

Southern Architect and Building News

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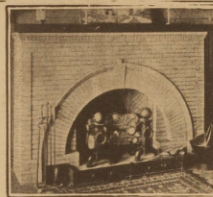
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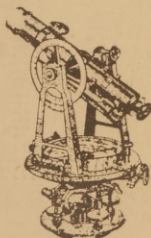
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Instrument Maker
Architects', Engineers' and Contractor's
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Perfect adjustment to any pitch of roof from 50 degrees to flat is secured by our patented flange and sleeve; the process of adjustment when applied to the roof being so simple a child can do it.

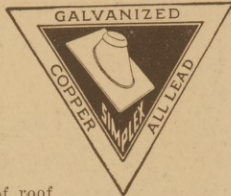
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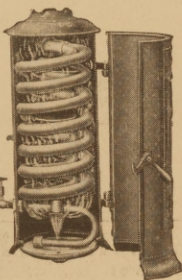
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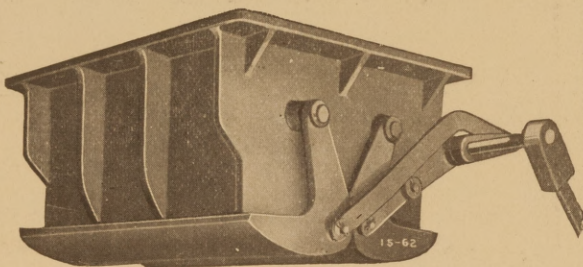
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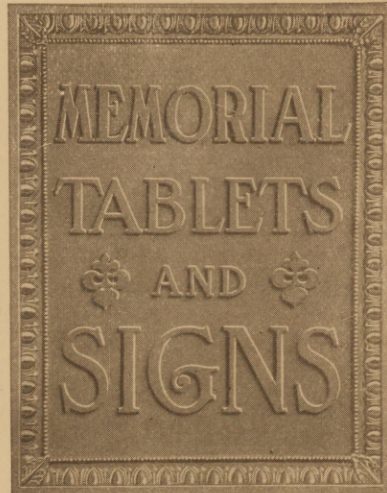
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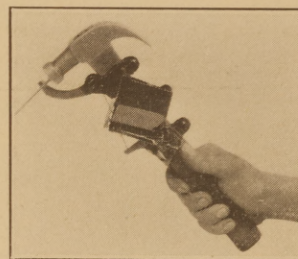
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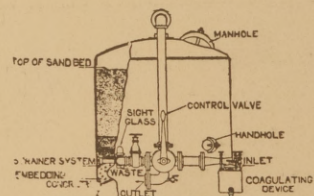
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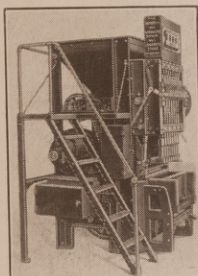
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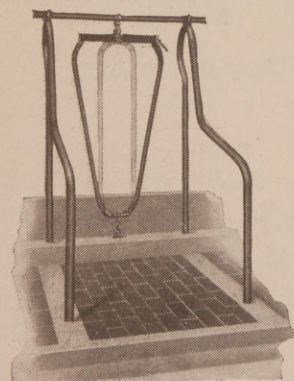
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have a reputation for quality and endurance that is backed up by 30 years actual roof service.

Specify Cortright Shingles and satisfy your clients.

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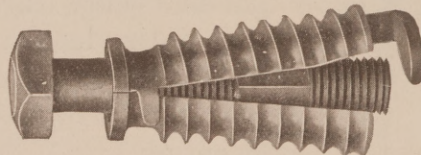
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LIGHT—AIR NO FLARE
KEEPS OUT HEAT—FOR SKYLIGHTS, WINDOWS
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They want Guaranteed for Strength, Comfort, Beauty and Economy

When specifying seats for a job get our Catalogue and name of nearest jobber who handles our line.

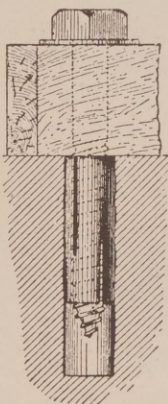
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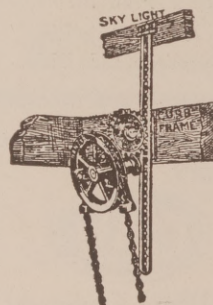
expands evenly throughout its entire length from the first turn of the screw. Screw cuts its own thread as it enters.

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DANZER'S Latest SKYLIGHT and SCUTTLE LIFT



Locks Anywhere
You Stop It

Adjustable
To Any Angle

Always Lifts
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Uses No. 10 Jack
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Sold by All
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FOR ALL BUILDING PURPOSES.

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See that you have a price from our Company before placing order. Plans will be returned promptly if sent for estimate.

J. Hoadley & Sons Company, Inc.

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Bowling Green & Green River Quarries Co.

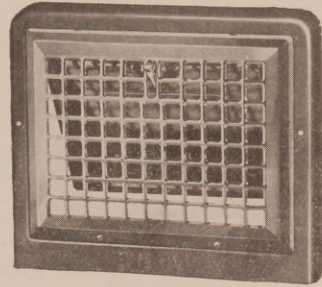
Dealers in the Celebrated

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Blocks Sawed—Planed—Turned—and Cut
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Famous for Fine Finish

A GOOD looking, well-designed register with a fine finish can be furnished at the same price to your customer (and same profit to you) as a register of commonplace design—if you sell Columbian Registers. The Columbian line is complete in all standard sizes, all finishes, in floor, wall and baseboard registers. Write for catalog.

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CLEVELAND

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*Installed in the home of
H. V. Schieren, Montclair, N. Y.*

Proof That Proves



Architects:
Wallace & Goodwillie.
Heating Contractor:
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Pressweld Radiation is well worth investigating. Let us send you full particulars at once. Write Department "C" today.



I NSTALLATIONS in buildings such as the one shown above, is the proof that proves the worth of *Pressweld Radiation*. It is being specified for all heating requirements by architects who have investigated its merits. Made of thin metal—a special radio alloy—it has the advantage of heating and cooling *quicker*—resulting in a marked saving in fuel. But a quarter the weight of cast iron, it can be hung on the wall if desired, greatly conserving space. Neither freezing nor rough usage will injure it. The smooth, even sheets of the fixture takes a beautiful finish and permit of quick and easy cleaning. Yet, with these many advantages, *Pressweld Radiation* compares favorably in cost with cast iron.

American Pressweld Radiator Corporation,

- Detroit, Michigan

Dark Hollow Gray

MR. ARCHITECT: Before making the selection for your client consider **DARK HOLLOW GRAY**. There is a decided beauty in the soft, delicate gray shade of this material. This stone is possessed of great density, runs more uniform in color and texture and is of a fine, close grain.

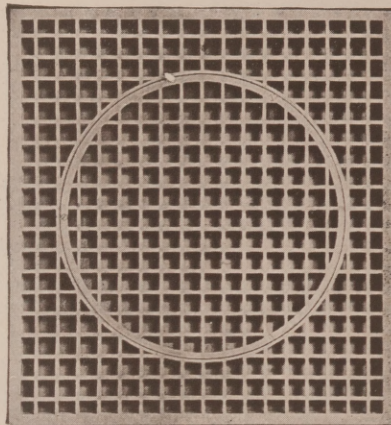
Write for samples of this material. Compare **DARK HOLLOW GRAY** with other Indiana Limestone.

We have in our stacks at the quarry several hundred thousand cubic feet of this material thoroughly seasoned and ready for shipment.

To assure yourself of getting this material, your specifications and contracts should stipulate the use of **DARK HOLLOW GRAY BEDFORD STONE**.

THE CONSOLIDATED STONE CO.
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DUPLEX GRATINGS for Pipeless Furnaces



We carry the following Gratings in stock for immediate delivery:

Size Grating	Size Collar	Size Grating	Size Collar
20 x 22	14	30 x 36	24
22 x 24	16	35 x 35	26
24 x 27	18	36 x 36	28
30 x 30	22	40 x 40	30
	45 x 45—36		

Prices on Application

TUTTLE & BAILEY MFG. CO.
NEW YORK

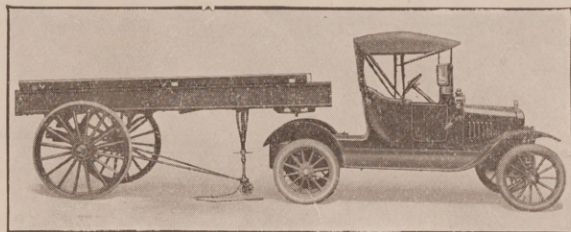
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The Martin Semi-trailer can be easily and quickly attached to a Ford Roadster without boring the frame or mutilating the car in any way. No outside help required to fasten it in place. When Trailer is not needed it can be instantly detached and the car used for pleasure.



This Trailer Body is 12 feet long—much longer than body of a 1 ton motor truck. The complete outfit is very little longer overall than the conventional truck of the same loading space.

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Originators of the semi-trailer method of hauling.

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Agents all over the United States

We have an especially attractive agents' proposition to offer to motor car dealers in cities where we are not now represented.

Send for details.

A Complete Motor Outfit to haul 1 ton, for \$500.00

Think of it!!!—Only \$500.00!!!

This new Martin semi-trailer costs - - **\$250.00**

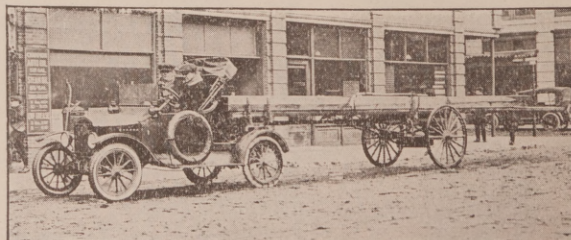
This slightly-used Ford Car costs - - - **\$250.00**

Total cost, complete, ready to run - **\$500.00**

A Martin Semi-Trailer and a Ford Make the Lowest Priced and Most Efficient One-Ton Truck in the Entire Commercial Car Field.

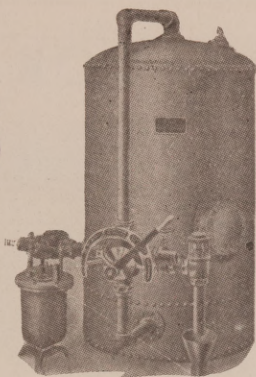
With a Martin Semi-Trailer, a Ford Car Can Easily PULL a Ton Without the Least Strain on the Driving Mechanism. Can be backed, turned and handled in the narrowest quarters.

Extension type lumber trailers, 1 ton capacity, \$250
Extension type lumber trailers, 1½ ton capacity, \$275
Other sizes and styles of semi-trailers, 1 to 10 tons capacity, always on hand, for immediate shipment.



There is a
**ROBERTS
FILTER**

For Every Need



*Style "G"
Roberts Filter.*

Catalog on Request.

Made in varying sizes to meet requirements for capacities. One valve controls all functions. Complete list of filters shown in Sweet's Catalog.

Roberts Filter Mfg. Co.

Main Office, DARBY, PA.

1707 Flat Iron Bldg.

New York

FACTORIES—Darby and Frankford.
(Suburbs of Philadelphia, Pa.)

**Wright
Coal
Chutes**

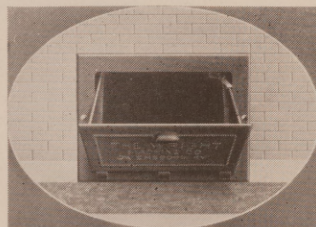


Are Mechanically Right

The design and construction of Wright Coal Chutes speak for them long and useful lives. They are constructed throughout of extra heavy cast iron, weigh practically three times as much as any other chute of the same dimensions. They will never lose their shape nor ease of operation.

They are easily installed. Will stand on flat surfaces which eliminates the necessity of staking and tying while being installed. They plumb themselves. Architects and contractors should always specify the Wright Chute.

*Write for Discounts
They are Liberal.*



**Wright
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Patent Chain-Hanging
STANCHIONS**

Make cows comfortable, keep them clean, and increase the flow of milk. Used with either concrete or wood base.

Liberal Discount to Contractors or Dealers.

Manufactured by

Wallace B. Crumb

Box S, Forestville, Conn.

Dependable Showers

Easily set for desired temperature.

The Milwaukee Mixer

precludes all danger of scalding.

Made in a variety of designs.

Valve either exposed or concealed.

China or metal handle.

Order from your jobber.

The Milwaukee Flush Valve Company

Valve Specialists

MILWAUKEE, WIS.

Build the Fireplace Right

Don't try to reduce the cost by leaving out a good damper. It results in an expensive fireplace to operate and allows rain, wind, birds, and other objectionable things to enter the room when the fireplace is not in use.

Stover Dampers support the brick work, form a smooth throat, regulate the draft perfectly, and reduce the labor cost of erecting fireplaces.

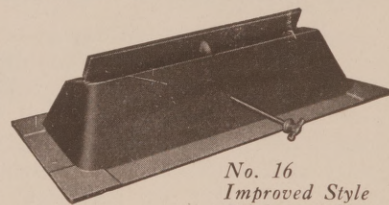
The price is low enough so a Stover Damper can be used in every fireplace. Made in several styles for all size openings. The Improved style shown above is one of the most popular.

Send for catalog No. 1740 showing our fireplace fixtures and giving information as to the best fireplace construction.

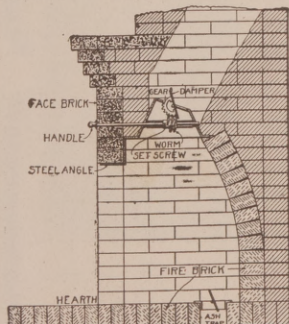
We also make windmills, feedmills, gasoline engines, hinges, pulleys, saw vises, latches, sink brackets and other hardware.

Stover Mfg. & Engine Co., 722 East St., Freeport, Ill.
Send us Catalog No. 1740.

Name Business
City State



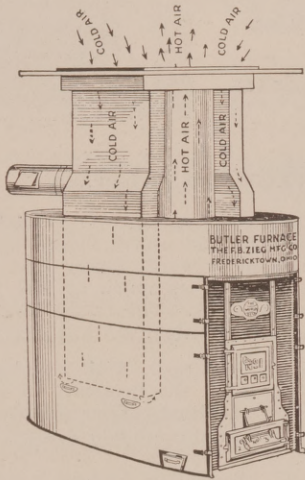
*No. 16
Improved Style
Made in 7 Sizes*



**STOVER
Mfg. & Engine Co.
FREEPORT, ILL.**

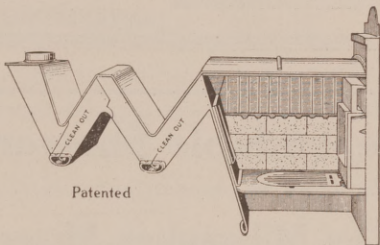
A Complete Line

Butler
Furnaces
Made in
3 Sizes
and
2 Types



Adapted for
Residences,
Apartments,
Storerooms,
School Houses
and
Public Halls

Completely Assembled When You Knock Off the Crate



WHEN you knock the shipping crate from a Butler Furnace you find the heating unit completely assembled with everything in place and all joints tightly caulked.

You and your helper carry it into the basement—set it on the floor—place the wrought iron base around it and proceed with the assembly. This will be found most simple as the furnace will have been previously assembled at the factory and all parts will go readily into place.

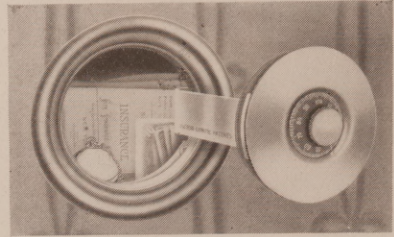
Another important advantage of Butler construction particularly interesting at this time is the fact that all parts that might ever need replacing will pass readily thru the fire door. More attention is being given at this time than ever before to the efficiency of furnaces and many people are finding, to their sorrow, that new parts can't be put into their furnace without completely dismantling it.

To be able to point out this feature to prospects is just another of many advantages the Butler Agent has over competitors.

THE F. B. ZIEG MFG. CO.

Fredericktown, O.

VICTOR LOWRIE



WALL SAFE

A
PRESENT
DAY
NECESSITY

ADAPTED
FOR
APARTMENT
HOUSES

WE WILL BE GLAD TO SUBMIT DETAILS

MANUFACTURED EXCLUSIVELY BY
The Victor Safe & Lock Co.
CINCINNATI, OHIO

Also Manufacturers of Safes, Light and Heavy Vault
Doors, Deposit Boxes and Bank Work of all Character

on edge of Trade "NO-SAG" Mark every door

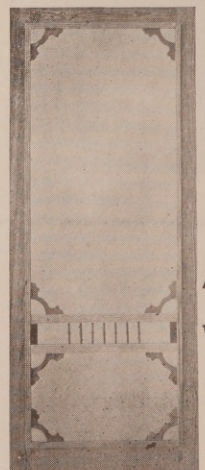
The Better Screen Door

is the Contractor's friend.

Made for front, rear and screen porch doors of houses and the strong, reliable screen doors used on offices and store buildings.

**THE DOOR THAT WILL
NOT SAG.**

A special arrangement is made for Architects and Contractors. Ask us how to buy NO-SAG direct.



Cadillac Lumber Co.
CADILLAC, MICH.



Terminal Station, Macon, Ga.

Alfred Fellheimer, Architect.

The entire contract for
KALAMEIN WORK

MADE BY

RELIANCE FIREPROOF DOOR CO.

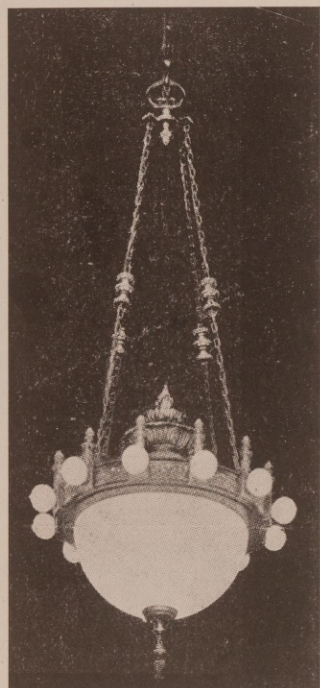
Metal Covered Doors, Windows, Trim, Etc.

Labelled Kalamein Doors a Specialty

West and Milton Sts., and
Greenpoint Ave.

BROOKLYN, N. Y.

Agents—Beaulieu & Applewhite, Atlanta, Ga.



Ornamental Lantern

Equitable
Trust
Building
New York

Made By

Bullock Mfg. Company

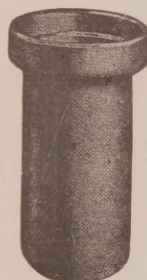
LIGHTING FIXTURES

BRASS AND BRONZE SPECIALTIES

408-10-12 West 13th Street, New York

"Sewer Pipe of Quality"

MADE OF OHIO RIVER FIRE CLAY



By test 43% stronger than competitors'
Send for special test circular.

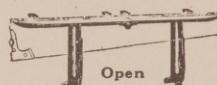
Cannelton Sewer Pipe Co.

CANNELTON, IND.

Southern Distributor—Fischer Lime & Cement Co., Memphis, Tenn.

Western Distributor—St. Louis Clay Products Co., St. Louis, Mo.

Unbreakable Steel Folding Saw Vises



Open

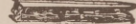
No shift saw vise. 28 in. jaw, wgt. 4 lbs.



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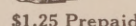
14 in. jaw, wgt. 2 lbs.

Folded



\$2.25 Prepaid

Folded



\$1.25 Prepaid

The 28 in. vise takes the full length of saw. The 14 in. vise required only on shift of saw.

Buckeye Manufacturing & Foundry Co.

Successors to Buckeye Saw Vise Co.

9491 Lake Avenue, Cleveland, Ohio

Notice to Architects

For that cool, non fading Bluegray side walk or stucco, ask your dealer for

THE L. MARTIN COMPANY'S
EAGLE BRAND LAMPBLACK

Special Blacks for Pointing Brick and Stone.

The L. Martin Co.,

81 Fulton St.

New York

Heating Apparatus

For Schools, Churches, Dwellings and other buildings.

Wonderful "Bilt-Rite" Furnaces

THE HAMMOND HEATING CO.,

130 E. Pearl St.,

Cincinnati, Ohio

In the Old Days

When you specified Cast Iron Columns, the local jobbing foundry turned out the work. You had no guarantee that the metal was clear and sound all the way through and you were almost sure that the wall thickness was not uniform. You finally became disgusted with their work and stopped using Cast Iron Columns altogether.

But Today

you can buy guaranteed and trademarked KEYSTONE Cast Iron Columns and be sure that the metal is clean and sound. Absolutely accurate wall thickness is insured by casting KEYSTONE Columns vertically. As an added precaution we also use solid molds and metal core-bars exclusively.

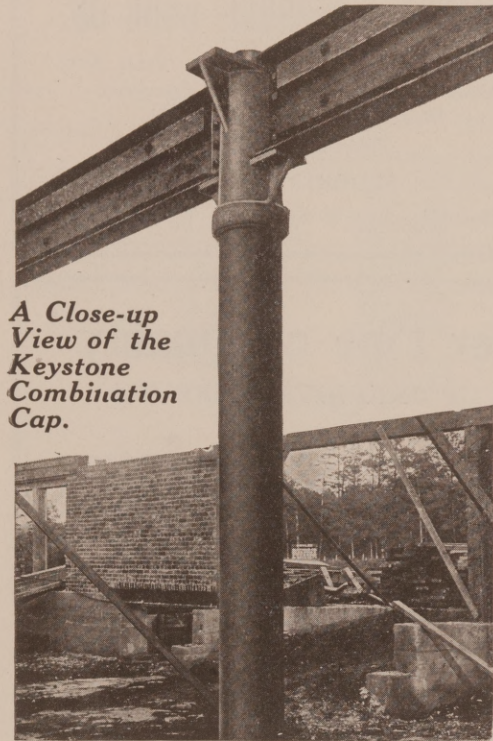
Rigid inspection and tests are given each KEYSTONE Column. Any further information you may desire may be secured from our Architect's Service Sheet which outlines the most approved application of KEYSTONE Columns. A copy of this sheet is waiting for you! What is your name and address!

Send for the Service Sheet Today.

UNITED STATES Cast Iron PIPE and **COMPANY** Foundry

722 E. Pearl St., Burlington, N. J.

Southern Sales Offices: 1002 American Trust Bldg., Birmingham, Ala. Security Bldg., St. Louis, Mo.



*A Close-up
View of the
Keystone
Combination
Cap.*

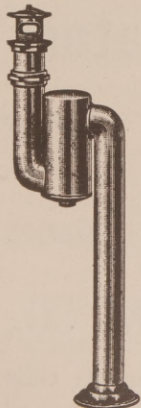
CRUSHED GRANITE GRANITE SAND RIP-RAP JETTY STONE

ALL SIZES SHIPPED PROMPTLY

A. T. Small Quarries Company

OFFICES: 353½ THIRD ST., MACON, GA.

QUARRIES: HOLTON, GA.



CLEAN SWEEP TRAP

Close to the PEOPLE'S NEEDS.
SAFE, SANE and SANITARY.
UP-TO-DATE in MAKE and APPEAR-
ANCE.

ABSOLUTELY the BEST TRAP.

A RED HOT Proposition.

A REAL TRAP.

Used by the Government in its work.
In LEAD and BRASS.

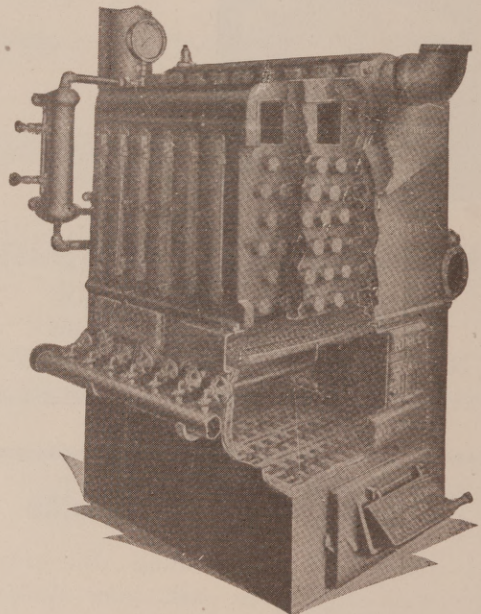
Detroit Sanitary Supply Co.

SOLE MANUFACTURERS

Second Ave. and Antoinette St.

DETROIT,

MICHIGAN



THE BACON HEATER MFG. CO.

