is not greatly in excess of portable fixtures. They will last as long as the house itself and be a perennial delight to the house owner.

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(Continued from page 35)

and every other establishment, is placed where it belongs, and not where the whim of a property owner may impel him to construct it, regardless of surroundings. Mariemont bids fair to a more beautiful city than even Washington, and is expected to serve for many years as a model for those communities, which seek to combine the practical with the attractive in the arrangement of their surroundings.

But as I have indicated, few communities have had the opportunity to lay out their plans from the beginning. The next best thing to this, however, is to lay them out from as near the beginning as possible—that is, now.

Grow Up By Accident.

Most towns grow up by accident of some special advantage possessed, either in the matter of natural resources, water courses, or railroad facilities. They develop along entirely unordered and undirected lines, each individual seeking his own interest, and usually unmindful of the fact that his interest today may be directly opposite to his interest in the future, because no man can tell in what direction development may take place. Too frequently, also, the important fact is lost sight of, that what is to the best interest of the community as a whole is to the best interest of every individual property owner in the community. I mean to lay particular stress upon that statement—please get it clearly: Whatever is to the best interest of the community as a whole is the best interest of every individual property owner in the community. And this is a fact that is almost universally overlooked or ignored in the development of the average American city.

Since we in Spartanburg cannot have our community laid out and planned for us along the ideal lines of a new city, we can only do what scores of other cities in the United States have been doing in the past few years—take it in hand at its present stage of development, and as far as practicable direct its future growth along the lines of intelligent planning. This we can do, and anything less than this, in my humble opinion, will be a backward step in the history of Spartanburg.

Much Work Involved.

Just a few words as to what this involves.

First, of course, is the adoption of a practical plan. Everyone knows that it is well to plan a building from turret to foundation stone but this is not always practicable. Frequently a building already in existence is made more commodious, convenient, and attractive by remodeling. I may be pardoned for referring here to what has just been done in the home of the Carolina National Bank and the Dollar Savings Bank. That work was done according to the plan of the architect. We did not skimp here and patch there, just as the idea or the impulse might strike us. We took the entire situation in hand and worked it out according to an intelligent and definite plan, with results that are most satisfactory from both the practical standpoint and from the standpoint of appearance. So it is with a city. If his growth is allowed to drift along according to the whim of each individual who wants to put a shack here and a shop there, it will have a conglomeration of patched up structures all out of harmony with each other and out of keeping with their surroundings. Apply a definite plan, according to regulations which all understand are for the benefit of all, and growth will not only be directed in proper ways, but it will most certainly be stimulated.

Second, perhaps the most important phase of city planning is a system of zoning. Some one has asked "Does your city keep its gas range in the parlor, and its piano in the kitchen? That is what many an American city permits its household to do for it.

We know what to think of a household in which an undisciplined daughter makes fudge in the parlor, in which her sister leaves soiled clothes soaking in the bathtub, while father throws his muddy shoes on the stairs, and little Johnny makes beautiful mud pies on the front steps.

"Live and let live" is a better motto for the modern city than the savage one of "dog eat dog."

Suppose you had just bought some land in a neighborhood of homes and built a cozy little house. There are two vacant lots South of you. If your town is zoned, no one can put up a large apartment house on these lots, overshadowing your home, stealing your sunshine and spoiling the investment of 20 years' savings. Nor is anyone at liberty to erect a noisy malodorous public garage to keep you awake nights or to drive you to sell out for half of what you put into your home.

Adequate Streets Necessary.

Then there is the matter of streets and traffic. This whole question has been almost revolutionized by the advent of the automobile and the truck. Throughout the country, the highways have been vastly improved to accommodate the twentieth century demands made upon them, but in our cities we are forced to use the same street facilities that were in existence before the motorcar was invented. Streets that were adequate up to a few years ago are now entirely unequal to the task of furnishing traffic facilities to the properties bordering them. The street of the future should be wider than the widest of the past or the

(Continued from page 86)

