

AMERICAN BUILDER

NOVEMBER 1947
PRICE 35 CENTS

WORLD'S GREATEST
BUILDING PAPER

A N D B U I L D I N G A G E

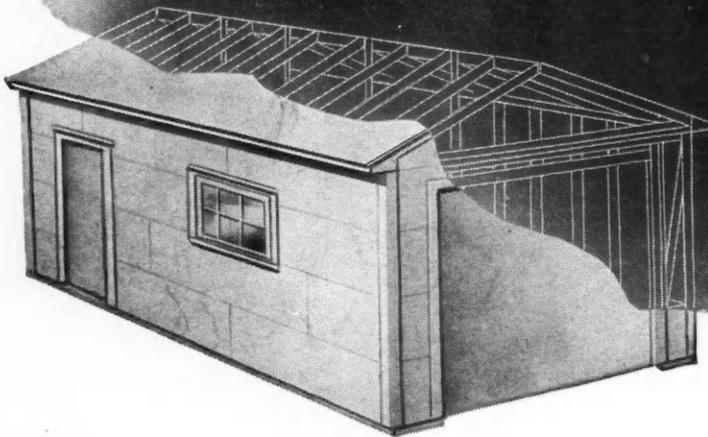
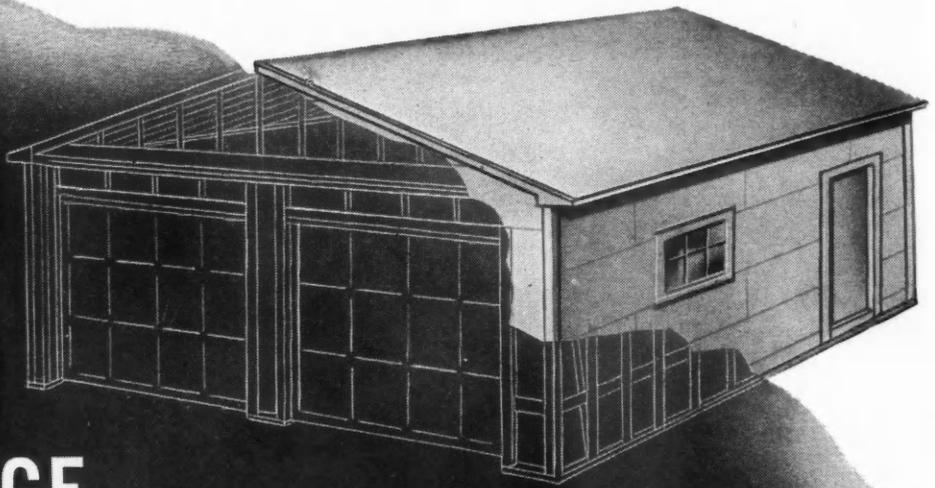
PUBLIC LIBRARY
NOV 11 1947
DETROIT



ROLLE
OR SET
ver by elim
of hangin
oor. The tw
n this pag
allations an
ry service.
Trolley Ga
nstalled wi
hich swin
two trolle
und the co
hung on th
. Equippe
le trolley
as desire
an eight-fo
No. 51 Trol
y, six feet
7-inch radi
ner. Sp
an eight fe
s required.
three-Do
re installe
oor on on
ley doo
e opposi
No. 51 Tr
3 Garag
anger ha
al adjus
with roll
either a
f garag
eight-fo
same as
used.
Dealer
ation

HAMPTON VILLAGE, World's Largest Drive-In Shopping Center

MEET
A
SHORTAGE . . .



MAKE A
PROFIT!

Build **CELO-SIDING** Garages from these **FREE** Plans

Garages are selling at a premium today. Here's how you can cash in fast. Send for the Celotex *free* garage plans and build the speedy Celo-Siding way. Simple framing goes up first. Then Celo-Siding completes the walls in a hurry and in one operation.

Customers like the extra value Celo-Siding gives them, too. Sheathing, insulation, structural strength, weatherproof ex-

teriors that don't need maintenance, pleasing appearance—all these features add up to a fast sale and a satisfied customer.

There's a big fast profit to be made here, so don't delay. Send for your **FREE** plans **TODAY!**



THE CELOTEX CORPORATION • CHICAGO 3, ILLINOIS

Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago 3, Ill. Subscription price, United States, Possessions and Canada: 1 year, \$3.00; 3 years, \$5.00. Foreign countries: 1 year, \$10.00; 3 years, \$20.00. Single copies, 35 cents. Entered as second-class matter Oct. 11, 1930, at the Post Office at Chicago, Illinois, under the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Illinois. Address communications to 105 W. Adams St., Chicago 3, Illinois.

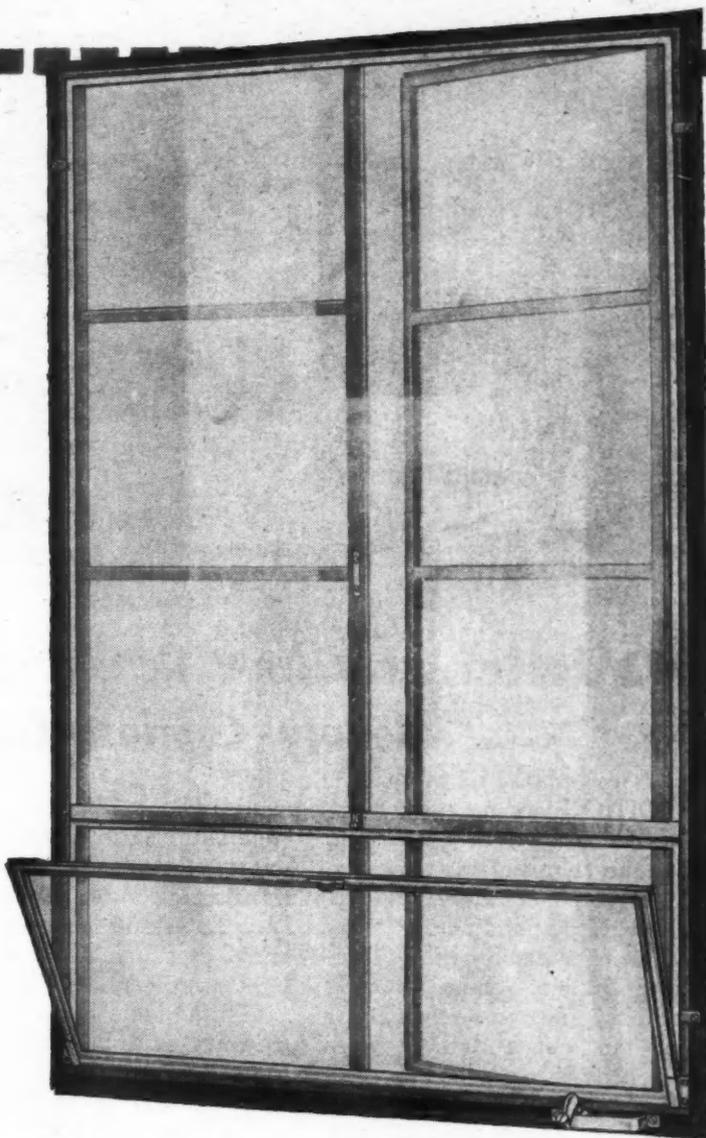
Now Available!
Fenestra

A NEW, LOW-COST, INSIDE, METAL STORM SASH FOR RESIDENCE CASEMENTS

Here's your opportunity to offer home buying prospects the last word in insulation of Fenestra Residence Steel Casements . . . with resulting comfort, heat saving and protection from window fogging.

Look at the benefits in this better, new storm sash—for new homes using Fenestra Casements and for homes which already have them:

1. A quality product made by the same company that made the steel casement and screen, as part of a complete window unit. Especially designed to provide most satisfactory results on Fenestra Casements at an economical price.
2. Made of formed steel for strength and rigidity.
3. Bonderized, with factory-baked-on coat of paint.
4. Economical to maintain—can be painted at any time to match color scheme of windows.
5. Frame section is hardly noticeable on inside.
6. Not noticeable from outside—nothing to mar architectural beauty of the exterior.
7. Safely and easily put up and taken down, from inside the room. No ladders needed—an especially attractive feature on upper-story windows.
8. A long-lived extruded rubber gasket, attached to storm window frame, prevents metal-to-metal contact with casement, quickly sealing whole opening. Both heat loss through glass and infiltration or "crack leakage" between casement's frame and ventilator are reduced.
9. Glass may be easily replaced, if broken.
10. Storm window is flat against inside of steel window—offers no interference to drapes, Venetian blinds or curtains.
11. Units are precision-built, for interchangeability in same size windows—require no marking or numbering when removed for storage.
12. Protected from weather, they last a lifetime!



Above: Interior view, installed. The tilt-in vent shown (available as an extra) provides draftless, fresh-air ventilation.

FOR FURTHER INFORMATION, MAIL THE COUPON 



Detroit Steel Products Company, Dept. AB-11
2260 East Grand Blvd.,
Detroit 11, Michigan

Please send me full information on your new,
Inside, Metal Storm Sash

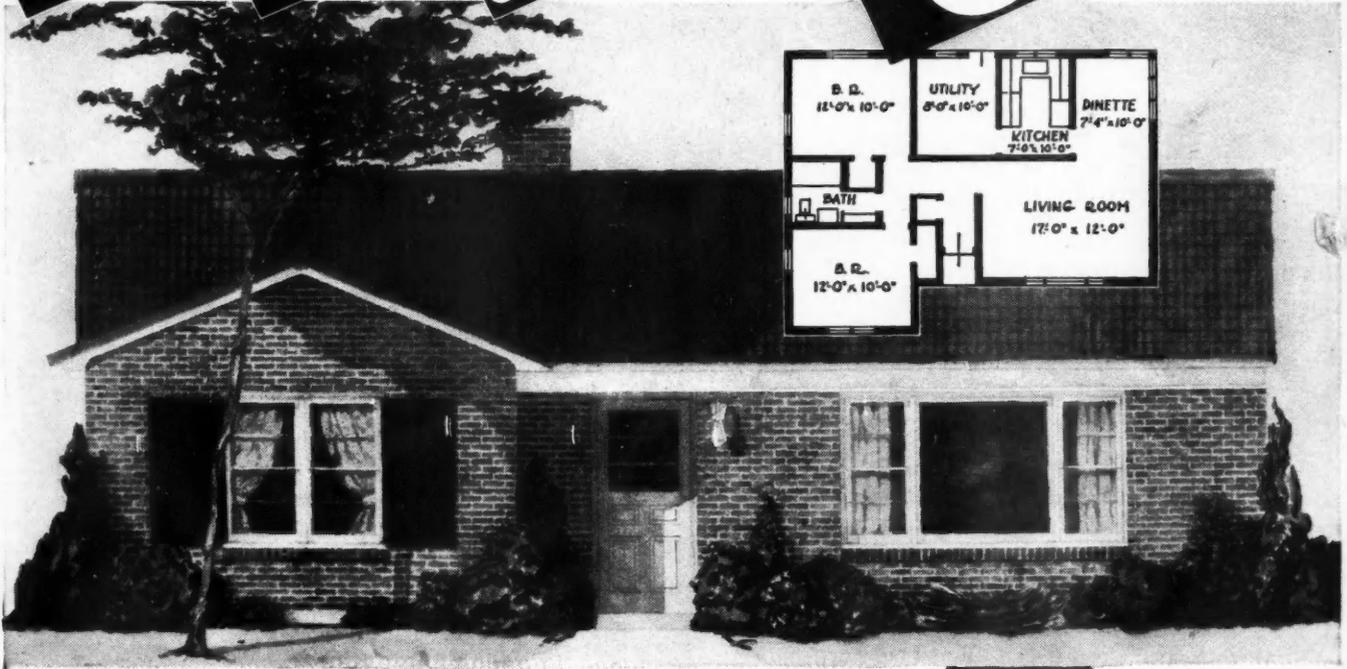
Name _____

Company _____

Address _____

year,
inois,
inois.

**ALL the
Dunbrik-Dunstone
to Build the Walls
of this 37'x24' Home
\$ 327**



MASONRY at a New Peak Point of Beauty • Comfort • Economy

IN ADDITION to a lower-than-lumber price, Dunbrik-Dunstone gives all the values of fine masonry: strength, long life, safety, low up-keep and depreciation costs.

Singly or in combination, Dunbrik and Dunstone help building contractors and operative builders develop an outstanding need—permanent low-price homes with all-masonry walls. **WITHOUT PRICE PENALTY TO BUYERS!**

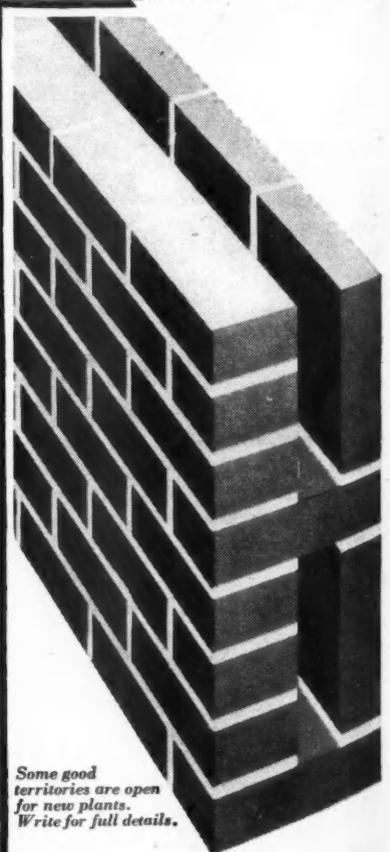
Typical of low price is the fact that all the wall units for the home shown (936 sq. ft.) sell—on the

average—for \$327.00. Exterior is Face Dunbrik in a choice of many smart colors. Back-up is plain 8" x 8" Dunstone. Bonding course is 8" x 8" Face Dunstone. Practical permanence, plus insulation values, plus light weight, plus laying ease.

Get the facts on America's finest masonry—Dunbrik and Dunstone. Note its scientific design—its large color range—its multiple sizes—its adaptability to modern architecture. Then figure what YOU can do with Dunbrik-Dunstone with YOUR plans, in YOUR community.

Dunbrik-Dunstone are produced by a country-wide chain of independently owned local plants operating under franchise. Write for Bulletin No. 40 and name of manufacturer nearest you.

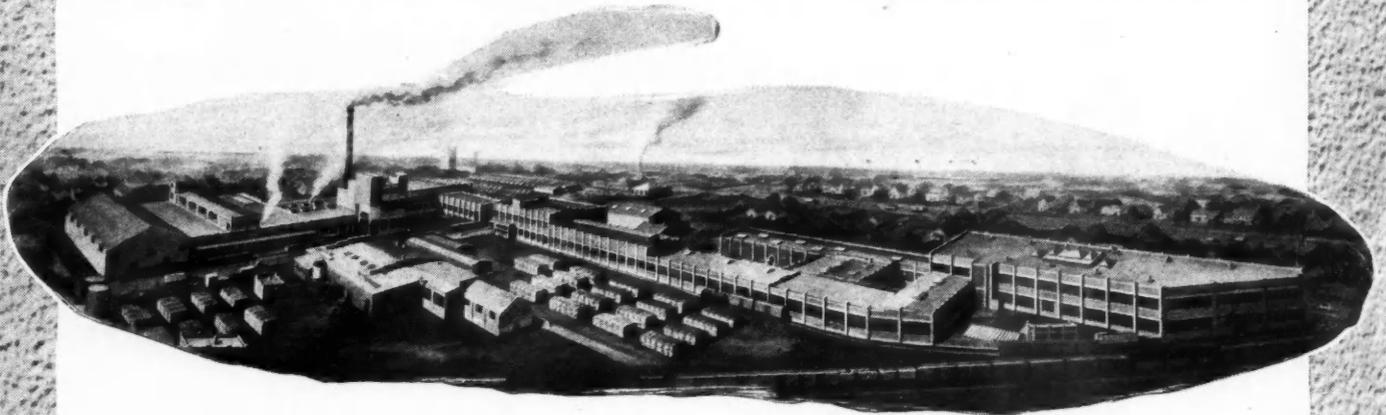
W. E. DUNN MFG. CO., 440 W. 24th St., Holland, Michigan



Some good territories are open for new plants. Write for full details.

DUNBRIK - DUNSTONE

Quality Panels Flow from this Plant to Bring
Profit to Contractors...and Satisfaction to Users



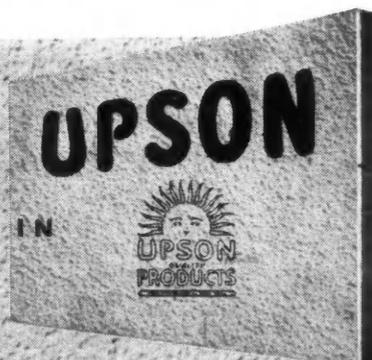
Progressive contractors and carpenters
are responsible for this plant

... thinking business men whose names
constitute a veritable Blue Book of the
Building Industry.

... contractors and carpenters who
consider quality of product and lasting
reputation for themselves paramount
to mere price.

THE UPSON COMPANY • LOCKPORT, NEW YORK

Upson Quality Products are Easily Identified by the Famous Blue-Center



PACEMAKER IN

CRACKPROOF PANELS

AMERICAN BUILDER

AND BUILDING AGE

F O U N D E D — 1 8 7 9

NOVEMBER

VOLUME 69

1947

NO. 11

C O N T E N T S

AMERICAN BUILDER and BUILDING AGE

(originally "Carpentry and Building") with which are incorporated National Builder, Permanent Builder and the Builder's Journal, was founded Jan. 1, 1879. Names registered in U.S. patent office and Canadian registrar of trade mark. Published by the SIMMONS-BOARDMAN PUBLISHING CORPORATION, 105 West Adams Street, Chicago 3, Illinois; 30 Church Street, New York 7, New York.

Samuel O. Dunn, Chairman of the Board; James G. Lyne, Vice-President—Assistant to Chairman; Henry Lee, President; Roy V. Wright, Vice-President and Secretary; Robert H. Morris, J. S. Crane, C. J. Wageman, Vice-Presidents; John T. DeMott, Treasurer.

Other Offices

Washington 4, D.C.: Nat'l Press Bldg.
Ann Arbor, Mich.: 214 Whitker Bldg.
Seattle 1, Wash.: 1038 Henry Bldg.
San Francisco 4: 300 Montgomery St.
Los Angeles 14: 530 West Sixth St.
Dallas 4, Texas: 2909 Maple Ave.

SUBSCRIPTION PRICE

United States and Possessions and Canada, 1 year, \$3.00; 3 years, \$5.00; foreign countries, 1 year, \$10.00; 3 years, \$20.00 Single copies, 35 cents each. Subscribers are requested to state company connection, nature of business, title or position. Address W. L. Taylor, Circulation Manager, 30 Church St., New York 7, N.Y.

Field Staff: C. L. Conley, W. J. Griffith, C. R. Hartung, Joe Sanders, R. J. Schnell, Dick Whittington.

Copyright 1947 by Simmons-Boardman Publishing Corporation



Members of the Associated Business Papers (A.B.P.) and of the Audit Bureau of Circulations (A.B.C.) Printed in U.S.A.

Publisher's Page	11
Our Readers Say	14
Trends	18
On and Off the Record	26
Monthly Review of NAHB	35
Editorial	67
Hampton Village	68
"Colonial Shops"	73
Locker Plant Construction	76
Factories Can Be Showplaces	78
New Storefront Trend	80
Commercial Use of Residences	82
Don't Overlook Glass	84
Specializing in Glass Masonry	86
Design for Automotive Building	87
Meeting Modern Requisites	88
Heating Commercial Buildings	89
Big Opportunities	94
Individuality Plus Luxury	96
Privacy on a City Lot	98
Prize House	103
Multiple Housing	104
Basementless House	106
Modern House Design	108
Unique Service Given by Builder	110
Lake Cottage of Stone and Fir	114
How Much Will It Cost?	115
How-to-Do-It Department and Better Detail Plate	116
New Products	118
Catalogs	126
Index to Advertisers	188

Samuel O. Dunn, Publisher Edward G. Gavin, Editor
Robert H. Morris, Business Manager

Lyn E. Arent, *Managing Editor and Art Director*; B. H. Wambolt, *Associate Editor*; Arthur V. Hansen, *Architectural Editor*; Bernard L. Johnson, *Western Editor*; W. C. Rodd, *Contributing Editor*, Los Angeles, Calif.; Ruth M. Balmes, *Production Director*; Margaret C. Carroll, *Assistant to the Editor*.

Editorial Office, 105 West Adams Street, Chicago 3.

AMERICAN BUILDER HAS THE LARGEST CIRCULATION OF ANY TRADE JOURNAL IN ANY FIELD

Remington Rand bookkeeping machines

reduce payroll administrative costs

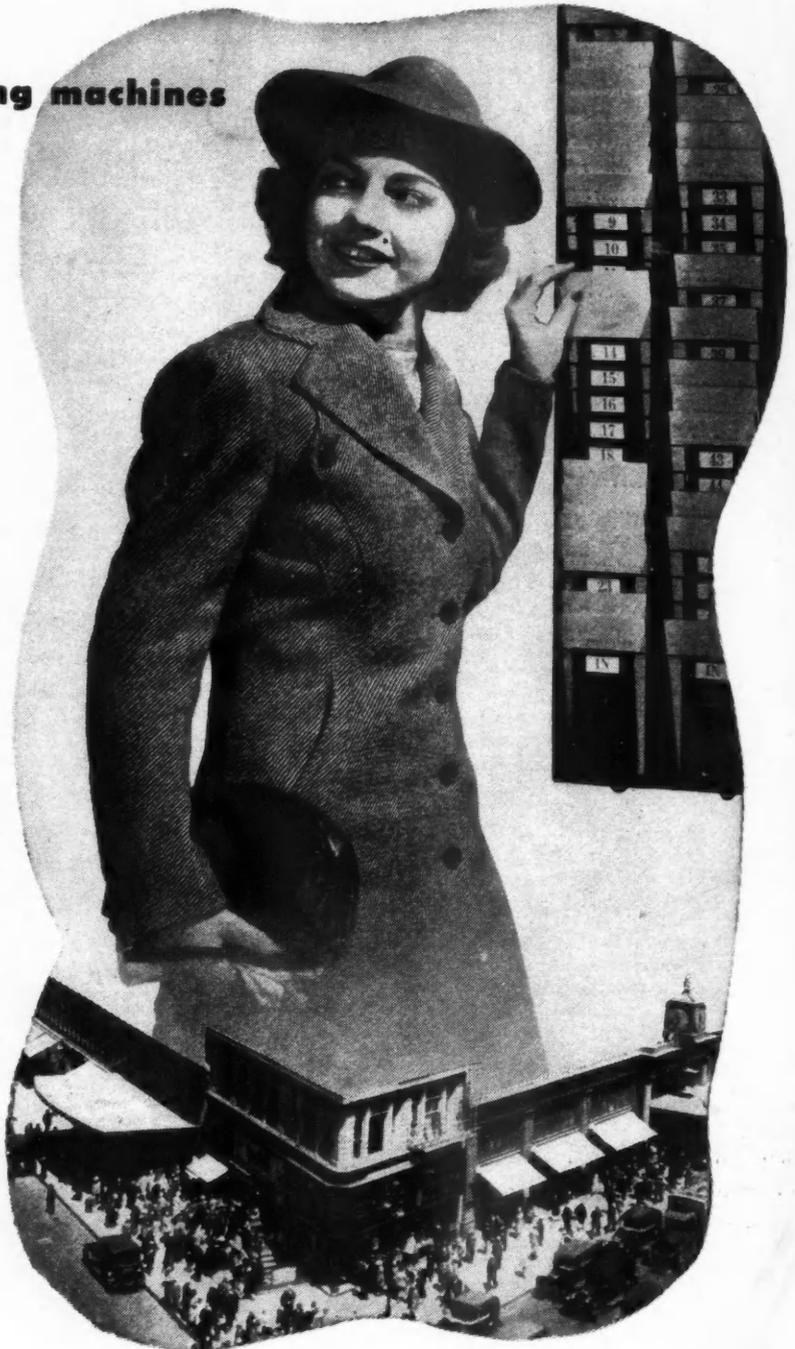
for modern builders

58,000,000 workers in American industry today necessitate streamlined and mechanized payroll accounting for efficient administration. Whatever the size of your company, deductions for social security, withholding taxes, pension plans or insurance premiums mean that your payroll procedure must be accurate, fast, informational and controlled.