Bacon Convertible Gas and Coal Boilers
FOR

STEAM, VAPOR AND WATER HEATING
2622 Franklin Avenue, - - - Cleveland, O.

CHANGE FROM GAS TO COAL
IN FIVE MINUTES

Southern Architect and Building News

WITH WHICH IS CONSOLIDATED "SOUTHERN BUILDING RECORD"

VOL. XLII.

DALTON, and ATLANTA, GA., FEBRUARY, 1919.

No. 4

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 publi-
cation.*

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

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Avoid the Friend Who Disparages.

Association with fault-finders is harmful to a
business man. It lessens his confidence in himself.
Friendship is not of the right caliber which mani-
fests itself chiefly in adverse criticism of one's plans.
Some persons labor under the mistaken notion that
friends must be frank with each other to the extent
of calling attention to every flaw. This practice has
a discouraging effect. It weakens initiative and
power of decision. The frequent mention of faults
works its result in imperceptible friction—an ero-

sion of self-reliance, subtle and destructive—against
which there is no adequate provision in the make-up
of character. If the censorious friend were to con-
centrate all his admonitions and fault-finding in a
single talk, there would be a flare-up of resentment
which would put an end to the friendship or to the
practice of disparagement. The contractor and
builder needs stimulation, encouragement, approval,
helpful and constructive suggestions. He should
choose friends who sympathize with his ambitions
and who spur him to greater effort.

Prices, Wages—the Vicious Circle.

A 25 per cent reduction in the price of radiators
is announced by the American Radiator Company.
The management explains, however, that it will not
attempt any reduction in the present scale of wages.
It will be content with lower profits for the time
being in the hope that its policy will stimulate build-
ing operations.

Recently the United States Steel corporation an-
nounced a similar policy. It cut prices in order to
encourage peace orders for its products, but re-
frained from reducing wages. So long as reasonable
returns were possible, the corporation deemed it
sound business policy to continue the present wage
scales with labor.

Are not these instances significant and instructive?
Do they not indicate the precise way to escape
what has been called the vicious circle of high prices
and high wages? Labor says it cannot accept wage
reductions while prices remain high. Manufacturers
say they cannot reduce prices while wages remain
high. Men of affairs contemplating extensions or
new enterprises say they cannot begin construction
while both prices and wages maintain prohibitive
levels. Manifestly, some one must make a beginning
if the vicious circle is to be broken and business is
to be stimulated. If those corporations and firms
that can reduce prices without sacrificing reasonable
profits will hasten to do so, accepting for the time
being a lower rate of return, the wholesome and nec-
essary process of deflation will be set in motion.
Labor will not object to reduction in pay if the pur-
chasing power of the dollar is increased and the
American standard of living is not threatened. Act-
ual, not nominal, wages determine the wage work-
er's standard of living. Far sighted and broad
minded corporations will wisely emulate the con-
cerns above mentioned and reduce prices to a point
that will eliminate not fair and reasonable profits,
but "profiteering."

Making Use of the Roof.

"In future all buildings will be erected with a view to making use of the roof," said L. P. Hazen, widely known contractor and builder. Mr. Hazen was explaining the nine "breathing spaces" on the roof.

"We have made a great mistake in building homes in recent years," he continued. "Too much attention was paid to making the basements habitable and little or no attention was given to the roof, except to see that it did not leak.

"The modern home will make good use of its roof, which is the best part of a building. It provides an ideal place for sleeping porches, and a safe place for the children to play can easily be provided at a moderate cost. This will be the most notable change in architecture within the next ten years."

Persistent Advertising Pays.

The Insurance World quotes the president of the American Rolling Mills Co. as saying that although for two and a half years his company has been unable to supply the demands for its products, it proposes to continue without interruption its advertising program. He further said:

"We are building a permanent business edifice, and some day we would have to spend millions to buy back the business and good will of our clients if they are forsaken in this emergency."

That failure to persist in an advertising campaign is fatal is illustrated by the Insurance World with the case of A. and F. Pears, the soap manufacturers of England, who some 15 years ago, were expending about a quarter of a million dollars a year in advertising. This energetic advertising made Pears' soap a household word all over the civilized world, and the company was selling annually its entire output. Then the directors of the company, elated over their success, decided to "save money" by discontinuing their advertising. It is understood, of course, that the usual purpose of firms and corporations when they discontinue advertising is to save money. Pears' soap is refrained from advertising for six months, and during that six months it lost 35 per cent of its business. It cost the Pears' company six and a half million dollars to get back to the place it occupied when it took that six months' vacation.

Should Work Both Ways.

Appreciation is something we like to get and usually forget to give. Appreciation is something we ought to give our helpers, something they like to receive, something it will pay us to give them, something we usually withhold because we are careless about it. Your assistant theoretically works for the pay he gets. He has to have that anyway. But as a matter of fact he needs appreciation of his good

work if he is going to get along. If we want an assistant to be good natured, cheerful, happy, and we do, because under no other conditions can he give us the kind of service we want, then we must show appreciation of what he is doing for our business. A good assistant earns more than he is paid. In no other way can we make it profitable to keep him. For that extra earning, for the profit we make on his services, he is entitled to an appreciation. The kind of help we like to hire like to work for the kind of employers we ought to be, the kind that show appreciation. If we are appreciative, we will get a better class of help and they will stay with us longer. They will return us money while they are with us. Appreciation, it is easy to see, is profitable. We can make more money by being appreciative. If we will not be appreciative just for the satisfaction it gives others, let's be appreciative because it pays.

Ben Franklin's Thriftograms.

Save and have
Every little makes a mickle.
Little strokes fell great oaks.
A rolling stone gathers no moss.
God helps those who help themselves.
Spend one penny less than thy clear gains.
Look before or you'll find yourself behind.
The way to wealth is as short as the way to market.

He that waits upon fortune is never sure of a dinner.

Money can beget money, and its offspring can beget more.

It is foolish to lay out money in a purchase of repentance.

Learning is to the studious and riches to the careful.

Waste neither time nor money, but make the best use of both.

Remember that money is of the prolific, generating nature.

All things are cheap to the saving, dear to the wasteful.

If you would be wealthy, think of saving as well as getting.

Beware of small expenses; a small leak will sink a great ship.

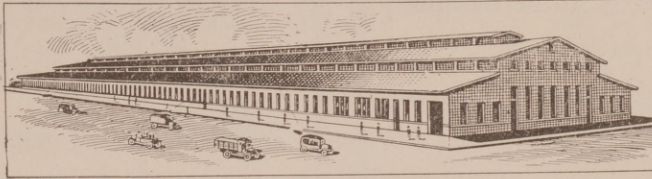
A penny saved is a twopence clear. A pin a day is a groat a year.

Gain may be temporary and uncertain, but expense is constant and certain.

Buy what thou has no need of, and ere long thou shalt sell thy necessities.

It is cheaper to suppress the first desire than to satisfy all that follow it.

He that murders a pound destroys all that it might have produced, even scores of pounds.

INTERNATIONAL STEEL & IRON CO., Evansville, Ind**S
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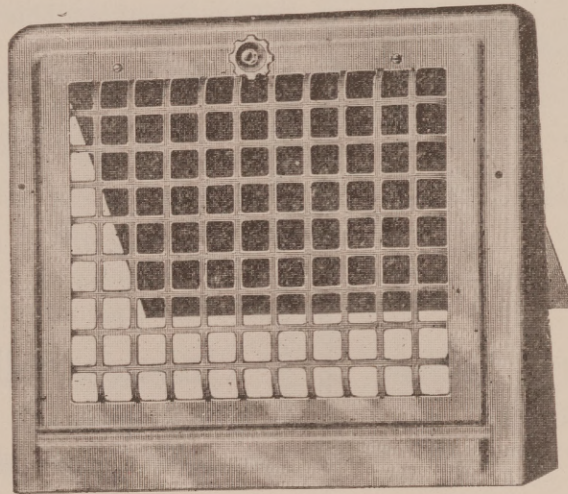
Warehouse and Fabricating Plant—Evansville, Ind.

IRON AND STEEL

Standard and Bethlehem carried in Warehouse stock for Immediate Shipment.

STEEL FOR BRIDGES AND BUILDINGS

Fabricated Promptly.

Elevators, Cornice and Skylights
Steel Ceiling**STORE FRONTS**
Write for General CatalogueMillwork and Glass, Ornamental Iron
Certain-teed Roofing.**STEARNS' STEEL BASE REGISTER**

represent the very latest in register construction. Their distinction is the result of combining these quality features—

DESIGN—simple, neat and very attractive.**FINISH**—very high (in black or white japan orelectroplated finishes).**MATERIAL**—the very best obtainable.**CONSTRUCTION**—durable (guaranteed against breakage).**OPERATION**—absolutely perfect.**CAPACITY**—full, both in face and box, for the size pipe it is intended for.

Let us convince YOU of the soundness of these merits, investigate STEARNS' STEEL BASE REGISTERS today. STEARNS' STEEL BASE REGISTERS can be had in five sizes ranging from 8x10 to 11x13.

WRITE FOR FULL PARTICULARS AND CATALOG TODAY.

STEARNS REGISTER COMPANY

111 Fort Street East

DETROIT, MICHIGAN

Standard for a third of a century
Passenger and Freight.
All Powers.

TURNER ELEVATORS**K. C. ELEVATOR MFG.
COMPANY,**

(Establish 1881)

2601-3-5-7 Madison Ave
KANSAS**Your Metal Problems Solved**

We are supplying some of the most prosperous Brass
Goods Manufacturers with our

**YELLOW
and RED
BRASS
(H. I. M.)
INGOT
METAL**



Why not join them? Write for information and prices.

Hartman Ingot Metal Company

2511 to 2525 W. 21st Street

Chicago

Conkling-Armstrong Terra Cotta Company

Manufacturers of

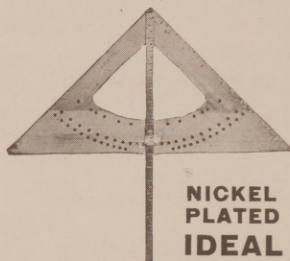
ARCHITECTURAL TERRA COTTA

in all colors and finish—Standard, Enamel and Polychrome.

We will be pleased to furnish approximate figures or final estimates, without obligations.

Main Office and Works: Philadelphia, Penna.

TRY SQUARE, RAFTER SQUARE, MITRE SQUARE



**NICKEL
PLATED
IDEAL**

Makes all rafter cuts—Common, shorts, hips and valleys.

The Ideal rafter tables give full length of all rafters (free with illustrated instruction book to buyers).

Makes all mitre box cuts. A great try square.

The bar swings and locks for every cut.

A wonderful tool—simplicity, speed and accuracy combined.

Mailed on Receipt of \$2.00.

IDEAL TOOL WORKS, MIDDLETOWN, N. Y.
Privilege to return money hereby reserved, in case of shortage of material.

Running Water--under pressure --for strictly modern homes

Without an adequate supply of running water—under pressure—a home cannot be strictly modern. It is the one essential needed in every home, and everyone who does not have access to city water mains may have this convenience for their homes by the installation of a

Hoosier Pneumatic Water Supply System

Hoosier Systems operate from any kind of power, electric motor, gasoline engine, windmill, or hand. They are easy to install, economical to operate, and give many years of service. Hoosier Tanks are coated inside with Anti-Rust Enamel, preventing rust and corrosion.

Hoosier Systems may be had in various sizes, suitable for homes of any size. Investigate the merits of Hoosier Systems without delay. Write for complete information.

Flint & Walling Mfg. Company

KENDALLVILLE,

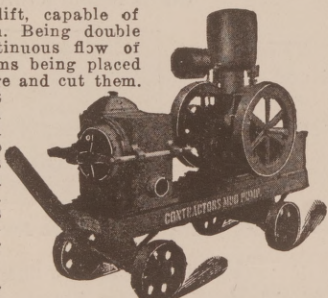
INDIANA

No Boiler, Engineer or Fireman Is Required for Our Contractor's Pump

It has an extreme hi-h lift, capable of producing 24-inch vacuum. Being double in action, it gives a continuous flow of water. Its two diaphragms being placed vertically, grit cannot lodge and cut them. Working horizontally, it does away with all overhead work. Mounted on solid truck, it is easy to move from place to place. Its compactness reduces needed floor space to only 2x5 feet. Its weight is 1000 lbs. Has no plunger, plunger packing, stuffing boxes or spring valves.

Our Circular Explains Fully

A. A. PARKER, Front Street, WATERFORD, N. Y.
New England Agents: Porin, Seamans & Co., 57 Oliver St., Boston, Mass.



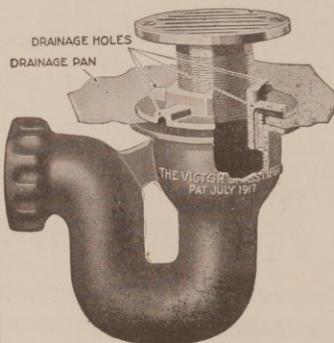
"HAYNES" & "HOFFMAN" Specialties Save Fuel

Our Booklet on modulated and Vapor heating is full of instructive matter. It also illustrates and describes these specialties. Send for your copy.

Haynes Selling Company

1711 Sansom St. Philadelphia, Pa.

VICTOR



Double Drainage Shower Traps and Drains Feature No. 9

Victor traps are designed so compactly as to avoid cutting away construction work to install them.

Licensed under Patent No. 855017.

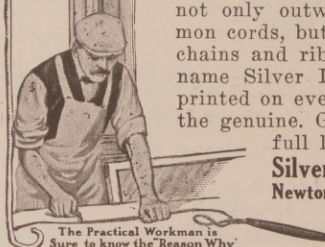
If your jobber does not carry Victor Traps, mail your order direct to us.

The Victor Brass Mfg. Co.
Cleveland Ohio

SILVER LAKE A Sash Cord

The guaranteed sash cord (since 1869 the standard) not only outwears common cords, but outwears chains and ribbons. The name Silver Lake A is printed on every foot of the genuine. Guaranteed full lengths.

Silver Lake Co.
Newtonville, Mass.



The Practical Workman is Sure to know the Reason Why

Pennsylvania & Kentucky Fire Brick Company

HIGH GRADE

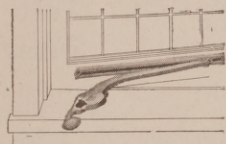
Pennsylvania, Ohio and
Kentucky Refractories

BOLIVAR, PENNSYLVANIA

Works in Pennsylvania, Ohio, Kentucky
and Georgia.

Security Casement Adjuster

For Use on Casements Swinging Out.



For both right-hand and left-hand casements. Can be opened as much or as little as desired, so that air can be admitted without also admitting rain or snow. Locks automatically, works easily. Gives a house a very distinctive appearance. Strong, durable, moderate price.

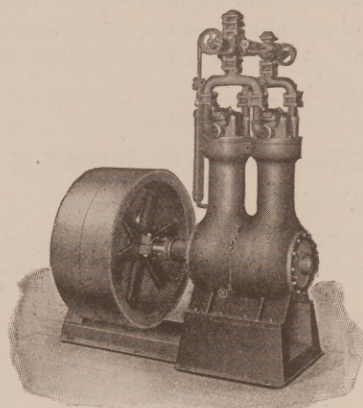
Manufactured by

GEORGE LESTER WILKINS,

7067-77 N. Clark St.,

Chicago, Ill.

The Brecht
COMPANY
ESTABLISHED 1853 ST-LOUIS



Ice
Machines

Refriger-
ators

Abattoir and
Slaughtering
Equipment

The Brecht Company

ESTABLISHED 1853

Exclusive Manufacturers of Machinery, Equipment, Tools and
Supplies pertaining to the Meat and Allied Industries.

Main Office and Factories:

1238 Cass Avenue, ST. LOUIS, MO.

New York, 174-176 Pearl St. Paris Buenos Aires
Chicago, 725 Monadnock Bldg.

Hires Turner Glass Company

Southern Headquarters

WASHINGTON, D. C.

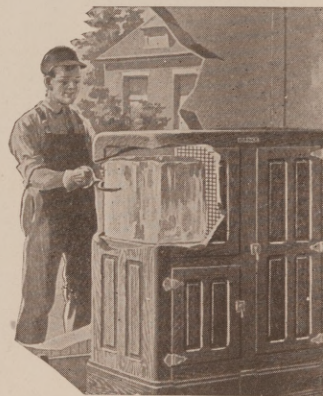
Plate, Window
Ornamental,
Beveled Plate

GLASS

Patent "All Glass"
Store Fronts
Solid Wire Glass
Skylight Glass

To Builders and Contractors

The Herrick Outside Icing Refrigerator is one of the most popular refrigerators for modern residence use. It gets the ice in the house and keeps the iceman out.



The

Herrick Outside Icing Refrigerator

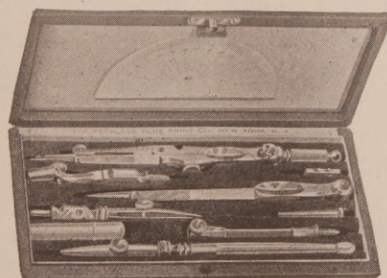
is winning praise everywhere. Hundreds of builders, contractors and architects are availing themselves of the Herrick Free Plan Service. Planning and making the outside icing openings right is important. Let us guide you.

Specify "Herrick" Refrigerators. They are sanitary, clean and economical. Perfect air circulation. Provide an even temperature and abundant pure dry air necessary to keep food sweet. Best for homes, apartments, stores, clubs, etc.

Write for Catalog SA. 918 with free blue prints
of construction.

Herrick Refrigerator Co.

Waterloo, Iowa.



Special Drawing Set

No. 450-A

Price \$4.65

Sent parcel post
prepaid
Cash with order

We have also a full assortment of large sets of
instruments.

PEERLESS BLUE PRINT CO.

341-347 Fifth Ave.,

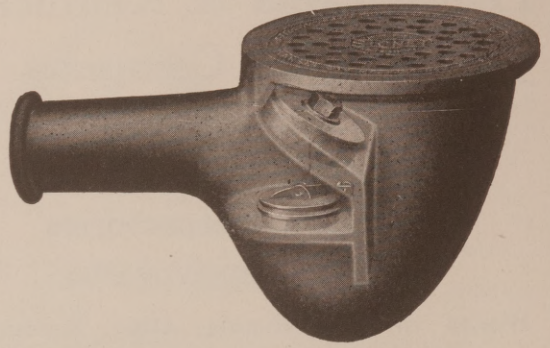
NEW YORK CITY

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

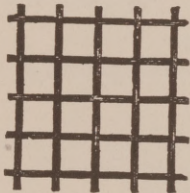
CRAMPTON-FARLEY BRASS CO.
KANSAS CITY, MO.



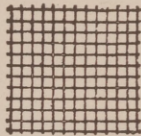
THE BACK WATER TRAP DRAIN OF QUALITY

"If it's made of Wire we make it."

ESTEY WIRE WORKS CO.



34 Cliff Street
NEW YORK
CAMBRIDGE, MD.



Manufacturers of

Bank Railings and Enclosures, Wire
Cloth, Wire Work, Wire
Goods, Etc.

Estimates Promptly Made. Send for our Wire Cloth Catalog
No. 20, Wire Work Catalog No. 19.

HIDDEN WASTE

Make your coal heat, not push air

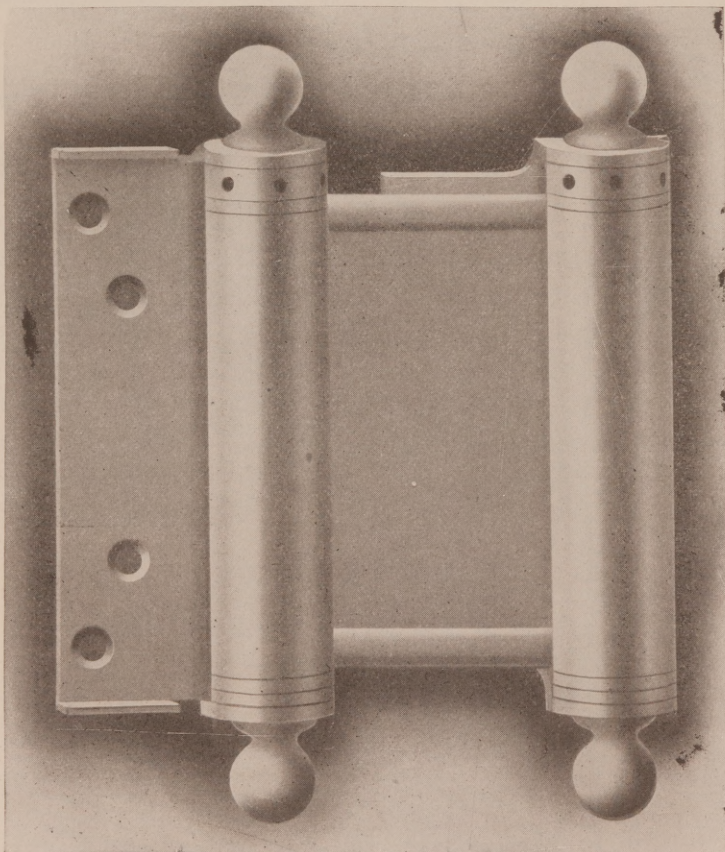


The
Eddy
System

gets the steam into action
quickly, then holds it there
while the coal pile rests.

Information and price
list on request.

Eddy Engineering Company
ALPENA, MICHIGAN



"NU-JAMB" HINGES

These hinges are applied DIRECTLY
to the JAMB.

NO HANGING STRIP REQUIRED

or if hanging strip has been installed,
the hinges can be applied DIRECTLY
to the strip WITHOUT mortising.

**Strongly Constructed. Ample Spring
Power. Bearings Insure Durable
Service. Ball Tips Locked to Pre-
vent Working Loose.**

**A Hinge Applied Direct to the Jamb
is more Solidly Supported than one
Applied to a Hanging Strip.**

Made of wrought metal—steel,
brass or bronze, single and double
acting, in sizes from 3 inch to 10
inch, the increase being per inch.

Catalog sent on request.

Lawson Mfg. Co.,

Superior and Franklin Streets,
CHICAGO, ILLINOIS
New York Office, 85 Walker Street.

Took the Broad-Minded View.

The reconstruction congress at Atlantic City showed a more humane and broad-minded spirit than some observers had anticipated. The junker spirit which had been feared was notable for its absence. A live-and-let-live spirit appeared to animate the members of the congress. A happy augury for the future is found in the attitude of the congress by the New York World, which says:

The problem of industrial reconstruction inevitably resulting from the war is generally recognized as a difficult one at least. But it will be made comparatively easy of solution if the business spirit prevails which has been shown in the discussions of the "reconstruction congress" held this week at Atlantic City by the Chamber of Commerce of the United States.

Many men of recognized industrial leadership took part in these proceedings. Yet the prevailing sentiment has not been what it used to be in such a gathering. Little or nothing was heard of "standing pat" on anything, and much of rising to the full demands of a new era and new conditions. The spirit of public service in business was championed rather than the spirit of getting and holding special privilege.

Organizing to fight organized labor gave way to a recognition of the right of labor to organize and to have a collective voice in the conduct of industry and the settlement of differences. The right of labor to a minimum living wage was superseded talk of capital's right to treat labor as a speculative commodity. The fallacy of a low wage as a companion to nation prosperity was rejected for the sound principle of the high wage as essential to national prosperity.

These are most hopeful signs. They reflect immeasurable credit as the due of these men of big business who would infuse their old bigness in material achievement with a bigness as well in the spiritual and humane elements of their achieving. The great question of "reconstruction after the war" will be settled in peace and order and progress and a new prosperity exactly in proportion as the industrial leaders of the nation face it in the spirit shown in this gathering.

Housing Problems Viewed Locally.

The developments of the war and the many things suggested for the readjustment are going to set people to thinking along many new lines. The compulsion of necessity led to many steps during war that people had not thought of when the press was less, but that does not mean that the same things will be forgotten now that the necessity is not so pointed.

With the practical phase of war stopped some of the problems that arose during war are not stopping. England is still considering the housing proposition, and it might not be a bad idea for this coun-

try to take up seriously some similar work. During war various communities under the government stimulation entered on house construction work. The results were good. The plans were at least intelligent, and the buildings as far as cost permitted were far better for the purpose they were created for than a similar number constructed under the hit-and-miss customs that are common.