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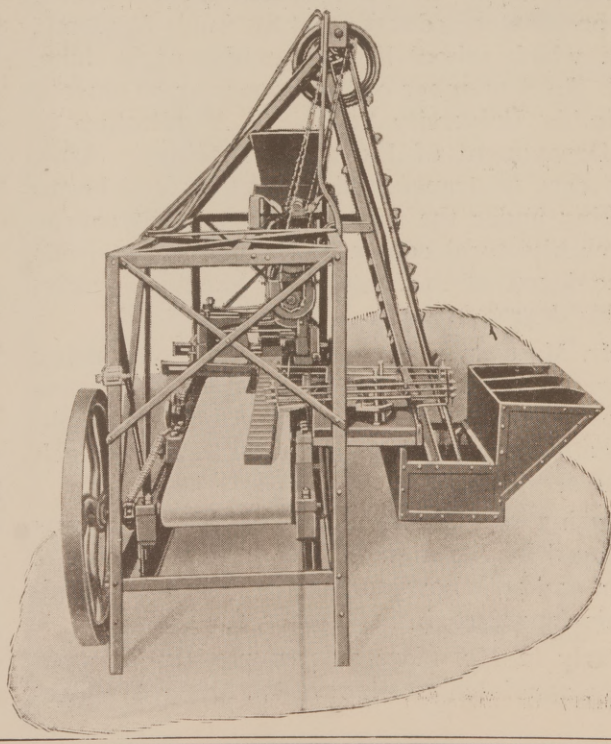

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Personal Mention

Henri Gabriel Marceau.

Henri Gabriel Marceau, who has just been awarded the Fellowship in Architecture of the American Academy in Rome as a result of this year's competition, was born in Richmond, Va., June 21, 1896. He received his gramar school and preparatory education at St. Ann's Academy, from which school he was graduated in June, 1914. In September of the same year he entered Columbia University School of Architecture in the Department of Extension Teaching. After two years he transferred his credits and began working under the scheme of combined college and architectural course at Columbia that leads to the degree of Bachelor of Architecture, receiving his degree in 1921.

Mr. Marceau's course was interrupted during the war, as he enlisted in the field artillery, serving as a cadet officer at Camp Taylor and subsequently receiving a commission in that branch of the service.

During several summers Mr. Marceau was employed by the architectural firm of Boring & Tilton and he is now working in their office pending his departure, in September, for Rome.

Early in Mr. Marceau's course at Columbia he was appointed assistant at the Avery Architectural Library, and held that position until his Senior year, when he was appointed assistant instructor in architecture in the Department of Extension Teaching. Last year Mr. Marceau also held a similiar post in the regular school, working the remainder of the time with Boring & Tilton.

Last summer he went over to France in charge of the Verdun unit of the American Student's Reconstruction Association. The unit was composed of architectural and engineering students representing eleven universities. The work was to make plans and surveys and help rebuild communal buildings in the front line areas. Upon his return he was elected secretary of the Association, a post he still holds.

During his course he was taken into the fraternity of Delta Upsilon by the Columbia Chapter.

Mr. Marceau tried for the Fellowship last year and was placed in the finals.

He attributes part of his success in this year's competition to the broadening of his vision in an architectural sense that came from his work in France last summer.

Beautiful Modern Buildings Shown.

Selections from the latest work of Milburn, Heister & Co., architects, Washington, D. C., are shown in a richly prepared and large book which is bound in a fine fabric cover of artistic design. The numerous prints in this publication display the appearance of many public and private edifices in different parts of this country and one shows the Bureau of Engraving and Printing buildings for the Chinese Government at Peking, China. The pictures are all handsomely done upon heavy calendered paper, many of them being accompanied by descriptive letters. The book has been published to convey an idea of modern architectural work to individuals, firms or corporations contemplating building.

F. Stillman Fish, architect, previously located at 7016 Euclid avenue, Cleveland, is now occupying offices at 412 Euclid-Sixty-first Street building, Cleveland, Ohio.

Crosby & Bagley is the name of a new firm that has recently opened offices at 627-31 Bulkley building, Cleveland, Ohio, for the practice of architecture.

John J. Zink, architect, formerly located in the Homer building, Washington, D. C., is now occupying offices at 126 Overland avenue, Baltimore, Md.