Remington Rand bookkeeping machines provide the special features to solve your payroll problems. Every form you require—payroll register, statement, pay check or envelope, individual earnings record, etc., is prepared at one operation.

Individual, adjustable registers accumulate each deduction separately. Cross computing registers compute and print the net pay automatically. Completely electrified alphabet, numeral and operating keys speed each operation. Checks are numbered, dated and "protected" automatically!

Let your Remington Rand specialist show you how this machine works on your payrolls. Write to Remington Rand Inc., Adding-Bookkeeping-Calculating Machines Division, Department AU, 315 Fourth Avenue, New York 10, New York



Remington Rand

MACHINES FOR MANAGEMENT



Whatever your size...

200 employees or 20,000 . . . complete electrification and balances computed and printed automatically are just two of the many Remington Rand features to help you eliminate waste effort in your payroll administration—give you extra facts and figures for departmental and management control.



Now a new plan book



to help you build
Engineered Homes in
BRICK and TILE

25¢

A short time ago the Building Industry told the country about the Industry Engineered Housing Program.

Already the public is showing interest because this program promises quality homes at substantial savings.

Are you ready to build these homes in brick and tile?

Here's a **NEW PLAN BOOK** of 6 attractive, small brick homes that will help you meet the demand. These plans show brick and tile adaptations for Engineered Homes.

Each plan is based on modular coordination to save time, labor, materials and money in the finished house. Each home has been designed by A. Gordon Lorimer, a foremost architect in the development of modular coordination and the Engineered Home.

Send for your copy of this plan book **NOW**. Just fill out the coupon below and mail it with 25 cents to the Structural Clay Products Institute—the National Authority on Brick and Tile Construction.



STRUCTURAL CLAY PRODUCTS INSTITUTE, Dept. AB-11
1756 K Street, N. W., Washington 6, D. C.

Gentlemen:

Please send me your new plan book—"Brick Engineered Homes."
I enclose _____ for _____ copies.

(Name and position or title)

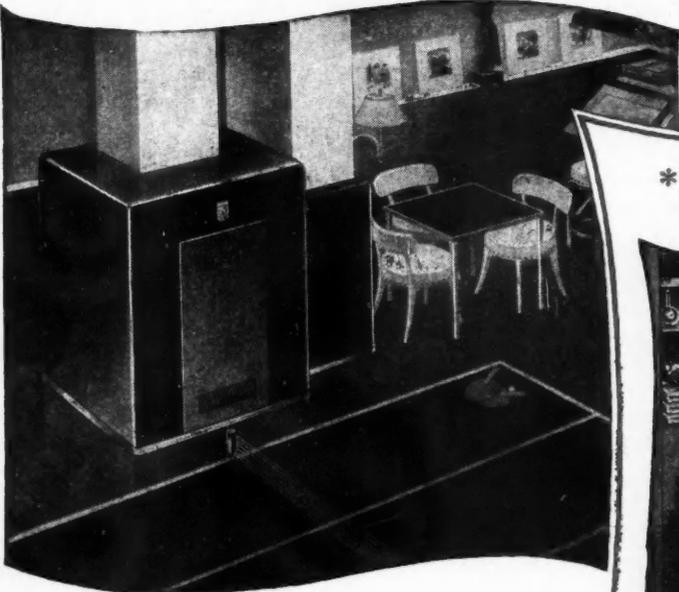
(Company and type of business)

(Address—Street, City and State)

mail this
coupon today

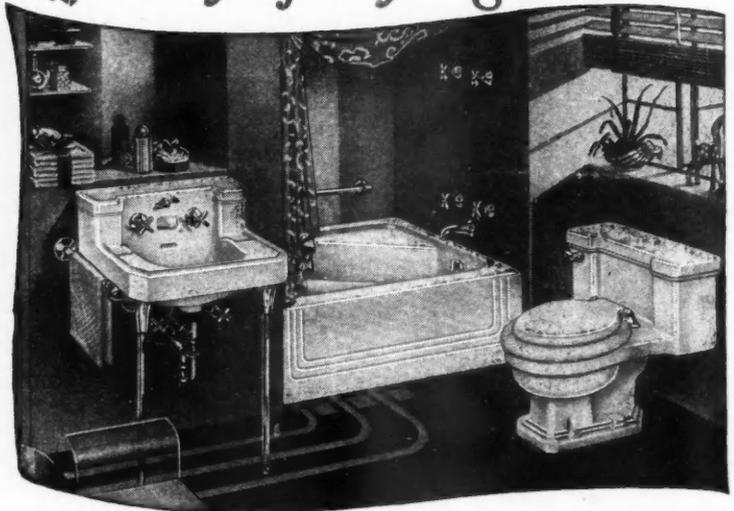
Choose **AMERICAN-Standard**
for **Quality that's sure to please!*

**Quality of Construction*



Beneath the smart jacket of the **WESTMORELAND Oil Fired Winter Air Conditioner** in this attractive basement recreation room is one of the sturdiest, most superbly engineered heating units money can buy! Available as a completely coordinated unit with American-Standard's own **Arcoflame Burner**, or for use with any other good burner. Made in sizes ranging from 105,000 to 330,000 Btu., the **WESTMORELAND** is ideal for homes of practically any size.

**Quality of Styling*



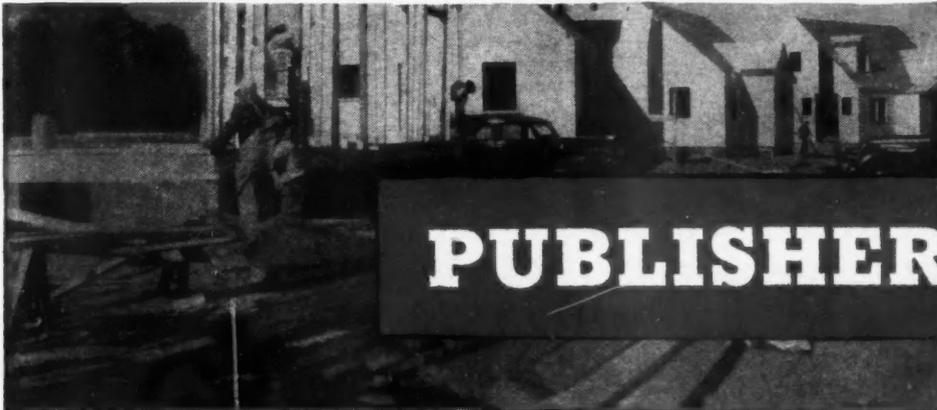
Center of interest in this bright, compact room is the beautiful **NEO-ANGLE Bath**, which though only about four feet square, provides roomier bathing space, greater comfort, convenience and safety than most baths. The harmonizing **COMPANION Lavatory** and **MASTER ONE-PIECE Water Closet** are of genuine vitreous china. All three fixtures available in white, and many attractive colors.



■ For well over a half century, American-Standard Heating Equipment and Plumbing Fixtures have been preferred by architects, builders, and home owners. Today, more American homes have heating and plumbing by American-Standard than by any other single company. Styled, designed and engineered to fit practically any type of building, American-Standard Products cost no more than others . . . and, for modernization, may be purchased on the Heating & Plumbing Finance Corporation convenient Time Payment Plan. For complete information, contact your Heating & Plumbing Contractor, **American Radiator & Standard Sanitary Corporation**, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

Serving the Nation's Health and Comfort

LOOK FOR THIS MARK OF MERIT—It identifies the world's largest line of Heating and Plumbing Products for every use . . . including Boilers, Warm Air Furnaces, Winter Air Conditioners, for all fuels—Water Heaters—Radiators, Convectors, Enclosures—Gas and Oil Burners—Heating Accessories—Bathtubs, Water Closets, Lavatories, Kitchen Sinks, Laundry Trays, Brass Trim—and specialized products for Hospitals, Hotels, Schools, Ships and Railroads.



PUBLISHER'S PAGE

Public Housing Fiasco in England

AN ENGLISH visitor to the United States recently remarked that public housing is like cancer. You can't have a little of either, and keep it under control. Any amount is too much.

The spread of public housing in England lends truth to that statement. Following a long period of rent control, which had the inevitable result of driving risk capital out of the rental housing market, England made the critical mistake of doing what the NHA wanted the United States to do. That mistake was to institute a modest public housing program to provide minimum shelter for the lowest income brackets under a partial government subsidy.

For a while, most Englishmen were not disposed to view a little public housing as a germ that presently would develop into an economic cancer. But, what did happen in England? In spite of everything government bureaus could do to produce adequate shelter quickly and economically, and to conceal heavy government administrative costs, private builders made the government program look slow, cumbersome and unreasonably expensive by comparison with their operations.

When the current socialist regime took over the reins of English government, it was evident to the new leaders that their success would in large measure depend on making public housing a more popular program. They sought to improve the government housing program by expanding it, and limiting the activity of private builders.

Therefore, they set a ratio of four public housing units to one privately built unit, and surrounded private builders with more red tape than ever. To build a housing project or a single house, it was necessary for a builder to appear before his local housing authority, fill out almost endless forms, conform to

rigid limitations, find his materials after the government needs had been satisfied, and suffer unaccustomed delays.

In spite of all this, however, private builders still built better houses in less time, and for less money than the government forces could, and awkward questions were being asked about hidden government costs that did not appear in the published cost records of government-built units.

Finally, a few months ago, England reached the end of the road for private home building. The socialist government, in order to save face, banned all private home building. Today, the government builds all housing in England. What the costs are, no one knows, unless the facts are in the hands of a few highly-placed government statisticians.

What the results are, everyone knows. The results are standard minimum shelter units, bearing little or no resemblance in size or equipment to the admittedly none too elaborate former English standards for small homes and apartment units. English women are beginning to grumble, and the end of the costly public housing fiasco in England is freely predicted.

The complete lesson of public housing waste and frustration has been written in England for all to see. The question before the American public is whether to permit the passage of legislation providing for a limited amount of public housing, and thus begin the sabotage of American housing standards, the wrecking of a major industry, and the futile squandering of billions of dollars of tax money, or to profit by the bitter lesson the English people have learned.

Mr. S. O. Dunn was unable to contribute his article for the Publisher's Page this month. This article was prepared by the editors.

Provide Luxury on a Budget... *with*



Clear Louvrex cupboard doors and *Satinol* Doublex panels make this "Kitchen of Tomorrow" sparkling and so easy to keep clean.

PATTERNED GLASS



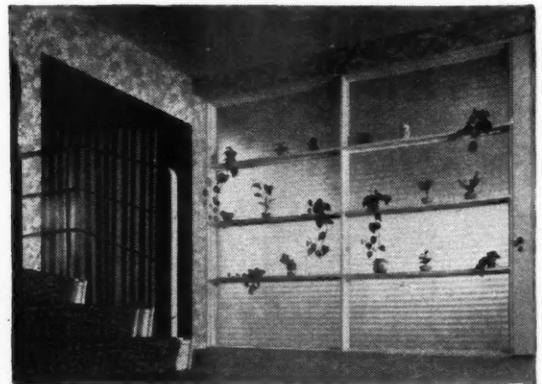
Doublex screen hides kitchen door from living room, makes a smart background for whatnot shelves in this Hudson, Ohio, home.

In large or small homes, you can build in the luxury look your clients want... with Blue Ridge *Patterned* Glass.

Easy to install, this fine glass adds never-fading beauty to every room. Because it transmits light yet obscures views, *Patterned* Glass solves countless design problems. Clear or *Satinol*-finished, it may be used for walls, panels, partitions, interior or exterior doors. It may be glazed like windows or louvered for ventilation. However used, *Patterned* Glass cuts maintenance costs. It never needs refinishing... quick cleaning with a damp cloth keeps it sparkling like new.

You may choose from over 20 linear, square or all-over patterns in Blue Ridge Glass. Used alone or in combination, they enable you to achieve smart decorative effects in modern or traditional homes. Your L·O·F Glass Distributor will be glad to work with you in selecting Blue Ridge patterns best suited to your building plans.

For Ideas... send 10c for booklet "Bright Ideas with Decorative Glass". Blue Ridge Sales Division, Libbey-Owens-Ford Glass Company, 1117A Nicholas Building, Toledo 3, Ohio.



Satinol Louvrex screens the porch and admits light to hall. Architect: James F. Eppenstein, Chicago.



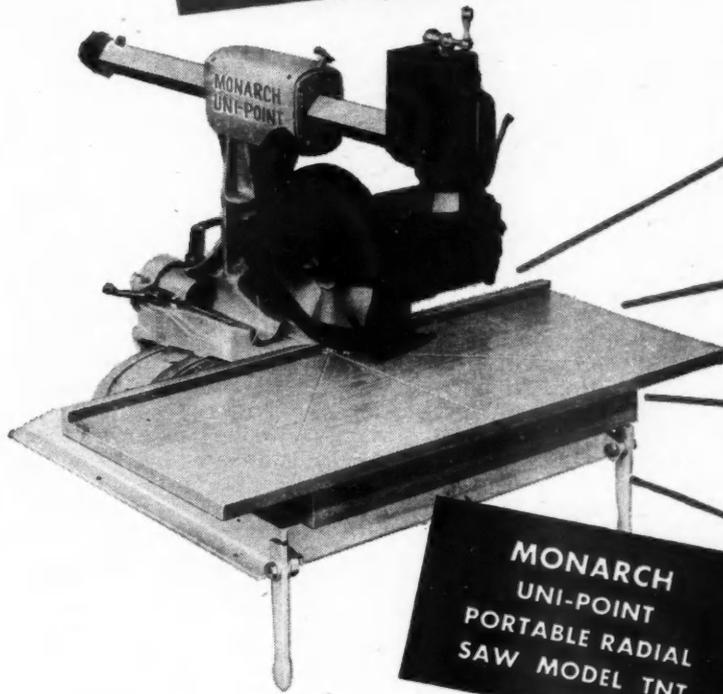
BLUE RIDGE *Patterned* GLASS



FOR SOFT, DIFFUSED LIGHT • SMART DECORATION • COMPLETE PRIVACY

IF IT SAVES YOU BUT \$2 A DAY

IT PAYS FOR ITSELF!



**MONARCH
UNI-POINT
PORTABLE RADIAL
SAW MODEL TNT**



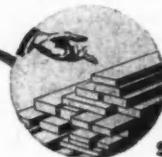
PORTABLE



25% FASTER



ALL PURPOSE



SAVES MATERIALS

THE MONARCH UNI-POINT SAVES MOST BUILDERS A WHOLE LOT MORE

This amazing saw costs so little to buy that it would still pay for itself in less than a year if it saved you just \$2 a day!

But the Monarch TNT saves most builders a great deal more, pays for itself even faster. It slashes sawing time 25% — not in unusual cases but on average work.

HERE'S Figure it yourself: if YOUR work is anything like average, if 25% of YOUR sawing time is worth \$2 or more, you'll be *money ahead* with the world's lightest, most portable 12-inch radial saw on the job!

PROOF! Few builders of any size can afford to be without it. Proof is the fact that so many want it — so many that increased demand has recently enabled American Saw Mill to reduce the price.

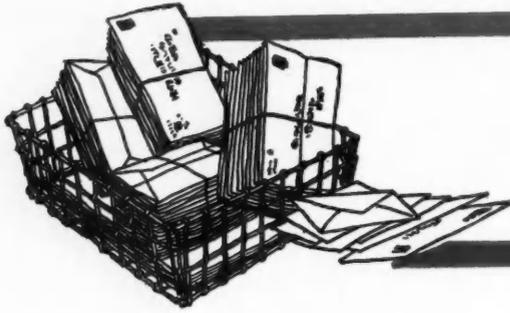
Write for literature and new low price today.

AMERICAN SAW MILL MACHINERY CO.

Manufacturers of Saw Mill and Woodworking Machines

50 MAIN STREET • HACKETTSTOWN, NEW JERSEY

Factory Branches: CHICAGO • SAN FRANCISCO • BIRMINGHAM



Our Readers Say:

Praises Nelson Article

To the Editor: A copy of "Headlines" of September 29th, 1947 was sent to us by Mr. S. M. Strand of Volk & Strand, Inc., realtors of Minneapolis.

The article by Mr. Herb Nelson entitled "It Is Socialism, Mr. Taft" is one of the best we have ever seen on the subject of Federalized housing. Certainly every man who reads this article will have a clear-as-crystal picture of Mr. Taft's position and also what socialized housing would do to this country.

Politicians in both the Democratic and Republican parties must be forced to take a stand for free enterprise or for socialism. The fence-straddlers and muddle-headed politicians can only be smoked out into the open by plain-talk articles, such as Mr. Nelson has written.—J. H. CHAPMAN, C. H. Chapman Lumber Co., Waterloo, Iowa.

The South Speaks Up

To the Editor: I did not get my copy of the *American Builder* for August, 1947. Have the September, 1947 number O.K.

When does my subscription run out, if it is not too much trouble to advise me.

I note that discrimination is practiced by you in publicizing the building activities of the south or should I say the deep south?

There is more building of a residential nature in the deep south than anywhere else in this country today, according to a recent report from Washington, D.C. However, I never see any scare lines or long articles in the *American Builder* about this activity.

Recently you had an article several pages long about Dallas, Texas, giving a picture of Dallas and puffing them up mightily. Also later, you had an article about Houston, Texas, several pages long, also giving a picture of Houston and a map of that place.

How about waking up to the fact that many of your subscribers are southerners and are very proud of the progress of the south. If you knew the facts as you are supposed to know them, you would throw your prejudices out of the window and give some building data about the backward south where they wear no shoes and every town and city is like Tobacco Road. If that is all you know about it and all you are going to do about it, then I believe you are due to lose some of your customers due to this policy.

Thousands of northerners are coming to the south and intend to make it home.

That is because they are slowly becoming educated and realize their past mistakes in staying in the cold, bleak regions that should really be back in the hands of the Indians. I know because I have seen both sections.

How about giving your readers some maps and several pages of facts in regard to such cities as Miami, Atlanta, and Memphis, also Jacksonville. Of the four, Atlanta tops them all, and to give Dallas and Houston such publicity and turn Atlanta down, shows either ignorance or prejudice. Which is it? Atlanta in many ways is a bigger city than Dallas or Houston. And Miami is booming.—W. R. BRADLEY, 218 North Delaware Ave., DeLand, Fla.

Adopts Evans House

To the Editor: Something over two years ago, we wrote to you for the blueprint of a home that you had shown in your magazine. This was a home that Randolph Evans and another architect had designed. We built a home from these plans and I am enclosing pictures of the front and rear of the house.



It took us two years to build this house because when we started we decided every bit of material that went into the house would be the best.

Our house had to be built just a little different from the plans. It was impossible for us to have a basement, and we didn't want one anyway, so we added on about ten feet, added another dormer window and made a service room for the furnace, shower, and a stool.

The sides of the house are of grey and tan sandstone put together with buff cement. The roof is a red tile. The front window instead of being of small glass is a large thermopane. The plans called for an inset back porch. This we closed up, making a large opening from this room into the living room.—J. D. AVERILL, Columbus, Kans.

English Brick Mason Available

To the Editor: Would you kindly pass this letter on to anyone willing to

offer me employment in a building organization. I am an Englishman, 30 years of age, keen, intelligent, with initiative and drive. At present, I am engaged as a bricklayer foreman on industrial plant extensions amounting to 100,000 pounds.

I have a sound knowledge of general building construction and I am fully experienced in all types of brickwork construction as practiced in this country, including firebrick and chemical work.

I am coming to the United States to seek further experience, and to gain knowledge of American methods of building construction.

I am the holder of a first class final certificate in brickwork and associated subjects as issued after the 1946 examinations by The Department of Technology of the city and Guilds College of London Institute. This, as you probably know, is the highest qualification obtainable here in this particular sphere.

Any offer you can make me will really be appreciated.—DOUGHLAS H. WITTS, 46 Gloucester Road, Bridgewater, Somerset, England.

The Copy Was Sent

To the Editor: You will be astonished receiving a letter from an unknown young German. But let me tell you the reason in plain terms.

I am 23 years old and want to become a civil engineer. First I must work as a bricklayer for two years. Then I will go to a school of civil engineering for three years. But already, today, I am very much interested in the American way of building.

Therefore, I should like to be put in touch with a young American, who, too, wants to become a civil engineer. We could exchange our thoughts and experiences, and I think that would be very interesting for both of us.

For a long time it was impossible for me to make the acquaintance of a young man from the New World. It does not matter if the young gentleman cannot speak German. I suppose my English is just good enough. Perhaps you are able to help me.

In case you should like my idea a little, I beg you to send me a copy of the *American Builder*. The copy may be of an older date, it doesn't matter. I should be very much obliged to you if you would be so kind and try to fulfill my wish.—SIEGFRIED FORSTREUTER (21) Bielefeld Westfalen, Marhische Str. 24, British Zone, Germany.

608 New Apartments

IN THE ELLIOT HOUSING PROJECT

PROTECTED WITH

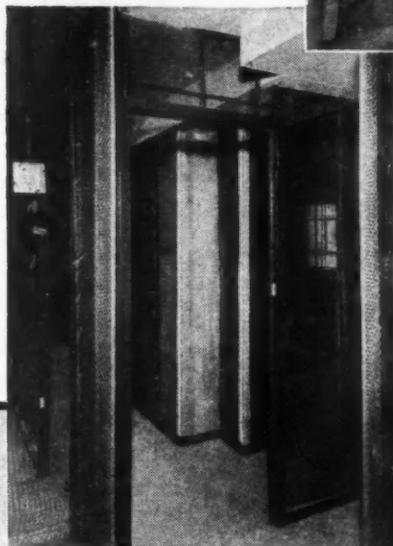
Truscon Metal Lath

Large quantities of Truscon Diamond Metal Lath, in conjunction with Truscon $\frac{3}{4}$ " Channels and Tie Wire, were used for the 2" solid metal lath and plaster partitions for this project. These Truscon steel building materials served several important functions: (1) They permitted the quick, low-cost coverage of large areas with smooth, flat lath; (2) they met strict fire-proofing requirements; and (3) they helped attain a high quality of plastered job, and will protect the fine appearance of the walls and ceilings for a great many years.

Truscon Diamond Lath has more openings in a given area, with a proportionate increase in the area of steel. The increased proportion of steel gives the sheets great rigidity. They are easily handled and quickly erected, and less time is taken in applying the scratch coat and truing up the wall than with ordinary diamond lath. The larger number of openings permits the formation of more keys to give efficient bonding of the plaster to the lath. Write for catalog on Truscon Metal Lath and Accessories.



Illustrating the straight, true plastered walls secured with Truscon Metal Lath Products.



Truscon Cold Rolled Channels are straight and true, with square corners that prevent rolling.



Truscon Diamond Metal Lath Used in Elliot Housing Project, New York City.

TRUSCON STEEL COMPANY

YOUNGSTOWN 1, OHIO • Subsidiary of Republic Steel Corporation

Manufacturers of a Complete Line of Steel Windows and Mechanical Operators... Steel Joists... Metal Lath... Steeldeck Roofs... Reinforcing Steel... Industrial and Hangar Steel Doors... Bank Vault Reinforcing... Radio Towers... Bridge Floors.

4 WAYS TO SOLVE THIS STORE FRONT PROBLEM



Out-of-Date Appearance
Poor Display Facilities
Inadequate Identification

These 4 designs from the same floor plan show how Kawneer's wide variety of materials offers unequalled flexibility in designing

1 All four of these stores feature an inviting vestibule, a Kawneer Full-Vision Door, and a row of shadow-boxes which direct eyes and feet inside. The clean-lined design below uses aluminum Zourite to face the ceiling above the show window.



2

The above store has the unified appearance and display value of a big framed shadow-box. This effect has been gained by framing the top and sides of the front with the same stock convex member. The right wall has been covered with Zourite.



These four stores were designed by Ketchum, Giná, and Sharp Architects, New York City

Mode
Kawneer
a con
every
Each
selling
and t
Yet
use o
Wi
floor-
and r
build



3

Here the dramatic appeal of a theatre stage sets off the mannequins. The reeded shape which covers the awning box is repeated as sign backing. The member which faces the bulkhead was used as an awning box cover in Design No. One.

4

By lowering the ceiling above the show window and by covering the entire sign area with Zourite, this design puts strong emphasis on the front's advertising power. The awning hood acts as a ledge for the sign and further stresses the shop's name.

KAWNEER METALS ARE STYLED AND ENGINEERED FOR MODERN STORE FRONT CONSTRUCTION

Modern store building is a challenge for new ideas—and Kawneer materials make these ideas practical by offering a complete range in members and assemblies which answer every store front requirement.