The housing of the American people is abominable. It is hard to conceive of any plan whereby it could be worse. Less intelligence is used in the expenditure of the money used to build houses in the United States than in any other work that involves such a large construction and outlay. We have all varieties of houses and only a few varieties that are put together with the best results. North Carolina may be worse than some of the other states in this respect. Occasionally a manufacturing corporation will plan house-building on an intelligent basis, as over at Albemarle, and the results are commendable. The long step forward in house creation at Albemarle should be a study for the state and for every community in the state, for it is going to make of Albemarle one of the most attractive towns of the South and a place of efficient workers housed in homes that cannot fail to have an influence on the character of the residents.

With the housing movement at its present status it has reached a point where a systematic plan might be taken up by state and national governments having in view the sensible and sanitary housing of all the people. Perhaps the idea is radical, but we are entering a radical era, and nothing that is radical today will be startling by tomorrow. The period we are entering is one of rationalism, and not one in which the worship of tradition is to be the chief cult. Nothing is ahead of this country now that is more important than the better housing of the people, and the discussion of plans to that end could very profitably engage the attention of the people.—Raleigh (N. C.) News and Observer.

The Building Outlook for 1919.

Despite the unusual and varied factors affecting construction work at this time, indications point to the greatest building revival during 1919 which this country has ever experienced. This is true largely because certain classes of structures must be erected almost at once to provide for actual demand, as viewed by Noble Foster Hogson, the well known New York builder.

First of all, in the larger cities, apartment houses and dwellings will lead the way, but closely following will be office buildings, lofts and industrial structures. There will be a tremendous amount of bank building. All over the country our financial institutions have been carrying on their work in their old homes, in crowded, inadequate quarters, waiting for a favorable time to erect new buildings to

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modernize their quarters by remodeling. Banks have never been more prosperous, and the bankers seem to feel that not only will they be meeting an economic need by building now, but that their action in this regard will set a precedent in their communities and encourage other owners to build. It is the specified wish of the government that, in order to provide employment, construction work be put under way at the earliest possible moment.

In the industrial as well as in the domestic and commercial fields, building should see a large and healthy increase in volume. New factories must be built; plant extensions are an economic necessity, instead of being scrapped and abandoned, will in many instances be altered for peace work.

Housing for employees, which received such an impetus during the past two years, will be carried out on a vaster scale than we had ever thought possible. Employers have recognized the actual money-value return of providing good housing accommodations for their employees. It is fatuous to believe that the employers have not profited by the lessons of war. They have learned that contented workmen are the best possible asset, that high labor turn-over is wrong and expensive, and that proper housing is one of the greatest, if not the greatest factor in reducing labor turn-over and keeping employees happy on the job.

The immense amount of reconstruction work to be done in France and Belgium is going to affect building conditions in this country more than is generally realized. This is particularly true in regard to prices for materials. The excessive demand for certain materials for use abroad, is most likely to keep prices in this country up to the present high level. Steel, so far, has been the only material which has shown any tendency to decline in price, but, with the great number and kinds of buildings needed, the matter of cost will probably not enter into calculations as much as under ordinary conditions. It should be remembered that since 1914 this country, except for a short period in 1916, has been under-built.

Building must cease being a gambling proposition, the owner taking a long chance on getting his structure erected for a sum of money which he sets aside in the beginning. In the future, there must be a closer and fairer relationship between the owner and the builder. The builder must gain the confidence of the owner, and, in turn, the owner owes

certain duties to the builder. Under the usual building procedure, the builder is a gambler, too; taking the job on a low competitive bid, and hoping by some hook or crook to make money on it. The formation of the Associated General Contractors of America, recently worked a great step forward in raising the building industry to a higher level, and it is through movements of this kind that the investor will feel free to put his money into building operations.

All Building Restrictions Removed.

Removal of all remaining restrictions on non-war construction by the war industries board was announced by Chairman Baruch Nov. 22, before that board ceased to exist. All building operations of whatever character may now be proceeded without permits either from the board or the state councils of defense.

This action was taken Chairman Baruch said, on recommendation of the building industry and the state councils of defense. The councils had been co-operating with the war industries board in passing upon applications for building permits.

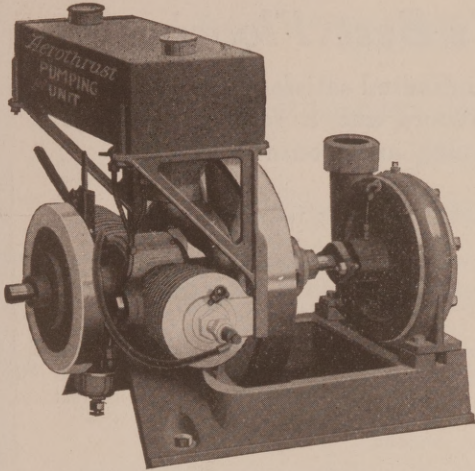
There was no estimate as to the value of building products which had been held up during the war, but officials expect that resumption of work will afford employment for thousands of workmen now being released from war industries.

About Up-to-Date Farm Cottages.

"Housing Farm Help" is a booklet issued by the engineering bureau of the National Lumber Manufacturers' Association, Chicago. A paragraph by R. S. Whiting is indicative of its purpose as follows: "The American farm home has been neglected during past years of industrial progress. The American farmer realizes that home improvements are necessary to make life worth while, not only for himself and family, but for those in his employ. If food will be a large factor in winning the war, it will be necessary to give as careful consideration to the housing of farm laborers as it has been to the housing of shipbuilding or munition workers." The book is handsomely illustrated, showing improved farm cottages for the hands.

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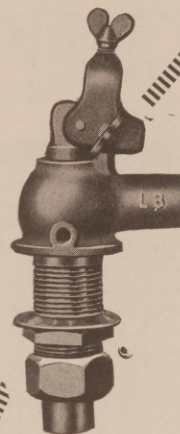
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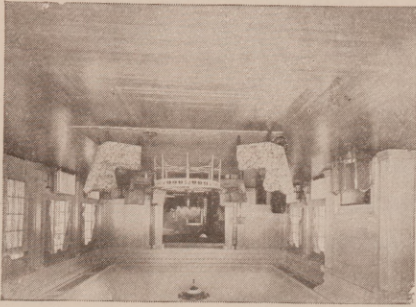
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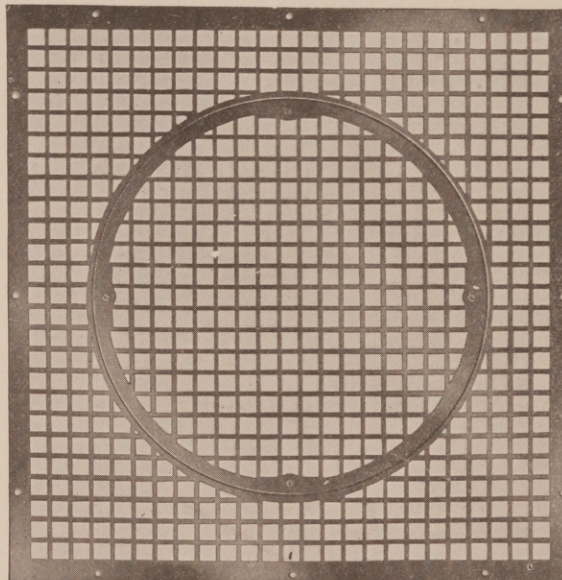
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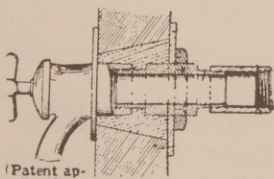
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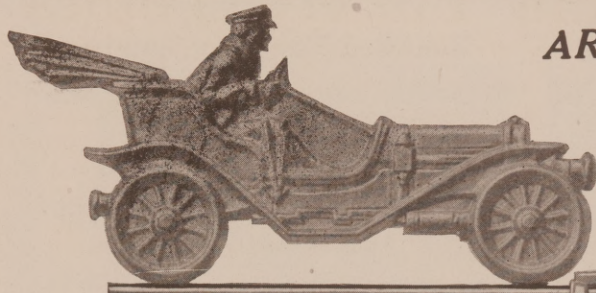
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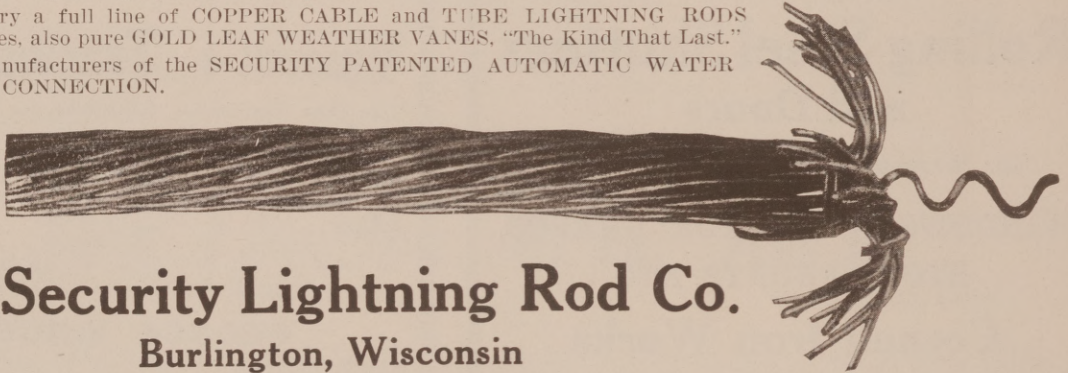
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Others Discuss Some Timely Topics

Folly to Wait for Lower Prices.

A tendency on the part of business men to hold back new enterprises, in expectation of lower commodity prices and wages, is a mistake, in the opinion of Joseph E. Otis, vice-president and acting head of the Central Trust Company of Illinois.

"I have no sympathy with the man who is sitting back, awaiting lower prices," said Mr. Otis in an interview in the Chicago Daily News. "The people who are waiting a drastic decline in prices aren't going to get it, they are going to get left. In other words, I do not believe we are going to see any immediate and drastic decline in commodity prices. There is a world-wide scarcity of many materials and production costs are going to continue abnormally high.

"We have had perhaps a certain amount of inflation. To the extent that present high prices are due to that cause, moreover, we can expect no immediate decline. The process of deflation will be gradual.

"If we are all to hold back, awaiting lower prices we should produce conditions of a sort that would benefit no one. It is the duty of business to go ahead and seize the opportunities now awaiting. If a manufacturer were to defer building needed additions to his plant, in the hope of securing a lower construction cost at some indefinite time in the future, he probably would lose more profits on goods which he might have been producing and selling in the meantime than he will save on cheaper construction costs."

Frank W. Thomas of A. O. Slaughter & Co., said today:

"In considering the outlook for commodity prices, we must bear in mind that wages are going to continue high for an indefinite time, and that European competition, formerly so keenly felt in our markets, is not going to be so severe as it was before the war. Wages have been advanced abroad with no immediate prospect of their return to the pre-war basis." Frank A. Vanderlip, president of the National City Bank of New York, in an address delivered in that city last night declared that it is possible to transfer 15,000,000 men now engaged in war activities to works of peace without greatly disturbing conditions.

"I would not argue that we can make this transition without any jolt," he said. "There will be some. But I believe that the demand for labor is so great that it is possible to make the transition without disaster.

"We may make a cushion of public works. That is possible. But there are really tremendous orders

that may now be executed, and on the whole I would not be surprised to find that we shall see no surpluses of labor, providing labor and the employer of labor each does his best to help in this readjustment."

John N. Willys, president of Willys-Overland Company, says:

"Material prices and wages are not likely to come down in a hurry. With the passing of the first flurry of unsettlement of prices which followed the signing of the armistice there is now a noticeable steadying of the market."

To Use Wood in Rebuilding.

The use of wood in the vast work of reconstruction which now confronts the late belligerent nations in the World War, has been the topic of frequent conferences among lumbermen.

The general plan which is being worked out emphasizes the utility of wood as construction material no matter what the nature of the construction project. Statistics have been compiled, and are being made use of at these conferences, to show in point substantiality what is the universal solvent of building construction problems.

An elaborate campaign for the education of the public generally, on the subject of the utility of wood for almost all purposes, is being mapped out and will be put into effect very shortly. It is the purpose of the lumbermen to insist upon adequate information relative to all branches of the lumber industry being disseminated in every section of the United States.

Particular attention is to be given to farming communities, with special reference to the utility of wood products in the conduct of the farm. The farmer is to be told how it may help him to build this or that improvement out of wood rather than out of other construction material.

When France Rebuilds.

"Have you Americans any conception of what the requirements of France will be, when the allies have won the war and our country begins its work of reconstruction?" This question was asked me a few days ago by a prominent business man of Paris, who, having been gassed, can no longer fight, and is visiting in this country, says H. H. Windsor in the Popular Mechanics Magazine. From what he proceeded to relate it is evident that comparatively few on this side do realize what our export trade to France is destined to become.

"For many years," he said, "our people secured their machinery, printing presses; tools, electric ma-

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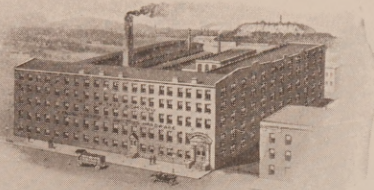
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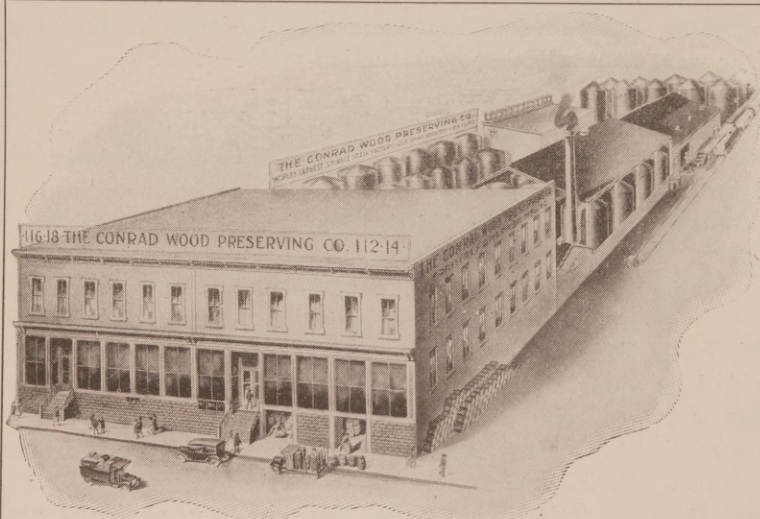
chinery, and lighting fixtures, etc., all from Germany. This was because German prices were lower than other countries. But now, Germany could not make a price which would induce a Frenchman to buy of her, no matter what his need. England will be busy supplying her own wants and those of her export trade, hence we are looking to your country. Our textile mills, nearly all of which were in northeast France, have long since been destroyed and the machinery carried into Germany. Our textile manufacturers are already making a new start in southwest France, securing what little machinery they can. With the end of the war this industry will be one of the first to resume, and we shall require, of textile machinery alone, over 200,000,000 francs. I could go on down a list of a hundred articles whose requirements, while not so great, will in the aggregate total a vast sum. Partly because our people regard the Americans so highly, and are full of admiration for the splendid things they are doing in our country, and partly that we may know and read your language great number of our people are studying English, not only to be able to read it, but to speak it well. We expect to offer such attractive opportunities, especially to constructive engineers and mechanics of all kinds, that thousands of your young men will remain in France, at least during the first two or three years of reconstruction."

Italy's Big Lumber Order.

An interesting and highly significant development

with respect to the export lumber market has taken place. The purchase, by commissioners representing the Italian government, of 3½ million feet of yellow pine timber (specified of "Southern pine merchantable grades") for delivery at Gulf ports to be moved, via ships supplied by purchaser, to Italy. This sizable order was placed with the Southern Pine Emergency Bureau, which now is distributing the business among the Southern pine mills east and west of the Mississippi. It will be inspected at the mills by Association inspectors and shipped to designated ports to await the cargo-steamers, which are to be furnished by the buyers.

The order is noteworthy and important not only because of its size, but because of its indication that post-war lumber-buying for European countries may be handled largely by government commissions—which in turn will deal with organized central agencies in preference to making direct purchases from the individual mills. It is not officially settled that this method will be adopted, but in addition to the Italian transaction noted above, there have been intimations very recently that France and England will buy lumber in this country through the "high commissions" which have handled their war-time purchases. The very important question of ocean tonnage, which has bothered students of the export market more than a little, may be disposed of if the business is handled upon the lines indicated, sellers making delivery at American ports and buyers providing cargo space.



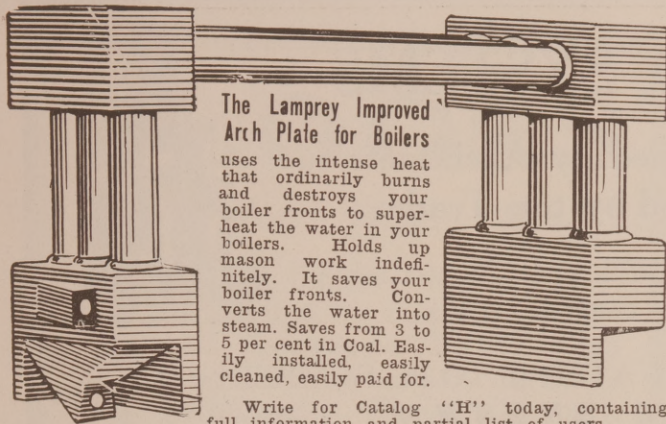
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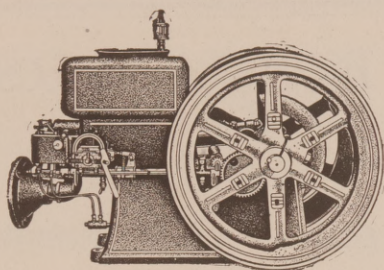
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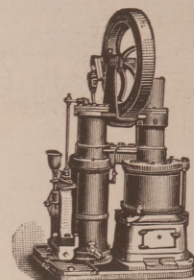


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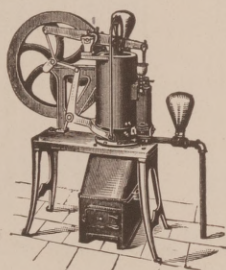
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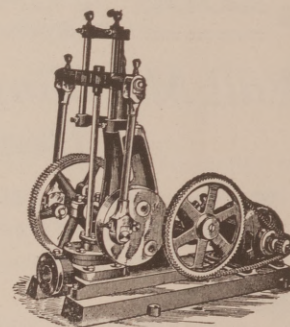
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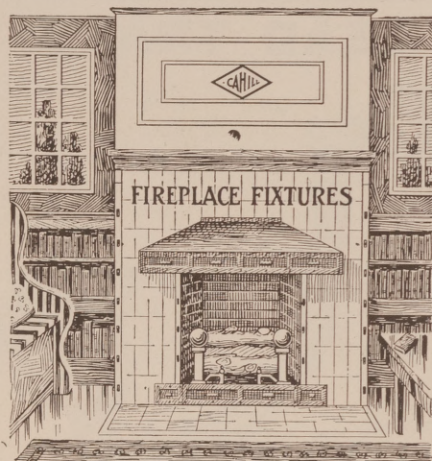
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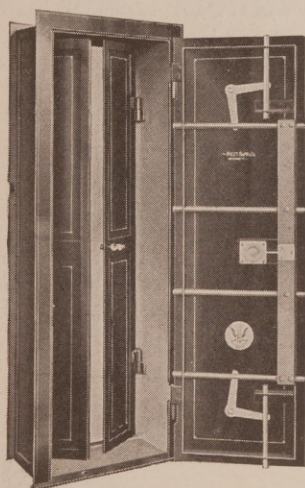
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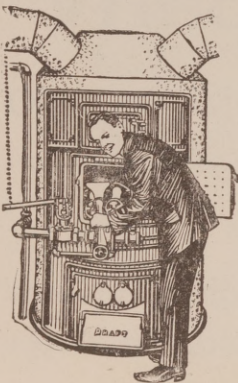
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Realtors Urge Construction

HERE are some timely extracts from an address delivered before the War Emergency and Reconstruction conference at Atlantic City, N. J., in December by William M. Garland, of Los Angeles, Calif. He said:

The National Association of Real Estate Boards is intensely interested in the development of home life, and the splendid citizenship which results therefrom. We desire particularly to encourage the building of homes for the working classes. This industry has, by abridgment and curtailment since February, 1918, been absolutely stopped; and, the only homes erected for working men have been by the Housing Bureaus of the government of the United States, which has constructed thousands of houses, which were to be occupied by laboring men engaged in the fabrication of war work necessities. The abrupt, but nevertheless welcome, termination of the war leaves these thousands of houses in a state of incompleteness. Through the influence of town planners and architects communities were in process of development, all of which should and must be abandoned; and the government must now realize, as best it can, from the early disposition of these half finished developments.

I advocate that all buildings should be sold which have been built under the various housing acts, as soon as they can be advantageously disposed of; for public policy and American tradition seem to demand that every semblance of control of the home by the federal government be destroyed on the instant that the necessity for such control ceases to exist. This sort of paternalism is not an American institution.

Americans Desire Homes of Their Own.

It is my opinion that the real American desires to own his own home. The safety of America lies in the final analysis in the hands of that class of citizens. There can be no doubt that in times of peace the greatest happiness lies among the contented home-owners; and in time of strife, when our citizens are called upon to bear arms in defense of their country, the man who owns his own home is inspired to fight that much harder for his flag.

Endorse "Our Own Home" Movement.

I predict an active building period throughout the United States as a result of the spirit of economy and thrift which has permeated every home since the commencement of the war, and as a result of the

removal of the restrictions which have prevented all classes of private construction during the past year. I should like to have this convention of industrial representatives strongly endorse the sentiment of "Own Your Home" as being thoroughly constructive and American. The Realtors approve this sentiment, not from a selfish viewpoint, but as a standard of better citizenship, of thrift, and a more general distribution of wealth, employment and happiness.

Extensive Highway Program Urged.

The National Association of Real Estate Boards has taken a firm stand in favor of national highways, not confined to one highway, but to several, reaching from the Atlantic to the Pacific, and of lateral highways leading from the Canadian border to the Gulf of Mexico, and the Mexican border. In October, 1917, at a meeting of the Kansas City Real Estate Board, I dwelt especially upon this improvement as second in importance only to the building of the Panama Canal; first, as a means of developing that vast empire lying between the Mississippi and the Pacific Ocean; of bringing into close relationship to the markets through the medium of motor transportation every part of that area, and bringing those sections particularly closer to the populous, wealthy and enterprising East; of developing land which is now inaccessible, and developing an earnest "Forward to the Farm" sentiment among that class of people who at present crowd our cities. The discontinuance of the colonist rates throughout the West, and especially the Northwest, had an immediately noticeable effect of prohibiting the sale, colonization and settlement of lands that particularly needed development during the past year. The effect of easy accessibility to this country would be instantaneous in the occupation thereof.

I further stated that in the event of war, which I hope will never again visit our land, every part of our vast country would be brought into immediate connection by means of these highways! They should be built by the government, and to insure reliable maintenance should be controlled by the government. Senator Robert L. Owen, of Oklahoma, was present at that meeting and enlarged greatly upon these remarks, pledging his earnest support if the matter came before congress, remarking that the psychological time for the building of such highways and laterals would be when millions of our soldiers,

at the conclusion of the war, should be granted an opportunity for employment during the readjustment period, stating that the government would receive incalculable value from such development, and it could not be construed in any sense a charitable offering, but a highly profitable business undertaking.

Now Is the Time to Build Roads.

That period of time has arrived. The moment is psychological for the development of this great highways system. The building and maintenance of such highways would result in perhaps the greatest asset this country could possess in the development of our resources and the enhancement of our entire nation, and should receive the unanimous, immediate and enthusiastic support of congress, divorced from all partisanship feelings.

Significance of Work of "Realtors."

I wish to take this opportunity to make one or two observations regarding "Realtors," known more particularly as members of the National Association of Real Estate Boards. First, because I wish you all to know more particularly what the word Realtor signifies, and what it stands for, so that I may urge you in your future dealings in the real estate world to be as careful in the selection of the man who is to represent you in the purchase, sale, lease, care and management of your property as you always are in selecting your physician, lawyer or banker. You long ago learned to avoid quacks and shysters, and you particularly inquire carefully concerning the reputation of your banker. You should be equally careful in your selection of him who is to represent you in important realty transactions.

Some ten years ago those real estate men who believed that honor should prevail in the conduct of their business organized the National Association of Real Estate Boards for the protection and advancement of their profession. They were guided somewhat by the fact that the bankers of the United States were organized under what was known as the American Bankers' Association; the lawyers under their American Bar Association, and the physicians under the American Medical Society. This latter profession was the last of the trio to receive favorable public recognition and approval. Furthermore, these professions are all protected carefully in the nation and state by certain license laws, methods of registration and periodical examinations or investigations.