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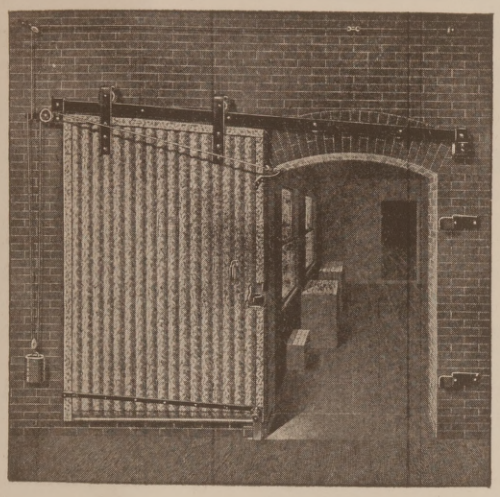

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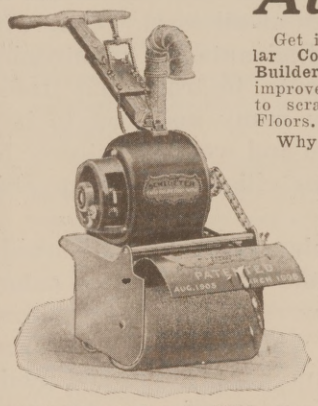

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(*Continued from page 82*)

present, and should be straight at all hazards. The traffic street that goes "clear through" in a straight line is the street that is going to be used, and the street that is most used is the one that is going to be bordered by the most valuable property. A country without roads is a wilderness of no value. A city of lanes and inadequate streets cannot grow.

Then the question of public buildings, parks and playgrounds should be comprehensively covered in the city's plan. All public buildings, except schools, should be grouped as near as possible together. City hall, courthouse, postoffice and other buildings of the sort should, as far as practicable, be arranged in one locality. This is not possible in Spartanburg just at present, and, of course, I am not advocating and such change immediately. But as an ideal for the future, it is worth consideration.

Plan City's Finances.

Another question of the utmost importance in city planning is the matter of financing. Sometimes some of us are prone to forget that when a city borrows money by the sale of bonds that money must be paid back with interest. It is easy to issue such bonds, but it is not always so easy to pay them when they fall due. The efficient city will be as careful in the planning of its finances as in the improvement of its streets or the establishment and enforcement of building zones. A city is not unlike an individual, in that its credit is its most valuable asset, and one that should be most guarded.

Then, having taken thought of the things of itself, the city can with both grace and self-respect invite the world to view its beauties and to make use of its facilities of all sorts. They will come to enjoy its varied advantages, to patronize its business establishments, to trade and traffic with its citizens and in many instances to buy its lots, situated on wide and well-kept streets, to build homes and become citizens of the greater city.

Organization and plan have been the only principle upon which the great business enterprises of our country were possible. Organization and plan, in 1917, when applied to our untrained men and our unprepared resources, made possible the wonderful success of our army and navy.

Let us think of these things. A city that thinks is well on the road to progress. The cross-currents of our complex economic life should be as far as possible directed into one great current, by means of the intelligent planning and leadership, and the strength of that one great current will measure the growth and progress of our city."