Each of the four store fronts above does an outstanding selling job. Each attracts customers, shows them merchandise, and then pulls them inside to buy.

Yet different interpretations of the problem and the varied use of Kawneer metals result in four unique designs.

With Kawneer materials you can erect fronts which use floor-to-ceiling lights of glass, flush glazing, full vision doors, and many other striking elements of modern design. You can build any type of modern store front because these materials

have been styled and engineered to meet the demands of contemporary architecture.

Write for the booklets which detail, describe, and picture the handsome K-47 line, Zourite, and Kawneer entrances. Send requests to The Kawneer Company, 773 North Front Street, Niles, Michigan. Kawneer factories are located at the above address and at 903 Dwight Way, Berkeley, California.

Kawneer
SALES-BUILDING
STORE-FRONTS

TRENDS

BUILDING MATERIAL — EQUIPMENT — APPLIANCES

Commercial Building Follows Residential Upswing

SINCE restrictions have been removed, a rising volume of commercial building is beginning to accompany current peak activity in residential building. Builders, nation-wide, started 83,000 new permanent non-farm dwelling units in August; a new high level for that month, and 17,600 (27 per cent) over August of 1946, according to reports of the Bureau of Labor Statistics. This rise brings residential starts, for the eight months ending in August, to 521,800 dwelling units as compared with 468,100 last year, an increase of 53,700 units (13.6 per cent).

Evidence of the growing volume of commercial building is apparent in almost every city and town. Main Street is getting a new face. Enterprising merchants are doing complete remodeling jobs or building entirely new structures for the better display of merchandise, and to better store increasing supplies of commodities. New stores and service establishments are springing up in new residential areas. There are impressive numbers of new buildings going up along highways. Permits for building in unincorporated areas are usually not required; there is, therefore, no factual information concerning the amount of building activity along highways.

The facts on commercial and other building show that in urban areas during the month of May, 4,938 commercial buildings were started, including 3,650 stores and warehouses, 449 public garages, 363 service stations, 272 office buildings, and 204 amusement buildings. Builders also started 1,375 factories and workshops, 282 churches, 170 schools and libraries, 62 institutions and 45 public buildings. This represents an increase of 814 buildings (13.5 per cent) over the corresponding month a year ago.

Building Material Shortages Appear Again

The record volume of building activity has caused shortages of certain materials to develop. It was generally believed that this year's production of materials would support construction of around 800,000 houses, and that level of output has now been passed. Consequently, shortages are occurring in many building materials.

According to the National Association of Home Builders, the worst of the shortages is nails. Once again, a critical shortage of this essential item is plaguing builders in every part of the coun-

try. Other metal items, including plumbing, likewise are short.

Competition from commercial and industrial construction and exports of building materials also affect the supply available for home building.

Building Materials Output

The Department of Commerce reported late in September that the output of many important building materials had recently declined or was only slightly higher than previous production.

Lumber: July lumber production declined 3 per cent from June and was below July 1946

Hardwood Flooring: July production, 17 per cent more than in June

Steel: Operating at 90.2 per cent capacity in August produced a 5 per cent increase over July output

Clay Products: July production of unglazed brick and unglazed structural clay tile slightly below July 1946 output

Brick (Common and Face): July production, an increase of 5 per cent above June and 15 per cent over July a year ago

Clay Sewer Pipe: July production a 5 per cent decrease from June, exceeding July 1946 output by 1 per cent

Structural Clay Tile: Output in July was 14 per cent above June production but slightly below July 1946

Gypsum Board and Lath: August production, 3 per cent below July

Cement: July production, 2 per cent above June and 6 per cent above July 1946

Asphalt Roofing: July shipments, 4 per cent less than shipments in June and 8 per cent higher than July 1946

Cast Iron Pressure Pipe: July shipments, 4 per cent less than June, 8 per cent higher than in July 1946

Nails: Production dropped 11 per cent in July as compared with June, increased 6 per cent over July a year ago

Heating Equipment: July production of nearly all principal items registered declined from June. However, cast iron boilers and mechanical stokers showed substantial gains

Labor Supply and Rates

The supply of building labor is not unlimited, and the current high volume of construction is likely to make a tight labor supply in some areas. As compared with 89,300 building trades' apprentices in December 1946, 104,285 were employed at the end of August. The woodworking trades employed the largest number; the total apprentices

employed break down into the following categories:

Woodworking trades	38,544
Pipe trades	15,532
Electrical trades	15,472
Trowel trades	13,838
Painting trades	8,363
Sheet Metal trades	7,543
Other trades	4,993

Total 104,285

It is estimated that a total of 1,817,000 workers were employed by construction contractors in July 1947, as compared with 1,626,800 in the preceding year. On private construction projects, the average employee works 37.7 hours; earns \$62.68 a week, at the rate of \$1.66 an hour, according to the Bureau of Labor Statistics.

According to the same source, minimum union hourly wage scales in 75 cities range from \$2.37 for bricklayers in Los Angeles to \$1.75 in Charlotte, N. C. and Charleston, S. C. Carpenters in Cleveland get \$2.12 an hour; \$1.50, in Manchester, N. H., Jackson, Miss., Jacksonville, Fla., Little Rock, Ark., and Charleston, S. C. The minimum hourly union wage scales for painters range from \$1.25 in Manchester, N. H., to \$2.30 in New York. Plasterers get not less than \$1.75 an hour in Tampa, Fla., Portland, Me., Charleston, S. C., Jackson, Miss., Mobile, Ala.; and a minimum of \$2.75 an hour in Newark, N. J. The highest minimum rate for plumbers is \$2.81 an hour in New York and is \$1.75 an hour in several other cities. Building laborers earn a minimum of 70c an hour in Jackson, Miss., and \$1.42 an hour in Detroit.

The practice of construction workers, insisting on double time week-end work which makes take-home pay as compared with production fantastic, is the subject of a vigorous campaign by the Chicago Metropolitan Home Builders Association. In order to assure an adequate market for homes, there must be a balance between the rate of pay of building labor and other workers. The general factory worker now averages \$49.00 a week, as compared with the average of \$62.68 earned by the employees of construction contractors. This is too great a disparity; if further augmented by restrictive practices on production, the number of customers for new homes, commercial, and institutional building will shrink considerably.

we take the floor  *for a minute*
 to give *you* **the floor for years!**

it's **Carey** asphalt tile flooring



FOR PROFITABLE SALES AND APPLICATION, TOO! The wide range

of markets and applications for this attractive, durable flooring gives you real opportunities for additional business.

That's doubly true because Carey Asphalt Tile Flooring has qualities that are in demand . . . that mean money-making applications for you. For example:

IT'S LONG WEARING—High quality asphalt, selected mineral fillers and asbestos fibres form this tough, durable flooring that wears for years and years.

IT'S RESILIENT—The smooth surface has sufficient "give" to cushion loads—

makes for greater comfort, less traffic noise.

IT'S FIRE-RESISTANT—Carey Asphalt Tile is highly fire-resistant . . . also electrical and chemical resistant.

IT'S DAMPPROOF . . . VERMINPROOF . . . DUSTPROOF — Non-absorbent qualities give excellent protection against dampness . . . this flooring is also vermin and termite-proof . . . the smooth surface does not "powder" under traffic, is easily cleaned.

COLORS . . . SIZES—Carey Asphalt Tile is available in black and red . . . in two thicknesses 1/4" and 1/2" . . . and in two sizes, 12"x12" and 12"x24".

Industro-Tile, for extra heavy duty, comes in 1/2" thickness, black only.

QUICK, EASY APPLICATION — Standard installation equipment is all that is required for fast, simple application.

WRITE FOR THIS FREE FOLDER. It gives you more detailed information about Carey Asphalt Tile Flooring . . . facts that will help you build more business, more satisfied customers. For your free copy simply address a penny postcard to Dept. AB-11.



THE PHILIP CAREY MANUFACTURING CO., CINCINNATI 15, OHIO

In Canada: The Philip Carey Co., Ltd.
 1557 MacKay Street, Montreal 1, P. Q.

Asphalt Shingles & Roofings • Built-up Roofing
 Asphalt Tile Flooring • Waterproofing Materials
 Industrial Insulation • Rock Wool Insulation
 Careyduct • Asbestos Wallboard & Sheathing
 Roof Coatings & Cements • Pipeline Felt
 Expansion Joint • Asbestos Shingles & Siding
 Corrugated Asbestos Roofing and Siding
 Miami-Carey Bathroom Cabinets & Accessories



On the high road or low road . . .
**YOU'LL HAUL WITH
 POWER!**



Advance-Design

CHEVROLET TRUCKS

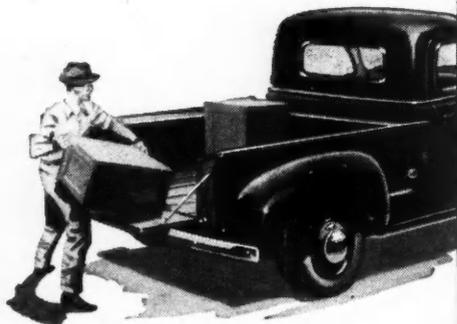
Here's "more power to you" on your hauling job—extra power to make "molehills" out of mountains and shorten the long level stretches. It's the famous Valve-in-Head Load-Master Engine in the new Chevrolet Advance-Design trucks. See these trucks of tomorrow—today! They're "loaded" with new features and innovations!

**Fresh-air heating and ventilating system optional at extra cost.*

**CHOOSE CHEVROLET TRUCKS FOR
 TRANSPORTATION UNLIMITED!**

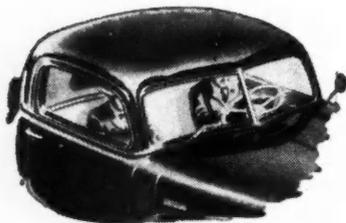
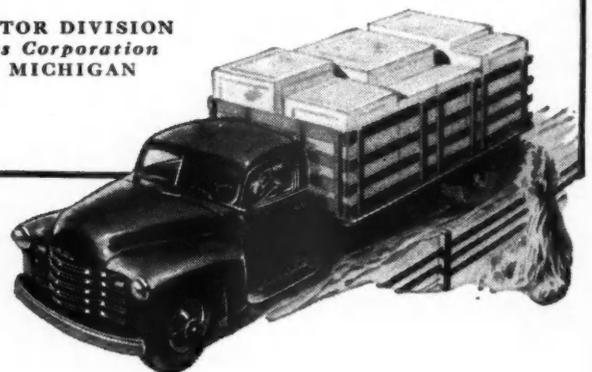
**CHEVROLET MOTOR DIVISION
 General Motors Corporation
 DETROIT 2, MICHIGAN**

THE CAB THAT "BREATHES" . . . fresh air is drawn in from the outside—heated in cold weather—and used air is forced out!*

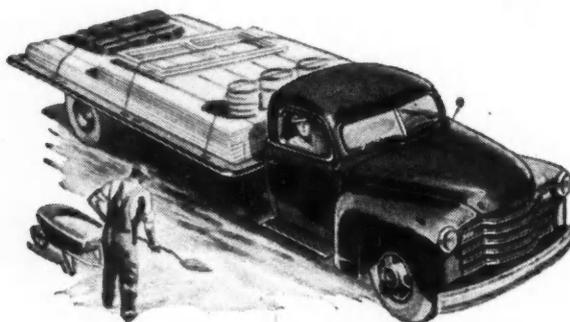


Panels and pick-ups have **INCREASED LOAD SPACE**—stake and high rack bodies **MORE EFFICIENT LOADING**. . . New, stronger, sturdier **FRAMES** are designed to carry greater loads greater distances for a longer time!

LONGER WHEELBASES give better load distribution. . . . Chevrolet's famous **FULL-FLOATING HYPOID REAR AXLES** are geared for the load!

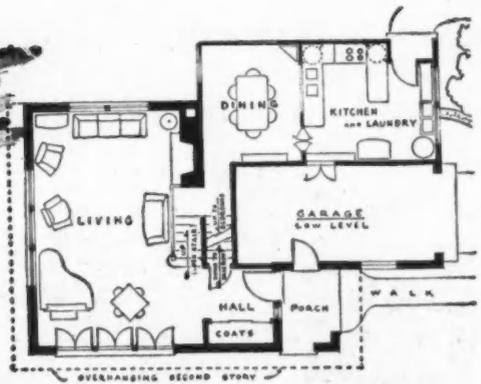


The cab is **FLEXI-MOUNTED**—cushioned on rubber against road shocks, torsion and vibration! . . . **DRIVER'S COMPARTMENT** is wider, with more leg room. The seats are fully adjustable, bigger and more comfortable. Wider, deeper **WINDSHIELD** and **WINDOWS** increase visibility by 22%!

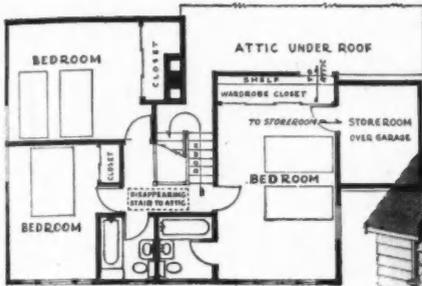


Chevrolet **VALVE-IN-HEAD TRUCK ENGINES** are world's most economical for their size. . . . There are **HYDRAULIC TRUCK BRAKES**, exclusively designed for greater brake-lining contact—for positive action!

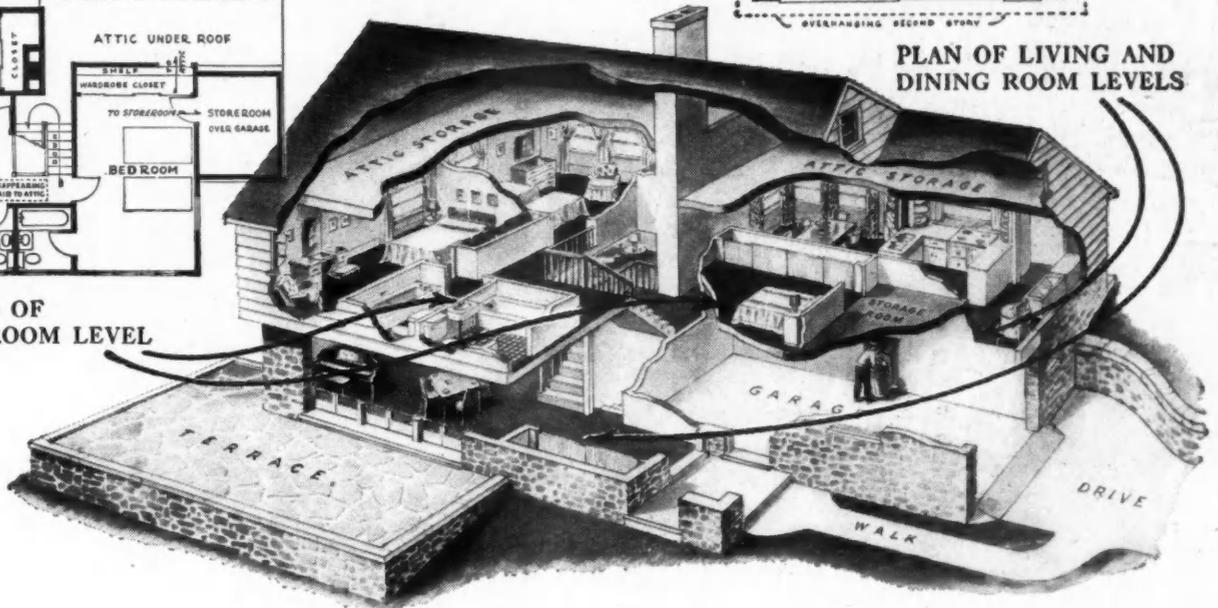
a **SMART** house
 in the **RIGHT** Location
 Heated the **SENSIBLE** Way!



PLAN OF LIVING AND DINING ROOM LEVELS



PLAN OF BEDROOM LEVEL

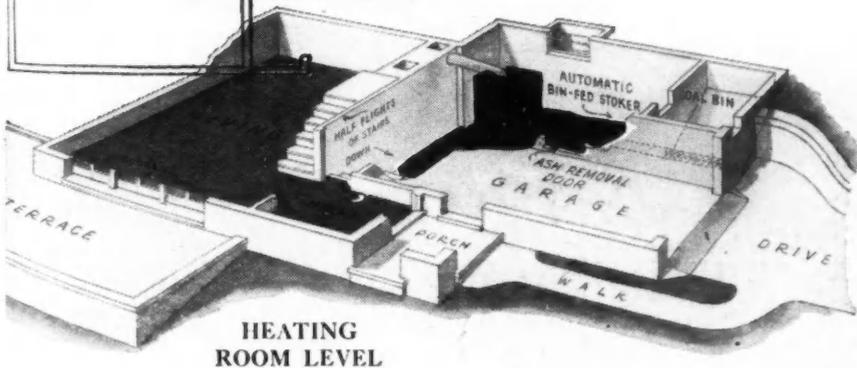
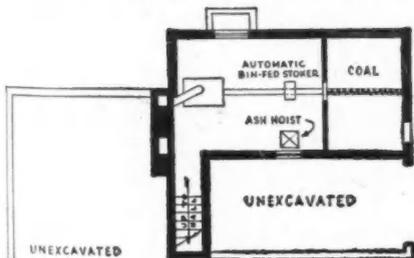


This lovely three-level home observes the best rules of microclimatic location. It's designed for south side location, below the top of the hill—to escape frost and still-air pockets peculiar to vales, and at the same time miss wintry winds which blast hilltops. It requires *minimum* street frontage, *minimum* excavation and *minimum* foundation perimeter—and it

offers the *maximum* in privacy, view, garden space, living convenience and all-around attractiveness.

And because it's sensibly designed for coal heat, with modern automatic stoker installation and "flick-of-the-wrist" ash disposal, it offers a *maximum* of winter health and comfort with *minimized* attention to fueling!

Coal Heat Is
 Healthful,
 Even Heat



HEATING ROOM LEVEL

With coal heat, there's always a bed of fire in the furnace, eliminating "pop-on, pop-off" periods which keep room temperatures rising and falling and invite sniffles, colds and sore throats. The choice of millions of homeowners who heat with coal is "Fuel Satisfaction", the superior, all-purpose bituminous coal mined along the Norfolk and Western — high in heat energy and low in volatile content.

**Norfolk
 and Western
 RAILWAY**

CARRIER OF FUEL SATISFACTION

1 Smooth operating, new type retractable arm... strong, rigid, unbelievably light in weight and easy to operate all day.

2 All work is plainly visible at all times... no obstructions in the line of vision. It's easy to see every cut as it's being made.

NEW... NEW... NEW

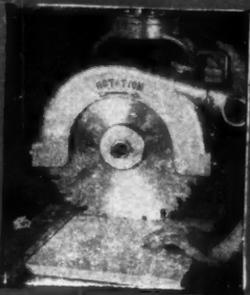
Radial SKIL^{*} Saw Better 12 Ways

3 Accuracy to within 1/100 of an inch for the life of the machine gives you "picture frame" precision on every cut you make.

4 Double-row adjustable load carrying bearings on heat-treated, precision ground steel rails for constant alignment of arm.

5 All adjustments can be easily reached from the working position... no hide-and-seek for measurements or blade angle.

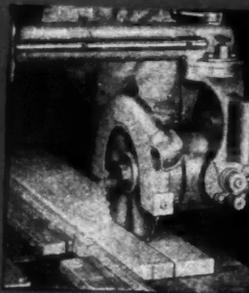
6 Finger-tip pressure is all you need... the saw does its work with a minimum of effort on newly designed retractable arm.



Cross-cut



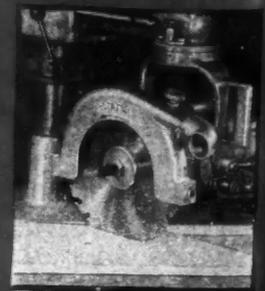
Bevel Cross-cut



Rip

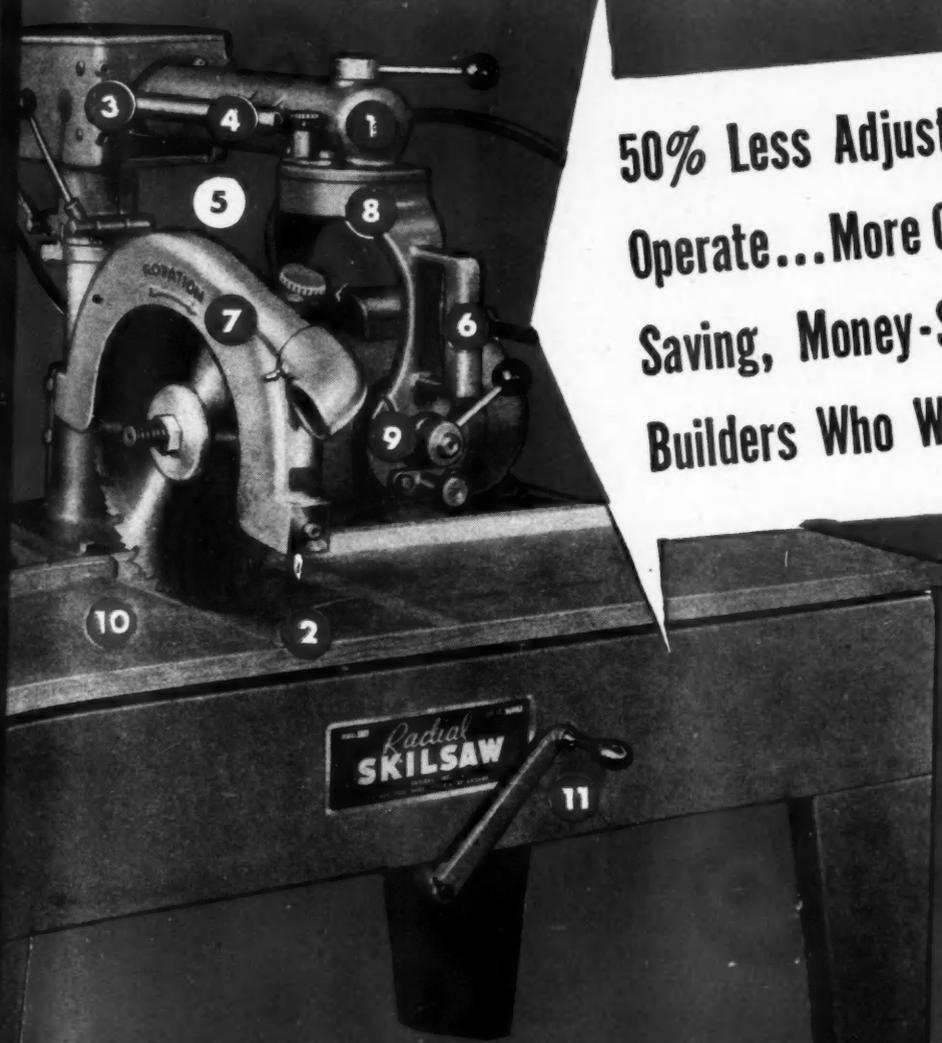


Bevel Rip



Alter

50% Less Adjusting Time... Easier to Operate... More Cuts per Day... 12 Time-Saving, Money-Saving Features... for Builders Who Want to Cut Their Costs



7 One-piece retractable saw guard provides maximum safety... removable in seconds.

8 Scales are large... easy to read... tell you instantly where the exact line of cut will be made.

9 Sturdy construction for years of hard use. Typical SKIL Tool quality throughout.

10 Plenty of room to set up jobs... with sawing head fully retracted it's easy to position the material to be cut.

11 Retractable elevator handle for quick, accurate adjustments on depth of cut... one full turn raises or lowers blade exactly 1/8 inch... half turn, 1/16 inch and so on.

12 Felt wicks keep rails free of dust and dirt at all times... a refinement that keeps Radial SKIL Saw working better... longer.

● 14 inch, 1 1/2 and 2 h.p. models with maximum cut-off capacity 3 1/2" x 14"... 16 inch, 3 and 5 h.p. models with maximum cut-off capacity 4 1/2" x 13 1/2".

See your Distributor today about a demonstration.

SKILTOOLS



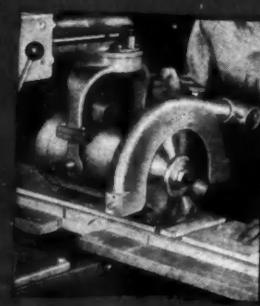
Made by SKILSAW, INC.