Separating the Wheat from the Chaff.

Please remember that those whose profession is buying and selling real estate, that greatest of commodities, in which is centered and from which comes all of the wealth of the world, have not, at this time, nor have they had in any state of the Union, either license or registration laws of any nature, affording that profession the slightest protection which it particularly deserves; and as a consequence the absence

of such laws has long served to protect adventurers and evil-disposed individuals in nefarious real estate transactions, which has tended to besmirch the profession and to reflect discredit on the real estate business, making a real estate agent almost synonymous with road agent. The organization of our association has done much toward separating the wheat from the chaff, and it is the cooperation of all branches of industry and business which we now seek to aid us in the work of placing the real estate profession upon its rightful pedestal, and to help surround it with such laws as will forever eliminate or segregate the dishonest and corrupt element from continually levying tribute upon the innocent and unprotected.

A Large Representative Membership.

Our association at the present time consists of 155 live active boards, in as many cities of the United States, having an individual membership of 10,500 conscientious Realtors, men of experience, training and ability, who have accepted and operate under a Code of Ethics of the National Association of Real Estate Boards. These men are loyal, upright American citizens; and, at the inception of the war, those of them who had not enlisted or who were not eligible to draft, volunteered their services, without compensation, through the parent organization, to the government to help win the war by assisting in any capacity where their services could be utilized by the government in the matter of acquiring property necessary for carrying on our war activities.

Real Estate Men Share in War Work.

This offer of service was accepted, and I may say that we have done most effective work, promptly and efficiently, throughout the length and breadth of the country. They have appraised or valued the land which has been taken over, and the land mortgages taken over by the Alien Property Custodian. They have investigated and appraised all the lands which were acquired by Otto M. Eidlitz, director of the U. S. Housing Corporation, in the Department of Labor; and so efficiently and satisfactorily was this work accomplished that the Realtors were charged with the additional task of negotiating, purchasing and leasing this land. I venture the assertion that this is the most efficient, intelligently handled real estate division ever maintained in Washington.

So, too, have they rendered great service in the War Department. In June the Secretary of War consolidated all the different real estate purchasing agencies under one Real Estate Division in the Department of Purchase, Storage and Traffic, which was placed under the management of Major James S. Holden, member of the Detroit Real Estate Board. We have also rendered service during the past nine months to Hon. A. Mitchell Palmer, Alien Property Custodian of the U. S. Shipping Board and the Emergency Fleet Corporation in the valuing of their

lands. Our cooperation has been sought in appraising hundreds of millions of dollars' worth of property, and we feel safe in saying that we have saved several million dollars to the government during this nine months by the maintenance of a corps of Realtors in Washington, who have paid their own expenses without salary, and where the out association maintained its headquarters, backed up by the active and enthusiastic assistance of Realtors throughout the country; and that knowledge to us is our ample reward and satisfaction.

Government Sets Precedent.

We feel that, for the first time, the government has shown proper recognition to the real estate men of the nation, as represented by these Realtors, and that that government recognition should merit, throughout the Union, the full confidence of our fellow citizens, and the knowledge should prevail that a guarantee of ethical, square dealing will ever be forthcoming to every investor who seeks the services of the Realtors of the United States wherever they may be found. Realtors are determined, by virtue of their splendid organization, and their desire to have the profession take its place in the front rank of constructive upbuilding in this great republic, to work unceasingly to stamp out all evil influences from the field of real estate operations, believing to be other than a Realtor is almost a deface toward establishing uniform methods of square dealing.

American Material for Norway.

What is thought to be the first shipment of American house-building materials ever sent direct to Norway has recently gone forward, and a trade that was started with the help of the Bureau of Foreign and Domestic Commerce now promises to develop into one of important dimensions. The bureau is just in receipt of the following self-explanatory letter from the New York representative of the company chiefly concerned in the transaction:

A couple of weeks ago I went to Louisiana and purchased about 120,000 feet of yellow pine in the different dimensions suitable for wooden buildings, which was shipped from New Orleans within a few days direct to Norway. We have since placed an order about half that size, and we now expect that others will follow right along.

We also shipped from New York some 17,000 pounds of American tile and ceramic flooring and some deadening quilt for walls and floors, and have placed orders for high-class and, in part, carved interiors in quartered oak, mahogany, and satinwood. for a certain brand of special-type panels, for ornamental composition ceilings, for plumbing fixtures, water filters, metal roofing, and a number of other building materials for the houses to be erected by the ——— Co. in Christiania as samples of American building materials and appliances. The company is being organized to carry a stock of such materials at Christiania, Bergen, and Trondhjem.

Harold Godwin in the Outlook Writes About Rebuilding France

DURING the excitement which somewhat prematurely carried Americans off their feet, late in 1917, with regard to reconstruction in France, I was fortunate enough to have made a visit to the Somme, which had then been reoccupied by the French, and to have been able to gauge the rebuilding situation before it was brought suddenly to an end by the rapid advance of the Germans toward the end of March, 1918. I was held in Paris for over two months, struggling with military and official red tape, during which detention I secured whatever information I could on the general subject, and came to some conclusions which may be of value in the final solution of the vast problem that presents itself with the cessation of hostilities.

In a speech made by M. Adre Tardieu, the head

of the French Commission, on November 8, he has admirably outlined the situation in which France finds herself after the dramatic ending of the war. Two and a half million men lost from the man power of the nation (nearly one-fifteenth of the total inhabitants), a debt of twenty-four billions of dollars to defray the cost of the war alone, and the richest part of France a desolate ruin which neither indemnities nor outside help, however generous, can ever again fully replace!

The region overrun by German hordes comprised but a sixth of French territory, but this sixth paid a quarter of all the country's taxes. In these regions were produced ninety per cent of the country's wool, flax, and iron ore, seventy per cent of its steel and sugar, and almost one-half of its coal and electric power. All the industry of this area has been de-

stroyed, its machinery broken or carried off, its agriculture and mines made useless for some time to come, and some 350,000 homes either partially or completely destroyed.

Before this year the German armies had occupied some 2,550 of the French communes. While some were left comparatively intact, others were all but obliterated. This was particularly true of those regions in which the fighting was long continued, where trenches, barbed wire, shell holes and mine craters transformed the smiling gardens and fields into desolate wastes and villages into heaps of broken masonry. Typical of this was the village of Beuvraignes in the Somme. It had been a flourishing village of 1,500 inhabitants to which I was taken for a visit by a man whose frugality had permitted him to buy a little home. Where his house had stood there was one of three craters in which tons of explosives had torn a hole 150 feet long and 40 feet deep. Around these craters stood the remnants of the village. Not a single house or wall of a house was left standing. The main road through the village was discernible, but that was all. Tangled bits of iron told the only story of its former occupants—the place had not the remnant of a single tree or shrub, and there seemed nothing of the entire village worth salvaging.

As an illustration, perhaps, of the recuperative spirit of the French and of the strength of the ties that bind its villagers to the soil, Beuvraignes offers

a remarkable example. Owing to its apparently total destruction, plans were made to completely remodel it on a thoroughly up-to-date design. It was to be moved slightly, and elaborate maps were made to give the people new and better situated lands for the old, while electricity and water were to be introduced, and the result was to be a monument to the new order of things.

I was fortunate to attend one of the sittings where these changes were proposed to some of the former inhabitants. It was evident that the new design did not please them, and the propagator proceeded to inform them that objections were useless, as the project would be forced on them if necessary. "How about my cellar?" asked one; "And my well?" said another; while a third preferred the situation of his old house to the new. It was evident that the scheme was not liked. In talking afterwards with some of the people I could see that they wanted just the little old garden, the same life they had led, and they were ready, despite the ruin, to clean it up, rebuild and replant on the very spot that they formerly owned, no matter what might be offered them. No new well or cellar could replace the one that had only to be cleaned to become once more serviceable.

These people's determination was a part of the wonderful spirit which we have all had occasion to admire in the French. They learn to love their



Pretty Residence in Summerville, a Suburb of Augusta.

hearthths and homes, no matter how uncomfortable they may be or how far from sanitary we may consider them.

It was surprising to see how quickly the region had assumed a smiling prospect as the spring of 1918 opened. The work of tractors was in evidence in many directions, and green patches of winter wheat relieved the barren stretches where ran the old trenches.

This was the situation when the fateful German drive began on March 21. Once again the people who had come back were forced to flee. The speed with which the Germans advanced glutted the road with refugees, with soldiers, with tractors working their way out of the army zone, while troops of reinforcements were moving up. The scene was indescribable. The procession of refugees was a succession of tragedies, and above it all hovered the fear that the progress of the enemy could not be stopped. Once more the ravages of war were to visit the lands that were thought safe from outrage. But the German advance went beyond former boundaries. Before it was so wonderfully checked by the superb French mobile army of Foch new destruction was added to that already done, and towns like Montdidier, with surrounding villages, were ravaged by the new invasion, with little thought that a cessation of hostilities would be possible before the close of the year.

In a few months the face of things was miraculously changed, and again the rehabilitation of the battlefields and the return of refugees becomes a problem needing immediate attention. With that eagerness characteristic of the French the roads will be filled again with returning civilians, and the problems of shelter and provisions for the coming winter months will be insistent.

Reconstruction is a question covering vast political and economic difficulties. Those which directly appeal to our people have to do with the unfortunate refugees, many of whom were twice driven from their homes. How can America help in alleviating their distress? In a moment of enthusiasm last year it was proposed that American cities or organizations should adopt certain villages and towns and collect funds for their reconstruction and for the care of their people.

Admirable as the feeling was which prompted this, it succeeded in causing endless heartburnings among those who were not fortunate enough to have secured our help. The number of adopted towns was small compared with the whole, and the result, in one instance that I know of, was that a very considerable fund was got together to rebuild a village which was only partially destroyed and which hardly needed the money, while a near neighbor which had suffered complete destruction was in direct need of help. This situation of disparity was further ac-

centuated by the fact that the French government last year had begun to furnish material to those who could repair their houses, but was not then ready to make any such advance to those whose houses had been completely destroyed.

The whole question of reconstruction is so complicated that it seems to me evident that individual projects of adoption of towns and villages are not the wisest form of help. Now that the war has come to an end, and that Germany has got to pay the bill, is it not all the more superfluous for America to be footing it?

The rebuilding of France is recognized as a matter for governmental control and intervention. The principle of indemnity has been thoroughly recognized already, and it seems as if individual, as opposed to governmental, assistance should be directed toward the immediate necessities of the people rather than their eventual ones. In work of this kind the Red Cross and a mass of other organizations both French and American can continue to be of greatest use.

There are other ways in which we can be helpful, and in which our desire to be of service in the rebuilding of France can find expression. That part of France which has been destroyed has got to be built. We can lend money for the purpose if it is needed—which it may be until France's accounts with Germany are in the way of settlement. Still further, we can help in the departments of labor and material without causing undue jealousy or discrimination.

What France needs is not alone material, but material suited to rapid and yet permanent rebuilding. The more quickly she can build the sooner will she be able to relieve the food shortage, which will be one of the most acute of after-war problems. We have many methods of building which answer her demands, and we can install the machinery and turn out the goods on the spot in such a way as to furnish the people of the devastated area with stronger, more sanitary, and more durable houses than they had before, at lowest possible cost and in the shortest possible time.

After a careful study of means at our hand, I am convinced that the large hollow-tile block, which is not as yet used in France, offers one of the best solutions of the problem. Throughout the zone of destruction in France and Belgium brick-yards abound and clay is to be had in unlimited quantities and of every quality. While the hollow tile is not yet unknown in France, it is made only in small sizes for interior partitions, fences, and small structures where reinforcing with angle irons is used. We have, on the other hand, extended its use to outside walls, and make it in single blocks which are equal to anywhere from a dozen to two dozen ordinary bricks. It is strong enough to hold every possible load, in two or three story houses; its hollows filled with air make it warm in winter and cool in summer,

while it comes in forms which make a wall of it impervious to moisture. Plaster on the inside and cement on the outside can be directly affixed to it, while the material is fire-proof, quickly laid, and susceptible to all the advantages of ordinary brick, and none of its disadvantages. Could this material be turned out in large quantities in France, it would be no small contribution to one of the pressing needs of the time. If Americans who would like to help along in the rebuilding of these regions would equip a dozen brickyards with facilities for turning these blocks out, and would then sell them at cost to those who need them, a really practical charity could be established which would be of the utmost philanthropic value at the present time.

The hollow tile is simply one of many devices that could be of immediate use in France. There are many ways in which cement can be prepared which would doubtless aid in reconstruction, providing that the prejudice of the French people against its use can be overcome. Every effort will doubtless be made in the rebuilding of France to introduce some of the modern conveniences which have been so notably lacking in its homes, but even more important will be the question of proper sanitation in its towns and villages. The authorities are awake to these needs and will look after them, just as French architects will take care of planning the rebuilt homes. Suggestions from us will doubtless be very welcome, but I feel quite confident that the role we can play to best advantage in reconstruction will be in pointing out some of the practical short cuts which can be made toward rapid yet permanent rehabilitation.

The methods likely to be adopted by the French are perhaps forecast in the procedure taken by them last year, and it may be of interest to American readers to know something of what was then done. The

French government was thoroughly conscious of the necessity of reclaiming the land and rebuilding the homes of the people in the parts of the war zone that were well back of the fighting line. It furnished portable houses, where it could, for people to live in, either selling them outright or renting them. It furnished labor for rebuilding from German prison camps, and materials such as cement, brick, tile, and wood. Individuals wishing to repair their houses applied first for an assessment of damages. Government assessors were stationed in the region, and the losses of the inhabitants were promptly looked into by them in conjunction with representatives of the individual seeking the assessment. Once a figure had been established, the householder could call for delivery of any material needed. This was charged, at prevailing prices, against the individual's ultimate indemnity—the indemnity allowed at the time covering seventy-five per cent of the individual's loss. Under the operation of this plan many houses were repaired which have doubtless since been destroyed again. Now, however, that the responsibility of Germany has been established, the full amount of loss, instead of the seventy-five per cent of last year, may be allowed, and the government, which then controlled practically all the material available for reconstruction, may hasten to restore an open market for building material heretofore under its control.

Last Restrictions Removed.

All remaining priority restrictions and directions of the War Industries Board have been lifted, effective January 1, 1919. Announcement to this effect is contained in a formal order issued by Judge Edwin B. Parker, Priorities Commissioner, dated December 20.



COLONIAL DESIGN

Brogden Residence
at

Jacksonville, Fla.

Reinforced concrete.

Cost about \$25,000.

J. H. W. Hawkins,
Architect.

Jacksonville, Fla.

America's First Apartment House

WHAT was probably the original apartment house, in the centuries before Columbus discovered America, has been found in the series of 100 or more community dwellings in the Animus Valley, in the northwestern part of New Mexico, a few miles below the Colorado boundary and directly across from the town of Aztec, it is announced by the American Museum of Natural History.

It is appropriate that the United States, which has brought the modern apartment house to such a state of perfection, should be the original home of this style of dwelling. The museum is excavating the ruins of these examples of prehistoric Pueblo architecture, and it is said to be the largest single piece of excavation work ever undertaken in this country.

J. P. Morgan and Archer M. Huntington are contributing the funds which have made the resurrection of the early apartment house possible.

America's original apartment house of prehistoric days was an attractive and well-built structure. It was stately, of sandstone, 359 by 280 feet, and built around a rectangular court. It was a high building, according to the primitive ideas, 35 to 40 feet, or three stories, and built with better ideas for sanitary conditions than many modern buildings, for the three stories rose on three sides of the rectangle only, while the south wing was low, to admit sunshine into the court.

On the ground floor are more than 200 rooms, the ceilings of which are still intact. These are formed of heavy pine beams, placed across the lesser dimensions of the rooms, overlaid by small poles running at right angles to the large ones and surmounted by a layer of split cedar, or in the more elaborate chambers by a layer of mats made from willows, which, while green, had been peeled, pierced and strung on yucca fibre.

Neat Workmanship.

This early American apartment house was a masterly piece of architecture and represented much labor and fine workmanship. It was put together with the greatest neatness and precision, notwithstanding the fact that each piece of timber and every block of stone was cut with crude stone implements. The museum was amazed to find in the ruin enough masonry to build a wall one foot wide and one foot high half way from New York to Philadelphia. Each stone had been carried by human beings from the quarry, three miles distant.

Travelers will be enabled to see exactly what the original apartment house was like, for the ruins are to be repaired and preserved. This so called Aztec ruin is on the property of H. D. Abrams, of

Aztec, and he has given the museum a concession to clear out and investigate it. The work is being supervised by N. C. Nelson, of the museum, and the actual work is done under the immediate direction of Earl H. Morris, also of the museum.

There are visible signs of the life and the tragedies of the early days in the ruins. Many things of household use and personal apparel which were found there have been brought to the museum. They are of exceptional interest and fine quality. There are pottery vessels of various forms and ornamentations, agate knives, woven sandals, cotton-cloth, tanned deer skin, bone and stone implements. Axes were of the stone and the prehistoric needle man or woman used needles of bone, some of which were found.

Articles of personal adornment are the finest ever discovered in the Southwest. There are abalone shell pendants as large as the palm of the hand and other pieces of shell of equal size set with remarkable inlay. One of the most elaborate of these has a pink stone in the center and around this circles of turquoise, gilsonite and galena crystals.

Traces of human life were found in one council chamber where a mother and two children had been overtaken by fire, set perhaps by the enemy, partially covered with mats they had drawn about them to keep off smoke and flames. There were mortuary chambers, where the dead reposed in excavations in the floor surrounded by great numbers of mortuary offerings.

This excavation is the most costly that has ever been attempted in the United States, as well as the most extensive. The ruins are to be preserved and as fast as the walls are uncovered masons replace the stones that have disintegrated and strengthen the portions of the structure which threaten to collapse. The whole will be made as nearly perfect as possible and will become a permanent monument to the aborigines of the Southwest, rivaling in importance the Mesa Verde National Park.

To Supply Consulting Experts.

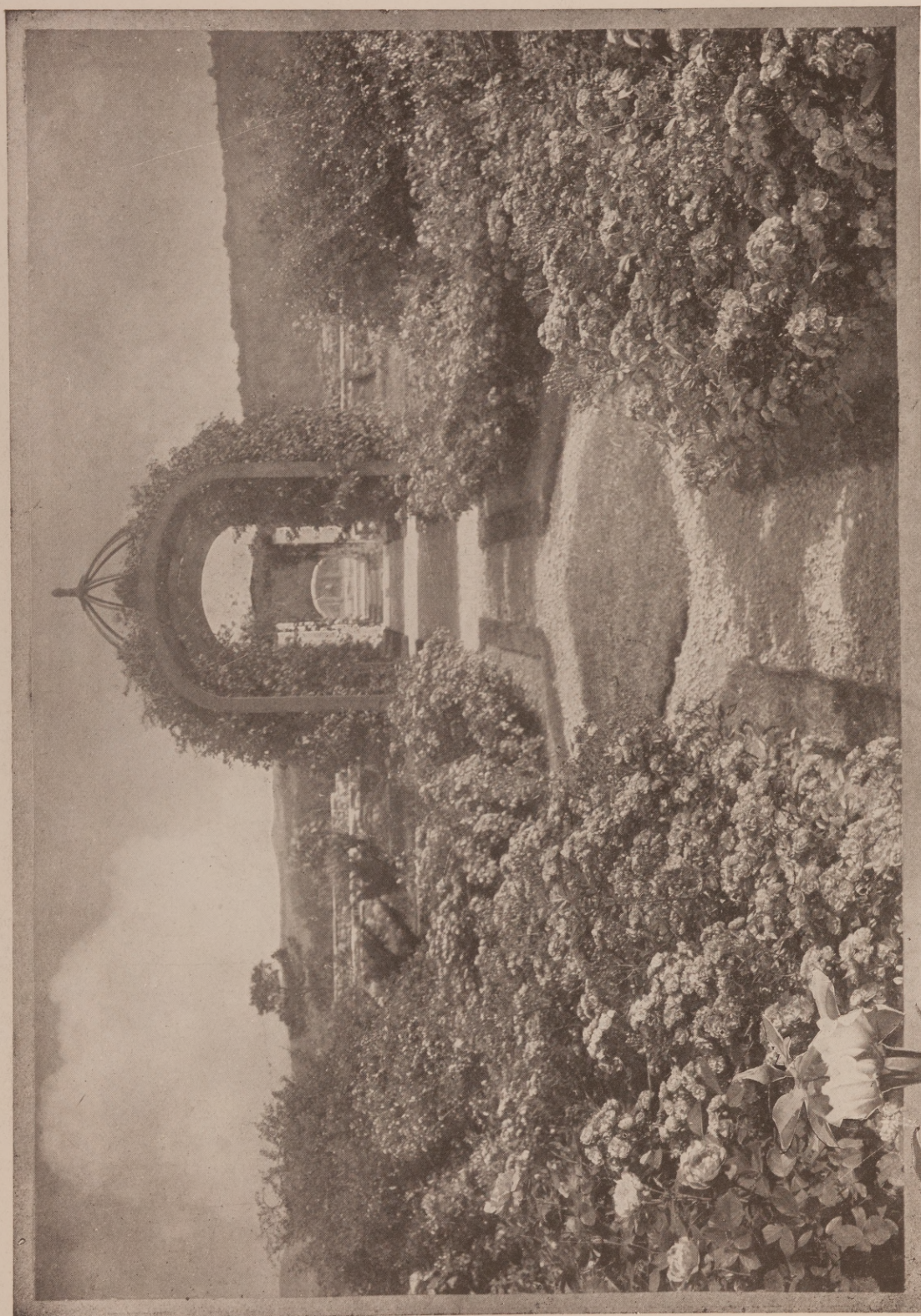
The government has gone into business as consulting expert on employment problems. Hereafter heads of business enterprises, when they desire scientific advice on important questions of policy or administration, may seek the assistance of the Working Conditions Service, Department of Labor. This service will supply careful experts who have had careful training and wide experience. Since its organization preparation has been made for the widest possible activity.

Types of Landscape Architecture



The Tulip Bed in Landscape Gardening for Brilliance of Color.

5461



Rose Garden Entrance to a Country Place, designed after the manner of small French Estates.



Shrubs are the garden fixtures and afford a striking display of blossoms with very little attention. The long, drooping chains of flowers are the white masses of the Van Houtte's Spiræa.



A Flowered Entrance to a country house, with a background of shrubbery and old time garden plants along the walk.



Type of English cottage, the details of which may be well applied to the small country house in this country.



Type of Old Home in Northern Woods.

Lumbermen's Export Bureau.

At a meeting of the emergency committee of the Northern Hardwood Emergency Bureau, held in Chicago, Tuesday, December 17, steps were taken looking to the formation of a corporation to handle the export trade in birch, beech, maple, basswood, elm, and ash.

The Northern Hardwood Emergency Bureau is made up of the members of the Northern Hemlock and Hardwood Association, Oshkosh, Wis., and of the Michigan Hardwood Manufacturers' Association, Cadillac, Mich. Its work in meeting government lumber requirements has been practically completed and under the plans proposed at Chicago the new organization will in effect move the emergency bureau branch office from Washington to Paris.

It is the belief of the northern lumbermen from Wisconsin and Michigan who attended the conference that northern hardwoods have not been properly exploited abroad and that new markets await these woods if an emergency campaign is undertaken at once.

Under the plan worked out by the committee, a sum will be raised immediately sufficient to finance a thorough investigation of the hardwood markets in England, France, Belgium, Spain, Portugal and Italy. This sum will be underwritten by such members of the two northern associations as care to participate in the direct foreign trade.

The firms which bear their pro-rata share of the cost of the investigative work for the next six months will be eligible to membership in the export corporation which will then be formed.

Roy H. Jones, who has represented the emergency bureau at Washington to the great satisfaction of the northern manufacturers, has been engaged to represent the new organization abroad and will leave this country shortly after January 1.

During the investigation period the management of the work will be vested in an executive committee selected by the underwriters and will be administered by the present officers of the emergency bureau, C. A. Bigelow, Bay City, Mich., chairman; O. T. Swan, Oshkosh, Wis., manager.

About Modern Plumbing.