THE

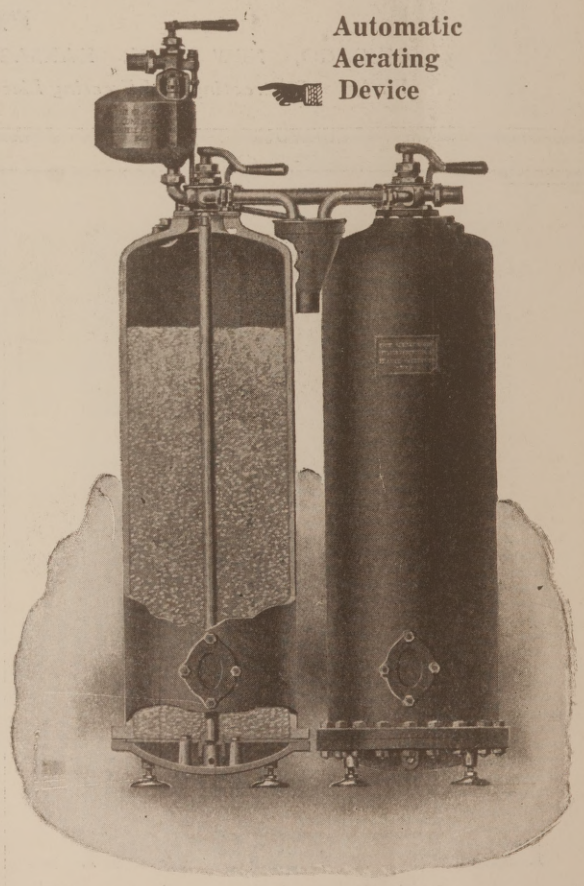
Continental Filter

The standard for high-class residence installation for the past quarter century

BECAUSE

it combines these important features:

1. DOUBLE FILTRATION — First through sand, then through bone-charcoal.
2. SLOW FILTRATION—Obtained by a large filtering area.
3. THOROUGH FILTRATION — Filtering material in each cylinder being 3 ft. in depth, making an aggregate depth of 6 ft.
4. SIMPLICITY OF OPERATION—Each cylinder controlled by a single valve, making no expert care necessary.
5. AUTOMATIC AERATING DEVICE—By means of which the filter beds are thoroughly agitated and aerated each time they are cleaned and the material is thus kept clean and fresh.



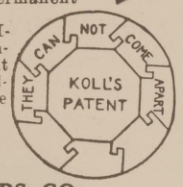
The New York Continental Jewell Filtration Co.

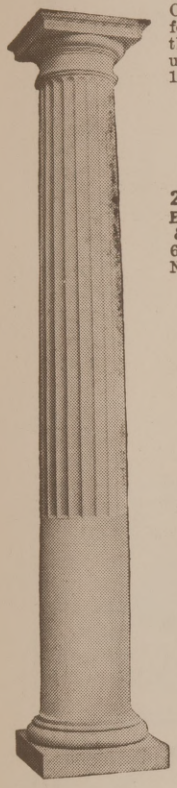
General Offices: NUTLEY, N. J.
Member Associated Manufacturers of Water Purifying Equipment.

Note the Lock-Joint

—We are the originators of the INTERLOCKING JOINT WOOD STAVE COLUMNS—they are the products of experience and an organization which has studied the most exacting requirements.
—Their specification gives assurance that the striking feature of colonial architecture will insure permanent satisfaction.

For EXTERIOR and INTERIOR COLUMNS very useful information will be found about them in our Catalogue for Columns. When writing enclose 15c and ask for No "S"-47.





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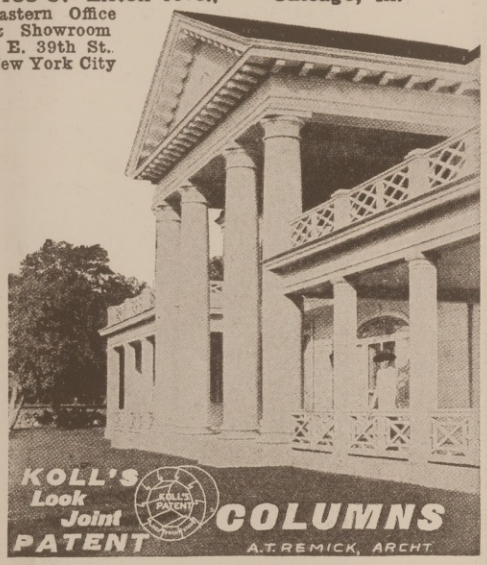

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Adhere tightly to iron, steel, wood, glass, stone or concrete, Make an elastic joint—tight yet indefinitely flexible, preventing glass from cracking.

Guaranteed to withstand heat, cold, rain or extreme climate conditions, without chipping or peeling.

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is used for bedding and glazing all classes of glass construction and is unequalled for greenhouses. Also supplied in shades to match for pointing up stone work, terra cotta, granite, etc.

Complete literature on this exceptional product together with testimonials from such prominent architects as Cass Gilbert, also the Lackawanna and Pennsylvania Railroad ,will be mailed on request.