SKILSAW, INC.
3033 Elston Ave., Chicago 30, Ill.
Factory Branches in Principal Cities
In Canada: SKILTOOLS, LTD.,
46 Peabody St., Toronto, Ont.

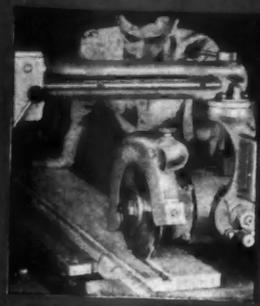
*SKIL Saw is made only by SKILSAW, INC.



Bevel Miter



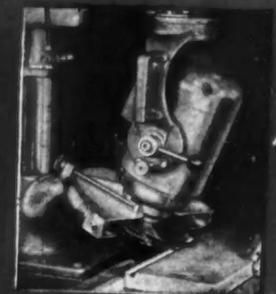
Dado



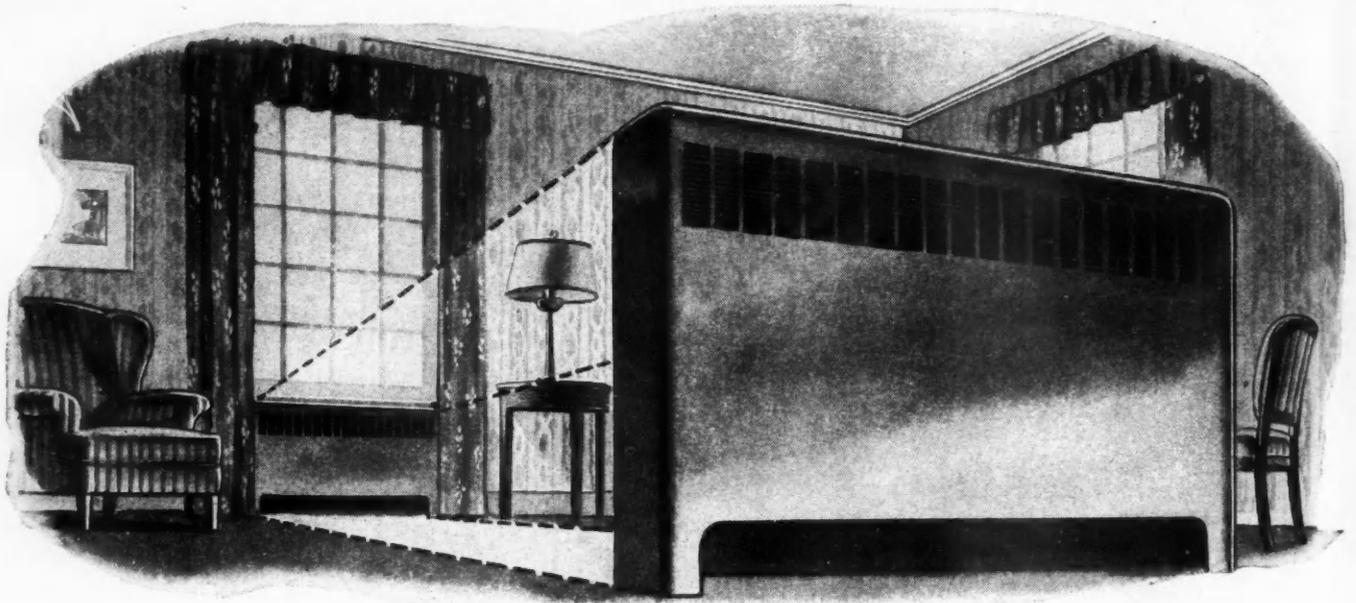
Plough



Rabbet



Bevel Rabbet



CUT YOUR COSTS with Nationally Advertised TRANE Convector-radiators

- ★ **Costs less** than any other type hot water or steam system
- ★ **Nationally advertised**—packed with consumer appeal
- ★ **Trouble-free**—“Lifetime” metal heating elements
- ★ **Available now**—from jobber’s stocks in most areas

Now, thanks to modern manufacturing methods and economical distribution, Trane Convector-radiators *cost less*. Both their purchase price and installed cost are less than any other type units for hot water or steam heating systems. Trane Convector-radiators offer you an important saving in your battle to reduce building costs. Added to this, these Trane units provide every desirable heating advantage.

Prospective customers for your homes *want* Trane Convector-radiators. That want is being created by a national advertising program. Ten million future home owners will be told, not once but many times, that *every home can now have luxury heating at budget prices* with the Trane Convector-radiator.

Builders everywhere are cashing in on the low cost and customer appeal of the Trane Convector-radiator. At the same time they are assuring their buyers an attractive, clean, easy-to-control heating system. And best of all, these outstanding heating units are available now from jobber’s stocks, along with Trane Hot Water or Steam Specialties to complete the systems. For further information write for Catalog A3.



TRANE

Manufacturing Engineers of Equipment for
HEATING AND AIR CONDITIONING

THE TRANE COMPANY, LA CROSSE, WISCONSIN • Also TRANE COMPANY OF CANADA, LTD., TORONTO, ONTARIO



When you
**BUILD or
REMODEL**



Here's Where
**DOUBLE DUTY INSULITE
MEANS**

Double FOR THE MONEY!

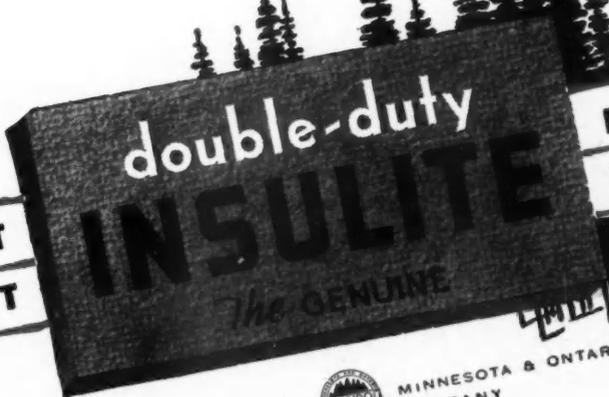
Take off the roof and look at those outside walls. That's where double-duty Insulite gives double for the money, because it does **TWO** things for the price of one:
(1st) IT BUILDS (2nd) IT INSULATES

Insulite Sheathing builds a stronger weather-tight house. Insulite Lath provides a rigid plastering surface. And each one offers good *insulation* qualities as a bonus! When you use Insulite, you can build better competitive houses—sell them faster—make more profits—and have more satisfied customers.



ONE MATERIAL
Double USAGE

**INSULATES AS IT
BUILDS AS IT**



**BUILDS ✓
INSULATES ✓**

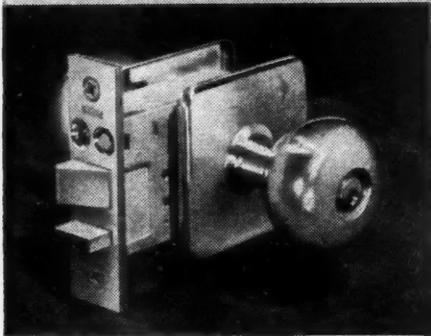
"Insulite" is a registered trade mark, U.S. Pat. Off.

INSULITE DIVISION
PAPER  MINNESOTA & ONTARIO
COMPANY
MINNEAPOLIS 2, MINNESOTA

ON THE
RECORD AT
SARGENT & COMPANY

THE
NEW

SARGENT
INTEGRALOCK*
PRECISION BUILT



Entrance door lock of LIFETIME QUALITY

●The Sargent Integralock* is a new type of lock, completely modern both in appearance and in engineering design. It is easier and quicker to install because it is a pre-aligned factory assembly. It gives a lifetime of service without maintenance because it is made entirely of strong pressure-formed metals, it's tamper-proof and it contains 30% fewer moving parts. In all, it is one of the strongest, safest locks ever made and one of the handsomest to grace the entrance door of a home.

●Another new Integralock feature is the shear pin which has been engineered into the outside knob to prevent the knob from being forced. Under extreme torsion this pin gives way. Then the knob—freed from the mechanism—spins harmlessly. Yet the regular key to the lock will continue to retract the bolt in the normal way. The broken pin, like an electric fuse, is quickly and cheaply replaced.

●For the name of your Sargent distributor and further information about the Integralock, write to Sargent & Company, Water Street, New Haven, Conn.

Quick Delivery from
Sargent Distributors Everywhere

*Trade Mark



SARGENT & COMPANY
NEW YORK • NEW HAVEN, CONN. • CHICAGO

News, Views
and Comments

On and Off the Record

JERRY BUILDING—A contemporary journal, evidently much concerned with the problem of rising building costs, amazingly suggests the elimination of numerous practices long known to be essential to sound building. What the journal advocates is widespread adoption of jerry building practices which always have been anathema to reputable builders, and opportunity to chiselers who skin jobs to make exorbitant profits.

BUILDING STANDARDS—There is not now, and there never has been any justification for advocating jerry building. Any policy of reducing construction standards below the minima necessary to insure lasting, safe and sanitary homes is reactionary and dangerous, regardless of what reason is advanced in support of the policy.

BUILDING COSTS—The facts are, that while building costs are high, they are no higher than costs of other essential commodities and services. Costs will be cut only when the purchasing power of the dollar changes, when competition for jobs results in higher man-hour production, and when there is again a reasonable balance between supply and demand. Jerry building as a panic measure to reduce costs, will reduce nothing but building standards.

BETTER BUILDING—As *American Builder* sees it, one of the several major jobs of the building press is to search everlastingly for better home design, better materials, better equipment, better construction technique, publish the information, and encourage its use, all to the end that American housing standards continue their year-to-year evolution to higher planes.

COMPETITIVE FORCES—These will determine costs and prices of quality building, jerry building and canvas tents. And of the three, quality building will be least affected by cost fluctuations. The need of the hour is for ever better home building standards. The current price spiral will run its course and be forgotten. The buildings of this era will stand and be remembered, and the integrity of the builders of this era will be determined by the ability of their products to reflect lasting values.

TAXES AND COSTS—Federal, state and local taxes require about one-third of the national income. Taxes are business operating costs and family mainten-

ance costs. They require higher prices. As long as the cost of government stays where it is or rises, prices will stay where they are or rise.

T-E-W BILL—Advocates of the bill are reviving the old claim that passage of the bill will increase the number of new housing units. Between now and the time Congress re-convenes, the big job of the home building industry is to prove to the public that no legislation, T-E-W or any other bill, will accelerate the pace of home building by as much as one house, but will transfer to government forces a part of home building, and at costs far in excess of what private builders take for the same work.

VETERAN'S PREFERENCE—Where a number of dwellings are to be built on a certain site as one project, the period of exclusive public offering to veterans which is applicable to the first or "model" dwelling (the period of construction and 30 days thereafter) may now be used for any or all of the other dwellings in the project which are substantially the same, even though their construction is completed later.

NAHO—It means National Association of Housing Officials. It claims the world's largest housing market, "because we are talking about the 964,879 dwellings in 5,584 separate developments in the United States public housing program . . . local housing authorities and municipalities have filed plans for 360,099 new dwellings in more than 300 cities in 40 states. Our members want to start this two billion construction right away. Most can't because Congress hasn't yet given the go-ahead signal. We don't propose to forecast what Congress will do, but eight states have already voted funds to expand the low-rent housing program."

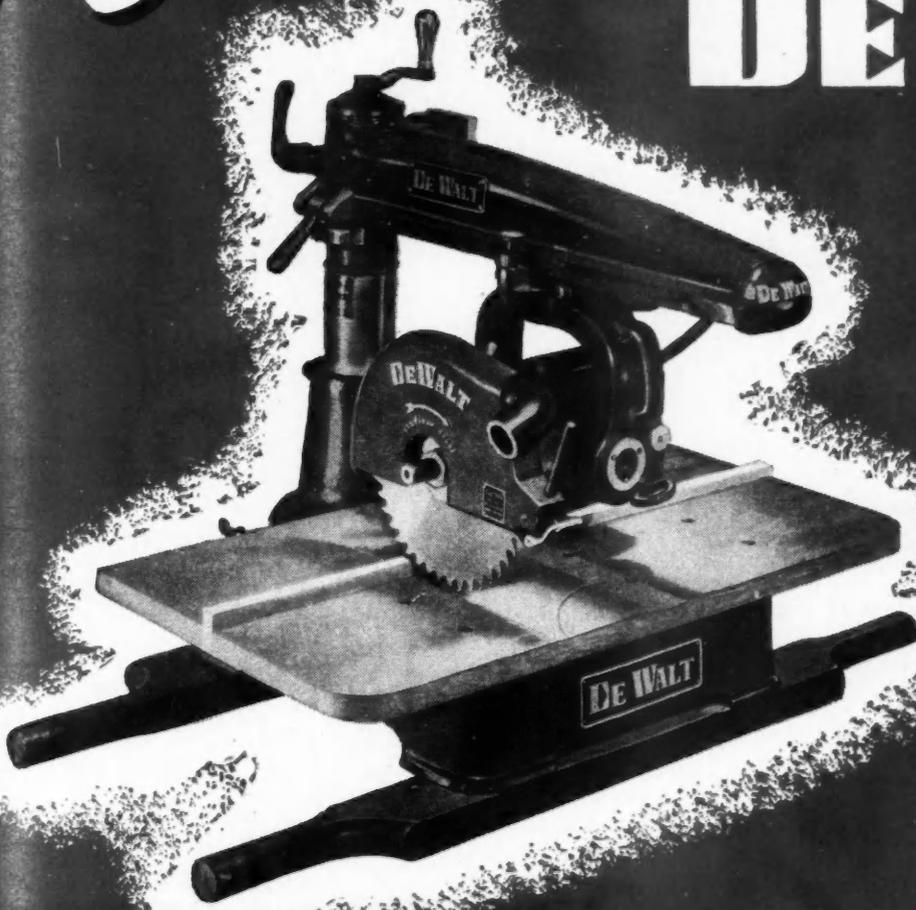
IT IS HERE—From the foregoing, can anyone doubt that public housing is upon us? The public housers impatiently await the passage of the T-E-W bill, and expect it. Worse than that, public housing now has its local organized branches ready to do business, and headed by a national organization holding an annual national convention with exhibits.

NOT IDLE—The public housers have been very active since Congress adjourned. So have private builders, but with the business of building homes, not with the business of spending tax money.

BACK AGAIN...AND BETTER THAN EVER!

Portable

DE WALT

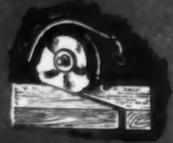


This ever-popular, low-cost DeWalt is the builders' first choice for fast, precision cutting. It's *first* in real value—*first* in safety and long-life dependability. When you put it on your building job, this DeWalt will give you "tops" in performance. It's the machine you should own to build more houses faster, better and at the lowest cost. It's a machine you can get quickly. Write for catalog. DeWalt, Inc., 111 Fountain Ave, Lancaster, Penna.

DE WALT



.. a cut-off saw!



.. a miter saw!



.. a rip saw!



.. a dado machine!



.. a shaper!



.. a router!



.. a rafter cutter!

ALL THESE AND MORE
IN ONE... for the
PRICE OF ONE!

THE SAW THAT'S FIRST WITH BUILDERS

more houses than buyers!



Don't wait for this to happen to you! See your houses sparkle with life when finished with Pratt & Lambert Paint and Varnish. Here are smart, new colors, in ready-to-use wall finishes, enamels and house paints that will speed up sales — not only today but when buyers are not so plentiful.

When your houses are ready for painting, waste no time in mixing, tinting or trying-out. Your painters open the can and are ready to start — with the color you picked, the right color. Painting costs are cut to the minimum for the up-to-the-minute P&L colors spread over more surface in less time and hide in fewer coats.

Put this strong selling force to work for you with Pratt & Lambert Paint and Varnish. If you haven't already received them, write now for copies of the modern P&L Painting and Varnishing Specifications covering high-grade, medium-priced and low-cost homes. Pratt & Lambert-Inc., 80 Tonawanda St., Buffalo 7, N.Y.

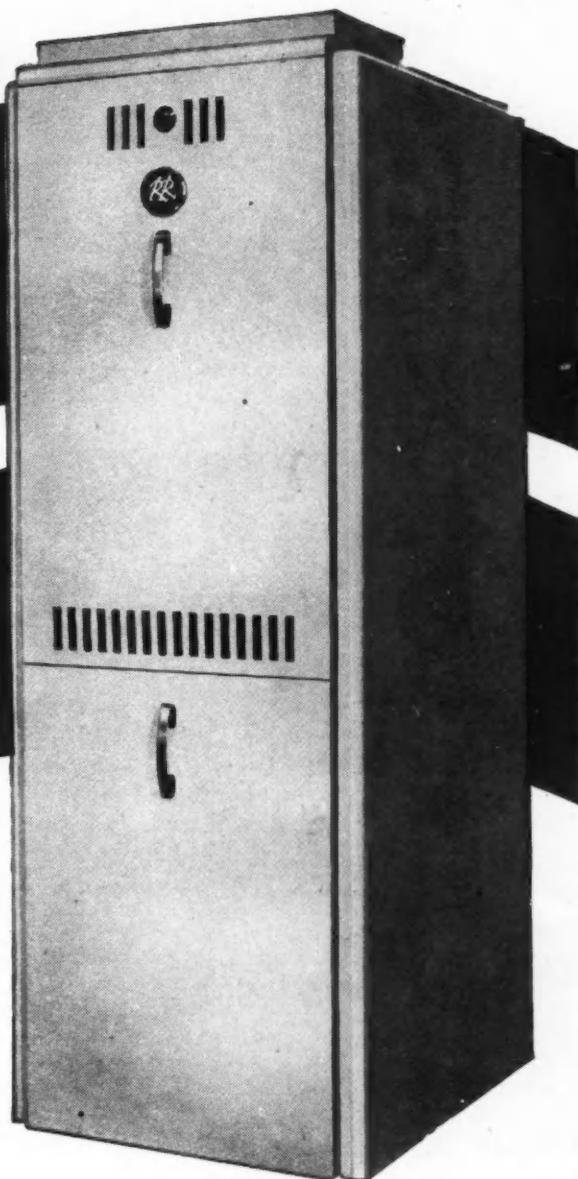


PRATT & LAMBERT
paint and varnish



More Prospects Become Customers

when you install
RICHMOND WINTER AIR CONDITIONERS



Sales are faster with Richmond because these Winter Air Conditioners have whole-family appeal. Women respond to their styling — men recognize their mechanical superiority.

Richmond Winter Air Conditioners are at home upstairs or down . . . fit in approximately 4 to 6 sq. ft. Heat, humidify, filter and circulate—all in one unit. Spun glass filters are easily renewed. Blower fan is rubber mounted for quietness. Completely packaged, quickly installed, Richmond conditioners cut profit-eating call-backs to a minimum. Carry *both* AGA approval and a one-year replacement guarantee. Get full details from your wholesaler or write Richmond Radiator Company, 19 East 47th Street, New York 17, N. Y. for name of nearest Richmond wholesaler.

SHIPPED COMPLETELY ASSEMBLED

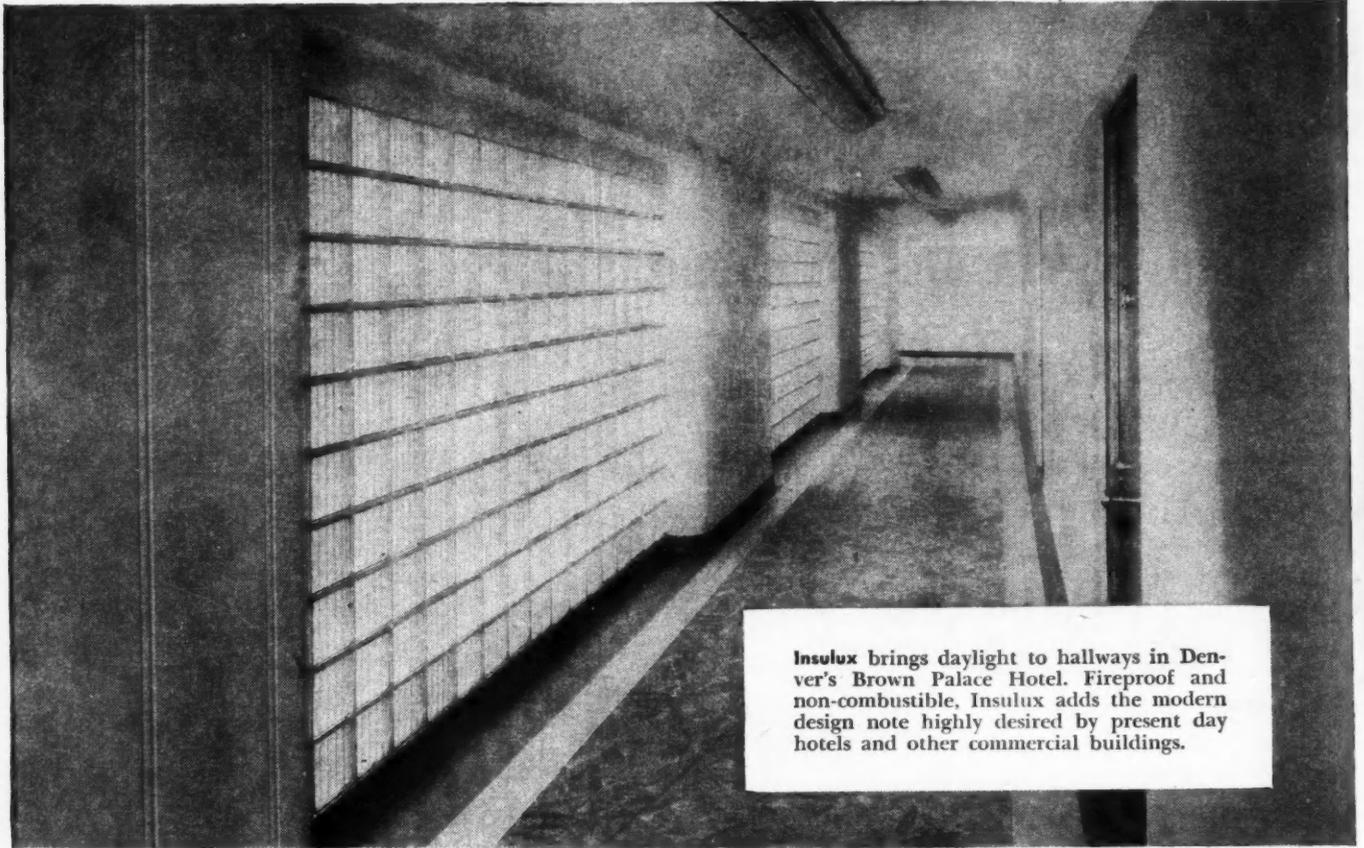
Winter Air Conditioner: Four sizes: 66,000, 90,000, 115,000, and 140,000 Btu input. Easily installed. May be converted to floor-type heater by addition of special cowl.

FACTORIES AT METUCHEN, N. J., MONACA, PA., NEW CASTLE, DEL., UNIONTOWN, PA. (2)



RICHMOND RADIATOR COMPANY

Affiliate Reynolds Metals Co.



Insulux brings daylight to hallways in Denver's Brown Palace Hotel. Fireproof and non-combustible, Insulux adds the modern design note highly desired by present day hotels and other commercial buildings.



Over \$6,000,000 has been spent on modernizing the Brown Palace Hotel since its erection. In the last ten years Insulux installations have added new beauty, lowered maintenance costs, created space for additional rooms.

How Insulux registers . . . with a fine, historic hotel!

INSULUX Glass Block registers high at the world-famous Brown Palace Hotel in Denver, Colorado!

First installed 10 years ago, Insulux floods suites and stair wells with soft daylight, adding cheerful surroundings to this colorful Western hotel.

For remodeling or construction on large jobs or small, contractors are taking advantage of the many benefits of long-lasting, highly profitable Insulux.

The well known insulating value of Insulux; resistance to rot, rust and corrosion; daylight with privacy—are all top selling points to discuss with prospective building customers. Insulux requires no painting or other maintenance . . . brings daylight to dark corners—more good reasons why progressive builders everywhere specify Insulux Glass Block!

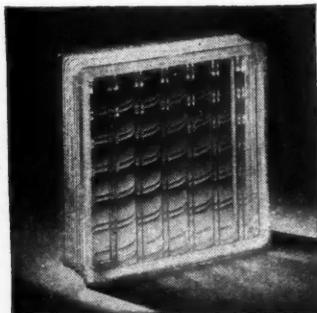
It will pay you well to investigate easily-installed Insulux . . . the functional building material that solves many complex construction problems.