Architects, builders and interior decorators agree on one point at least and that is the plumbing in a house should be of the very best. It is the most expensive economy to put poor plumbing in a home. It is far better, if cost be considered, to leave one room unfinished or to use make-shift furniture. If the plumbing fixtures are put in at all they should be chosen for the fitness and durability. A modern, fully equipped bathroom is the pride of the housekeeper's heart. The built-in baths of solid porcelain are the acme of sanitary perfection and a delight to the eye. However, if they are too expensive for the

small house there are several good designs equal to them in finish and in quality. One of the beauties of the built-in baths is that there is no exterior plumbing to be kept polished. These built-in tubs are glazed outside as well as inside, which makes them easy to keep clean. As they set tightly upon the top of a tiled floor, there is no chance for dust or germs to collect. Sometimes the floor is made of concrete or a composition and the tub is actually embedded in it. When a floor is thus made it should be rounded at the base, so that the side walls and the floor are in one piece.

Bathrooms should always be light in color. Many people prefer white tile with a little border of blue or green or yellow on the floor and wall. When the walls are not made of tile clear to the ceiling, they should be finished with enamel paint that can be washed. Paper or calcimining will be destroyed by the steam from the hot water. Several coats of enamel finish give the walls a hard surface that can be easily cleaned. Next to the enamel finish is Sanitas, which is a fine finished oilcloth, applied directly to the walls.

The choice and placing of the small fittings of a bathroom add much to its attractiveness and convenience. The towel rack, soap-dish, tooth brush holder, glass shelves for toilet requisites should be placed within easy reach and yet not be in the way. Some people like the certain fittings, as the soap-dish, to slip inside the wall. This is done by removing a tile and setting in its place a recessed soap-dish. There are sponge-holders, enameled bath-seats, racks for soiled towels, adjustable shaving mirrors, bathroom scales, medicine caskets of so many sizes and designs that it is impossible to enumerate them. —The Touchstone Magazine.

Terrazzo Floors Laid in A. D. 900.

A writer by the name of Sagredo, states an exchange, in referring to building construction in Venice, tells how Venetian pavement—today referred to as terrazzo floors—was laid. In A. D. 900 the usual method was to lay down a floor of heavy planks, upon which a thick layer of mortar and small pebbles was spread out and beaten down to a hard surface; upon this again a second layer of cement mixed with pounded bricks was spread, and this was beaten with heavy wood beaters till it was perfectly hard and even. It was from this beginning that the so-called "Venetian pavement" soon developed. For rich people caused small pieces of colored marble, and even mother-of-pearl, to be set into the cement of the second layer, which was then no longer beaten, but rolled with a ponderous stone roller and then rubbed down with a smooth stone and sand and water, and at last polished to a brilliant surface. So the roller for finishing concrete pavement is not so much of an innovation after all.

Need For A City Housing Department

AN ADDRESS was delivered before the National Housing Association in Boston in November by Charles B. Hall, Chief Sanitary Inspector of the Chicago Health Department, in which he points out that neither the Building Department nor the Health Department is fitted to cope with the housing problem. Mr. Hall said:

Mr. Lawrence Veiller, the leader of housing reform in America, some years ago told us that it was "The problem of enabling the great mass of the people who want to live in decent surroundings and bring up their children under proper conditions to have such opportunities. It is also to a very large extent the problem of preventing other people, who either do not care for decent conditions or are unable to achieve them, from maintaining conditions which are a menace to their neighbors, to the community and to civilization."

We all agree that the old time idea that housing deals only with that which is enclosed by four walls and a roof is no longer tenable.

Scope of Housing Problem.

Housing is concerned with such fundamental principles of government as control of land, equitable taxation, etc. The solution of the housing problem begins with the layout of the city. The proper development of the several public utilities, including transportation, water supply, sewerage, public lighting, as well as appropriate street, block and lot dimensions are all vital to the right kind of housing.

A housing program must therefore be comprehensive and consistent, and must include in its scope a forecast of the extent and location of housing need in the future, the adequacy of existing utilities, park and school facilities, etc. All these, in addition to the framing and enforcement of progressive laws applicable to the construction of new dwellings, the improvement of the old and the sanitary maintenance of both new and existing dwellings.

Duties of Building Department.

With such apprehension of the broad social aspects of housing administration, we may now inquire if any organized city department is properly equipped to add such duties to its present responsibilities.

What are the ordinary functions of a building department, and how related to the housing problem?

The building department of a city controls:

The examination and approval of plans of all classes of buildings in respect to:

1. Materials of construction.

Are these suitable for the use to which they are to be applied?

2. Strength of structure.

Is the design adequate in strength and stability of Foundation,

Walls,

Floors,

Roof, and

Stairs?

3. Proper facilities of access for the use intended.

4. Proper record and issuance of permits.

The public interest requires a sufficient record of the issuance of proper permits for the construction of buildings.

5. Inspection of work in progress to determine its conformity to the plans.

6. Reasonable standards of workmanship in execution.

7. Final certificate on completion.

Let us note:

1. That these functions are in general mechanical in their nature.

2. That the relation of the department to the structure ceases on its completion.

3. That they are concerned with all classes of structures, many of which involve, to a slight degree only, the human element.

4. That the qualifications and training required to properly perform these duties are technical and tend to a narrow outlook, and that

5. The duties performed contain little incitement to the social point of view.

It will, of course, be said that the dwelling is a structure and therefore should be placed with other structures under control of this department. This we admit, but contend that such control should be applied to its structural elements only. We feel that the peculiar relation of the house to the human being whom it shelters justifies exceptional consideration of its purpose and planning.

We shall also meet the argument that when the laws which control the design of a dwelling are expressed in explicit, mathematical terms it needs no more than ordinary intelligence to observe if these provisions are complied with. That is, anyone who is competent to make measurements can determine if a room has a floor area of 80 square feet, and if a ceiling has a height of 8½ feet. We contend that in the mind of the observer some conception is required of the purpose of the law; otherwise he might, for example, accept a room 4 feet by 20 feet as fulfilling the intent of the law as a living room, which would be ridiculous. Likewise, he might accept a legal window as fulfilling its proper function if the window does not have outside of it adequate space on which to open.

Unfitted to Control Housing.

It will be granted, I think, that a building department will usually have little concern for the community needs with respect transportation, recreation, public lighting, street improvement, etc., for future housing developments.

All things considered, we are forced to the conclusion that a building department without other co-operation and supplementary control is an insufficient agency to cope with housing problems.

Duties of Health Department.

Resuming our original inquiry, what shall we say about control of housing by a health department?

The functions of a municipal health department are as follows:

1. The registration of vital statistics and mortuary control.
2. The control of communicable disease.
3. The conduct of school inspection and the protection of child hygiene.
4. The safeguarding of the food supply.
5. The abatement of nuisances and the regulation of offensive trades and sometimes also:
6. The supervision of hospitals and dispensaries, and
7. The operation of a laboratory.

Should Not Control Housing.

An important reason why housing control should not in large cities be under a health administration, is the great and ever present difficulty in securing

adequate appropriations for the carrying on of health activities. The men and money to prosecute housing work can be much more readily obtained for an independent item in the city budget than for an additional subordinate item in health activities.

A second reason is that the training of the physician who is the health executive of a large city is usually little more than a technical education in medicine. He rarely has any knowledge of house planning or of house construction or of the materials used, and for this reason is unfitted for technical control in connection with such matters.

The technical character of its work imposes upon a health department limitations due to its very nature and offers little incitement to consider broad and vital questions such as the future needs for housing, the study of districts in which housing development is likely rapidly to take place, the types of dwellings most suited to the needs of different classes in the community, and the possibility of making modifications in structure and plumbing such as will, without the sacrifice of essential strength and convenience, decrease the cost of housing the worker.

Housing Made Secondary.

The main reason, however, why health departments of large cities should no longer be the chief agencies for housing control and development, is that in the presence of health emergencies their housing functions are discontinued and the housing forces diverted to other uses. The epidemic of infantile paralysis in 1917, and that of influenza, just past,



Colonial Residence Major Spence at Tuscaloosa, Ala.

give emphasis to this argument.

There is a constant temptation also at all times to place the ordinary duties of a health department above the exercise of housing functions.

The report of the Woman's Municipal League but states a fact common to all health departments, when it records: "In Boston the housing of the people has been and still continues to be placed far down in the long list of the duties of the health department."

Independent Department Needed.

I am convinced, after working first for some years in co-operation with a health department, then in the tenement house department of New York City, and for a long period afterward in a health department, that in large cities, perhaps setting the limit at 300,000 population, housing control and outlook should be vested in an independent administrative agency, having no other functions.

We need not, however, consider this question wholly from a theoretical or personal point of view. We have a practical demonstration of the satisfactory operation of an independent housing department in the work of the tenement house department of New York City since its organization in 1902. Its administration has been notably successful and it has set a high standard for other cities to follow. Its statistical publications included in the annual report are especially noteworthy and are far in advance of any such material collected and published by health departments. A parallel is also found in the working of the state tenement commission of New Jersey, which has attained exceptional success as a housing agency quite independent of city health departments.

Organization of a Department.

The following fundamental organization of a housing department is proposed for Boston, and would apply equally to other cities of similar size and problems:

I.—Executive Bureau—

1. Plans.
2. Violations.
3. Vacations, condemnation and demolition.
4. Structural improvements.
5. Police cleanup.
6. Verification of inspections.
7. Co-operation with other agencies.

II.—The General Public Office—

1. Examiner and bookkeeper.
2. Complaint desk.
3. Plan desk.
4. Old building violation desk.
5. Tickler clerk.
6. Charging and filing clerks.
7. Reinspected work.
8. Dismissal clerk.
9. New building violation desk.

10. Supply clerk.

11. Notice servers, messengers, etc.

III.—The New Building Bureau—

1. Plan examination.
2. Field inspection.
3. Office division.
4. Certificate of completion.

IV.—The Old Building Bureau—

1. Plumbing inspection.
2. Fire escape inspection.
3. Structural improvement inspection.
4. Underground occupation inspection.
5. Vacation, condemnation and demolition.
6. Bakery structure inspection.
7. Periodic and patrol inspection.
8. Nuisance inspection.
9. Instructive inspection.

V.—Bureau of Records—

1. Filing and record division.
2. Statistical and research division.
3. Photographic division.
4. Library and publicity division.
6. Stenographic division.

VI.—The Bureau of Law—

1. Legislative division.
2. Suits and prosecution division.

Foreign Trade Opportunities.

Where addresses are omitted they may be obtained from the Bureau of Foreign and Domestic Commerce, Washington, D. C., and at the branch offices of the Bureau, 315 Custom House, New York, N. Y.; 629 Federal Building, Chicago, Ill., and Association of Commerce Building, New Orleans, La., and 310 Custom House, San Francisco, Cal. For convenience in filing, please use separate letter sheet for each trade opportunity request.

27998.—An architect engaged on important municipal building in Denmark desires to receive catalogues of building hardware and metal window frames.

27997.—A civil engineer with established business relations in Mexico desires to secure an agency for the sale of building and construction material and drugs. He desires to have a stock of goods for ready sales. References.

27813.—An agency is desired by a man in France for the sale of hardware, building material for interior decorating, surface-coated paper, paints, etc. Correspondence may be in English. Reference.

27817.—A representative of a French syndicate, who is at present in this country, desires to purchase and secure an agency for electrical apparatus and supplies, gas fixtures, sanitary apparatus, household requisites, bolts and rivets, heating apparatus, building materials, hardware, locks, plumbers' supplies, stoves, ranges, heaters, paints, wall paper, cordage, and rope. Correspondence may be in English. References.

Boston Bans Three-Decker Houses

AFTER several months' study of living conditions in Boston during which time the services of experts were available, Mayor Peters's Committee on Housing made its reports outlining eight recommendations, which will form the basis of a bill to be introduced in the legislature by Corporation Counsel Alexander Whiteside. The recommendations follow:

1. A "housing law" distinct from a "building law."
2. Strict enforcement of all building and health laws which apply to housing.
3. More light and air in congested districts.
4. Removal of all dwellings no longer fit for habitation.
5. Public improvement of the North End as proposed by the City Planning Board.
6. Public assistance toward the building of multiple-dwellings at low rental.
7. Organized development of public interest in health and housing.
8. No more wooden three-deckers, but non-combustible walls, with wooden porches, if desired.

Mayor Peters is highly pleased with the report, signed by nine members of the committee. One member, A. V. Brogna, disagrees on two important recommendations, such as the proposed limitation on the height of buildings in the congested section, and in restrictions against the future construction of houses facing the North End alleyways. The study is called the most comprehensive ever made for Boston and confidence is expressed that the housing situation, long regarded as serious, will be greatly improved by the legislation sought.

Why a Housing Law?

Why Boston needs a "housing" law is explained on the ground that present requirements for dwellings are scattered here and there throughout a code known as "The Building Law of the City of Boston," and in a few additional acts of the legislature covering minor details, and are necessarily confusing. The housing sections of the code are not even consecutive, the report says. Details of construction are mixed up with details of maintenance. Matters which concern buildings hereafter erected are not separated from requirements intended solely for existing buildings. The functions of the health and building departments are not clearly inter-related, and there is a lack of precision in the remedies provided for existing housing evils.

The committee believes that the standards of the present laws are not so high as they should be, standards having advanced in the eleven years which have passed since most of the legislation was enacted. The laws do not give all light and ventila-

tion that many houses require, and in matters of maintenance of new and old buildings good housing standards require, in the committee's opinion, a more satisfactory code. By the proposed law, dwellings are classified as: First, private or single-family dwellings; second, two-family dwellings, and third, multiple-dwellings.

As to the enforcement of all building and health laws, the committee says:

"The committee has ground for believing that no thoroughgoing enforcement of the building or health laws has been accomplished in recent years. Even where it may be assumed that the will to enforce was present, the means have not always been sufficient. The records reveal hundreds of cases of violations that have been called to the owners' attention without result and referred to the law department, where they are hung up today. The health department has of late years taken its own cases into court. Usually this department's threat to begin proceedings has moved owners to make a beginning of amendment. The cases have been placed on file and the work left uncompleted. In many cases, more or less serious, no effective action whatever has been taken.

More Inspectors, Also Women.

"Under the heading 'How May Inspection Be Improved?' the committee says:

"After a building is completed the Building Department ceases to keep watch over it unless it is reported as dangerous, or unless some impulse is given to increase or improve the condition of fire escapes and other means of egress. There is no need of periodic, systematic inspection by the Building Department of existing buildings except to determine how far they are in good repair. Building inspectors as a class have little training in sanitation and hygiene. The committee is convinced that to maintain good living conditions in occupied multiple-dwellings, the responsibility for oversight and for enforcement of the housing laws should be placed in the housing division of the Health Department. Good housing conditions are largely a matter of sanitation and hygiene. Inspectors of the Health Department should be selected for their qualifications as sanitarians."

Legislation called for requires the appointment of a considerable number of additional inspectors in the housing division of the Health Department, in which the committee believes should be included women. The committee also believes that the Health Department should be made responsible for the examination and approval of plans for new dwellings and for alterations, but that probably the installation of plumbing should remain under the supervision of the building department. During work on a

building, inspection should be by both departments.

"The committee cannot avoid the conclusion that good housing in Boston, as elsewhere, implies not only adequacy of laws governing the construction and maintenance of dwellings, but also a very definite and cheerful acceptance of the obligations implied in these laws by both landlord and tenant," the report says. "There seems reasonable ground to believe that many of the abuses found in and about dwelling houses would not exist if there were a sufficient corps of inspectors attached to the city departments responsible. Good housing depends very much upon the interest taken in the matter by the citizens generally. It should be the aim of every citizen or group of citizens to understand and promote good housing. Without it there will be lacking many of the virtues essential to the inhabitants of a healthful, prosperous community."

More Light and Air.

The committee offers four methods by which more light and air can be secured in the congested districts. First, by further limiting the height of dwellings in proportion to the width of the street, the present permission to build multiple-dwellings to a height of two and one-half times the width of the street being regarded as detrimental. The proposed law cuts down the height to thirty-six feet, or to one and one-half times the width of the street. Second, by increasing the width of rear yards, beginning with a width of fifteen feet instead of twelve, as now required, and increasing that width with the height of the building. Third, by making it impossible to ventilate sanitariums on inner courts of less than 400 square feet of area. Fourth, by enlarging the air-intakes essential to every vent shaft and inner court.

As for the removal of dwellings not fit for habitation, the committee recommends that not less than \$10,000 be appropriated for the Health Department every year. The North End improvement, as studied by the Planning Board, is regarded by the committee as "of very greatest importance, for it will modernize the district." It is suggested that the work begin immediately and be completed within a year.

Boston Should Aid Building.

Under the title "Public Assistance toward Building Multiple-Dwellings at Low Rental," the committee says that regulation is not of itself sufficient to solve the housing problem, but that regulation must be coupled with governmental encouragement and financial aid. The committee believes that such aid can be granted in agreement with the Constitution of Massachusetts and by methods successfully adopted by most of the European countries. The committee proposes that a fund be established by the city of Boston, by loan, the proceeds of which shall be loaned out by a commission of five, to be known as the Housing Council; such loans to be made at a

rate which will encourage the building of such houses.

As to the wooden three-decker, the committee says:

"The usual wooden three-decker is cheaply built and therefore deteriorates rapidly. After the first few years it is apt to be neglected both by owner and tenant. It is unsightly. When a great number of these buildings cover a district, all other property tends to depreciate. And there is of necessity a constant fire risk. What is the substitute? Non-combustible walls, or second-class construction. With the increasing cost of lumber this type of building will not be of much greater cost at the outset. At the end of fifteen years the second-class building will be worth far more than the wooden building and will have before it a much longer future. Wooden piazzas or porches may be added of brick or concrete buildings for comfort and beauty. A type of dwelling can be provided which is a benefit to landlord, tenant and community as well."

U. S. Specifications for Latin America.

Two more numbers of the Industrial Standards series are ready for delivery; No. 3, Standard Specifications for Open Hearth Steel Girder and High Tee Rails, and No. 4, Standard Specifications for Low-Carbon Steel Splice Bars. These specifications are printed in Spanish and English, and are published to meet a demand from South American firms for information that will enable them to specify American structural materials. The text is that adopted by the American Society for Testing Materials, and is published in cooperation with the American Society of Civil Engineers and the Bureau of Standards, Department of Commerce. Copies can be purchased at 5 cents each from the Superintendent of Documents, Government Printing Office, Washington, D. C., or from any district or cooperative office of the Bureau of Foreign and Domestic Commerce.

Building Conference at Ottawa.

The Canadian Contractors formed a permanent organization at Ottawa. The officers elected for the ensuing year were as follows:

General Contractors' Section:—Chairman, Alex. I. Garvoek, of Ottawa; secretary, G. A. Crain, of Ottawa. Executive Committee—The chairman, the secretary and H. Hayman, of London; Ed. Cass, of Winnipeg; Jos. Gosselin, Jr., of Quebec; H. Dancy, of Toronto; and J. P. Anglin, of Montreal.

Trade Contractors' Section:—Chairman, W. A. Mattice, of Ottawa; secretary, E. R. Dennis, London.

Supply Section:—Chairman, W. E. Ramsey, of Montreal; secretary, W. Frank Evans, of Toronto.

It was decided that the different sections are to act independently in any matter pertaining to its own welfare.

How Can Architectural Practice Gain Recognition?

IN AN address before the North Dakota Architects' Association, Mr. George Hancock, president of the society, referred to the tendency of engineers to usurp the architectural profession. He said in part:

Engineers, by their energy and success in gaining the public ear, are fast driving the modest, timid architects out of business. To offset this tendency we notice that many architects, in order to keep up with the procession, have added the title of engineer to that of architect, for the purpose of impressing the public with their superior qualifications over and above that of the properly trained architects who make no claim to other professions. Architects and engineering are two separate and distinct professions, and it is given to but few men to master the intricate details of both, so that in most cases the assumption of the dual title is used for the sole purpose of gaining advantage over those who do not have the temerity to adopt such with little or no preparation.

The Massachusetts Institute of Technology makes the distinction between architecture and engineering and has separate courses for the training of students in each, as either is all that the average intellect can properly master with credit to himself. So that the mere adoption of a title without the necessary training to properly sustain it should at least be discouraged by all self-respecting architects.

However, we must cease worrying over our troubles and assert ourselves with energy in order to gain what we desire; a better and more extended appreciation of our profession as architects.

Some professions, such as the law, are held in less esteem than that of architecture, and if we would increase respect for our profession we must command it through our work and that will bring us the public recognition we so urgently need.

It is useless for us to look to the law courts for protection, as the lawyer is the only winner where such efforts are made, but as a reason for hope in the improvement of our chosen calling, we have only to look at the host of poorly paid teachers and clergy to learn that our lot is no harder than theirs, in the matter of lack of appreciation of the service they render to the public. It is well to think of others when disposed to complain of our lot.

If we would succeed better than they we must do better and nobler work, with our minds set more on achievement than on temporary financial success.

It is futile to complain that this is a commercial age, with but little public appreciation of art; such whining does no good and only indicates weakness. There is just as much artistic taste and feeling in

the world today as in the days of Titian and Michael Angelo, and it is for us to satisfy this artistic taste and feeling if we would succeed in gaining for our profession the respect and recognition to which we believe the nobility of architecture is entitled.

During the past ten centuries architecture has come through many changes and developments. The eighth and ninth centuries gave us the unique creations of the Saxons; the tenth and eleventh centuries the solid honest Norman work that has so well stood the test of time, as evidenced at Winchester and Durham.

The twelfth and thirteenth centuries gave us the pure and graceful early French and English Gothic that so clearly expresses the aspirations of the people of those nations in the magnificent creations of Rheims and Amiens, Salisbury and Westminster, the like of which has never been seen before or since that age.

The fourteenth and fifteenth centuries gave us the geometrical and perpendicular styles, often referred to as the climax and full development of gothic architecture in Europe.

Such art and architecture as the people of those times produced should serve as a stimulant to greater efforts of the younger architects of our time. They had no examples to guide them and their work was the result of creative and imaginative concentration and skillful independent effort.

Shall we then, with all these beautiful examples before us and the numerous examples of the Renaissance of the sixteenth century, and the more recent productions of Jones and Wren and the revival of the Romanesque by Richardson and Hunt in this country, fail for the lack of making an effort to merit the recognition we so earnestly crave? No, we must attempt much even if we accomplish little, but as effort is the parent of results, we can expect no recognition by the public unless we command its attention.

By education and experience the architect of today should be better qualified to handle successfully building operations of all kinds than men not having such qualifications, but the public cannot appreciate this for the reason that the architects have not done their part in the construction of the public to the point of appreciation of their service to their clients and to the public in general.

So far, along this line, our efforts have been limited to talking to ourselves through the medium of professional and trade journals, that seldom or never reach the eye of the general public, or prospective client.

Undue modesty on the part of the trained archi-

test is doubtless the cause of this shyness and should be overcome by a much needed change in the method of bringing the client and architect together, on a better and fuller understanding of their relationship to each other, and to protect the public from the trickery of the faker and charlatan who is ever ready to pluck the fruits of honest effort along all professional lines. The men who have fitted themselves by great expenditure of money and time to serve the public in an honest and skillful manner must have some protection as against quacks who have no training in architecture and who do their work by proxy and only see the commission or money side of the profession.

The licensing of all architects is a reasonable solution of the problem.

National Lumber Manufacturers' Association.

A fully equipped traffic bureau will be established at Washington shortly by the National Lumber Manufacturers' Association, it was announced by Secretary Wilson Compton.

The move is one of the direct results of the recent Lumber Congress held in Chicago. Among the problems of lumber manufacturers and dealers, which stood out prominently all during the conference, was that involving the actual transportation of lumber and lumber products. It was discussed in committee meetings and in group sessions, but most of all it was discussed by individual delegates in the lobbies of the hotels and in the recesses between sessions of the congress.

Finally the matter came forcibly to the attention of President Kirby, of the National Association, through Dr. Compton, who insisted that the traffic bureau was greatly needed in order that the efficiency of the national association might be increased.

According to the announcement of Dr. Compton, every facility is to be afforded shippers of lumber and lumber products for obtaining the very best results in their transportation problems. The bureau will keep in close touch with the railroad administration and with all branches of the lumber industry.

1,000,000 Homes Needed by Allies.

Belgium, England and France are about to call upon the United States to supply building material and equipment for at least 1,000,000 homes, according to William C. Redfield, Secretary of the Department of Commerce, says the Dow Service Daily Building Reports. This fact, with disclosures concerning the domestic building situation made to various trade conventions last week, has brought the American building investor face to face with a rather serious condition. The problem centers chiefly in the question of building material demand and the capacity of American manufacturers to meet an unprecedented domestic call for construction material

and at the same time take care of the imperative requirements of other parts of the world.