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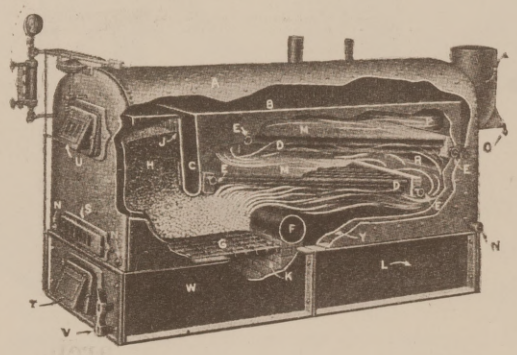

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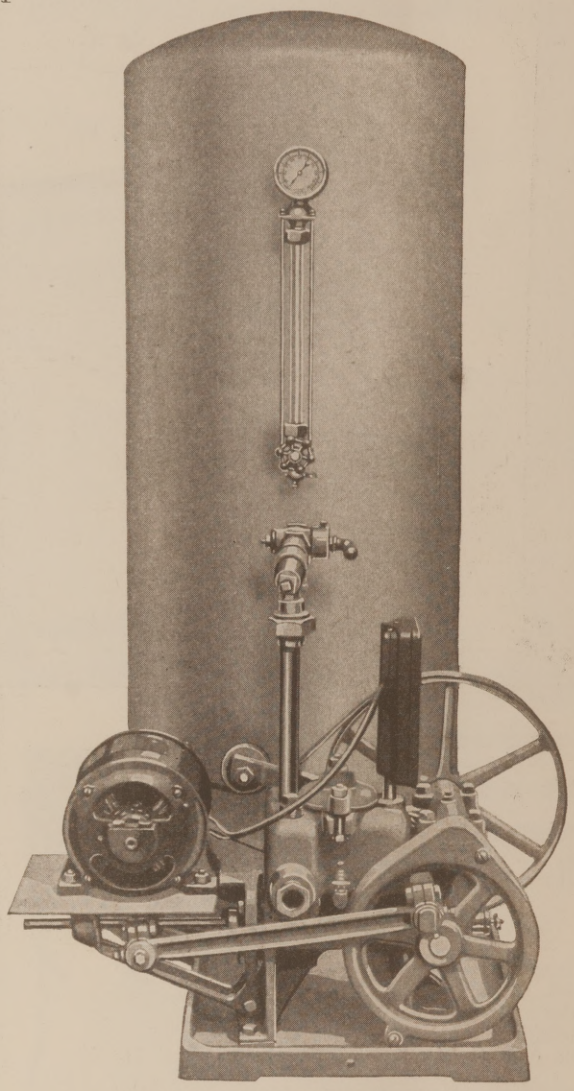

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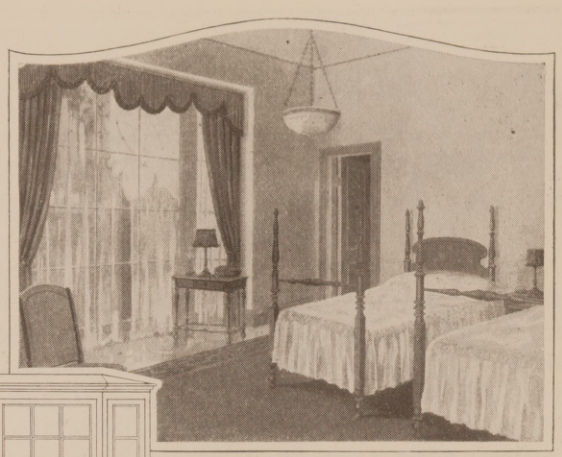
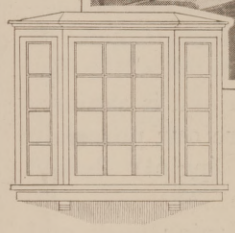
Each month from now on we will tell you something interesting about a company that has been building ice machines in Charlotte, North Carolina, for the past ten years, and about the machine built by this company that has been speaking for itself for the same length of time.