For complete information on the practical uses of Insulux Glass Block, for new building or modernization, write Dept. D-59, Owens-Illinois Glass Company, Insulux Products Division, Toledo 1, Ohio.

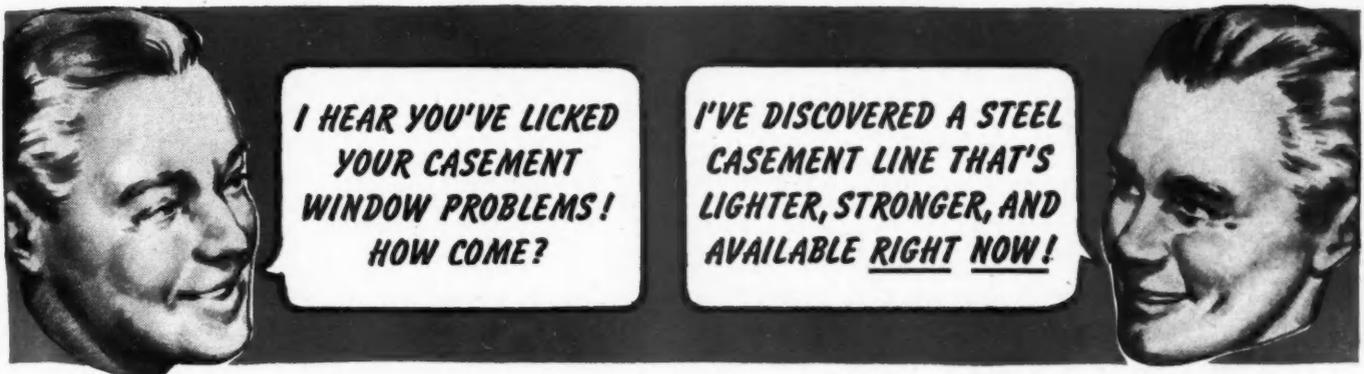
OWENS-ILLINOIS

INSULUX
GLASS BLOCK

Insulux Glass Block is available in three sizes—many attractive and functional face patterns. Insulux has solved many complex building problems. Investigate Insulux now!



REVOLUTIONARY NEW METHOD OF MANUFACTURING STEEL CASEMENTS Provides *Immediate Delivery!*



You Profit by these Amazing Manufacturing Short-Cuts!

● Remarkable New Production Methods Bring Streamlined Automotive Assembly Line Procedure Into Casement Manufacturing!

● Patented Aluminum Electropainting Operation Makes Casements Easy to Finish, Reaches Every Exposed Surface, Lasts Longer, Has Real Eye Appeal!

You Get these Big Steel Casement Benefits!

1. Lighter, Yet Stronger Casements . . . by Actual Laboratory Tests!
2. Electropainting . . . for More Protection; Longer Lasting Finish!
3. Machined Parts for Perfect Fit, Easier Installation!
4. Immediate Delivery!

Here at last . . . the steel casements to solve all your window problems! Available **RIGHT NOW** . . . straight from our completely new, modern manufacturing plant . . . lighter, stronger (*by actual laboratory tests*), more perfectly-built steel casement windows . . . precision-machined for faultless fit, aluminum electropainted for lasting finish! STEELCRAFT Casement Windows provide you with exceptional advantages of engineered construction and durability . . . *plus* prompt delivery . . . resulting in complete satisfaction for the home owner!

Send for Complete Descriptive Literature!



LIGHTER YET STRONGER

. . . pound for pound! Sensationally new manufacturing methods give STEELCRAFT Casements more strength at less weight, more pound-for-pound construction advantages than any other casements!

Immediate Delivery!

We Deliver Within One Week from the Time Your Order Reaches Our Factory!

MAIL THIS COUPON TODAY!

	STEELCRAFT MFG. CO. 9019 Blue Ash Rd. Rossmoyne (Cincinnati), Ohio Please send me, without obligation, complete descriptive literature on STEELCRAFT Casement Windows.
	Name..... Position..... Business Address..... City.....State.....

STEELCRAFT
 MANUFACTURING COMPANY
 ROSSMOYNE (CINCINNATI), OHIO

We quote

"...a good article always will be praised..."

CAMDEN 4-9884

Camden Roofers' Supplies

CAMDEN, NEW JERSEY

510-12 CHESTNUT STREET

August 10, 1947

NAILS

SHINGLES AND ROOFING

SHEET METALS

30 GALLON BOILERS

In 100-lb. Cartons and Paper Bags



Now AVAILABLE!

FURNACES PIPE

ADJUSTABLE ELBOWS

The Texas Company
c/o Mr. B. Reese
205 E. 42nd Street
New York, New York

Dear Mr. Reese:

In the past few months we have been receiving quite a few compliments on your SOLID ASPHALT PRODUCTS, and we thought it would be a good thing to pass same on to you.

Our roofing mechanics have been greatly impressed by the improved packing of your SOLID ASPHALTS, whether in bags or cartons. These packages are packed solid and tight, so that when they are unloaded from railroad cars, and delivered to our mechanics, they can pack them away neatly and when ready to use they are clean and as fresh as just being unloaded. They also compliment you on the easiness of peeling off the paper or cardboard.

Our mechanics especially bring out the fact that there is practically no RESIDUE in the kettle left, and the Asphalt has a smooth uniform flow requiring very little attention by the kettle man.

Trusting this information will help your company realize that a good article always will be praised, we are.

Very truly yours,

David Goldschneider
CAMDEN ROOFERS' SUPPLIES



TEXACO SOLID ROOFING ASPHALT

Asphalt SHINGLES and ROOFING



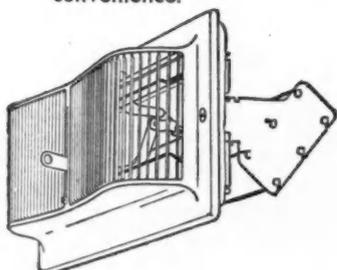


HONEYWELL REGISTER

gives you DRAFT-FREE DIFFUSION

DESIGN FEATURES

1. Balancing becomes a QUICK, ONE-MAN job.
2. Branch quadrants can be eliminated, when velocities are under 800 fpm.
3. Installation costs are drastically cut.
4. Smart new appearance and functional design.
5. No streaks on walls and ceilings.
6. Manual shut-off for fuel saving and convenience.



Self-contained volume dampers accurately meter the air with an adjustable lever at the register itself. Locking feature guards against unbalancing system.

EXCLUSIVE features of the new Honeywell Air Diffusion Register afford true, draft-free diffusion. The gently curving lines, which enhance the register's appearance, assure even air diffusion throughout the room.

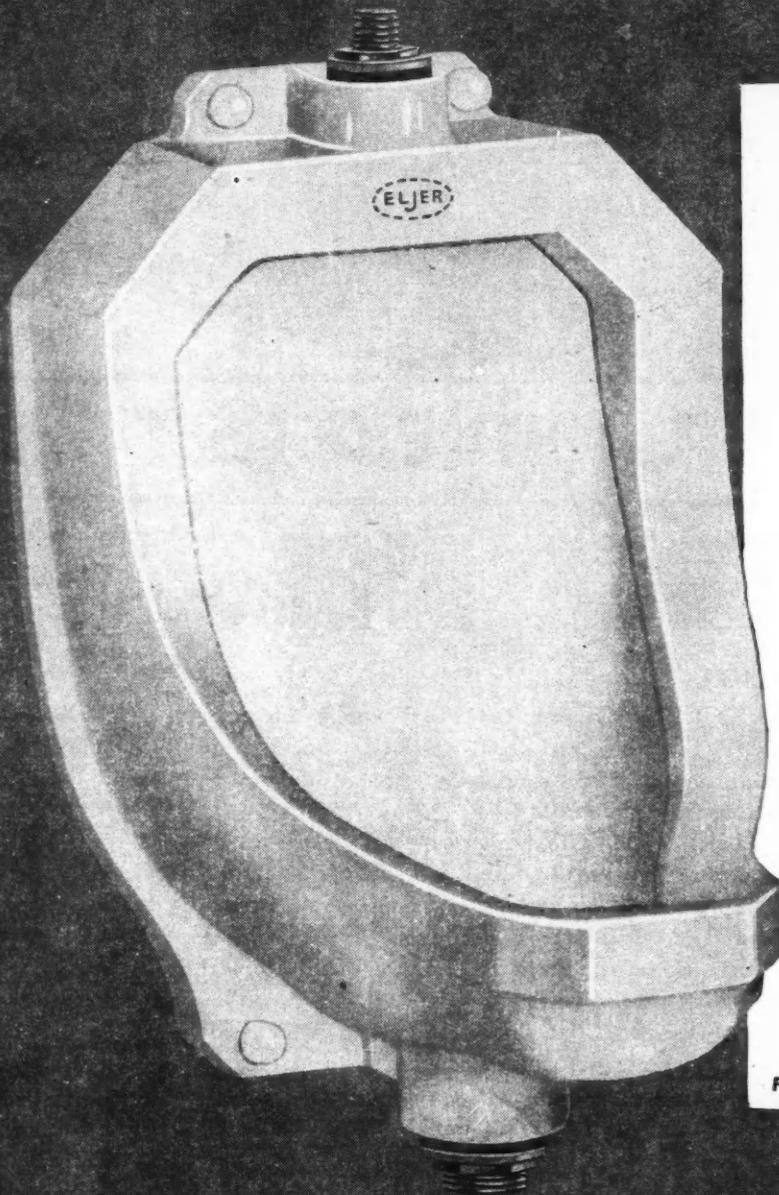
Fixed angle adjustable turning vanes—an integral part of the register—prevent turbulence of the air stream. Simplified one-man balancing and elimination of quadrants drastically cut installation costs and effect a saving of labor.

Investigate the many advantages of this remarkable new register. Whether of the high or low wall type, you'll want to include it in every new home you build using forced-warm-air. Remember, you and your customers benefit through more efficient, draft-free performance plus installation economies.

The new Honeywell Air Diffusion Register is available now. Write today for complete information. Minneapolis-Honeywell, Minneapolis 8, Minn. In Canada: Toronto 12, Ontario. Branches and distributors in all principal cities.



THE NEW BEDFORDSHIRE by ELJER



for
SCHOOLS, OFFICE BUILDINGS,
FACTORIES, INSTITUTIONS,
COMFORT STATIONS...

Here is a new, popular priced, *Vitreous China Urinal* by Eljer that will "open the door" for you on many jobs.

Easy to clean and keep clean, this well-designed piece appeals to architect and builder alike. The hard, glass-like surface resists stain and reduces janitor service to a minimum, an economy feature which appeals to every building manager.

Ask your Eljer Distributor about this fixture or write direct to Eljer Co., Box 192, Ford City, Pennsylvania.

Fixture illustrated, New Bedfordshire No. B-8230

ELJER CO.

FACTORIES AT FORD CITY, PA.
SALEM, OHIO · LOS ANGELES, CALIF.

MAKERS OF FINE PLUMBING FIXTURES SINCE 1904



MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

Heavy Interest in NAHB Chicago Show Revealed by General Electric Survey

Just who will attend the 1948 Convention and Exposition which the National Association of Home Builders will hold in Chicago the week of February 22? What will visitors expect to get out of it? What will they think of the things they see there? A pretty complete answer to these questions is found in a survey which the General Electric Corporation made of the 1947 Home Builders' Show.

That survey, which was conducted by the appliance and merchandise department of G.E.'s Distribution Services Division, reveals that the majority of those attending were either builders or contractors. Fifty-seven per cent of those interviewed, either personally or by mail, were in the first category. Twenty-one per cent were in the second. The remaining 22 per cent included representatives of mortgage and finance

companies, electrical and appliance dealers, architects, real estate agencies, magazines and building associations.

Over 40 per cent of the visitors were looking specifically for new ideas and trends—45.6 per cent in the case of the builders and contractors. Nearly a third of this group were looking for new materials, equipment, products and new devices. About one-fifth professed only general interest. It is noteworthy that less than 10 per cent of those interviewed personally and by mail were attending to see other visitors, to make contacts or to get data on materials.

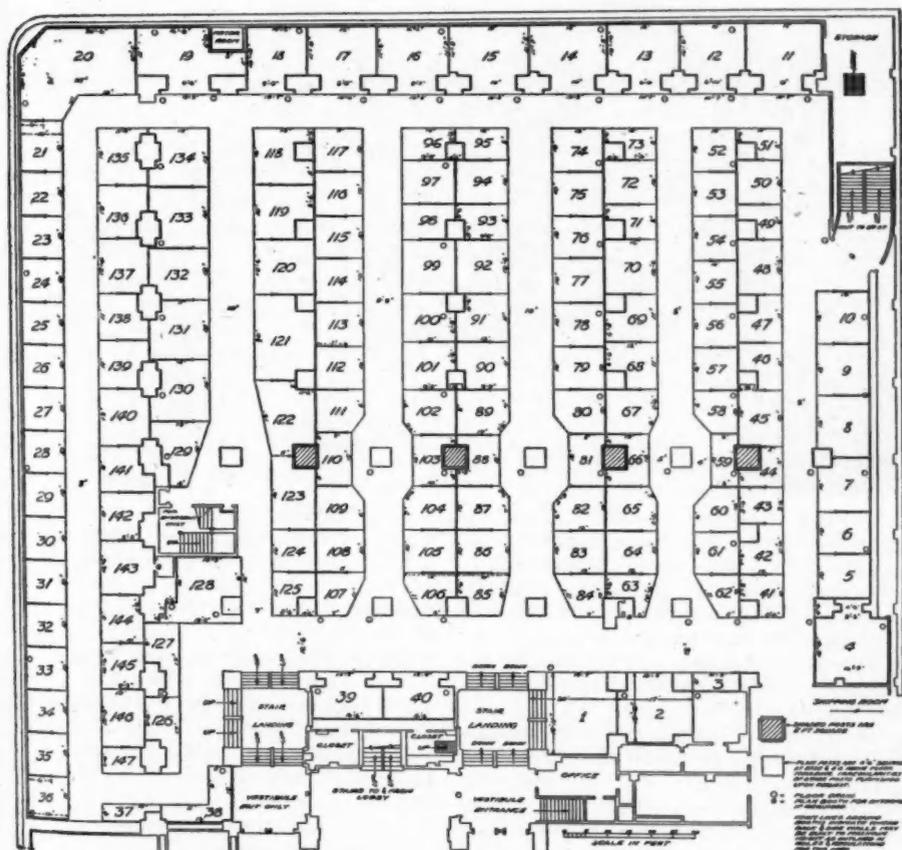
Quite a few builders had specific problems to which they sought answers. About one quarter of those interviewed personally were in this group. The mail questionnaire showed 37 per cent wanted specific data. A major problem was the availability of

materials and equipment. Heating problems also got a high mention, with radiant heating exciting most interest.

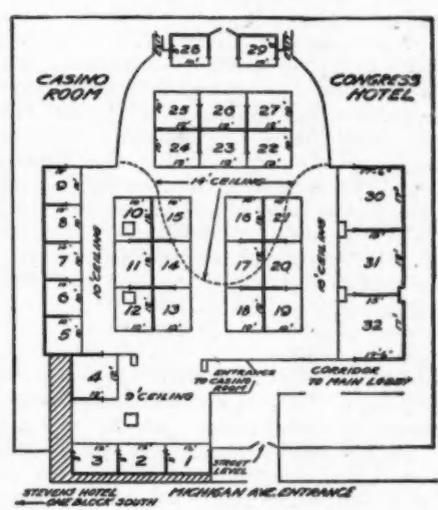
The survey showed that 80 per cent of those who did bring specific problems to the show found answers there. Sixteen per cent of the builders and contractors answering said they found a full solution and 43 per cent admitted finding a partial solution.

The exhibits were credited with being most helpful in providing solutions by 42 per cent of the builders and contractors. Ten per cent ranked convention meetings first and 39 per cent said both were equally helpful. These figures apply to the personal interviews. The mail questionnaires showed 68 per cent thought exhibits and meetings equally helpful with 22 per cent giving exhibits first place and 10 per cent giving the meetings first place.

Does actual business result from the show? The survey says "yes." In personal interviews, 57 per cent of builders and contractors replied that they had placed definite orders or recommended purchases.



FLOOR PLAN-ANNUAL EXPOSITION
NATIONAL ASSOCIATION OF HOME BUILDERS OF THE UNITED STATES
STEVENS HOTEL, CHICAGO



MANY exhibitors were disappointed at the 1947 NAHB Show because of limited space for display. Next year, more space will be available because there will be two exhibition halls, the one at Hotel Stevens, used this year, and another at the Congress Hotel one block north of the Stevens. Floor plans above show both. No booth equipment will be furnished by the show management. Each exhibitor will be his own stage manager. The show will be open four and a half days—Sunday, Feb. 22 from 2 to 8 p.m.; Monday through Wednesday, 10 a.m. to 10 p.m. and Friday, 10 a.m. to 5 p.m.

Plan Now to Attend or Exhibit at the NAHB Convention February 22-26, 1948

Chicago Builders Give Veterans Dinner; England's Building Situation Described



SEATED: Nathan Manilow, president of the Chicago association, and De Loss Walker, speaker at the veterans' dinner

Members of the Chicago Metropolitan Home Builders Association were hosts to World War II veterans of Chicagoland and the officials of veterans' organizations at a dinner in the Hotel Sherman Thursday evening, October 2. With more than 600 in attendance, De Loss Walker, nationally-known public speaker and lecturer, delivered the featured address. Choosing as his subject, "Vets' Future in America," Mr. Walker outlined in his customary emphatic and entertaining manner the basic principles of the American way of life.

President Nathan Manilow, who presided at the dinner, talked briefly regarding the purpose of the "Bring a Vet" dinner. He explained that the home builders of Chicago, as well as builders all over the nation, are doing their level best to build good houses at right prices as fast as they can, and he urged the veterans to keep in mind some of the difficult problems which plague builders in their efforts to do a good job fast.

Mrs. Millicent Pleydell-Bouverie, of London, England, talked to a group of Chicago builders September 23 on home building in England, discussing some of the results of public housing there.

Mrs. Pleydell-Bouverie is in public relations work. She lived in London throughout the bombings, almost lost her life twice, and was temporarily blinded by a V-2. This is her first trip of any kind since 1939, and she is thoroughly enjoying the United States and our good food, which, she says, has already improved her general health in the short time she has been here. Following is a digest of her description of building conditions in England.

Under government directives, the private builder, when he is allowed to build, has a cost limitation on his homes of \$5,200 in rural areas and \$5,600 in urban areas. This sum includes the cost of land, roads, and sewers, in addition to the house itself. The \$5,600 house is limited to 900 square feet. This is normally a two-story house with 450 square feet on each floor—the main floor consisting of a living room, dining room, and kitchen, and the upper floor three bedrooms and a bath.

The Town and Country Planning Bill,

recently passed, is a huge, bulky document about which lawyers are already saying, "How are they going to work it out?" Under this bill, property owners must submit any plans they have to build to the government for approval. The government also determines what the development tax on the project will be, and this tax must be paid before any work is begun.

Under this bill, the government can requisition any land from its owner. This has already been done with a good deal of property bombed during the war.

Builders might be interested in what happens when the union worker is put on a weekly wage scale: The average brick layer is laying about 300 bricks a day, whereas, it is estimated he could lay about 900 to 1,000. The unions will not stand for piece rates, although the builder is agreeable to paying more money for more work. As a result, Mr. Bevin is right now trying to get union leader and employer together and offer bonuses for improved output.

Although labor rates vary in the different sections of the country, the skilled laborer in London is averaging about 75c an hour at the moment.

NAHB President Carr Visits R. I. Chapter



NAHB President Edward L. Carr seldom has spent a busier day than he put in at Providence, R.I., on his recent visit to the Home Builders Association of Rhode Island. Builders were meeting in his room at 9:30 in the morning, and from then until noon, he made a tour of many home construction projects in the Greater Providence area.

At noon, he had an informal luncheon with officers of the Industrial Trust Co., and at 3:30, he addressed a large gathering at the Home Planners Clinic. At 6, he was guest at a dinner of the Rhode Island association, and at 8:30, addressed the members at the Providence Gas Company auditorium.

President Carr, in his talk to the Home Planning Clinic, stressed the fact that building costs are not going to drop in the immediate future and that nothing is to be gained by waiting to build.

Hartford Builders Association Picks New Executive Secretary

The Home Builders Association of Hartford County, Conn., has its first full time executive director. Shipley D. Burton has been named to that post, according to Henry F. Tetrault, association president.

Mr. Burton formerly was with the Washington Home Builders' Association and has had many years' experience in association work. A native of Salt Lake City, he received his education at the University of Utah. For 10 years, he was state association's relations director for the American Trucking Association at Washington. Prior to that, he served the association as its western representative.

After leaving the truckers' organization, Mr. Burton served for a year as director of the National Clean Up and Paint Up organization, leaving that post to go with Washington Home Builders.

He is a graduate of the National Institute for Trade Association Executives and a member of the American Association of Trade Executives.

Mr. Burton fills the position left by the retiring executive director, Don Shively, executive of the builders' division of the Hartford Gas Company, where Mr. Burton will make his office temporarily.

He emphasized his conviction that private enterprise can overcome housing problems, if unencumbered by federal regulation. He pointed out that federal housing has accomplished little in clearing slums and blighted areas. Builders must form their own plans for slum clearance, he indicated.

The picture above was taken at the Providence meeting. Seated, left to right: John Olsen, NAHB vice-president; Nazzareno Meloccaro, NAHB President Carr, Laurence Paolino, Amadeo Galli, Ralph DeLeo. Standing: Stanley Slocum and Chester Martin, Industrial Trust; Anthony Cianci, R.I. president; Charles R. Brunelle, executive secretary of Boston association; Edward J. Bigoness, Angus McNeil, Boston association president; John Mansolillo, Anthony Viola, Jr., and Earl W. Taylor, R.I. vice-president and NAHB director.

Builders' Refresher Course Sponsored by Cleveland Unit

The Home Builders Association of Greater Cleveland, cooperating with the Cleveland Trade School, is sponsoring a "brush-up course on building know-how." Evening classes, limited to 25 builder-students, will run for 15 weeks. Each class is three hours long, conducted on a semi-forum basis. The course began at the end of September and will wind up in December.

Subjects covered will include home planning; layouts and architectural trends; basements, foundations, drainage, waterproofing; box sills, lumber shrinkage, plaster cracks elimination; joists, material estimation, code specifications; wall construction, framing, sheathing; wall covering, roofing, stairs; kitchen designs, room layouts; millwork and trim; heating and ventilating and decorating.

Anderson Picked to Manage South California Home Show

Earl S. Anderson, for 10 years a construction industry executive of the Los Angeles Chamber of Commerce, is general manager of the Construction Industries Exposition and Home Show of Southern California, big construction event, both in attendance and exhibit space.



EARL S. ANDERSON

Mr. Anderson has been a prominent figure in the Los Angeles construction industry. Formerly, he was state registrar of contractors and was secretary of the committee which revamped the Los Angeles' building code. During the war, he served as vice-chairman of the Los Angeles' War Housing Committee and in 1944 was secretary of the chamber's civic development committee. He has been a vice-president of the home show since its inception.

St. Paul Ads Educate Public

In a series of weekly advertisements, in the St. Paul Pioneer Press, the St. Paul Home Builders Association, together with the Builders' Exchange of St. Paul, and the St. Paul Lumber and Millwork Dealers, sponsored publication of information about construction costs as compared with other costs. The ads carried out the theme that, "A smaller portion of family income is required today to purchase a home than before the war."

Cortright's Column

By Frank W. Cortright

Executive Vice-President, National Association of Home Builders of the United States



We must never let it happen here! That's my earnest conviction after observing the continent-wide home building debacle during a month's tour of Europe where housing has become an instrument of national policy. Private enterprise is completely eliminated from the picture.

Now every home in England will be built and owned by the government. Many political leaders there foresee eventual nationalization of the land. Nearly two years ago, the labor government initiated what it termed a "comprehensive programme" to provide new construction for both sale and rent. It decided that for every four houses built by local public housing authorities and owned by them, private builders could build one house for sale.

Though the government staked out four-fifths of the operation for itself, licensed private builders constructed 45,520 houses, and local housing authorities built only 54,250 units in the same period. An embarrassed socialist government immediately cancelled all private enterprise housing construction. Many builders in England now face extinction unless they secure local authority contracts to construct government housing.