A computation of the probable amount of new construction is being made at present, and it is already evident from figures at hand that there is approximately twice as much building construction in project in this country today as in the best previous years ever recorded. No consideration is given to the building demands of South America and Canada, where American cement is already supplanting the German brands that were formerly almost exclusively used.

The building investor is face to face with an alternative of either taking what material he can get at existing prices or deferring his operation until prices come down. If he proceeds, he will have to pay high prices, but will also have a demand for the finished building. If he waits, he may find prices lower, but the demand will not be there. Foreign building material demand, as far as Europe is concerned, probably will be only of a year's duration, but that of South America will be of a permanent character. The demand for construction material in the United States cannot be met, even with present plans in project, short of two years based solely upon normal demands. This demand now has expanded from domestic to world proportions. The estimate does not include speculative construction of any kind.

The price situation as it pertains to domestic building materials is developing without regard to organized control so far as can be discovered by a rigid investigation into the price markets. The mason material dealers are taking the almost unheard-of attitude of counselling against anything like arbitrary price advances. In fact, a federal department is watching carefully for any evidence of price advances that have no foundation for the movement. For that reason, while no fixed government quotation has been made in certain important basis building commodities, the government is holding a potential control over any commodity that shows signs of stampeding. The government looks to the building and allied industries to absorb much of the return and naval labor, and the intimation is plainly made in some channels that it intends to see that its plans are not upset by any price manipulation that will frighten off the prospective building investor.

Prospective builders will find it to their advantage to consider fundamentals in determining to defer construction. It took ten years for building material prices to find their normal level, with a few exceptions, following the Civil War. The construction program of the country then was only sectional, whereas today it is world-wide and far beyond the capacity of present American building material manufacturers to supply it when it gets into full stride. Prices of practically every building commodity are remarkably steady.

United Engineering Society Proposed.

The question of forming a United Engineering Society that would be endowed with sufficient power to actually take control and administer affairs that are of universal interest to the profession, has been engaging the minds of a great many engineers of late. W. H. Woodbury, a member of the American Society of Civil Engineers, has endeavored to formulate a scheme and outline a general form which he believes would be feasible and effective. Just at this time when the Committee on Development of the American Society of Civil Engineers, is going into action, it is pre-eminently desirable to get this broad visional conception of the needs of the engineering profession clearly in sight. Mr. Alfred D. Flinn, secretary Engineering Council, has made a statement of the cardinal elements desired as follows:

- (1) Autonomous local, state and national societies;
- (2) Membership of any society in a representative national association, embracing all engineers;
- (3) Membership for individuals who do not wish to be members in any other society;
- (4) Combined action in local, state and national matters—civic, professional and social—of common concern to engineers;
- (5) A scheme of representation and membership in the United Societies which will prevent any person being counted more than once;
- (6) Common standards for membership of various grades in all member societies and the United Societies;
- (7) Inducement to membership in the United Societies through a National or other society, by the adjustment of dues;
- (8) Direct responsible representation;
- (9) Definite organized action to better the engineer's economic condition.

National Crushed Stone Association.

The annual meeting of the National Crushed Stone Association will be held at the Iroquois Hotel, Buffalo, N. Y., on February 11 and 12.

Data on Power Stations.

Preliminary figures from the forthcoming quinquennial report on the central electric light and power stations of the states of Connecticut and Rhode Island have been given out by the Bureau of the Census, Department of Commerce.

The statistics relate to the years ending December 31, 1917, 1912, and 1907, and cover both commercial and municipal plants. They do not, however, cover electric plants operated by factories, hotels, etc., which consume the current generated; those operated by the federal government and state insti-

tutions; nor plants that were idle or in course of construction.

Kentucky Stone Crushers Organize.

The Kentucky Crushed Stone Association has been permanently organized. Officers are: President, W. J. Sparks, Mt. Vernon, Ky.; F. W. Katterjohn, Paducah, vice-president, and R. B. Taylor, Louisville, secretary-treasurer. These officers will compose the board of directors.

Pine Association Annual Meeting.

The Southern Pine Association announces that its annual meeting will be held at the Grunewald Hotel, New Orleans, on February 25-26. No announcement of the program is available as this is written, but it is understood that a discussion and study of export market problems and conditions will be one of the leading features.

Hollow Tile Prices.

The price fixing committee has determined upon the following prices, f. o. b. plant, on hollow building tile for government purchases made during the period from July 1, 1918, to January 1, 1919: Perth Amboy, N. J., \$9.75 per ton; St. Marys, Pa., \$7.95; Canton, Ohio, \$7.50; Terre Haute, Ind., \$8.00; Louisville, Ky., \$8.10; Birmingham, Ala., \$8.55; Mason City, Iowa, \$7.20; Coffeyville, Kans., \$7.20; Elmen-dorf, Texas, \$11.00; Athens, Texas, \$11.00; Salt Lake City, Utah, \$10.00; Los Angeles, California, \$10.00; Lincoln, California, \$10.00; Seattle, Washington, \$10.00. The foregoing prices are for standard, kiln-run tile. Additional allowances will be made on other types of tile.

Prominent Builder Passes.

Mr. T. O. Brown, one of the oldest contractors of Augusta, Ga., and perhaps of Georgia, for years prominent in the affairs of that city, died at his home January 8 at an advanced age.

Urge National Help for Home Builders.

Aid to home builders on a national scale similar to that given farmers by the federal farm loan banks, has been suggested by E. L. Keezler, of Charlotte, N. C., president of the United States League of Building and Loan associations, to the department of labor, as a step to stimulating private construction during the period of industrial transition from a war to a peace basis.

Mr. Keezler urged that mortgages made over to the building and loan associations should be redis-countable at federal reserve banks or that farm loan banks be authorized to accept mortgages on homes as well as farms. Building and loan associations number 7,269 with a total membership of 3,838,612, and assets of \$1,750,000,000.

Trade Notes of Interest.

Fire Proof Doors and Shutters.

In this issue of The Southern Architect & Building News, Merchant & Evans Co., of Philadelphia, are represented with a full page advertisement on their celebrated Evans "Alwell" fire doors and shutters. These are especially suited for use in industrial plants of the South, such as cotton ginning plants, cotton oil mills, cotton compresses, cotton oil refineries, cotton storage warehouses, fertilizer factories and cotton mills.

The high price of cotton necessitates better protection of the staple now than ever before. For this reason better buildings for its storage and handling are going up everywhere, and the demand for fire proof doors and shutters will be enormous.

Merchant & Evans Co. have perfected this line of material. They know what is wanted, and by large expenditures of time, money and labor have brought out fire doors and shutters which will stand every requirement and have been endorsed by the U. S. government. The firm has been so long before the trade that its name stands for all that is best in up-to-date building material. High class literature on the subject will be gladly sent to our readers on application.

Zelnicker's New Bulletin.

The Walter A. Zelnicker Supply Co., of St. Louis, has just issued its bulletin No. 250, which it is offering free to the trade. It contains a list of the rails, machinery bars, equipment, cars, plates and other machinery and parts which the company handles, and on which it bases its slogan, "The Nation's Market Place." It's a most convenient book for the buyer or seller.

Invites Investigation of Its Claims.

It is well known to the trade that the Stearns Register Company of Detroit, Michigan, has an established reputation for the high quality of its goods and the honesty of its dealings. They state: "Our product will do certain things. It possesses many desirable advantages. We shall be glad to have you investigate the truth of our claims." They invite the dealers and installers to investigate the following merits of their steel base register:

- Attractive design,
- Highest finish,
- Best obtainable material,
- Durably constructed,
- Perfect operation,
- Full capacity both in the face and box.

All registers are guaranteed against breakage. The company also carries a complete line of pipe and fittings and by writing to the Stearns Register Company, 111 Fort Street East, Detroit, Michigan, deal-

ers can secure a copy of the company's latest catalog.

Nice Contracts for Hammond Heating.

The Hammond Heating Company, Cincinnati, Ohio, have been awarded the contract for heating with their fan furnace system of warm air heating, a large state school building at Keyser, W. Va., also a school at Pokeville, Miss., one at Strayhorn, Miss., and the Tennessee Valley Bank at Florence, Ala.

New Sales Manager.

Effective January 1st, Mr. J. B. Shatzer assumed control of the Sales Department of the Cement Products Company, Wilmington, N. C., as sales manager, and that on the same date their former sales manager, Mr. C. E. McKee, ceased to represent that company in any capacity.

Acme Radiator Shield.

There is a large demand for a radiator shield which will properly protect the walls and ceilings from being blackened with dust, which is caused by the upward current of hot air through the radiator carrying the particles of dust and depositing them on the walls and ceilings.

The Acme Radiator Shield, manufactured by W. H. Johnson & Son Co., Indianapolis, Ind., and illustrated in their advertisement appearing elsewhere in this issue of the Southern Architect & Building News, fills this demand and you can make an additional profit on your steam and hot water jobs by explaining the merits of Acme Shields to your customers, because they will be sure to want them. Send for illustrated literature and descriptive matter.

Concerning Butler Pipeless Furnaces.

Attention is directed to the advertisement of the F. B. Zieg Mfg. Co., Frederickstown, Ohio, which appears elsewhere in this issue of the Southern Architect and Building News.

This well-known company manufactures the Butler Pipeless Furnace, a marvel of modern heating efficiency, a furnace incorporating a heating unit having a record of 20 years of highly successful and economical operation, together with pipeless design that contains many obvious improvements.

Can be installed in any building by cutting a single hole in the floor.

Simplicity of installation, ease of operation, economy of fuel consumption and adaptability to various kinds of fuel are important features.

Made in sizes to meet the needs in buildings of various sizes. Descriptive literature will gladly be sent upon request.

Building and Construction News

Churches.

Birmingham, Ala.—St. James Methodist Church, Rev. I. T. Walker, pastor, has plans by W. A. Rayfield & Co., Birmingham, for building at 41st St. and 3d Ave., North; 60 x 100 feet; ordinary construction; metal roof; pine inclined floors; hot-air heat; electric lighting; cost \$10,000 day labor; bids opened in May. Address Architects.

Decatur, Ga.—Men's Business League of Decatur Baptist church organized with L. L. Perrine, Prest.; J. B. Overton, V.-P.; J. J. Robertson, Secy. and Treas.; plans to erect building.

Shreveport, La.—Highland Avenue Baptist church, Rev. C. P. Roney, pastor, 1333 Jennings Ave., will erect building at Olive and Stevens Sts.; steel and reinforced concrete construction; brick facing; cost \$75,000 to \$100,000; expect to let contract about June; architect not selected and other details not determined.

Lake City, S. C.—Baptist church has plans by Chas. C. Wilson, Columbia, for building; brick; slate roof; steam heat; 75 x 100 feet; cost \$25,000; contract in spring.

Brownwood, Tex.—Southern Presbyterian church, Rev. W. Gray, pastor, will erect building.

Lynchburg, Va.—Rivermont Avenue Methodist church, Rev. J. C. Robertson, pastor, 1110 Early St., is having plans prepared by Craighill & Cardwell, People's Bank Bldg., Lynchburg, for Sunday school building; probably brick; 2 stories; cost \$20,000.

Bank and Office.

Collinsville, Ala.—First National Bank organized with \$25,00 capital by W. E. Killian, Prest.; J. D. Jordan, V.-P.; W. S. Ward, Temporary Cashier; will erect \$7,000 building; brick; 50 x 35 feet; fireproof; tile floors; open bids at once. Address Mr. Killian.

West Palm Beach, Fla.—Chamber of Commerce will erect building; cost \$4,000.

Conyers, Ga.—First National Bank, E. P. McDaniel, Chairman of Building Committee, has plans by A. Ten Eyck Brown, Forsyth Bldg., Atlanta, for bank building; 30 x 72 feet; 2 stories; brick and terra cotta; marble trim and screen; 4 columns across front; tar and gravel roof; cost \$25,000; low pressure steam heat, \$1,000; bids opened January 11, award held up.

New Orleans, La.—Union Labor Temple Assn. will soon begin erection of proposed labor temple; store and bank on first floor.

Baltimore, Md.—Seaboard Bank is having plans prepared by Robert L. Harris, 1131-33 Calvert Bldg., Baltimore, for alterations to building at Park Ave. and Fayette St.; reinforced concrete; steam heat; electric lighting; push-button automatic elevators; cost about \$50,000; date letting contract not decided. Address Architect.

St. Louis, Mo.—Russmann Refrigerator & Butcher Supply Co. is having plans prepared by H. J. Schulte, 1517 N. 23d St., St. Louis, for office building and factory; concrete and steel; 1 story; cost \$15,000; owner receives bids about March 1.

Drew, Miss.—Merchants & Planters' Bank will remodel bank building; cost \$15,000 to \$20,000, including new fixtures; Raymond B. Spencer, Archt., Goodwyn Institute Bldg., Memphis, Tenn.; construction to proceed at once on percentage basis.

Oklahoma City, Okla.—Liberty National Bank will erect 3-story addition to building.

Oklahoma City, Okla.—Tradesmen's Bank purchased old Western National Bank building and will reconstruct; use

walls, roof and foundation; fireproof; lower first floor to level of side walk, install elevators, etc.; 3 additional stories planned later.

Greenville, S. C.—Working Benevolent Realty Co., capital stock \$30,000, inceptd. by E. W. Biggs, Jas. A. Talbert and W. E. Payne; will erect store and office building at East Broad and Falls Sts.; 3 stories; brick; cost about \$70,000.

Lake City, S. C.—Bank of Lake City is having plans prepared by Chas. C. Wilson, Columbia, for remodeling bank building; plans ready in spring.

Marion, S. C.—Planters' Bank has plans by Chas. C. Wilson, Columbia, to remodel bank building; pressed-brick front; marble trimmings, etc.; bids being received.

Memphis, Tenn.—National City Bank plans to increase capital stock to \$400,000; will remodel building on Madison Ave.; install stone front, enlarge mezzanine floor, change interior, etc.; cost \$15,000.

Deanville, Tex.—First State Bank will erect building; 32 x 52 feet; brick; concrete floors; cost about \$3000; construction begins at once. Address C. C. Nelms, Caldwell, Texas.

Fort Worth, Tex.—Farmers and Mechanics' National Bank, J. W. Spencer, Prest., will erect building at 7th and Main Sts.; 100 x 95 feet; 12 to 16 stories; fire proof; cost \$800,000 to \$1,250,000; other details not determined; construction will probably be held in abeyance until latter part of year.

Fort Worth, Tex.—P. C. Levy and W. R. Mitchell are reported considering erecting theater and office building on Main St.

Fort Worth, Tex.—J. W. Mitchell will not remodel hotel for office building except painting and calsoining.

Charlottesville, Va.—National Bank of Charlottesville, R. T. Minor, V.-P., plans to erect bank and office building; architect not selected; details not determined.

Norfolk, Va.—Norfolk Bank & Trust Co. will expend \$3500 for alterations to building at Charlotte and Granby Sts.

Huntington, W. Va.—Henry Persun will erect shop and office building; 40 x 60 ft.; 1 and 2 stories; cement block; construction by owner.

Schools and Colleges.

Tuscaloosa, Ala.—Jas. H. Foster, Secy. Board of Education, receives bids until Feb. 27 to erect addition to high-school building; 58 x 131 feet; 2 stories and basement; brick walls; sanitary plumbing and low-pressure steam heat to be installed by owner.

Tuskegee, Ala.—Tuskegee Institute, R. R. Taylor, Director Mechanical Industries, is having plans prepared by W. A. Rayfield & Co., Birmingham, for Slater-Armstrong-Trader buildings; 1 main building and 5 units; fireproof; tile, cement and wood block floors; Johns-Manville shingle and roll roofing; heating and lighting from plant on grounds; cost \$200,000; construction by student labor; contract for special features to be let later; construction begins in April. Address Architects.

Burdette, Ark.—Three States Lumber Co., C. H. Gilchrist, Prest., is reported promoting erection of school building; pressed brick; probably tile roof; steam heat; Regan & Weller, Archts., Bank of Commerce & Trust Bldg., Memphis, Tenn.

Brooksville, Fla.—Special Tax Dist. No. 1 and Special Tax Dist. No. 7 vote March 3 or \$25,000 and \$15,000 bonds,

respectively, to erect and equip school buildings; W. O. Le-masters, County Supt., Brooksville.

Atlanta, Ga.—Gov. Hugh M. Dorsey receives bids March 19 for location of Twelfth Dist. Agricultural High School building.

Franklin, Ga.—Heard County voted \$15,000 bonds to re-build vocational school building; D. B. Whitaker, Chairman; G. A. Adams, Secy. School Board.

London, Ky.—Bennett Memorial School will erect high school and auditorium building; cost \$50,000.

North Carrollton, Miss.—City will erect \$15,000 school building; construction to begin about Apr. 1; W. T. Terney, Trustee.

Grant City, Mo.—Board of Education, Leo Phipps, Secy., is considering erection of high school building; cost \$50,000.

Boiling Springs, N. C.—Board of Trustees, Boiling Springs High School, E. B. Hamrick, Treas., plans to erect school building as memorial; to contain auditorium, society halls, music-rooms, art and domestic-science rooms, etc., cost, \$25,000.

Oxford, N. C.—City is considering election on \$50,000 bond issue to erect school building; W. J. Mitchell, Mayor.

Hooker, Okla.—School Board has plans by Mann & Gerow, Hutchinson, Kan., for school building; 54 x 94 feet; brick and reinforced concrete; composition roof; pine and concrete floors; steam heat; cost \$40,000; construction begins about March 1.

Langston, Okla.—State Board of Affairs, Oklahoma City, plans to erect industrial building and dormitory at colored Agricultural and Mechanical College; cost \$50,000 and \$5,000 respectively.

McAlester, Okla.—School Board, W. G. Masterson, Supt. of Education, selected architects to prepare plans for school building to replace burned structure.

Oklahoma City, Okla.—City votes March 18 on \$650,000 bonds for school buildings; John H. Hope, Prest. Board of Education; J. G. Stearley, Clerk.

Sand Springs, Okla.—Board of County Commrs. receives bids submitted to Lewis Cline, County Clerk, until Feb. 17 to erect addition to brick school building in separate school district No. 19; plans and specification on file in office of Mr. Cline.

Belton, Tex.—Baylor College, J. C. Hardy, Prest., is having plans prepared by R. H. Hunt, Chattanooga, Tenn., for enlargements to college.

Dallas, Tex.—Southern Methodist University, Dr. R. S. Hyer, Prest., plans to erect gymnasium; will contain basketball and hand-ball courts, bowling alley, indoor track, spectators' balcony, officers' and refreshment rooms, etc.; cost \$25,000.

San Marcos, Tex.—San Marcos Baptist Academy Trustees plan to erect \$100,000 administration building; will contain class-rooms, auditorium, library, laboratories, president's and registrar's offices, commercial, music, domestic and manual arts departments.

Elkins, W. Va.—Davis & Elkins College, Dr. Jas. E. Allen, Prest., plans to erect building; 2½ stories; about 110 x 40 feet; stone; tile roof; hardwood floors; heating from coal furnaces; city power lighting; cement sidewalks; cost about \$60,000; C. L. Harding, Archt., Woodward Bldg., Washington, D. C. Address Dr. Allen.

Public Buildings.

Oldsmar, Fla.—Engine-house.—City is having plans prepared by Albert Haworth, Oldsmar, for fire-engine house.

Atlanta, Ga.—Cyclorama and Museum.—City votes March 5 on \$1,000,000 bonds, including \$100,000 for erection of cyclorama and museum in Grant Park. Address The Mayor.

Hope, Ark.—Elks Lodge No. 1109 plans to erect club building; contain gymnasium, sleeping-rooms, parlors, etc.

Americus, Ga.—War Camp Community Service, Dr. F. A. Starratt, Executive Secy., will make minor repairs only to building for soldiers; chiefly redecorating; cost \$800.

Baton Rouge, La.—Young Men's Christian Assn. opens bids about Feb. 20 to erect Y. M. C. A. building; 2 stories; brick; cost \$75,000; Shattuck & Hussey, Archts., 19 S. La Salle St., Chicago.

Cumberland, Md.—Alleghany Trades Council, John V. Fisher, Secy., will erect Labor Temple; contain auditorium, dance hall, lodge halls, stores on ground floor, etc.

Jena, La.—La Salle Parish Police Jury plans to issue bonds for jail, courthouse and roads.

Kingston, N. C.—City is interested in establishing public park and playground; erect community recreation building to contain reading and music-rooms, gymnasium, swimming pool; plans also include paving, iron railing, terracing, etc. Address The Mayor.

Mount Airy, N. C.—City plans to erect municipal building on Moore St.; 2 stories and basement; will contain offices of mayor, Electric Light & Power Co., fire and police departments, Chamber of Commerce, jail, etc. Address The Mayor.

Frederick, Okla.—Chamber of Commerce is promoting erection memorial building to contain auditorium, gymnasium, natatorium, etc.

Greenville, Tenn.—City is considering bond issue to erect city hall, repair sewers, build streets, etc.; plans not definite. Guy Drew, City Clerk.

Nashville, Tenn.—Market-house Assn., J. J. Hill and others, committee, is considering tentative plans by Thos. W. Gardner, Nashville, for market-house on present site; probably 3 stories; steam heat; refrigeration plant, etc.; will petition city to issue bonds for erection.

Canadian, Tex.—Hemphill County will probably erect jail building; cost \$12,000. Address County Judge.

Seminole, Tex.—Commissioners' Court of Gaines County meets February 10 to select architect to prepare plans and superintend erection of courthouse and jail.

Newport News, Va.—Commission on Buildings and Grounds receives bids until February 5 to repair jail building, erect additional story, equip with cages, etc.; plans with City Engr.; Floyd Hudgins, City Clerk.

Macon, Ga.—Bibb County votes March 6 on \$1,500,000 bonds, to include \$40,000 for courthouse, \$400,000 for schools and \$700,000 for paved roads and bridges; J. H. Heard, Chrmn. County Commissioners.

Baton Rouge, La.—East Baton Rouge Parish Police Jury plans to issue bonds for courthouse and jail.

Dwellings and Apartments.

Selma, Ala.—R. B. Hudson opens bids in February for bungalow; 35 x 65 feet; ordinary construction; composition shingle roof; pine and oak floors; hot-air heat; city lighting; cost \$5,000; W. A. Rayfield & Co., Archts., Birmingham, may be addressed.

Texarkana, Ark.—H. A. Munn is reported to erect 25 dwellings on Riverland ranch.

Texarkana, Ark.—F. McKeehan will erect residence and garage; 7 rooms.

Schlater, Miss.—G. R. Stokely, Drew, Miss., has plans by Raymond B. Spencer, Goodwyn Institute Bldg., Memphis, Tenn., for residence on plantation near Schlater; cost about \$5,000.

Ormond Beach, Fla.—G. Blake Smith, care of Miss Stout, is having plans prepared for residence.

St. Petersburg, Fla.—Louis Huenke, care of Mrs. Harry Komminsk, will erect dwelling in Davista.

Augusta, Ga.—Mrs. W. W. Partridge has plans by G. Lloyd Preacher, Augusta, for residence; brick and stucco on hollow tile; slate roof; cost \$15,000.

Savannah, Ga.—G. W. Schultz will erect 2-story concrete residence at 404 E. 39th St.; also 1-story frame and iron garage.

Wiley, Ga.—T. B. Ashe has plans by W. A. Rayfield & Co., Birmingham, for bungalow; 35 x 50 feet; ordinary frame construction; metal roof; pine floors; hot-air heat; electric lighting; est \$5000 day labor; bids opened in March. Address Architects.

Ashland, Ky.—Richard M. Bates, First National Bank Bldg., Huntington, W. Va., is preparing plans for double residence; 2 stories; stucco on lath or tile.

Marion, Ky.—E. L. Harpending will erect residence; frame; 5 rooms; 28 x 36 feet; shingle roof; oak floors; pipeless heater; electric lights; concrete sidewalks; open bids March 1.

Shreveport, La.—T. A. Jordan will erect dwelling; frame; cost \$4500.

Blowing Rock, N. C.—W. L. Alexander, Charlotte, has plans by Willard Rogers, Charlotte, for dwelling; frame and stone; steam heat; hardwood floors, native materials; cost \$25,000; contractor selected.

Cary, N. C.—J. A. Smith will erect residence previously noted; slate or galvanized-iron roof; hardwood floors; steam or hot-water heat; electric lighting; plans by owner; bids opened May 1.

Elkin, N. C.—Rev. S. D. Johnson, Hamptonville, N. C., purchased site on Bridge street and will erect residence.

Gastonia, N. C.—Chas. C. Wilson, Columbus, S. C., is preparing plans for 4 residences, total cost about \$150,000; other details not available.