For immediate information, write

Southern Ice Machine Co.
Charlotte North Carolina





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THE architect can be the great physician. His only medicines are sunshine and air, cheapest and most wonderful of medicines. Doctors cure human ills but the architect can, in great measure, prevent them.

The liberal use of window glass has made possible a degree of sanitation approaching perfection. Of all rooms in the house, the bedroom should have the largest area of glazing in relation to floorage. There is a growing demand for sunshine by day and plenty of air by night.

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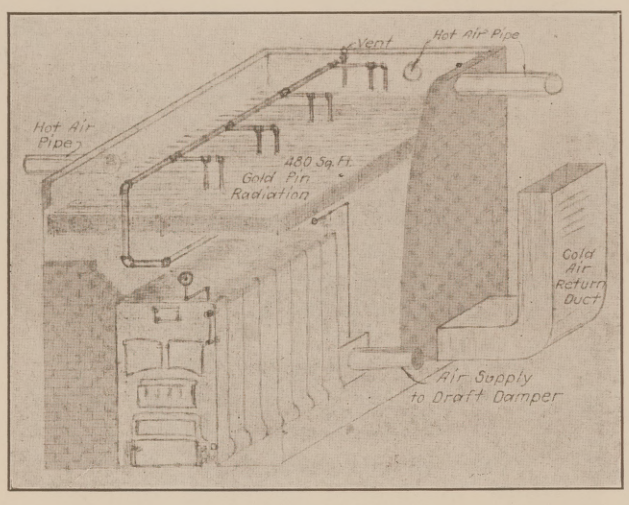
Trade Notes.

THE QUAD GAS WALL HEATER.

Made Like the Tub, etc.—Vitreous Porcelain—Not White Paint.

Neat, New, Novel. This Heater can be easily installed in new or old construction to either inside or outside connection. Attractive design, smooth finish in White Vitreous Porcelain—Nickel Plated—Bronze and Oxidized Copper if desired. The white porcelain matches the fixtures and finish in the bath room and is sanitary and easy to clean. Don't compare our porcelain finish and price with the white (paint) baked enamel finishes and prices.

This heater has a copper reflector back and sides and an aluminum tip burner for the illuminating flame which is absolutely odorless, heats quickly, consumes a small quantity of gas, is easily regulated and is at all times ready for service.



Dimensions.

Width of Front	15½	inches
Height of Front	19½	inches
Depth of Front	2¼	inches
Width of Body in Wall	13½	inches
Height of Body in Wall	17½	inches
Depth of Body in Wall	4	inches

Packed one in a carton. Shipping Weight 30 lbs.

The Heater has a lift up door, giving easy access to the burner for lighting and cleaning. This door when full open is securely held, thus forming a convenient shelf which when desired can be used for heating water, milk, drying shoes and many other practical purposes.

The open front work admits the cold air at the bottom and sides and discharges hot air through the top openings.

The part of the heater inserted in the wall is 13½ inches wide and is of sheet metal insulated inside and outside with asbestos board and all heated parts are 1½ inches away from the woodwork. The flame jets are boxed in and insulated and air space between it and top, thus eliminating all danger of fire.

The heater being in two parts is easy to install, the one part or stove with connections to the gas is first placed in wall, then after the proper adjustment the front is put on and securely fastened to the wall by four set screws with nickel plated heads.

No vent or flue is required in using the Quad Gas Wall Heaters because perfect combustion is attained and the gas regulator is adaptable to all pressure, insuring efficient results.

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There are three qualities necessary to produce a satisfactory mortar color, namely: fineness of grinding, strength of color and permanency. Tamms Colors are all natural and guaranteed to meet these requirements.

Are your colors pemanent, is one of the first questions asked, and rightfully so, for if they are not it does not make much difference how they look when they are first put on, it is how they wear. Tamms Colors are permanent, as they are not manufactured, but are natural ores and will run uniform at all times.

It is always best to mix the color with cold lime and add sand after it is thoroughly mixed, thereby getting the full strength of the color, but if this is not practical, be sure that you get a perfect mixture, thereby saving color.

Tamms Colors are ground fine, which is another important point, for the coarser the color the less staining or coloring power it will have.

Following is apporximately the proportions of color to use for laying 1000 brick with ⅜ inch joint.