A serious threat to contractor-builders still struggling to stay in business is the number of jobs being started where the local housing authority employs labor direct, eliminating all contractors and sub-contractors. That proposition actually is being advanced in the United States by public housing advocates. How England, which is already verging on bankruptcy, can hope to finance from the public treasury the hundreds of thousands of homes so vitally needed is indeed a mystery.

Extension of rent control in European countries is a major factor contributing to low production. It completely eliminates incentive to construct housing for investment purposes. Rent control has been in effect in France since 1914. Construction costs since then have mounted 30 to 1, but the increase permitted landlords is only 4 to 1. This substantially blocks new construction in that country. Carrying charges for most properties are far in excess of rental income.

Despite government claims, the new English homes would take Americans back 30 years or more. The "modern" bathrooms, kitchens, fittings and fixtures going into new homes in England are the equivalent of what we put into houses about 1910. Regimented rows of public housing units are uniformly unattractive in design. They lack minimum heating facilities and what we consider elementary comforts.

The few new houses going up in France fall sadly below American standards, too. Although larger and better designed than those in England, they lack central heat and have only elementary plumbing. In Sweden, where housing conditions are more comparable to our own, new apartment buildings are of modern design, utilizing much glass. But in Stockholm, 85 per cent of whose people live in apartments, for each new unit built there are fifty applicants.

With low labor productivity and inefficient government operation of home building in Europe, the situation is unlikely to be relieved soon. In comparison, the housing outlook in America is very bright.

Behind the strangulation of building in Europe is one common thing which must serve as a grim warning to our own country: While housing in the United States is a personal problem for American families, in Europe housing has become an instrument of national politics and is beyond individual choice. With the breakdown of the capitalistic system and the inroads of socialism, much of the political control in Europe is expressed in housing. The private builder is almost entirely liquidated and complete control over new construction is invested in the State.

Cincinnati Association Conducted Tour Results in Favorable Publicity in Ohio



CINCINNATI Enquirer devoted eight column picture layout and two-thirds of Sunday real estate page to reporting findings on building association's conducted tour

The tour of housing in the Cincinnati vicinity, sponsored in September by the Home Builders Association of Greater Cincinnati for the benefit of the local press, achieved part of its main purpose. Cincinnati papers which reported the tour carefully did much to correct incorrect impressions of the general public.

Representatives of governmental and veterans' organizations who made the trip also got a better picture of just what is being done in housing in the big Ohio city. There was some careless reporting, which some who made the tour characterized as downright misrepresentation, on the part of one newspaper which is known to be strongly pro-public housing.

Cincinnati residents who picked up the Sunday edition of the Cincinnati Enquirer of September 21 found a very complete and uncolored account of the housing situation on the real estate page. Real Estate Editor Frank Ruhl of the Enquirer devoted nearly two-thirds of that page to illustrations of various housing projects and an account of the tour.

Ruhl reported that completed new homes this year probably would run around the 2,500 mark instead of the overly-optimistic 5,000 to 6,000 forecast last winter for the Cincinnati area. He also noted that the price range on homes in the immediate future would be from \$10,500 for the more modest up to \$25,000 for sumptuous homes.

Breaking Ground for Million Dollar Unit



MEMBERS of the Rochester Home Builders Association and public officials at ground-breaking ceremonies for the association's Title 608 low-cost rental housing project in the up-state New York city. Members have pledged construction funds for the big, million dollar structure. Plans call for 136 apartments of 3½ and 4½ rooms each

Memphis Builders Plan Show For Mid-South April 11-18

A home show with a give-away house feature is scheduled for April 11-18 in Memphis by the Home Builders Association of that city. It will be called the Memphis and Mid-South Home Show.

The exhibition house is being constructed behind a high board fence to conceal it from the public until time for the "unveiling" which will be sometime prior to the start of the show itself.

Mrs. Neva Wash, executive secretary of the association, reports that 25 per cent of the exhibit space already has been requested. To heighten the interest, arrangements have been made with the Memphis Retail Grocers Association to hold a food show in conjunction with the home show. The mid-south area embraces 127 counties and will draw from portions of seven states.

Lansing Starts Ball Rolling For Michigan State Chapter

At the invitation of the Lansing Home Builders Association, delegates from other local Michigan associations met in Lansing, Oct. 6, and took initial steps to form the Michigan Home Builders Association, a state organization.

There are seven local affiliates of the NAHB in Michigan, and all were invited to participate. Delegates attended from Detroit, Grand Rapids, Battle Creek and Lansing. Kalamazoo indicated by phone that it is in favor of the move.



RODNEY LOCKWOOD

Howard C. Walsh, executive secretary of the Lansing chapter, was appointed temporary chairman of the embryo association. Rodney Lockwood, executive secretary of the Builders Association of Metropolitan Detroit, heads the by-laws committee.

It is planned to hold a convention at the Hotel Olds in Lansing on Dec. 8-9 to elect officers and directors and adopt bylaws.

John Lindop Dies in Chicago

John Cummings Lindop, Sr., past president of the Chicago Metropolitan Home Builders Association, died Oct. 6 from injuries received in an automobile accident. Mr. Lindop was 51.

Born in Oak Park, a Chicago suburb, Mr. Lindop entered the real estate business in 1922. He developed large business sections in western Chicago and suburbs.



Industry Engineered Two-Story Feature House

For Sparkle that Clinches Sales

... include Electrical Living Engineered by Westinghouse

Win the women with your Industry-Engineered Houses and you are on the road to profits. You can be sure of sparkling details that captivate women with Westinghouse engineering.

In the kitchens, for instance, where the sale must be made, Westinghouse offers tested design . . . plans that have demonstrated appeal . . . that you can install at surprisingly low cost.

All through the house the same careful attention to electrical details that add buying appeal has been given by Westinghouse specialists. We wrapped the whole story in a book. It gives wiring diagrams, kitchen layouts, product information. It's free.



VALUABLE AIDS TO DESIGNERS

- Designs for Electrical Living in Industry-Engineered Houses. Free.....
- 4 Degrees of Home Electrification. Complete details on how to wire any house you build. Free.....
- Planning Your Kitchen Electrically. The most practical kitchen planning book available. \$1.00.....

Please send me a copy of books checked.

Name.....

Street.....

City.....Zone....State.....



Westinghouse

PLANTS IN 25 CITIES... OFFICES EVERYWHERE

Better Homes Bureau

J-91568

P. O. Box 868, Pittsburgh 30, Pa.

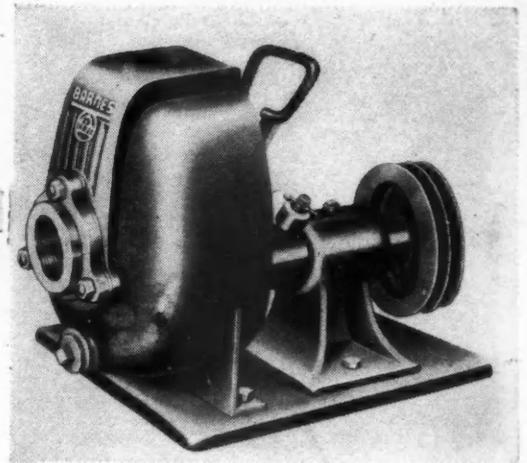
YOU GET MORE BECAUSE *Barnes* GIVES MORE



90 M

3 MU

- A NEW HIGH IN PUMPING EFFICIENCY
- PRACTICALLY NO MAINTENANCE
- NEXT TO NO WEAR OUT
- MORE GALLONS OF WATER FOR YOUR PUMPING DOLLAR



GASOLINE-ENGINE DRIVE —
UNIVERSAL-BELT DRIVE —
AUTOMATIC CENTRIFUGALS

• • • •
DIAPHRAGM PUMPS

• • • •
Capacities from 3,000 to 90,000
gallons per hour

Quality Control in the manufacture of Barnes Stream-luxe Pumps gives the user added assurance that the superiority of Barnes engineering design is matched by like superiority in the materials and workmanship of the finished pumps. Under the Barnes method of *Quality Control*, forty-two different and distinct inspections—the materials, the metal, cores, patterns, machining, assembly—make certain that every Barnes pump comes up to the high standards set for it.

Each Barnes pump, from the largest to the smallest, is rigidly tested for capacities at various heads; for perfection of engine performance; and for clearances, tolerances, and alignment of the entire unit. With nothing short of these *Quality Controls* can you be assured of the superior pumping performance to be found in a Barnes Pump. For sale by leading distributors in all principal cities.

BUY THE BEST — BUY BARNES

BARNES MANUFACTURING COMPANY
MANSFIELD, OHIO

MAIL THIS
COUPON
TODAY

Barnes Manufacturing Co.
601 North Main Street
Mansfield, Ohio.

Please send me descriptive literature on pumps marked below:

- Gasoline-engine driven automatic centrifugals
- Universal-belt driven automatic centrifugals
- Diaphragm Pumps

Name _____

Firm _____

Address _____

City _____ State _____



Presenting...with pride,
another great addition
to the most complete
line of gas-heating
equipment in the nation



Bryant Modernaire, Model VS-304 Winter Air Conditioner. Fully automatic, made in six sizes (45,000 to 145,000 btu) for all types of domestic application. Unit completely factory-assembled. Controls readily accessible for service or adjustment. Features the exclusive Bryant H-pilot for positive burner operation and control; efficient high static blower for smooth, steady circulation of air; scientifically designed, cast iron burner with raised, drilled ports. Completely enclosed by attractive Bryant-grey jacket of heavy-gauge steel.

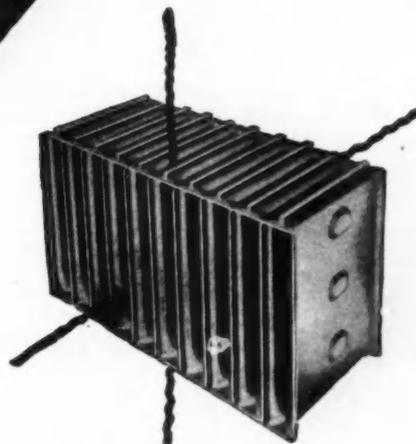
THE *Modernaire*
WINTER AIR CONDITIONER

You have waited for this great new gas-fired winter air conditioner. In its design and operation are the features you require for heating equipment in housing designed for forced warm air. In a single or multiple installation, the Modernaire provides the kind of fully-automatic, trouble-free operation that pays off all down the line . . . from sales appeal to economy to customer or tenant satisfaction.

Amazingly compact, this Bryant-engineered beauty is a long-lived space saver that can be installed almost anywhere. The smallest of its six sizes, adequate for apartments or small homes, can actually be installed in a small closet. Efficiently and surely, the Modernaire does the four big winter air

conditioning jobs . . . providing warm, filtered, smoothly-circulated air with the right amount of humidity.

Take your cue from the owners of the soon-to-be-constructed Tremont Apartments at Allentown, Pa., who have already specified the Modernaire for individual heating in its 126 modern suites. *Sell—install—specify* the Bryant Modernaire! For details, contact your Bryant representative or write direct to Bryant Heater Co., 17825 St. Clair Ave., Cleveland 10, Ohio . . . *One of the Dresser Industries.*



...with the HEVIGAGE
STEEL HEAT EXCHANGER!

Made by the industry's most advanced machine welding process, this rugged heat exchanger is fabricated from 12-gauge steel, approximately *three times* as thick as minimum A.G.A. requirements. Designed for straight-line flow, both horizontal and vertical, there is no complicated travel of warm air or hot gases. There is no dead metal . . . *every inch* of the HEVIGAGE works at its job. It will outlast ordinary heat exchangers by many years.

the NEW products
come from bryant



bryant
GAS
HEATING

LET THE PUP BE FURNACE MAN

ONLY *Numetal* WEATHER STRIP *has all these* EXCLUSIVE FEATURES

For
DOORS
and
WINDOWS

No weatherstrip on the market offers as many exclusive features as NUMETAL. It's efficient . . . permanent . . . inexpensive. What's more, it is conveniently packaged in individual sets that make it a perfect over-the-counter sales item. Shipped prepaid on orders totalling two dozen sets or more.

- Has a patented turned edge and embossed nailing zone that make a weather-tight "dead air" space between the strip and the frame. Dirt, soot and cold air cannot pass UNDER this strip.
- The "tension" in NUMETAL is "built-in" and forces the free edge of strip to make a firm, positive contact with sash at two points.
- Patented design gives NUMETAL greater longitudinal strength, prevents strip from buckling.
- Hemmed edge makes NUMETAL practically hum-proof.
- Easily installed without removing windows or doors.
- Small hammer and household scissors only tools needed.

COMPLETE
in a handy package
ready to hand
your customer

Window sets packaged for 28", 30", 32", or 36" size double hung windows. Door sets packaged for 32" x 80" and 36" x 84" sizes, or for any special size required. Each set complete with weatherstrip, accessories and instructions.

THESE PRODUCTS SOLD ONLY TO LEGITIMATE RETAIL HARDWARE, BUILDING MATERIAL AND LUMBER DEALERS.



MACKLANBURG • DUNCAN CO.
OKLAHOMA CITY 7, OKLAHOMA

FOR THE FIRST TIME!

A UTILITY Jackhammer

Having **UTILITY WEIGHT
REAL DRILLING POWER
AUTOMATIC ROTATION**
Air Operated

This amazingly *powerful* Jackhammer weighs only 14 lbs and can be used wherever *light weight* is of first importance. It handles easily on a scaffold or ladder and makes short work of holes for hangers, anchor bolts, pipe, conduit, dowels, and reinforcing rod. It is ideal for plug and feather work.

The "J-10" tears out brick work for doorways and windows or cuts anchors for girders and joists. It is used for chiseling and channeling and for vibrating concrete forms.

At last, here is a real Rock Drill—*air operated*—built for plant maintenance work. It is no longer necessary to use make-shifts. The "J-10" UTILITY Jackhammer is fast, powerful, easy to handle, has strong rotation and hole blowing and uses standard Jackbits. Buy a J-10 UTILITY Jackhammer to save **TIME AND MONEY.**

The "J-10"
**UTILITY
Jackhammer**
is built by the
world's largest
manufacturer of
Rock Drills
and Compressors



Ingersoll-Rand
11 BROADWAY, NEW YORK 4, N. Y.

Leigh BUILDING PRODUCTS

*A Complete Line of Metal Building Products.
Modern! Smartly Styled! Correctly Engineered!
Priced for the Low Cost Home!*

**Just off the
press! Beautiful
Catalog in Color!**

Showing complete details
and installation views. Ask
your LEIGH Jobber for
your copy, or write direct.

*Get your
Copy of New
Catalog 47-L
today!*



**Ornamental Shutters - Dust Chutes - Clothes Chute Doors - Brick
and Foundation Ventilators - Attic and Roof Ventilators - Built-in
Mail Boxes - Milk and Package Receivers.**

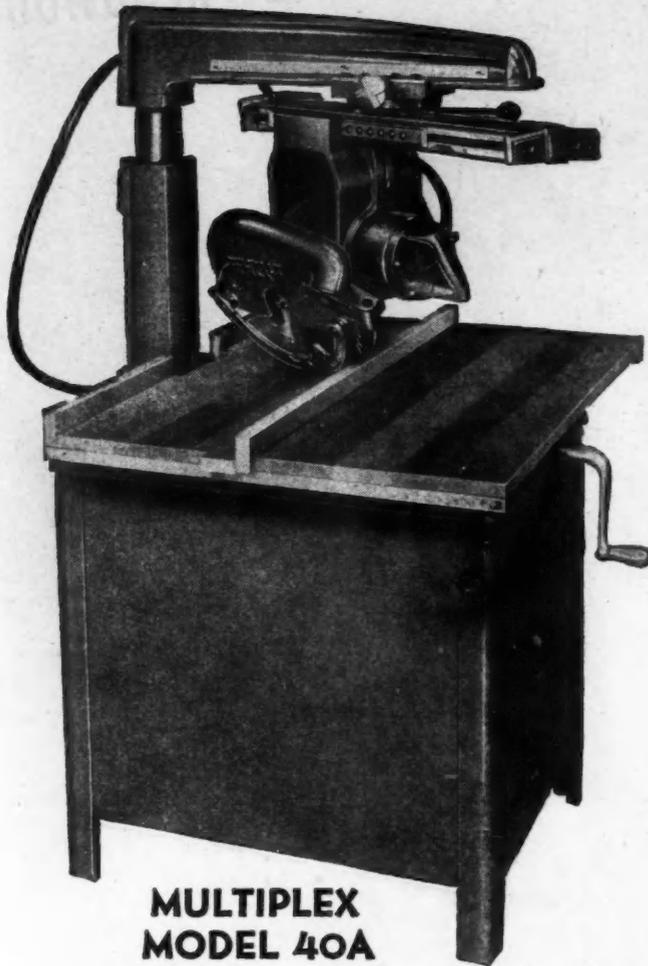


Styled and Built by

AIR CONTROL, PRODUCTS, INC.
Coopersville Michigan

Your Next Job will Show More Profit

with a **MULTIPLEX** *Radial-Arm Saw*



**MULTIPLEX
MODEL 40A**

Builders and contractors everywhere are discovering the money-saving advantages of moving a Multiplex saw from job to job. Its speed, versatility and accuracy keep it busy through every stage — from frame to interior finish — cutting labor costs, speeding building progress.

The exclusive versatile elbow, or center pivoted track arm, is rotatable 360°, permitting left as well as conventional right hand mitering. It also makes possible an infinite number of saw positions, providing facility and scope not found in any other saw.

The Multiplex also features unmatched convenience of operation. All controls are within easy, safe reach. Accurately calibrated bevel, rip and mitering scales are at eye level and can be read quickly without strain. Ball bearing mounted yoke moves with exceptional ease. And in addition to all conventional safety features, all Multiplex saws are provided with the unique retractable saw guard.

For any building or woodworking operation Multiplex means unmatched performance in speed, accuracy and versatility.

Write for full information and name of nearest Multiplex dealer.

**CROSS CUT . MITER . RIP . BEVEL CUT OFF . COMPOUND MITER . BEVEL RIP
DADO . PLOW . RABBET . SHAPE . TENON . DRILL . ROUT . CIRCLE ROUT**

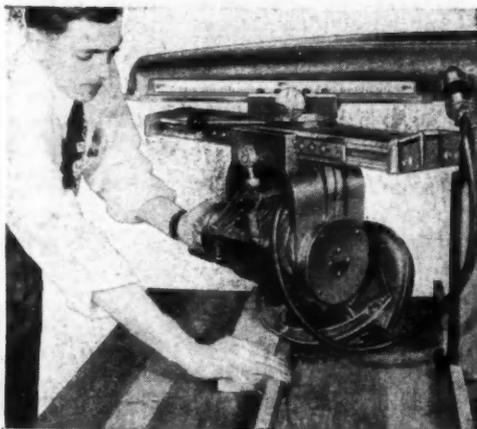
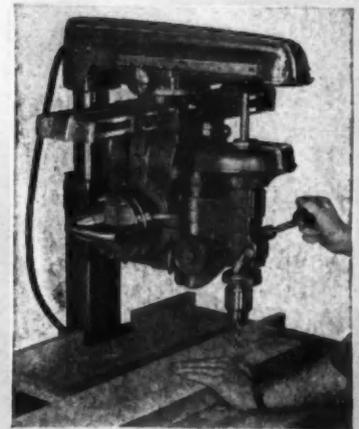


Illustration at the left shows an important and exclusive Multiplex feature. Center pivoted track makes possible left hand as well as conventional right hand mitering. Here the operator is making left hand bevel miter.

Optional equipment. A special drill press attachment is available for models 30A and 40A. This high speed ball bearing drill press is quickly attached to and driven by the saw motor. Valuable also for shaping, carving, routing, circle routing, tenoning, planing, sanding, polishing and many other operations.



RED STAR PRODUCTS, INC.

**3455 VEGA AVENUE
CLEVELAND 13, OHIO, U. S. A.**

THE WONDER WOOD OF 1000 USES • MASONITE PRESWOOD

Worked easily with carpenters' tools

Can be bent permanently to curved designs

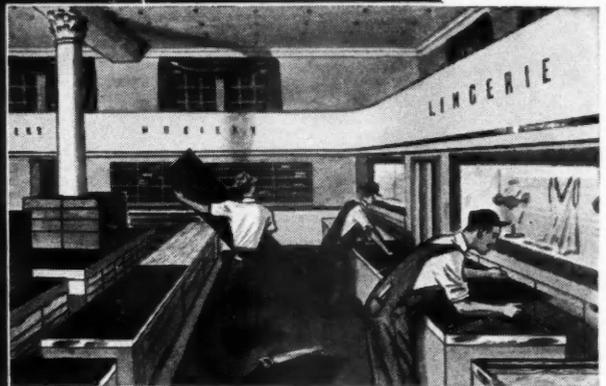
Resists moisture permanently—no tendency to warp

Great structural strength

Takes almost any applied finish

Can be sawed, planed, routed, beveled, laminated

Won't split, splinter, snag, dent or corrode



Presdwood quickly and easily transforms dull, unattractive interiors — makes possible unique new streamlined effects.

Most useful for modernizing stores, theaters, showrooms . . . for remodeling hotels, hospitals, office buildings . . . for almost any job that challenges the skill and imagination of the architect and builder! That's Masonite* Presdwood* — the time-tested hardboard with perhaps more valuable characteristics than any other basic material. Presdwood adds durability and beauty . . . provides quality construction. It makes possible unusual effects on curved surfaces, takes almost any kind of finish. Presdwood is made from natural wood refined to a better, stronger wonder wood. Progressive lumber dealers have it — Untempered, or Tempered to extra hardness. For full technical data, write Masonite Corp., Dept. AB-11, 111 W. Washington St., Chicago 2, Ill.

THE LEADING HARDBOARD

MASONITE PRESWOOD



Reg. U. S. Pat. Off.

*Trade-marks Reg. U. S. Pat. Off. "Masonite" signifies that Masonite Corporation is the source of the product.



FROM EXPLODED WOOD TO VERSATILE HARDBOARD

ATTRACTION... SATISFACTION!

4222 PRISCILLA
Note self-adjusting
latch mechanism

4224 NEWPORT

4220 REGENCY

4221 PRINCESS

4223 CENTURY

PRISCILLA 4422 PULL

NEWPORT 4424 PULL

REGENCY 4420 PULL

PRINCESS 4421 PULL

CENTURY 4423 PULL

*are built into
this super-selling
cabinet hardware*



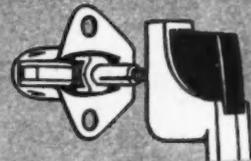
Every hardware merchant, every contractor and builder knows from experience that today's cabinet hardware must *attract the eye* and *satisfy*. A glance will show you how the new Stanley designs do exactly that!

See how pressure cast, rust-proof alloys with touches of sparkling, jewel-like plastics are cleverly combined into sturdy, functional, lastingly beautiful cabinet hardware. Small wonder that discerning feminine eyes and practiced hands choose this new line above all others!

You can profit by this! Order an *operating* counter display today. You'll see how attraction and satisfaction add to your prestige . . . and your sales. The Stanley Works, New Britain, Connecticut.

STANLEY

HARDWARE • HAND TOOLS • METRIC TOOLS



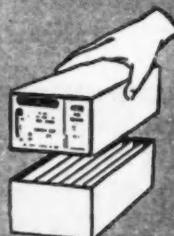
SELF-ADJUSTING LATCH.
New "Trigger" latch design . . . automatically adjustable to doors from 3/4-in. to 1 1/8-in.



5-KNUCKLE HINGES. Five knuckles for strength. Raised barrel permits door to open full 180°.



"ITEM-IZED" ENVELOPES. Each item comes packed complete with all necessary parts.



PACKED FOR EASY STOCKING. All items packed in same size boxes, with easy-to-read labels giving complete data.