Winston-Salem, N. C.—Hanes Rubber Co. will construct mill village near Winston-Salem; erect number bungalows.

Wilmington, N. C.—L. W. Moore's Real Estate Agency and M. Shrier are reported to erect 2 dwellings in Carolina Place.

Oklahoma City, Okla.—Jack Gill will erect 2-story residence at 3701 Classen Blvd.; cost \$15,000.

Oklahoma City, Okla.—A. R. Nelson will erect 2-story residence; cost \$5,000.

Oklahoma City, Okla.—J. I. Trippett will erect dwelling; frame; cost \$4,000.

Tulsa, Okla.—W. W. Fox will erect 1-story frame dwelling; cost \$3,000.

Tulsa, Okla.—T. J. Byrnes will erect frame dwelling in Fitzpatrick addition; 1 story, cost \$5,000.

Tulsa, Okla.—Viner Investment Co. will erect 2 dwellings on North Santa Fe street in Park Hill addition; brick; 1 story; cost \$5000 each

Tulsa, Okla.—R. S. Dodd will erect 1-story frame dwelling in Orcutt addition; cost \$3,000

Greenwood, S. C.—J. M. Caines will erect residence.

Miami, Fla.—Norman MacInnes purchased property between 23d and 24th streets, Avenue D and Miami Ave.; will remodel building on site for fireproof apartments, designed to permit conversion later into flatiron building covering entire lot.

St. Petersburg, Fla.—White L. Moss, Pineville, Ky., is having plans prepared by W. S. Shull, St. Petersburg, for apartment house.

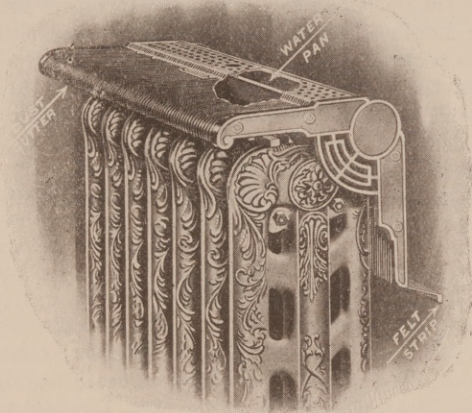
Atlanta, Ga.—Mrs. Carrie W. Waitt will erect apartment house at 12 Wabash Ave.; 4 apartments; cost \$12,000.

Baltimore, Md.—Simon Rief, 100 N. Chester St., and associates purchased dwelling at Eutaw Place and Whitelock street; will convert into apartments.

Appeals to Every Home Owner

No Radiator installation is 'complete' without the

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Prevents walls and ceilings from being soiled by catching and retaining the dust circulated by radiator.

A new and novel feature is the invisible copper water pan set in top of shield over hottest part of radiator for supplying moisture to the air.

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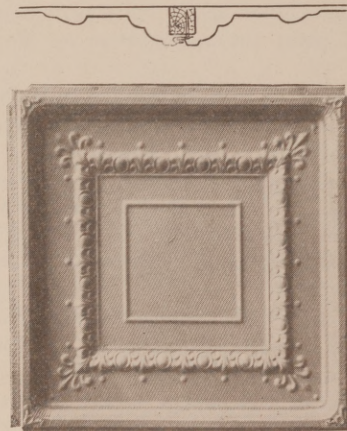
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The high price of cotton and the necessity of its protection will result in the building of many Storage plants, as well as manufacturing establishments. Architects and builders can safely specify and use Evans "ALMETL" Fire Doors—assured that they will give the very highest satisfaction.

We will be pleased to put you in touch, with one of our Contracting and Erecting Licensees located near you.

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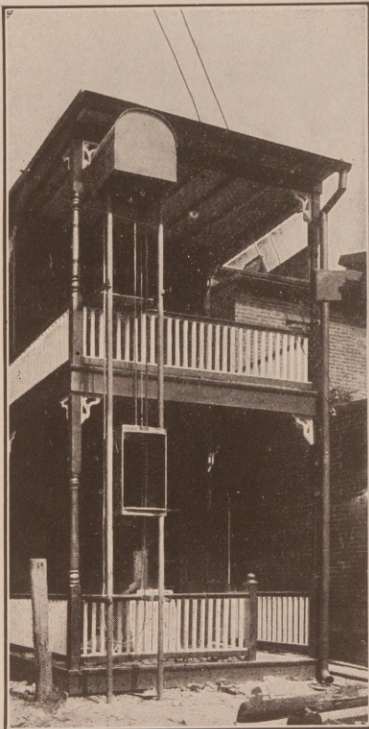
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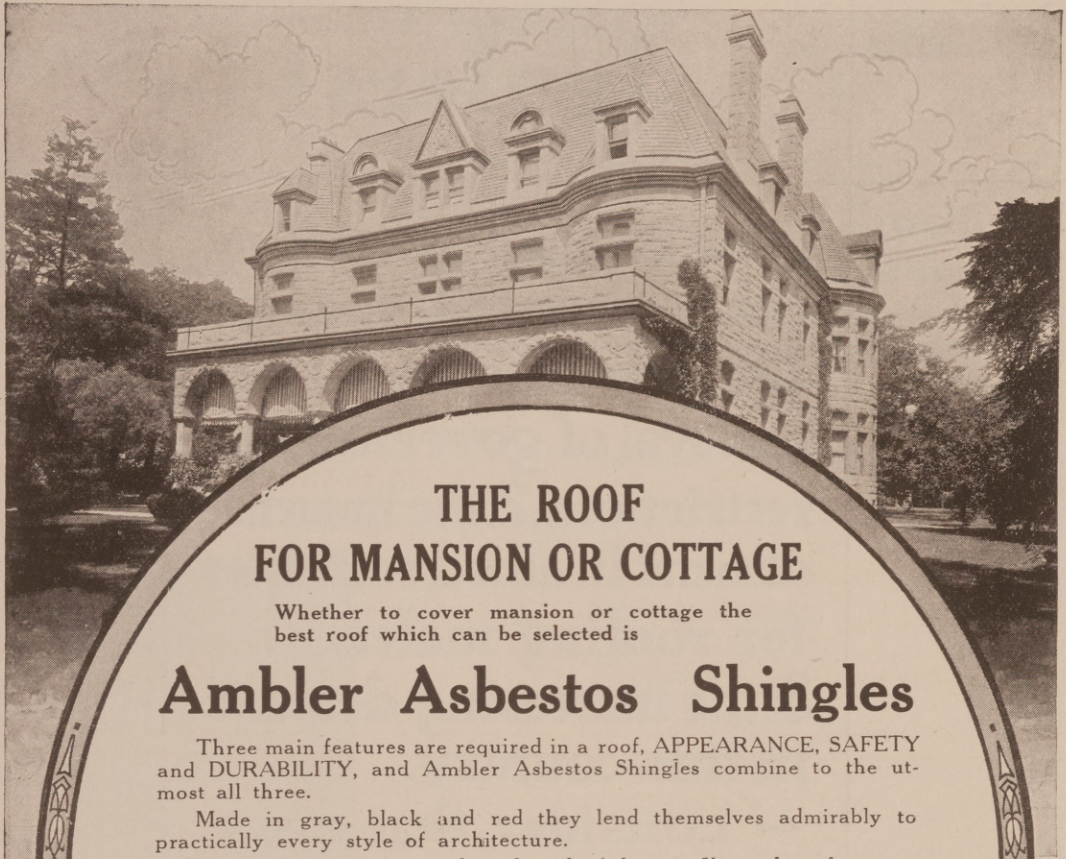


DUMB WAITERS BUILT TO LAST

Fire-Proof—Steel Tube Construction—for Indoor or Outdoor.

STANDARDized construction permits Prompt Delivery and Quick Erection.

Write for Prices.



THE ROOF FOR MANSION OR COTTAGE

Whether to cover mansion or cottage the
best roof which can be selected is

Ambler Asbestos Shingles

Three main features are required in a roof, APPEARANCE, SAFETY and DURABILITY, and Ambler Asbestos Shingles combine to the utmost all three.

Made in gray, black and red they lend themselves admirably to practically every style of architecture.

Made of cement strengthened with Asbestos fibre, they form an absolute protection against fire, water, wind and lightning.

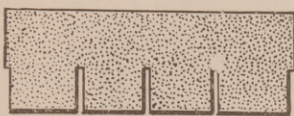
They cannot burn, warp, crack or split and require no painting.
Practically indestructible.

Write for further facts, pictures and prices.

Keasbey & Mattison Company, Dept. SA BN-1 Ambler, Pa., U. S. A.

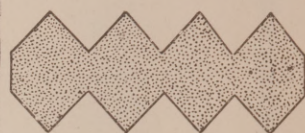
Manufacturers of Ambler Asbestos Shingles,
Asbestos Corrugated Roofing and Siding, 85%
Magnesia Pipe and Boiler Covering and
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Style 4 Slab

dealers!

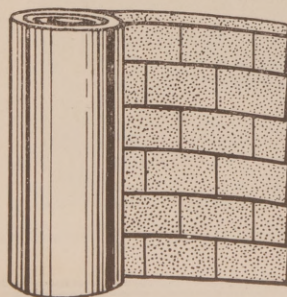


Diamond Point Slab

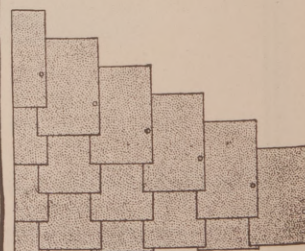
-the demand for roofing next season will be great for three reasons; 1. the removal of government restrictions. 2. the immense demand in allied countries for roofing material. 3. the increasing demand in this country.

— consider that even last spring the demand for Flex-a-tile roofing was so large that we could not fill all orders promptly. Estimate your requirements now and order for early shipment; avoid spring congestion.

Shingle Roll Roofing



Wide Space Shingle



FLEX-A-TILE

Roofing



Shingles

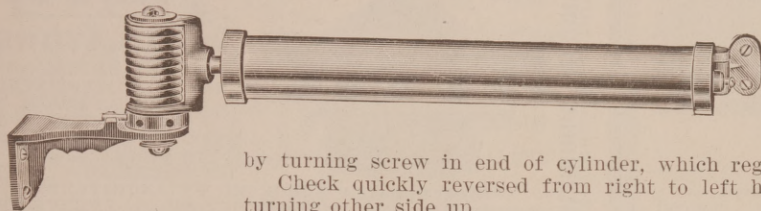
The Heppes-Nelson Roofing Co.

Dept. , Marshall St. N. E.
Minneapolis, Minn.Dept. , Kilbourn Ave.
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Factories: Chicago, Rutherford, N. J. and Minneapolis, Minn.

Manufacturers of Flex-a-Tile Roll Shingles — Rubberized Roofing — No-tar Asphalt Paint

The Shelby Screen Door Check and Closer



Designed for use on light doors, such as screen or storm doors, also inside doors and office gates. Has adjustable spring and meets all requirements for light doors. Speed in closing easily adjusted

by turning screw in end of cylinder, which regulates the air.

Check quickly reversed from right to left hand by removing cotter pin at top and turning other side up.

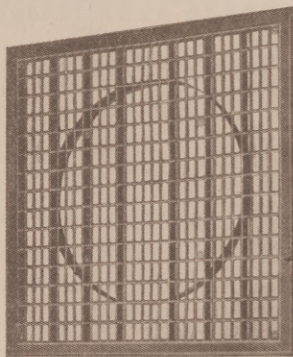
Can be applied to either side of door and also between screen and regular door as only $1\frac{3}{4}$ inch clearance is necessary. Bracket can be fastened to either door, casing or trim without extra parts. Can be used with or without spring hinges.

It has brass barrel $10 \times 1\frac{3}{4}$ inches, polished and lacquered bracket finished in gold bronze. Ask us about it.

The Shelby Spring Hinge Co.,

Shelby, Ohio

"H & C" No. 260 GRATINGS FOR PIPELESS FURNACES



FRONT VIEW
CLASS 260

Made to meet the conditions as they obtain in the installation of a one pipe furnace.

Strong, Durable.

Face is readily detached from frame.

Do you wish to learn of a line of Registers for Warm Air Heating, Ventilators and Grilles which for beauty of design, durability of finish and strength are not excelled? Then write

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Made from scrap whiskey jugs and shale.

80 STOCK SHAPES IN THREE DIFFERENT TEXTURES.
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Chicago Perforating Co.

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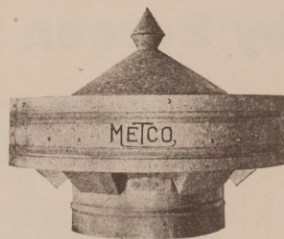
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"The exclusive Furnace, Stove and Range Folks of Akron and everywhere."



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VENTILATORS

ARE THE RESULT OF
LONG SCIENTIFIC STUDY
AND ELABORATE
EXPERIMENTS
AND AFTER 20 YEARS
IN GENERAL USE
ARE NOW

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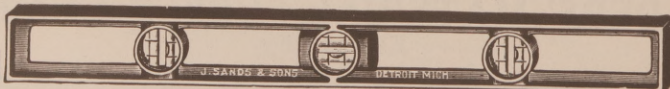
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The lightest levels made—strong and durable because the greatest strength is placed where most needed. Ask your dealer to show you these levels, and also write for our circulars showing full size levels.

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Originators of
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Standard Colorings
for Interior and Ex-
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Special Architectural
Colors to Order.

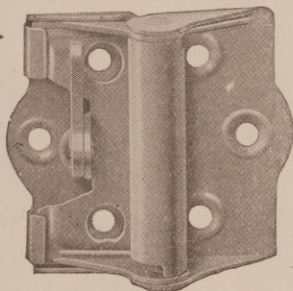
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JIFFY →

Just the hinge your clients have been looking for. Once installed, the Jiffy Hinge enables the housewife to put up or take down the screen doors or windows without the use of screws or tools of any kind.



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Koll's Patent Lock-Joint Stave Wood Columns.

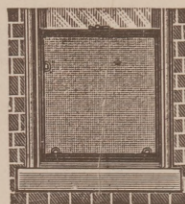
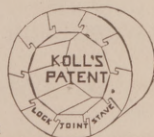


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The Very Latest and Best.

**STRONG, DURABLE, NEAT,
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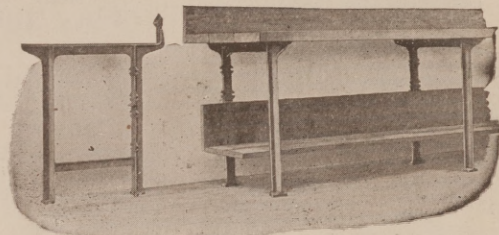


The Strongest and Most Economical in the Market. One-half the amount of our Mortar Colors will do the work of any others, and they are unsurpassed in strength, fineness and body.

Write for samples and quotations. We manufacture a superior grade of Red Oxide of Iron Paint for Railroad Cars, Bridges, Barns, Fences, Etc.

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Capacity for 300 hands.

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Shipments when you want them.
The qualities of desirability, durability that comes with full value and faultless structure; fuel economy from correct design; the promise of years of use and lasting satisfaction.

Advertising literature and personal backing that sells.

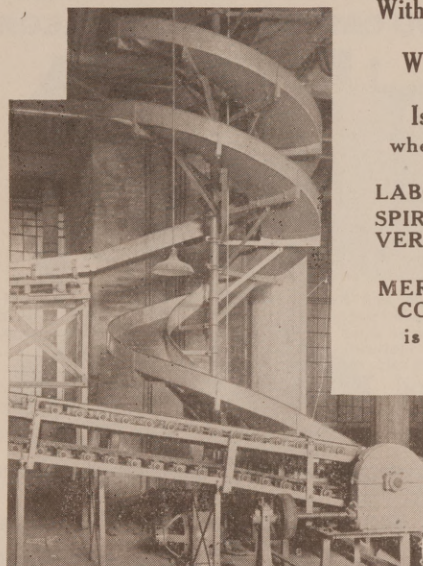
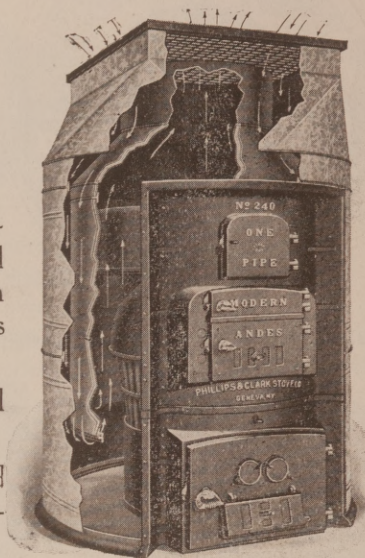
A furnace that is widely known and respected for its actual accomplishments.

In short, the qualities that have made Andes owners repeaters. You know they are and so do we. And here's the pith, then, of "What's in it for you"—Salability and Service.

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With Help Scarce
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Wages High
NOW
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LABOR- SAVING
SPIRAL CHUTES
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MERCHANDISE
CONVEYORS
is imperative

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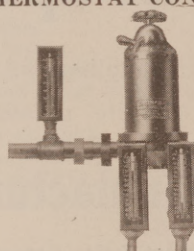
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For light structural building work;
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PROMPTEST DELIVERY for EXTRA GOOD WORK

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Carthage Marble & White Lime Co.

PRODUCERS OF

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FOR INTERIOR WORK

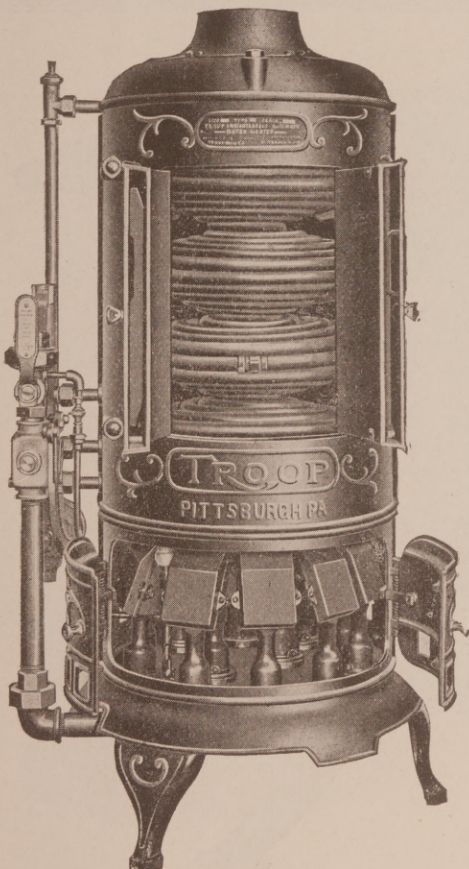
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UNLIMITED HOT WATER NIGHT OR DAY

BY SIMPLY TURNING THE FAUCET ANYWHERE IN THE HOUSE.

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No trouble of any kind if you have a

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Automatic Water Heater.

This masterpiece of automatic simplicity heats the water, regulates the temperature and shuts off the gas when you close the faucet. Write for circulars and current prices.

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Here is a Glazing Composition that will—



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 securely setting floor or wall tile. 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.

There is a reliable dealer in your locality selling Kuhl's Elastic Glazing Composition. His name will be sent on request.



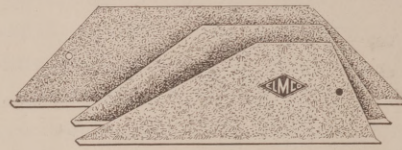
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ELMCO Handy Rafter Markers answer your need for a small building job on your farm or anywhere.



You don't need an expert to mark out your rafters. With a set of ELMCO markers your twelve year old

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The ELMCO Handy Rafter Markers

(Patent Applied For)

Give you every angle and length you want for the ordinary small farm building. You only need a pencil and this set of markers to lay out your rafters the correct length—at any pitch you want. Saves

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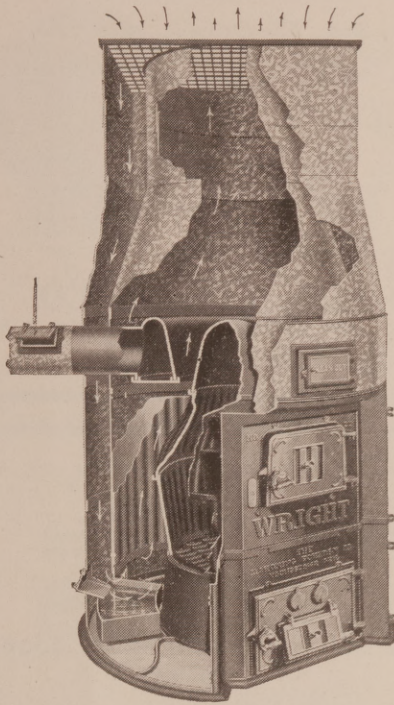
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TRIPLE INNER LINING
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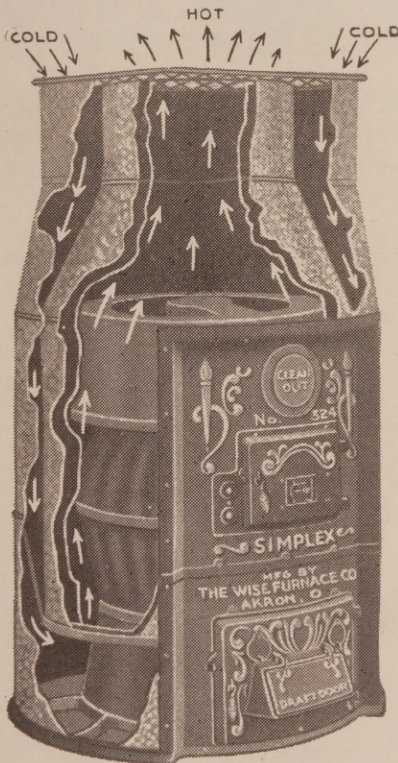
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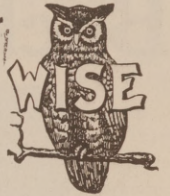
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The Simplex Pipeless Warm Air HEATER



is a simplified heating system that combines efficiency, economy, ease of operation and installation. It is especially desirable because of its eliminating numerous warm air pipes in the basement and within the partition walls, and the special cold air duct, combining the whole system into a DUPLEX CASING AND REGISTER directly over it, that provides a cold air intake and warm air discharge, eliminating all friction and loss of heat, thus saving a considerable amount of fuel and delivering a maximum amount of heat.

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Write for circulars and prices.

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MONARCH

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ARISTOS "COPPERWELD" NAILS

for Copper, Slate, Tile

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13



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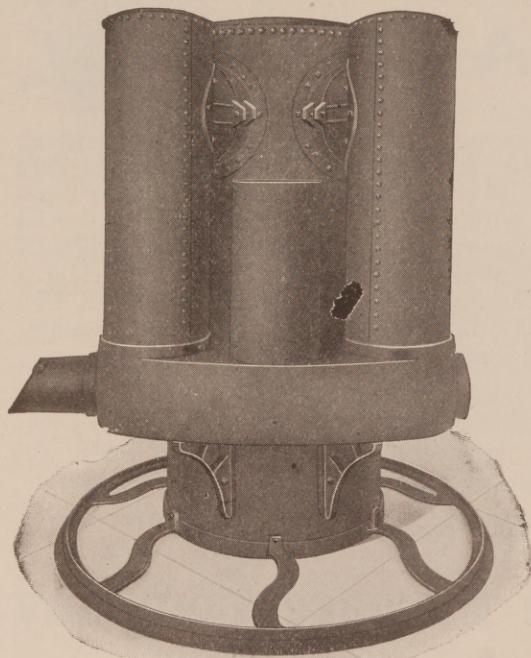
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TRADE NAME REGISTERED



Back of the **FRONT RANK** Warm Air Furnace is 29 years of integrity, fair dealing, and thorough, conscientious attention to the warm air furnace business.