Tamms D. S. Chocolate	75	pounds
" Red	75	"
" D. S. Black	90	"

The proportions of colors used are, to a great extent, dependent on the way they are mixed, but the stronger the color the less will be used, and a minimum of Tamms Colors will give the desired shades in all cases. This is especially true of the D. S. Black and D. S. Chocolate, but in all colors are guaranteed satisfactory.

Above colors also adaptable for use in cement, stone, stucco, etc.

Many other shades can be made through combinations.

Tamms Colors are packed in 100 pound paper-lined bags.

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Our specialty is manufacturing millwork to fit any architect's requirements in any wood desired. Veneered doors and all other items of millwork manufactured in our own plant. A full mechanical equipment and experienced organization enables us to guarantee prompt service and accurate workmanship and material of good quality. Send us plans for estimate.

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Sewage Disposal Without Sewers is now available anywhere

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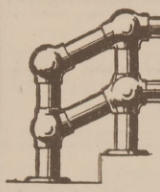
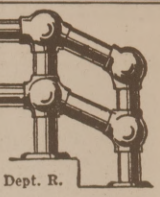


IRON PIPE RAILINGS



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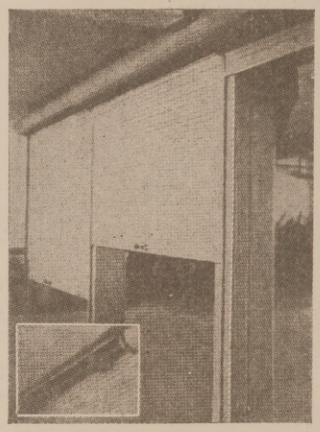

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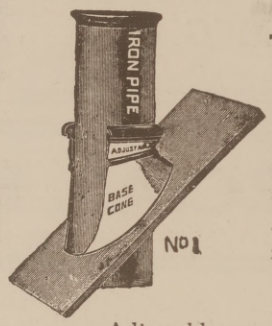

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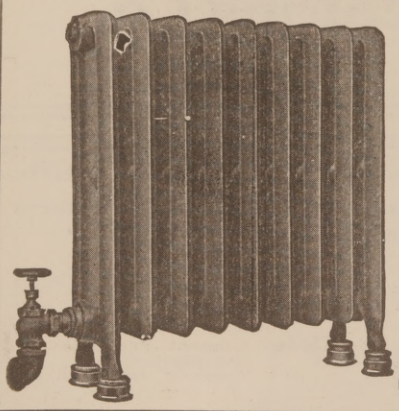

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Simply the twist of your wrist up screws it—raises it or lowers it as you desire.

A sample will be sent free upon request. Sold by jobbers.

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NORTH STATE Building Castings, Clean Out Doors, Ash Dumps, Ventilators, Ash Hoists, Coal Hole Rings and Covers,

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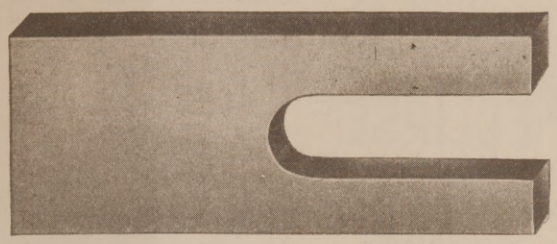

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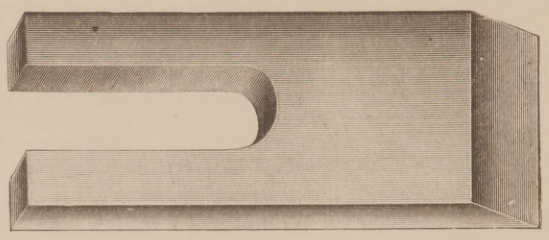

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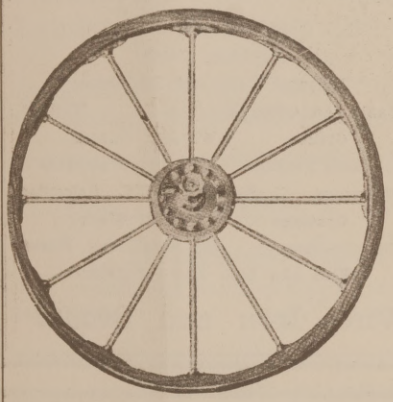

IT IS IMPORTANT to keep your band saw wheels trued up. This will help to eliminate the breaking of band saw blades.