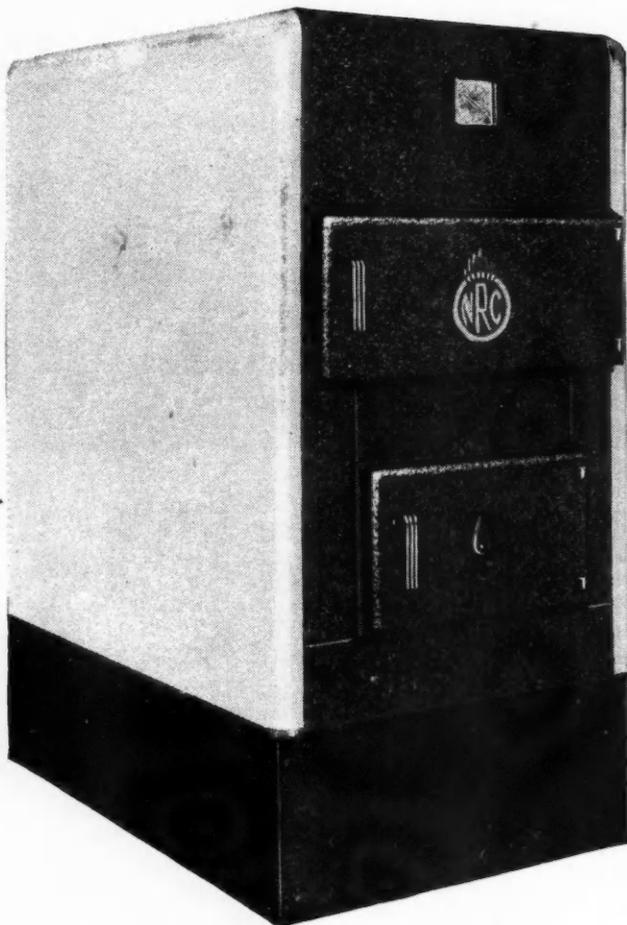
LATEST ADDITION TO A DISTINGUISHED FAMILY

A NEW LINE

of NATIONAL Residential STEEL BOILERS!

Designed specifically for homes, smaller apartments and small commercial installations. National Residential Steel Boilers are available in 13 sizes ranging in net rating from 275 to 3,000 square feet of steam radiation.

This new line of National Residential Steel Boilers embodies the most modern engineering practice for design and production of boilers for mechanical firing. Here are a few of the reasons why you'll be proud to specify "National"—



- ✓ **FAST, DEPENDABLE HEATING** with multi-tube construction that more effectively brings hot gases and water in contact with heating surfaces.
- ✓ **FUEL ECONOMY**—through the use of modern engineering design—turbulator tube baffles and more generous insulation of jacket and doors.
- ✓ **LOW INSTALLATION COST**—boiler and platework are factory-assembled as a unit. Easy handling through small doorways eliminates costly building changes.
- ✓ **LONG, TROUBLE-FREE LIFE** is assured through high-grade flange quality steel construction and genuine Electrunite tubes. Design and construction meet all requirements of the Steel Boiler Institute Testing and Rating Code, and the American Society of Mechanical Engineers' Boiler Construction Code. All boilers are inspected during construction by a representative of The Hartford Steam Boiler Inspection and Insurance Company. These features add up to a quality product. Specify nothing less! Many makes of boilers do not meet these requirements.
- ✓ **DOMESTIC HOT WATER SUPPLY**—year 'round, is available with storage or tankless heaters covering a wide range of capacities to meet requirements of homes, smaller apartments and small commercial installations.
- ✓ **SMART STYLING** with a handsome flame-red jacket and contrasting crinkle-cast black platework.

Contact your nearest Heating Contractor, your NRC heating sales branch or write to The National Radiator Company, 221 Central Avenue, Johnstown, Pennsylvania, for full product information.



The NATIONAL RADIATOR Company

JOHNSTOWN, PENNSYLVANIA

New ALUMINUM PRODUCTS bring quick sales and nice profits

ALUMINUM ROOFING SHEETS

The finest roofing material for barns, sheds, garages, tool shops, etc. Aluminum Roofing *substantially reduces inside temperatures* during hot summer months because of the ability of aluminum to reflect the direct rays of the sun. Aluminum roofing is economical, too, as it will last a lifetime without maintenance expense. *Cannot rot, rust or crack.* Nichols Aluminum Roofing Sheets are available in 1 1/4" and 2 1/2" corrugations and 5 V Crimped in 26" widths, 6, 7, 8, 9, 10, 11 and 12 ft. lengths. Aluminum roofing accessories for all types of roofing are available.

ALUMINUM IS NOT A SUBSTITUTE

Special sales proposition is now open and available to jobbers and dealers. Write us today for details.

Nichols aluminum nails

ARE DEFINITELY SUPERIOR FOR USE IN APPLYING WOOD SIDING, ASBESTOS SHINGLE AND SIDING, BATTENS, PLASTER BOARD, WOOD SHINGLES, ALUMINUM AND ASPHALT ROOFING.

War developed aluminum alloy wire invades the nail market. It is definitely superior for the above applications.

RUST PROOF. Rust from steel nails or oxidation from copper nails for any of the above applications will mar the surfaces on which they are used. Aluminum Nails are solid aluminum. There is no protective coating that can be knocked off the head by hammer blows. **ALUMINUM CANNOT RUST — CANNOT STREAK OR BLEMISH THE SURFACE.** They are **SANITARY** — put them in your mouth with the same safety as food cooked in an aluminum utensil.

COMMON NAILS in sizes 3d to 40d. Use for same applications as steel nails when ultimate in corrosion resistance is desired.

ALUMINUM STAPLES—9 gauge, 1" and 1 1/4" sizes.

All Aluminum Nails and Staples packed 50 lbs. per keg. A 50 lb. keg contains 50% more aluminum nails than a 100 lb. keg of the same size steel nails.

WILL ALUMINUM NAILS DRIVE? Sure they'll drive! Send for samples.

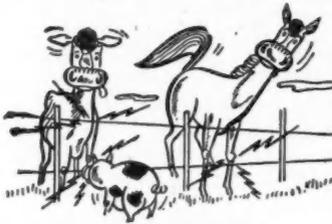


1 pound Steel Nails

1 pound Aluminum Nails

3 TIMES MORE ALUMINUM NAILS THAN STEEL
Entire nail surface etched for maximum holding power.

Nichols aluminum electric fence, garden and form wire



FOR ELECTRIC FENCING

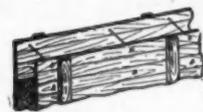
Many miles of aluminum electric fence and garden wire are now in use everywhere. Aluminum is **FIVE TIMES BETTER** electrical conductor than steel. Thus, one electric fence charger can charge five times more aluminum footage than steel.

Aluminum is truly economical. It **CAN'T RUST** or "SHORT OUT". It is modern looking, easy to install and never needs replacing. It is ideal for use in gardens for grape arbors, trellis, etc. Also for use in holding concrete forms.

Available for immediate delivery in 10 and 35 lb. coils. Show it to your customers — it sells on sight.



FOR GRAPE ARBORS AND TRELLIS



FOR CONCRETE FORMS

Nichols aluminum clothesline

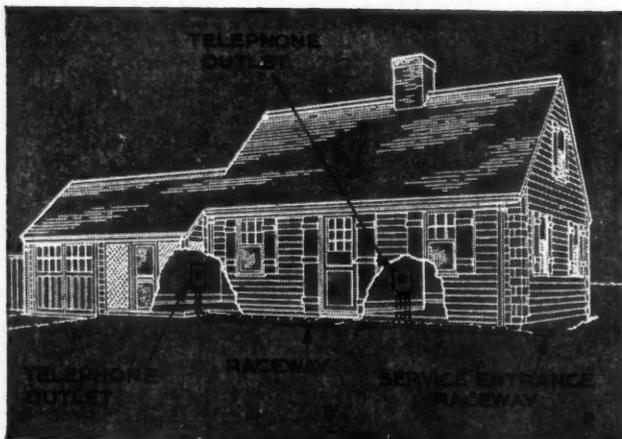


Just the thing housewives everywhere have been praying for — the original Nichols Aluminum Clothesline. Gone are the nuisances of putting line up, and taking line down. No more ruined washings from broken lines. Once a Nichols Aluminum Clothesline is put up, it need never be taken down. It cannot **RUST, ROT or CRACK.** Cleans quickly and easily with a wet soapy, cloth. Holds all types of clothespins. Packed 1200 ft. per carton (4 - 300 ft. coils marked every 50 ft.). Specify size wanted on your order. Not original unless coil contains wrapper as illustrated at left. Nichols Aluminum Clothesline Wire specially treated for this particular use. It is *not* ordinary aluminum wire.



Architect, George R. Paul, Abington, Mass.

EVEN SPACE-SAVER PLANS CALL FOR TELEPHONE RACEWAYS



Little homes can be just as livable as big ones—if the same attention to detail goes into their plans. Among modern conveniences, a raceway for telephone wires gives a lot of value at little extra cost.

A few sections of pipe or electrical tubing, installed by the builder while the house is under construction, carry telephone wires into the house and within interior walls to pre-planned outlets.

In homes with finished basements, a telephone raceway avoids exposed wires in the basement as well as on the main floor. It also assures the convenience of built-in telephone outlets for the owner.

Your Bell Telephone Company will be glad to help you plan wiring facilities for small as well as larger homes. Just call your Telephone Business Office and ask for "Architects and Builders Service."

BELL TELEPHONE SYSTEM



Now Available!

STAINLESS STEEL

FOR GUTTER

DOWNSPOUT

CONDUCTOR PIPE

FLASHING



Architects prefer stainless steel because it is a proven functional material in the modern style. Low coefficient of expansion and contraction eliminates expansion joints....permits greater freedom in design. Stainless steel is beautiful....everlasting....and available right now.



Builders prefer stainless steel because its instant eye appeal and permanent beauty make a better, more salable product. Corrosion-proof stainless steel gutter, downspout, conductor pipe and flashing is light, bright, water-tight never needs replacement can be erected with or without paint. And stainless steel is available right now.



Home Owners prefer stainless steel because it is more attractive.... permanent reduces upkeep does not stain painted, stucco, masonry or brick walls and surfaces. Building need not be delayed because stainless steel is available right now.

Full details upon request. Write

SHARON STEEL CORPORATION

Sharon, Pennsylvania

SHARONSTEEL

PRODUCTS OF SHARON STEEL CORPORATION AND SUBSIDIARIES: THE NILES ROLLING MILL COMPANY, NILES, OHIO; DETROIT TUBE AND STEEL COMPANY, DETROIT, MICHIGAN; BRAINARD STEEL DIVISION, WARREN, OHIO; SHARONSTEEL PRODUCTS COMPANY, DETROIT, MICHIGAN, AND FARRELL, PENNSYLVANIA. Hot and Cold Rolled Stainless Strip Steel—Alloy Strip Steel—High Carbon Strip Steel—Galvanite Special Coated Products—Cooperage Hoop—Detroit Seamless Steel Tubing—Seamless Steel Tubing in Alloy and Carbon Grades for Mechanical, Pressure, and Aircraft Applications—Electrical Steel Sheets—Hot Rolled Annealed and Decarburized Sheets—Galvanized Sheets—Emerying Grade Steel—Welded Tubing—Galvanized and Fabricated Steel Strip—Roof Strapping, Tools and Accessories.
DISTRICT SALES OFFICES: Chicago, Ill., Cincinnati, O., Cleveland, O., Dayton, O., Detroit, Mich., Indianapolis, Ind., New York, N. Y., Philadelphia, Pa., Rochester, N. Y., Los Angeles, Calif., San Francisco, Calif., St. Louis, Mo., Montreal, Que., Toronto, Ont.

SEE WHY ONLY THE GAS REFRIGERATOR

FROZEN FOODS-ICE CUBES

BIG FLEXIBLE INTERIOR

NO NOISE, NO WEAR



STAYS SILENT . . .
LASTS LONGER

Servel
The
GAS Refrigerator

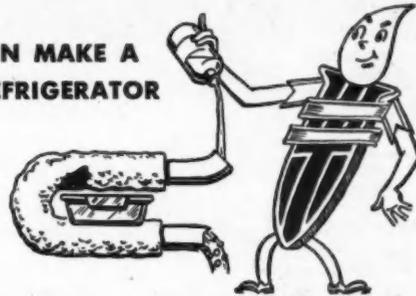
Stays Silent - Lasts Longer



LIQUIDS COOL ON EVAPORATION

When you pour alcohol on your skin and blow on it, it will feel cool. That's because liquids draw heat from the surrounding area as they evaporate. You could test this for yourself with a thermometer. Both gas and electric refrigerators operate on this principle . . . but there's a *big* difference in the application. Study the following illustrations and you'll see why Gas Refrigeration's method is superior.

YOU CAN MAKE A SIMPLE REFRIGERATOR



All you would have to do would be to pour continuous streams of ammonia or any other refrigerating liquid and air through a bent metal tube. As the ammonia evaporates on the inside, the outside of the tube cools . . . which causes refrigeration. The evaporated ammonia is then passed off in the form of vapor gas. However, in practical refrigeration, allowing this vapor gas to escape would be wasteful. It must be recovered and used again.

ONLY ONE HAS NO MACHINERY . . . A TINY FLAME DOES THE WORK

HERE'S HOW



All refrigerators but one use machinery or moving parts to change the vapor back to a liquid and circulate it for re-use. Only the Gas Refrigerator makes cold and ice with no motor, no pump, no valves, no piston or compressor.



A tiny gas flame takes the place of machinery in the Gas Refrigerator. Here the vapor is changed back to a liquid by first being passed through water. The water absorbs the ammonia. The mixture is then heated by a tiny gas flame. The ammonia is driven off in the form of vapor. Cooled by passing through pipes, it condenses again into a liquid. *Not a single moving part is needed.*

● Shown above are the basic principles on which all refrigerators freeze ice and produce cold. Perhaps you're ready to order refrigerators for new apartments or a housing development . . . or planning to buy replacements for your present apartments. Either way, it is important to know the difference between refrigerators.

As you'll note, there are two types of automatic refrigerators. One uses machinery. The other—a different, sim-

pler refrigerator—operates without moving parts. In their place a tiny gas flame does the work, silently, efficiently. This is the Servel Gas Refrigerator.

Because it freezes with no moving parts, you'll never hear a sound from Servel. No hum of stopping and starting. And it won't lose its efficiency or run up costly repair bills. More than two million families are enjoying this basically different refrigerator right now. Servel, Inc., Evansville 20, Ind.

Check INSL-COTTON'S SUPERIOR POINTS TO...



Check **HEAT LEAKS** THIS WINTER!

*** Certified**

Every lot manufactured is tested for weight, density, thickness and flame-proof qualities. Insul-Cotton will permanently retain its flame-proof qualities—you are certain to get what you buy!

With a "K" value of only 0.24, Insul-Cotton Insulation *only three inches thick* has the insulating value of a five-foot brick wall. It stops those "heat leaks" that mean higher fuel bills, drafty floors and chill-born winter colds.

And next summer—Insul-Cotton will keep summer heat *out*, just as it keeps winter heat *in*! Certified® Insul-Cotton is flame-proof and fire-retarding... the most efficient type home insulation made, yet the lightest on the market... finest type sound-deadening material... vermin and moisture resistant... clean and free of foreign matter... won't sag or settle... exceeds Government specifications for FHA, FPHA and HH-1-528 installations.

Check the superior points of easy-to-handle, easy-to-install Insul-Cotton—and you'll know you've found the way to make any home more livable!



INSL-COTTON DIVISION
TAYLOR BEDDING MFG. CO. TAYLOR, TEXAS
The Originators of Flame-Proof, Fire-Retarding Cotton Insulation

MAIL THIS ORDER COUPON TODAY

DEALERS DISTRIBUTORS

Some territories still open for competitively-priced Insul-Cotton. Write for details.

INSL-COTTON DIVISION
Taylor Bedding Mfg. Co., Taylor, Texas

Gentlemen:

Please send specifications and full information on INSL-COTTON.

Name _____

Address _____

City and State _____

Check Here: Distributorship Architect Contractor

MORE PRESTILE Now Available!



PRODUCTION INCREASED!

With our expanded facilities, we are now able to service a greater number of dealers! Good news, because consumer demand for Prestile is steadily increasing, due to national ads appearing each month in Better Homes & Gardens, American Home and other magazines. Cash in on Prestile! Write us today, stating your requirements.

PRESTILE MANUFACTURING COMPANY
2860 LINCOLN AVE., CHICAGO 13, ILL.

PRESTILE
"It's Plastic Beauty is Baked In"

BYRNE'S BIG HARUNDALE PROJECT FEATURES REYNOLDS *Lifetime* ALUMINUM CLAPBOARD SIDING



Most of 1,190 homes will also have Reynolds Lifetime Aluminum Weatherboard on Gable Ends . . . some have Reynolds Lifetime Aluminum Shingles!

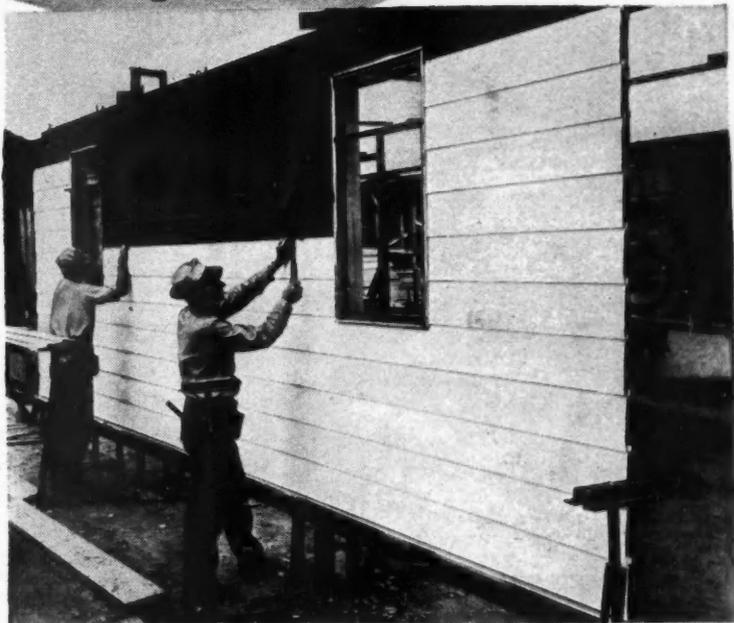
Byrne is a byword in modern on-the-site mass fabrication. And the Byrne Organization has proved "on the site" the advantages of Reynolds Lifetime Aluminum Clapboard Siding...advantages both in application and in customer satisfaction.

Byrne has found that aluminum clapboard lends itself particularly to shop assembly of entire wall sections. And though other siding materials are represented in finished houses, the houses with aluminum clapboard outsell them all. So with about half of the 1190 houses completed as this is written, the plan is to build practically all the rest with Reynolds Lifetime Aluminum Clapboard Siding.

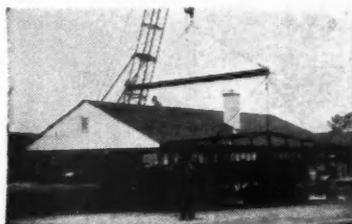
And that's not all! Most of the Harundale houses now built have Reynolds Lifetime Aluminum Weatherboard on the gable ends...all those to come will have it. Some have also been built with Reynolds Lifetime Aluminum Shingles (at an extra charge)...and the "SOLD" signs are up on these!

Whether you're designing, building or selling... you can do it better with Reynolds Lifetime Aluminum. See Sweet's Architectural and Builders Files... or write for A.I.A. file brochures, Reynolds Metals Co., Building Products Division, Louisville 1, Ky.

PRICES AGAIN REDUCED . . . through increased demand, improved production. Remember, the base price of aluminum is 30% below prewar.



Assembling the wall panels on conveyor lines in the shop. This is Reynolds "Texturized" clapboard finish, prime-coated white at factory. Byrne also uses Reynolds Lifetime Aluminum Casement Windows.



Loading complete roof on special truck. Reynolds Lifetime Aluminum Weatherboard Siding on gable end. Louvre also of Reynolds Aluminum.



Porch being applied to the completed house, showing Reynolds Lifetime Aluminum Clapboard Siding with its final (second) coat of paint.



REYNOLDS
Lifetime ALUMINUM
BUILDING PRODUCTS

REYNOLDS *Lifetime* ALUMINUM BUILDING PRODUCTS

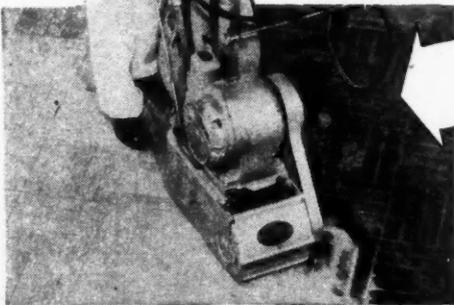
AMERICAN

MACHINE POWER
Saves Job Time!



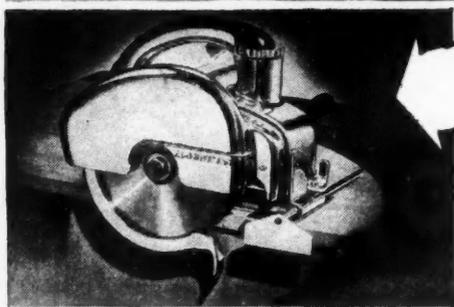
Here's the right line-up for your needs in Portable Power Saws and Sanders... American-built for dependable power, speed and easy handling! All American products are top-Quality construction... designed for long life and trouble-free performance.

Expert maintenance service and genuine parts are nearby at your American Distributors—a big help for owners of American Machines.



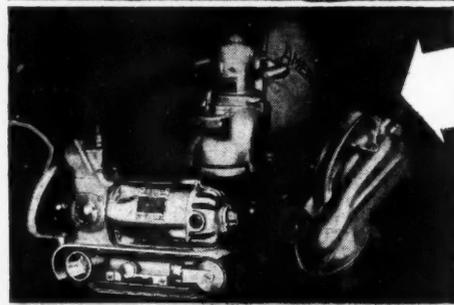
FLOOR SANDERS

Four models including 8 and 12 inch drum widths. Smooth, uniform sanding. Shown here American Standard Eight.



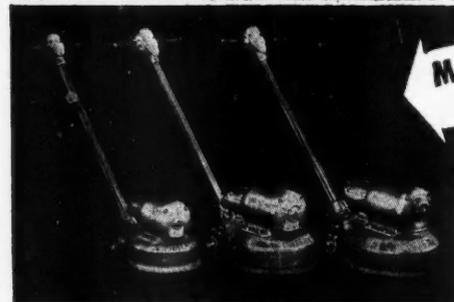
SAWS

New Portable Electric Saw. Big power... easy handling... cuts any angle. 8" blade.



SMALL SANDERS

Many uses for the Sanderplane, a belt sander... Speedy Spinner semi-flexible disc sander... and Floor Edger, & disc-type sander,



MAINTENANCE MACHINES

Labor-saving machines for polishing, disc sanding, steel wooling and scrubbing floors. Many models.. 10" to 17" discs.

Write for further details

AMERICAN

FLOOR SURFACING MACHINE CO.
511 SO. ST. CLAIR ST., TOLEDO 3, OHIO

Choose from **3** styles

with

TILETONE'S complete line of

MODERN DESIGN SHOWER CABINETS

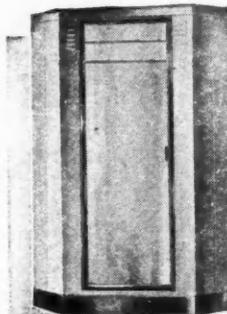
For residential or commercial buildings, new or old, Tiletone offers a complete line of modern design shower cabinets. Three styles are available now. All are superior Tiletone quality. For beauty and utility... for all building needs... Tiletone has models you can recommend with confidence.

WHY SPECIFY SHOWER CABINETS?

1. A new pre-sold market is here... big demand.
2. Assured satisfaction for the owner.
3. No delay... available today.
4. Easy, fast installation... save space.

WHY SPECIFY TILETONE?

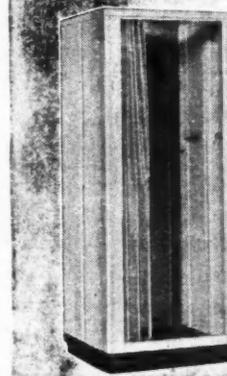
1. A complete line... 3 popular styles.
2. New modern design... rigid... beautiful.
3. Improved receptor base... leak-proof drain.
4. Double-baked enamel walls... the finish lasts and lasts.



MODEL 75

Sizes: 32" x 32" x 80", 36" x 36" x 80" and 40" x 40" x 80" Corner.

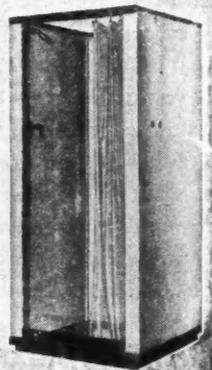
Terrazzo receptor. White Dura-Bond enameled aluminum cabinet. Interior lights. Anodized aluminum glass doors. Adjustable shower head. Dial type mixing valve.