The back of the **FRONT RANK** Furnace tells the story---no other furnace has a larger fire travel---the radiators are of heavy steel, securely riveted and absolutely gas tight. There are other important features that make it advisable for you to

Buy the FRONT RANK
For Residence, Church, School or Store

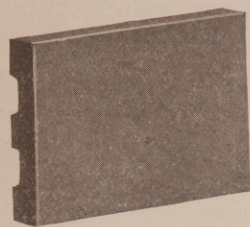
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QUARRY TILES For Floors

of Porches, Terraces, Corridors, Kitchens,
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ELEVATORS

FOR

Passenger and Freight Service

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WE MAKE ALL KINDS OF ELEVATORS

ANY SPEED AND CAPACITY DESIRED

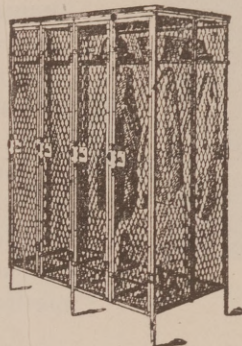
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OF EVERY DESCRIPTION

Steel Equipments for Hotels,
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STEEL SHELVING

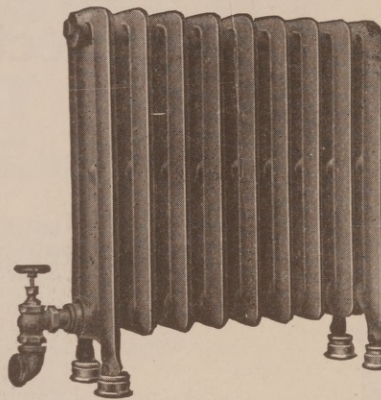
DEXTER METAL MFG. CO.,

Successors to Merritt & Co.

CAMDEN, N. J.

Wm. A. Parent, General Manager.

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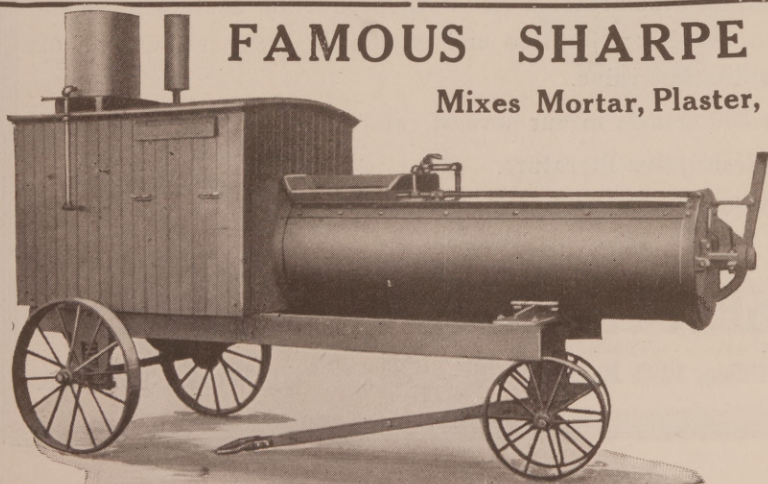


The Jennison Adjustable Foot jacks it up in a jiffy.

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

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

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Mixes Mortar, Plaster, Cement, Fire Clay or Concrete.

Will Supply 50 to 75 Bricklayers.

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Run for 30 cents per day.

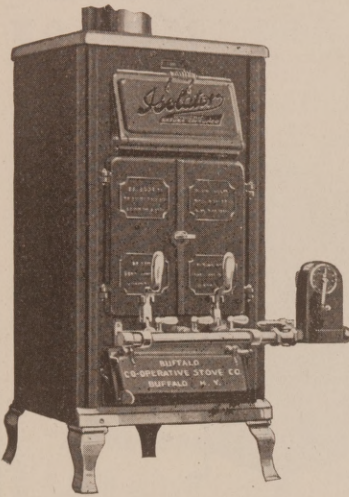
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have no garbage cans at the back door step.

Incineration at the source of origin is the modern method of waste disposal. In justice to your client and yourself you should familiarize yourself with the merits of the

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It is installed in the kitchen or basement and operates with natural or artificial gas. Investigate the possibilities of this new sanitary necessity now.

Special proposition to Builders
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Buffalo Co-Operative Stove Co.
BUFFALO, N. Y.



Concrete Roads Are Now Under Construction in Lee County, Mississippi, and Fulton County, Georgia.

There is now under construction in Lee County, Mississippi, connecting Saltillo and Verona, twelve miles of magnificent Concrete Highway. Still another is under construction in Fulton County, Georgia, three miles from Atlanta. These roads will last for all time, monuments to the

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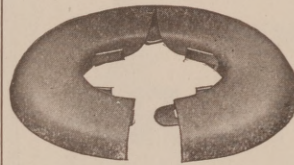
Let us send you "Concrete Highways"; it is free. Also "Concrete in the Country," devoted to the use of Portland Cement on the farm.

DIXIE PORTLAND CEMENT CO.

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CONCRETE FOR PERMANENCE

The No. 10 Cold Rolled Steel Combination Ceiling and Floor Plate

B. & C. PLATES



B & C Plates can be put on at the completion of your work and fastened securely thru a simple but positive lock joint. The B & C Catalogue shows the unique construction of our many types and tells the full B & C story. What is your name and address?

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Capacity 15 Cars Per Day

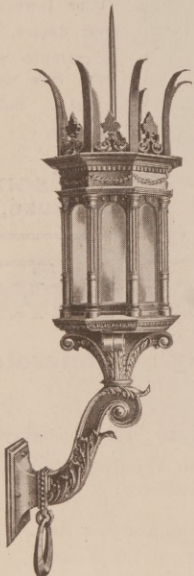
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A special knowledge of the subject of exterior lighting combined with years of successful ornamental metal work production enables us to incorporate into our lamp fixtures and standards every refinement of artistic and utilitarian value.

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OUR organization of twenty-five foremost slate quarries in Pennsylvania was satisfactorily tested in rendering urgent service to the Government in its housing needs.

Now our increased facilities are at your disposal. Most standard sizes carried in stock; special sizes made quickly.

But whether you need treads, wainscoting, urinals, closets or other slate units, we can make prompt shipment.

The drafting department gladly offers its help. Or if you send blueprint or other specifications we will make quotation.



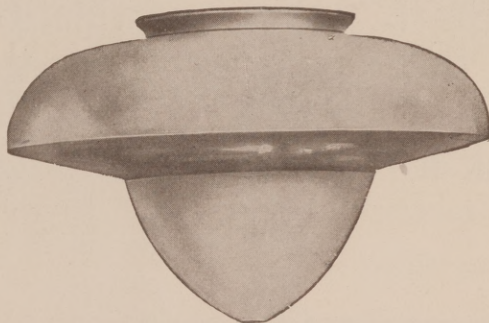
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Three sizes: 10x4, 13x6. In individual cartons, crated. The unit without a bad habit



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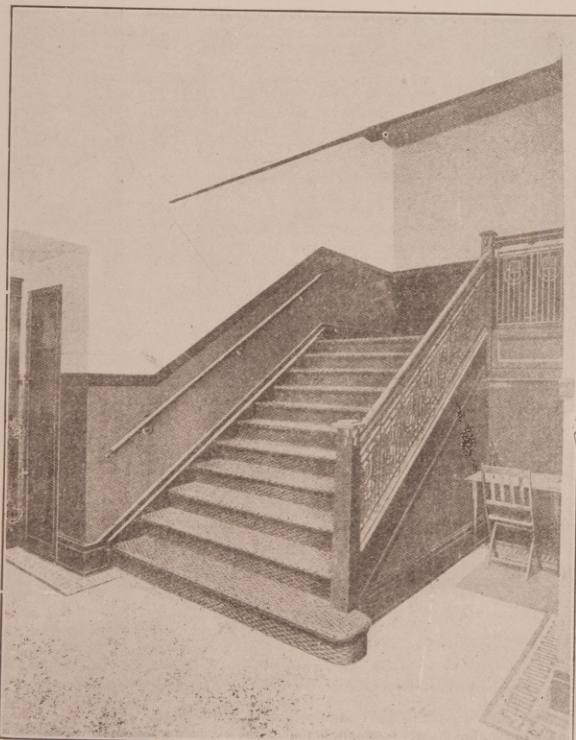
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Manufactured in Four Different Types Exclusively by
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BUILD FIREPROOF

Why erect an expensive public building or residence, only to have it destroyed through a fire-brand blowing onto the roof from some other fire?

A slate roof **can't** burn. And it will still be giving complete service when the walls of the structure crumble with age.

Owner, architect and builder can always feel pride and satisfaction in the longest-wearing, most economical and fireproof roofing—slate.



VENDOR SLATE CO.
Largest Shippers of Roofing Slate in the World
BANGOR, PENNSYLVANIA



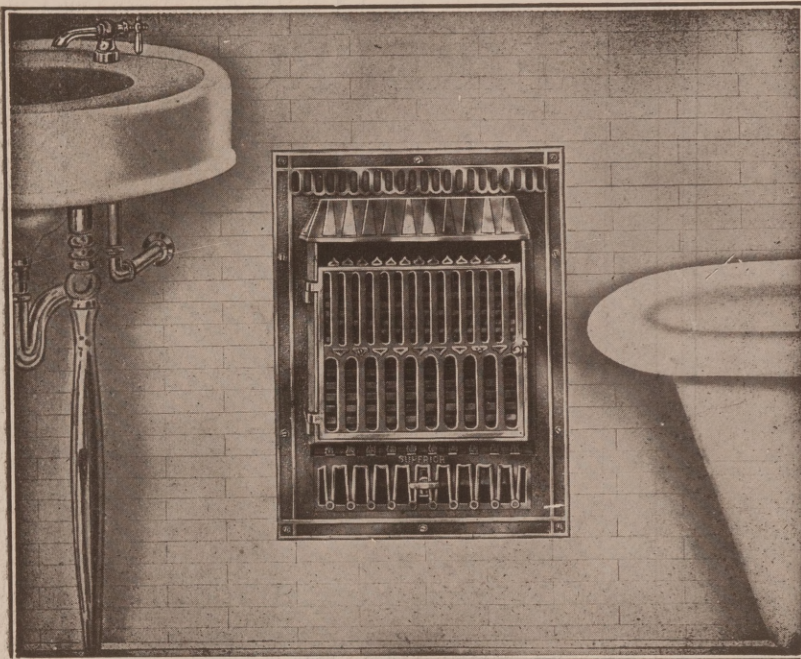
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What have you for sale?

*Remember this one fact—Any-
thing of intrinsic merit can be
successfully advertised.*

**Superior Bathroom Heater in Use with Tiled Bathroom.**

from any danger whatsoever from fire, the body of the heater being lined both inside and outside with heavy asbestos, as well as having a large circulating cold air space around the inner frame which contains the burner. The inner frame also is covered with heavy asbestos. The burner, which is made of Imported Lava Tips, is fitted with an adjustable check for regulating the combustion on the different pressures of gas. No air mixer is used, as the gas comes in contact with the air through very small lava tips; it mixes and purifies itself, leaving no odor from the gas whatever. It is made so that the heat from the gas jet causes the air furnished to be drawn from the floor through the fender and pass up over the flame, discharging itself back into the room, thus creating a continuous circulation of pure air through the room at all times.

This heater is equipped with lower corrugated copper reflectors and an upper corrugated deflector, also, upper reflector and baffle plate on the cast door for directing the products of combustion back to the point where it comes in direct contact with the air drawn from the floor, which greatly purifies it. The deflector plate not only directs the heat, but hides the gas jets and reflects the light down upon the lower reflectors, giving a very luminous and pleasing effect. This method of heating a bathroom is not only convenient, but very economical and safe, doing away with the objectionable bathroom stove.

The Superior Bathroom Heater not only ornaments the bath-room handsomely but it quickly heats it to just the desired temperature at the least expense. By its use it is possible to bathe and complete the toilet in perfect comfort without firing an expensive furnace which too frequently destroys the delightful coolness so much appreciated in all other parts of the house during warm weather. In fact, it is a necessity in every up-to-date modern home.

Leading architects and designers throughout the United States and foreign countries always specify "Superior" Bathroom Heaters when the best is desired. The front is heavily plated and polished as handsomely as a watch case.

This heater is made for either outside or inside connection, and whenever neither kind is specified in the order, the kind for outside connection will invariably be sent, as that style is generally preferred when the gas line is not inside the wall. In plan for new house the pipe should be about 5 inches to the left of center of opening and come up just as high as the bottom of same, for convenience in setting.

FINISHES:—NICKEL, JAPANESE BRONZE, or BRIGHT BRASS.

Be careful to specify finish and to state whether outside or inside connection is wanted when ordering.

Complete with valve and adjustable check. Bright Brass, Nickel or Japanese Bronze Finish.

NO FLUES**NO ODOR****NO ASBESTOS****NO LARGE GAS BILLS****NO DANGER FROM FIRE****The Superior Manufacturing Company, N. S., Pittsburg, Pa.**

General Offices and Factory: Corner Said and Magnolia Streets, North Side.

KEOKUK Metal Window Strips

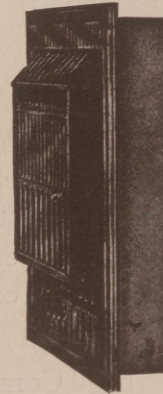
(Patent Pending)

Installed in half the time, at half the
cost of old style weather strips

Installing Agents Wanted NOW

To Get Ready for Fall Business.

Write today for special proposition.

Keokuk Metal Window Strip Co.**KEOKUK, IOWA**

U. S. Pat. June 28,

1910

Side View

Side of Cast

Front:

14 ins. wide

18 ins. high

Size of Body

of Heater:

12½ ins. wide

16½ ins. high

4½ ins. deep.

For Natural and Artificial Gas

THE Superior bathroom heater differs material-ly from any other device for bathroom heating. The front is of Colonial design, cast iron heavily plated, which is fitted with a door for convenience in lighting without danger of being burned. It is constructed to be used in the regular wood partition, tiled or plastered wall of the bathroom and has the appearance of a hot air register, set 14 or 18 inches from the floor.

It is flueless and odorless, as the flames come in contact with nothing but air, (thereby eliminating asbestos and other artificial substances commonly used in all other types of heaters, which become soiled and unsightly.) Its construction is such as to make it entirely free

from any danger whatsoever from fire, the body of the heater being lined both inside and outside with heavy asbestos, as well as having a large circulating cold air space around the inner frame which contains the burner. The inner frame also is covered with heavy asbestos. The burner, which is made of Imported Lava Tips, is fitted with an adjustable check for regulating the combustion on the different pressures of gas. No air mixer is used, as the gas comes in contact with the air through very small lava tips; it mixes and purifies itself, leaving no odor from the gas whatever. It is made so that the heat from the gas jet causes the air furnished to be drawn from the floor through the fender and pass up over the flame, discharging itself back into the room, thus creating a continuous circulation of pure air through the room at all times.

ODORLESS AND FLUELESS

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The Superior Bathroom Heater not only ornaments the bath-room handsomely but it quickly heats it to just the desired temperature at the least expense. By its use it is possible to bathe and complete the toilet in perfect comfort without firing an expensive furnace which too frequently destroys the delightful coolness so much appreciated in all other parts of the house during warm weather. In fact, it is a necessity in every up-to-date modern home.

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Entire building except first floor
Glazed with our

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It's cheaper than Polish Plate
Just as practical

If you want samples, prices or any information, setting forth the advantages of this product, write for any information you desire.

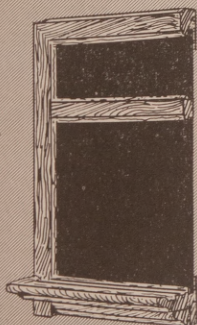


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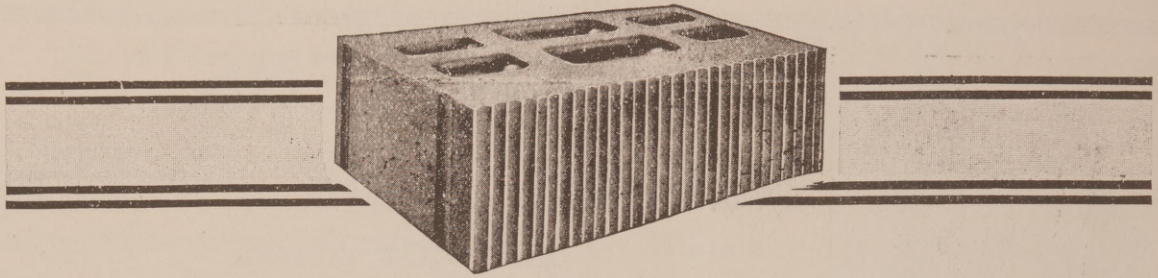
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"Absolutely Satisfactory"



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—how you can make them at a profit

The time for you to establish a McIntyre building tile plant is NOW.

If you wait until next spring you will probably find that some more enterprising chap has already established a McIntyre plant on the very site you had selected.

The demand for building units is going to be enormous. It represents a big opportunity for live men with the right kind of snap.

Here are the advantages of the McIntyre Live Air Space Building Tile as a building material.

It is a light unit and the masons like to lay it.

It being light it does not sacrifice strength. It is dense, strong, waterproof.

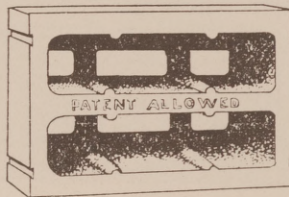
It lays up a wall that admits air at the bottom and lets it out at the top under the roof plate. This blanket of live air is a perfect insulator.

McIntyre tile walls may be put up at considerable saving over brick construction and at a lower cost even than wood frame construction.

These tile are manufactured on automatic machines in permanent plants.

The machines are operated by power and turn out from 2,000 to 3,000 building tile per day which will displace in the wall 12,000 to 18,000 common building brick.

We want to establish a McIntyre tile plant in every community where the proper raw materials are available and where a sufficient market is assured for the product.



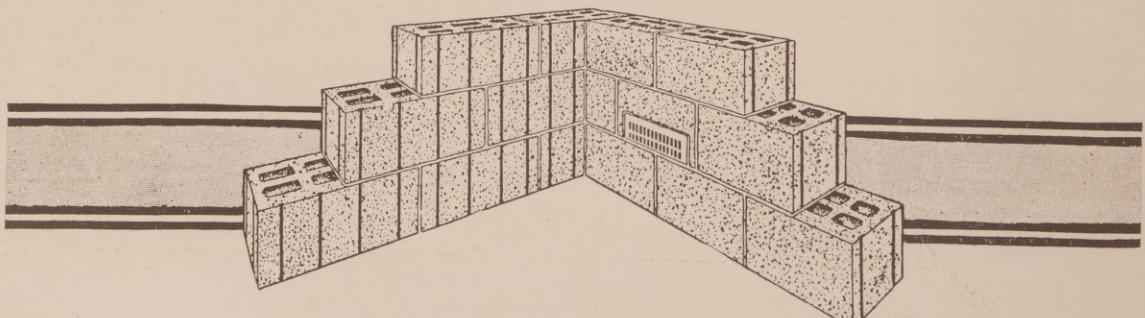
Bottom View of McIntyre Building Tile

Note that this tile when laid in the wall really forms a triple concrete wall with two blankets of live air space. The design of the tile is such that it is easily taken hold of. It is a unit that workmen do not object to handling.

This is a proposition to be taken up by men who have ability in handling concrete, who have the capacity for overseeing a simple manufacturing operation and who can secure the necessary selling organiza-

Write for complete details, which will be outlined to you frankly.

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A Real and Complete Protection

Hundreds of industrial plants are securing efficient protection against thieves and enemy agents through the use of Page "Wire-Link" Fabric. Years of experience—in many cases, costly losses—have demonstrated the imperative need for enclosing both the factory itself and various special departments.

Page "Wire-Link" Fabric is ideal for both interior and exterior use, and offers a perfect protection material. It is light, durable and sightly. It is most resilient. The peculiar construction of

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When you consider this positive protection, the improved appearance of your property as well as its increased value and the saving which results in eliminating loss and stolen materials from your overhead, the cost is inconsequential.

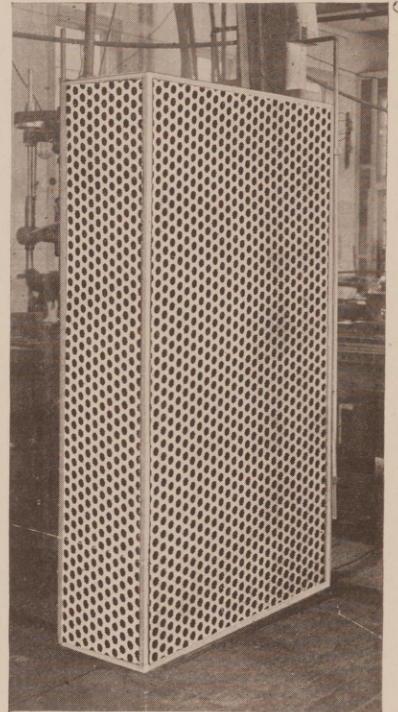
Is your plant adequately protected?

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Page "Wire-Link" Fabric is also made from rust-resisting "ARMCO" (American Ingot) IRON Wire which is drawn exclusively in Page Mills from "ARMCO IRON" Billets, the product of the American Rolling Mill Company, of Middletown, Ohio. We always recommend it where conditions of atmosphere or climate are conducive to corrosion.



Safety guards for exposed gears, belting, etc. Sanitary, durable and affords maximum protection to employees.

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Formerly Page Woven Wire Fence Company

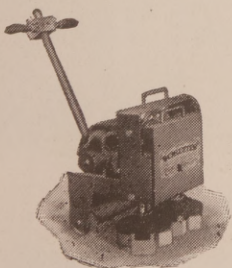
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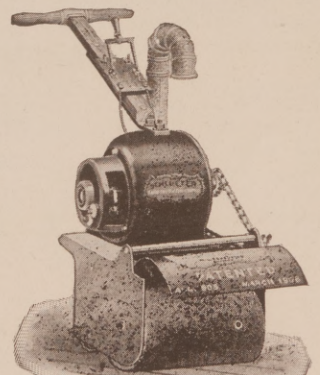
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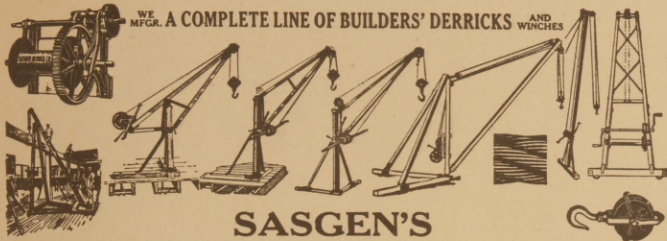
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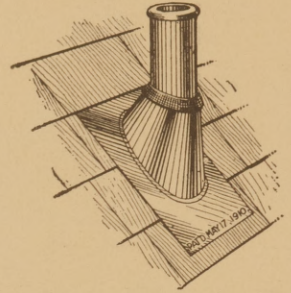
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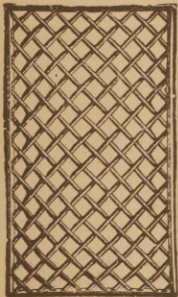
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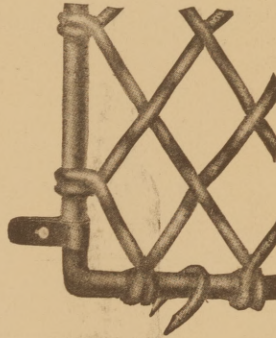
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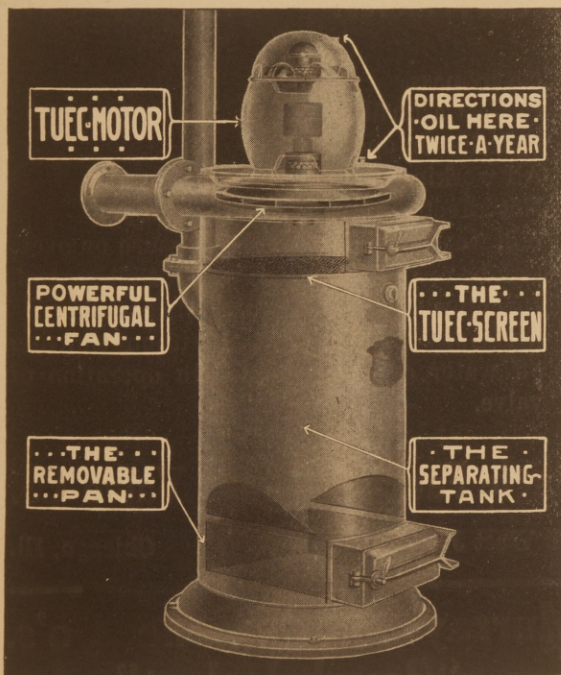


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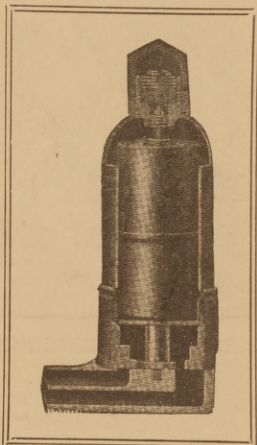
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