We Repair Band Saw Wheels

true them up, put on new rubber bands and new brass bushings when necessary so as to make them run perfectly true. When in need of repairs write us. When ordering bands state diameter and width of wheel.

High Grade Rubber Bands for Band Saw Wheels Carried in Stock

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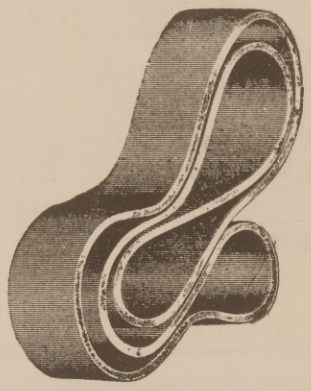
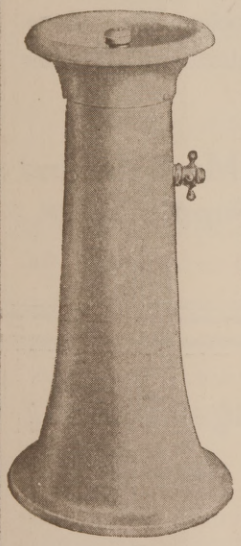
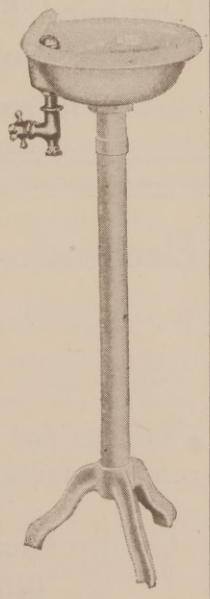


Practical Fountains of Simple Design.



This strong and serviceable sanitary drinking fountain is Model A-27, especially designed for streets, parks and playgrounds. Pedestal and bowl are of heavy cast iron, porcelain enameled; equipped with self-closing stop-cock. Our attractive new Fountain catalogue describes and illustrates many models suitable for public use, all of them designed to protect the health of your population. Send for your copy.



The Century Model D-29, illustrated here, is sturdily built and absolutely sanitary. Pedestal Fountains of this particular design make splendid installations for industrial institutions. They are moderate in cost as well as being simple in construction. All Century Fountains are fitted with our own patented bubbler heads, which are recognized as having no equal. D-29 Pedestal Fountain may also be furnished with vertical stream.

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From Cisco Warehouses located, equipped and operated to render satisfactory service, will give you your steel when needed.

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Bars, Angles, Beams, Channels, Plates, Sheets, Pipe, Reinforcing Bars, Rivets, Shafting, Boiler Tubes, Tool Steel, Chain.

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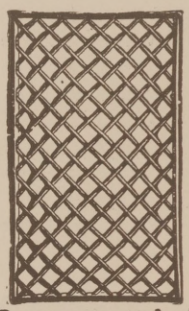

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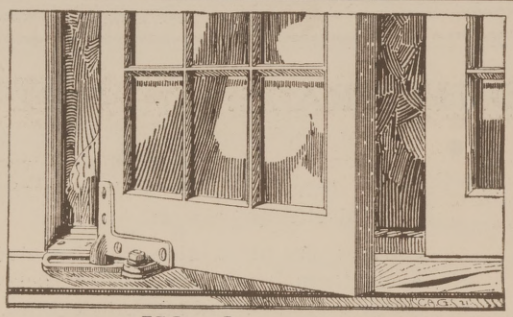

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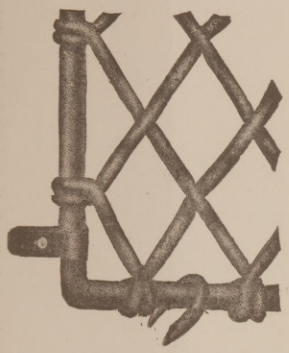

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