MODEL 45

Size: 32" x 32" x 76"

Porcelain enameled receptor. Aluminum panels finished in white enamel. Shower curtain. Shower head. Dual shower valves.



MODEL 55

Sizes: 32" x 32" x 80", 36" x 36" x 80" and 40" x 40" x 80" Corner.

Terrazzo or porcelain enameled receptor. White Dura-Bond enameled aluminum cabinet. Shower curtains. Shower head. Dual shower valves.

IMMEDIATELY AVAILABLE

TILETONE Shower Cabinets

TILETONE COMPANY
2323 WAYNE AVENUE, CHICAGO 14, ILLINOIS



GIVE THIS *Double Feature* TOP BILLING

The roof plays a featured role in any building program. And, when that roof is shingled with Flintkote Thikbuts, it's a *double feature*.

Why? Because these sturdy shingles are designed to combine beauty and durability.

You see, to make Thikbuts, we start with a regular Flintkote Asphalt Shingle. Then, on the exposed tabs ... where weather-resistance is most needed ... we add the extras. A thick, *extra* layer of Flintkote stabilized asphalt coating. A generous *extra* coating of fireproof mineral granules.

The result is virtually "two shingles for the price of one." A modern, moderately-priced roofing material

that gives extra years of service ... at no extra cost.

Like all Flintkote Asphalt Shingles, Thikbuts are available in a variety of popular plain colors and blends that are enhanced and emphasized by the heavy shadow lines of the extra thick tabs.

Use Flintkote Thikbuts for re-roofing, remodeling or new construction. You'll find a bonus of Homeowners' satisfaction in every dollar's worth of their famous double feature value.

We'll be glad to give you complete information on any Flintkote Building Material. Write: THE FLINTKOTE COMPANY, Building Materials Div., 30 Rockefeller Plaza, New York 20, N. Y. Offices in Principal Cities.

FLINTKOTE MAKES A COMPLETE LINE OF BUILDING MATERIALS... Asbestos-Cement Shingles and Sidings • Asphalt Coatings • Asphalt Shingles and Sidings • Building Papers • Decorative Insulation Board • Fiberglas* Insulating Wool • Hot and Cold Built-Up Roofings • Insulated Sidings • Roll Roofings and Sidings • Structural Insulation Board.

(*TM Reg. U. S. Pat. Off. Mfg. by Owens-Corning Fiberglas Corp.)



FLINTKOTE

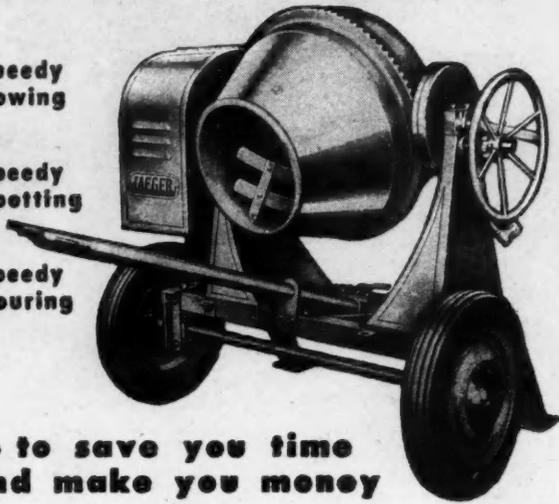
the extra years of service cost no more!

here's the mixer you've wanted!
JAEGER 3½-Speedy

Speedy
Towing

Speedy
Spotting

Speedy
Pouring



— to save you time
and make you money

Here's an improved end-discharge Tilter that will get to your jobs faster, set up faster, and pour faster. Gives you more daily yardage on every job, with greater profit from each! These are some of the reasons:

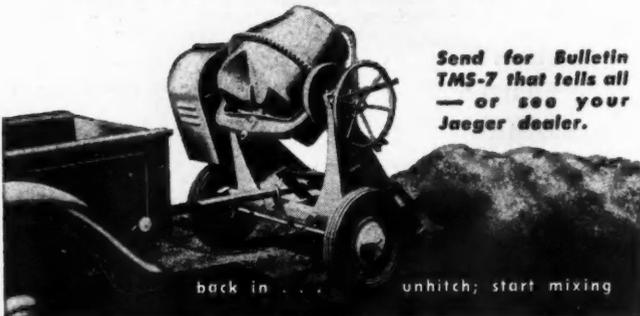
Patented Jaeger V-bottom mixing drum that gives double the mixing action of any other tilting drum and quick, clean discharge of stiffest concrete, bituminous mixes or plaster. Perfectly balanced for fast, controlled, semi-automatic tilting.

Spots quicker, because it tows with the loading end at rear. Back up to the material pile, unhitch, go to work. No turning.

Wheeler approach discharge opening from either side — barrows spot without jockeying and leave without reversing direction, because there are no obstructing legs or feet on the discharge side.

Trails swiftly and safely behind lightest cars, on wide-tracking, pneumatic-tired, Timken bearing wheels and coil-spring shock absorbers. Readied for towing without lifting or straining.

2½-hp, air-cooled Wisconsin engine and compact, weight-saving design, yet built for lifetime service.



Send for Bulletin
TMS-7 that tells all
— or see your
Jaeger dealer.

back in ... unhitch; start mixing

THE JAEGER MACHINE CO.

Main Office and Factory — Columbus 16, Ohio

REGIONAL OFFICES

B E. 48th St. 226 N. La Salle St. 235-38 Martin Bldg.
New York 17, N. Y. Chicago 1, Ill. Birmingham 1, Ala.

AIR COMPRESSORS, MIXERS, PUMPS, HOISTS, PAVING
MACHINERY, TRUCK MIXERS — DISTRIBUTORS IN 128 CITIES

We Can Afford Them!

*Savings on
Installation*

MORE than
pay the cost!



134,445,000 modern-minded
people share her interest

Grand Rapids Invisible Sash
Balances are sold monthly to
the readers of these magazines
. . . the bulk of the home-
building market.



* **She is interested in**



The practical SPIRAL sash balance

Of course she can afford them! They go in quick and easy . . . just three screws per balance . . . save hours of high-priced labor. Laboratory tests point to perfect lifetime performance . . . proved in thousands of homes. No tapes, no cables, no exposed tubes, no corrosion. The one practical installation for modern narrow trim. A few standard sizes fit 95% of all residential requirements . . . same size balance fits upper and lower sash.

For complete specifications and instructions



Write today for fully illustrated specification and installation data. See how Grand Rapids Invisibles fit into your next set of plans!

GRAND RAPIDS HARDWARE COMPANY

Grand Rapids, Michigan

Quality Leaders in Sash Hardware for 50 Years



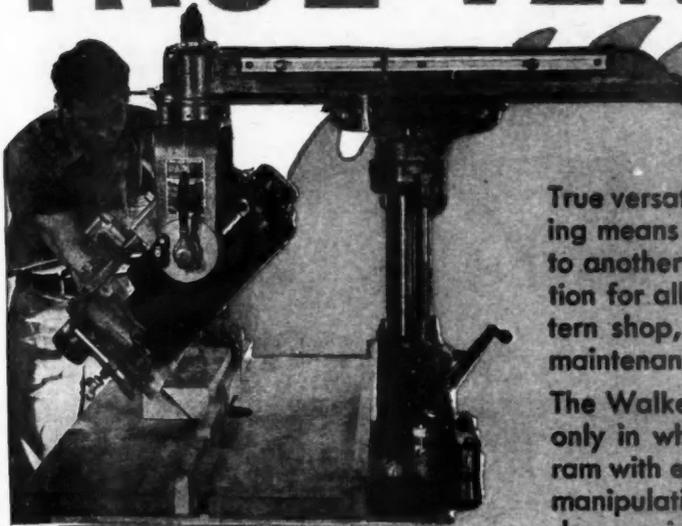
Grand Rapids Sash Pulleys



◀ No. 103 face plate, cone bearing type and Nos. 175, 100, 110 sawtooth drive type sash pulleys cover 95% of all sash pulley requirements. ▶

TRUE VERSATILITY

WITH WALKER-TURNER RADIAL SAWS



ANGLE RIPPING

True versatility in wood working and handling means quick shifts from one operation to another with fast, simple and safe operation for all jobs in building construction, pattern shop, wood products manufacture and maintenance operations.

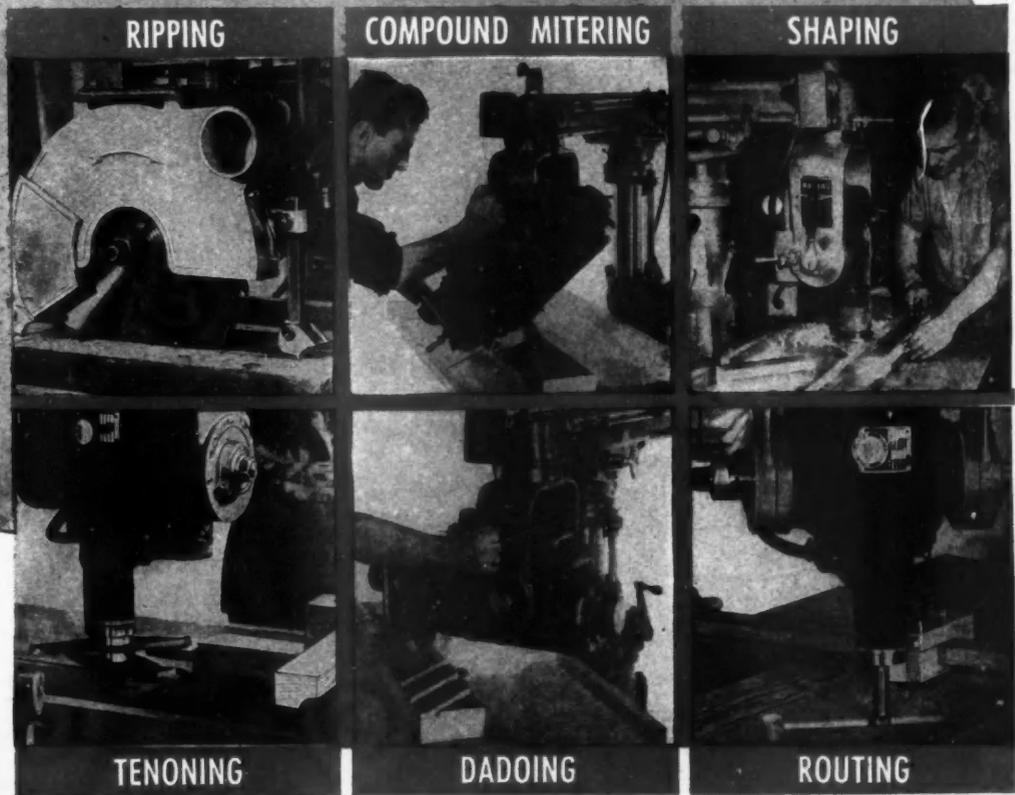
The Walker-Turner Radial Saw is truly versatile—not only in what it does, but how it does it. A sliding ram with eight over-size ball bearings provides quick manipulation and clear view at all times. Saw tilts 45 degrees in either direction. Patented geared motor means smaller blades, greater sawing capacity per horse-power!

It's a typical Walker-Turner high capacity, low investment, production tool—one of a family that made outstanding records during the past ten years and is now replacing heavier equipment in thousands of plants.

RADIAL SAW RA1108

Motor unit tilts vertically and swings horizontally for any angle bevel, mitre, or compound cut—also operates at 90° for shaping, tenoning and routing—Cuts material up to 4 1/4" deep—Sliding ram travels 21 1/2"—rips material 38" wide—Price: With 2 or 3 h.p. motor, less base—

\$445.00



Walker-Turner Machine Tools are sold only by authorized Industrial Machinery Distributors.



MACHINE TOOLS

DRILL PRESSES—HAND AND POWER FEED • RADIAL DRILLS • RADIAL SAWS
METAL CUTTING HAND SAWS • POLISHING MACHINES • FLEXIBLE SHAFT MACHINES
RADIAL CUT OFF MACHINES FOR METAL • MOTORS • HOIST • CONCRETE

Better View . . . Fresh Air too, with



In construction products **CECO ENGINEERING**

you
line
view
get
Th
way
too
br

Ste
star
ing
they
...
thin
spe
som

C
G



Picture Windows OF STEEL!

When we say that Picture Windows of Steel give you a better view, we mean that and more too. First, the trim lines of the steel framework increase the light area, so the view from the outside has less obstruction. Yes . . . more view gets in to you and, what is equally important, fresh air, too. That comes from controlled ventilation. We often put it this way: Picture Windows of Steel that breathe and are beautiful, too . . . that capture and control every stray breeze . . . that bring the outside fragrance into the home.

Here are other reasons why Picture Windows of Steel are preferred over all: They are made from easy-to-install standard Ceco casements. Gone are annoying delays in waiting for special framework. Because these windows always fit they are easy to operate . . . no sticking, warping, or swelling . . . no fitting, planing, or weatherstripping. And here is something you will like, too. The cost is lowest of all installed. So, specify Ceco Picture Windows of Steel . . . handsome and then some. Write for free literature.

CECO STEEL PRODUCTS CORPORATION

GENERAL OFFICES: 5701 West 26th Street, Chicago 50, Illinois

Offices, warehouses and fabricating plants in principal cities

See Ceco catalogs in Sweet's Architectural File or write for literature

**CECO
STEEL**

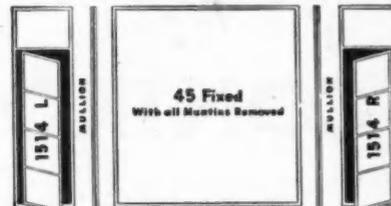
makes the big difference

3 ADDITIONAL WAYS TO MAKE A PICTURE WINDOW from CECO Stock Casements!

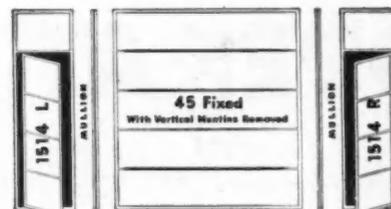
There are many ways to combine Ceco casements. The three combinations shown below are five-lights high. A four-light-high combination is shown on the facing page. Here's how these windows are installed.



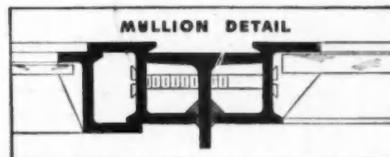
Remove all muntins and insert transom bar as illustrated. Combine windows with standard mullions.



Remove all muntins from Ceco stock casement 45-Fixed. Combine windows with standard mullions.



Remove vertical muntins from Ceco stock casement 45-Fixed. Combine windows with standard mullions.

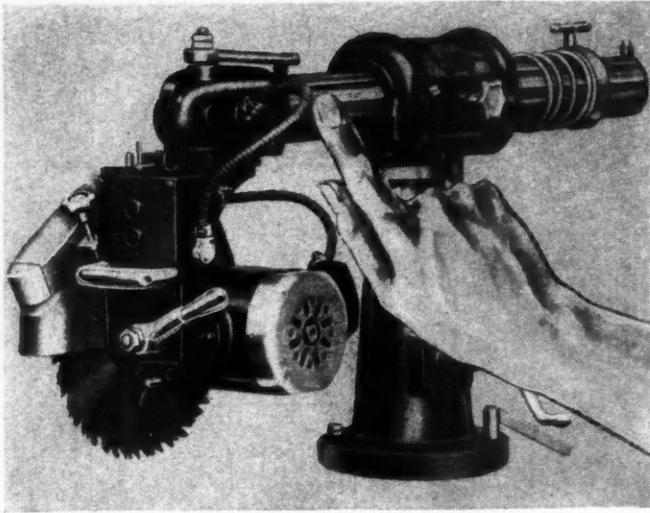


Above is a detail drawing showing how the windows are combined by use of CECO Standard Mullions.



Partial list of other Ceco Products

- METAL FRAME SCREENS • ALUMINUM STORM WINDOWS • MEYER STEEL-FORMS • REINFORCING STEEL • STEEL JOISTS AND ROOF DECK • METAL LATH AND ACCESSORIES • HIGHWAY PRODUCTS • VENTILATORS



Finger-Tip Pressure **CONTROLS** **COMET** **OPERATION**

These rugged, powerful saws are so precisely balanced that you can actually swivel them around with mere finger-tip pressure. Builders everywhere praise the easy Comet operation. No balky, jerky performance. Comets do the work smoothly, swiftly, and with high accuracy. You might as well buy the best. Order from your dealer or write direct.

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.
2029-33 Santa Fe Avenue, Los Angeles 21, California

COMETS *cut quicker*

Contractors and Builders

1. If you have a problem with water or dampness, THOROSEAL will correct and solve the problem.
2. THOROSEAL is prepared especially to fill and seal voids and cracks, to equalize the absorption in the various units comprising the surface and to make a beautiful, matt-textured finish.

It may be the home or garage!

It may be the cellar!

It may be the cistern or pool!

It may be the dairy barn or milkhouse!

It may be the city water reservoir!

It may be the stable or pens!

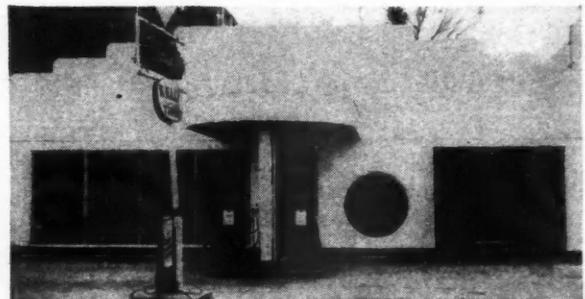
It may be the commercial building!

It may be the factory or warehouse!



This is a 100% THOROSEAL home, not only the interior and exterior, but over the roof. THOROSEAL adds protection and beauty.

Not only the exterior wall surfaces of any type of masonry, including the sills and lintels, the roof, but the interior walls of light manufactured block can be filled and sealed with THOROSEAL and then a beautiful finish coat of QUICKSEAL.



The small commercial building, constructed of lightweight block or brick, can be perfectly sealed and filled with THOROSEAL and then given a delightful finish of QUICKSEAL.

Throughout the United States and Canada, buildings of every type are being protected and beautified with THORO System products.

Write at once for our new and up-to-the-minute Circular No. 17, which describes, in photographic detail, all the methods of The THORO System of protection against heavy rains and storm waters, how to seal the surface of new homes and every type of masonry, on the inside or outside surface, above or below grade.

Request your Lumber or Builders' Supply Dealer in your home city to order for you.

Standard Dry Wall Products, Inc.
BOX X NEW EAGLE, PENNA.

STAINLESS STEEL



*You're Looking
at Her Dream*

What is a woman's dream kitchen made of? All sorts of time-saving gadgets to be sure, but it must be a place of beauty as well — something to show off to friends. That's why housewives like sinks and cabinet tops, as well as pots and pans, of stainless steel. They like this bright metal because it has lasting beauty; its smooth surface is easy to clean and can't chip or peel. For ideas on how to use stainless steel, write to Department B-11 for our monthly publication **ELECTROMET REVIEW**.

ELECTRO METALLURGICAL COMPANY

Unit of Union Carbide and Carbon Corporation
30 East 42nd Street **UCC** New York 17, N. Y.

PRODUCERS OF ALLOYS THAT MAKE STEEL STAINLESS

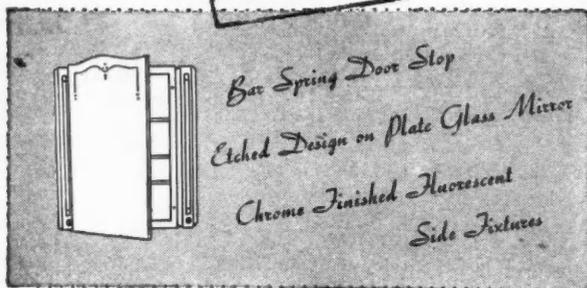
Beautiful Enduring Strong Tough



"THE MISSUS INSISTED ON THE FINEST."

The finest is right. The Mirro-Glo Fluorescent Bathroom Cabinet, with the beautiful chrome-finished fluorescent side fixtures, represents the utmost in bathroom-cabinet luxury and beauty. This model cabinet is popular with interior decorators who want to achieve that "Model Home" effect. To make all of your bathrooms perfect models,

Always Specify
MIRRO-GLO



● For additional information concerning our other products, send for our new product folder.

A DIVISION OF STANDARD STAMPING & PERFORATING CO.
3131 WEST 49th PLACE, CHICAGO, ILLINOIS . . . HEMLOCK 6600

The **MIRRO-GLO**
CABINET CO.

All over the lot



From front porch to back fence, there are hundreds of places where the very practical beauty of the Western Pines* does a job superbly.

Inside, the mellow charm of these selected woods lifts any room triumphantly out of the commonplace. Outside, they stand serene in any weather because they are seasoned well, fit tightly and take and hold the paint. And they are beautifully receptive to a great many finishes.

North, east, south and west—home-owners are cheering architects and builders who made charming homes a certainty by using Western Pines.

AIDS FOR REMODELING

Your customers and clients who come to you with remodeling projects will be definitely interested in the following literature:

1. Paneling Old and New Interiors with Real Pine.
2. The Kindchis Remodeled Their Home.
3. Make Your Attic Livable With Cheerful Walls.

Send a postcard for free copies; address—Western Pine Association, Dept. 11B, Yeon Building, Portland 4, Oregon.

*Idaho White Pine

*Ponderosa Pine

*Sugar Pine

THESE ARE THE WESTERN PINES

Well Manufactured—thoroughly seasoned—rigidly graded—
by all Association member mills.

Windowalls . . .

AN ANDERSEN STUDY IN COMFORT



Time was when an architect would put his tongue in his cheek if he detailed a window seat like this one. For it was bound to be a drafty proposition at best.

But with Andersen WINDOWALLS, the windows that function as a wall—weathertight and secure against infiltration of cold air—the window seat becomes a cozy, inviting spot in the home.

This WINDOWALL, in a New York home, is made by a mullion installation of Andersen Complete Wood Gliding Window Units. The WINDOWALL is completely weatherstripped, equipped with double glazing panels, and screen.

For complete details, consult Sweet's Catalog, or write directly to Andersen.

Andersen Corporation • BAYPORT • MINNESOTA

COMPLETE WOOD WINDOW UNITS • CASEMENT • GLIDING • DOUBLE HUNG AND BASEMENT

"LOOK... SMALL KITCHENS TURNED INTO
BIG ONES... LIKE MAGIC!"



Kelvinator's "SPACE-SAVER" PACKAGE

New Electric Range only 21" wide—New "Space-Saver" Refrigerator only 24" wide... big kitchen utility in small kitchen space!

It's here! The neatest solution to the need for small kitchens with modern family-size facilities!

Here's the New Compact Electric Range!

Only 21 inches wide—new design permits installation flush against wall. A full-sized 2-unit oven for baking and broiling. Automatic oven temperature control, one 8" and two 6" 7-heat surface units for

electric-fast, safe, cooler cooking. Beautiful exterior of one-piece wrap-around porcelain, porcelain acid-resistant top, recessed sloping switch panel, oven signal light and handy appliance outlet. Kelvinator quality throughout!

Add Kelvinator's "Space-Saver" Refrigerator!

Here's the refrigerator with 50% more storage—6 cu. ft. compared to

the previous 4 cu. ft. models, but takes no greater floor space. Big, stainless steel freezer... ample room for tall bottles, and shelf space galore for daily food storage.

This is today's answer to the builder's problem of utilizing small space to full advantage. Use Kelvinator's new "SPACE-SAVER" PACKAGE!

For further information write Nash-Kelvinator, Detroit 32, Mich.

Kelvinator



DIVISION OF NASH-KELVINATOR CORPORATION, DETROIT



REFRIGERATORS • ELECTRIC RANGES • HOME FREEZERS • WATER HEATERS

AMERICAN BUILDER

L D I T O R I A L

Investigating Material Shortages

AMONG the current government investigations of practices and conditions in the home building industry, those which purport to uncover the causes of continuing shortages in several classes of building materials are wasting public funds and the time of the Congressmen and manufacturers involved. Nothing will be uncovered that manufacturers have not known and have not been stating freely for months. If the investigators do not know the answers, they could get them by reading a few selected magazine articles, and making a few telephone calls.

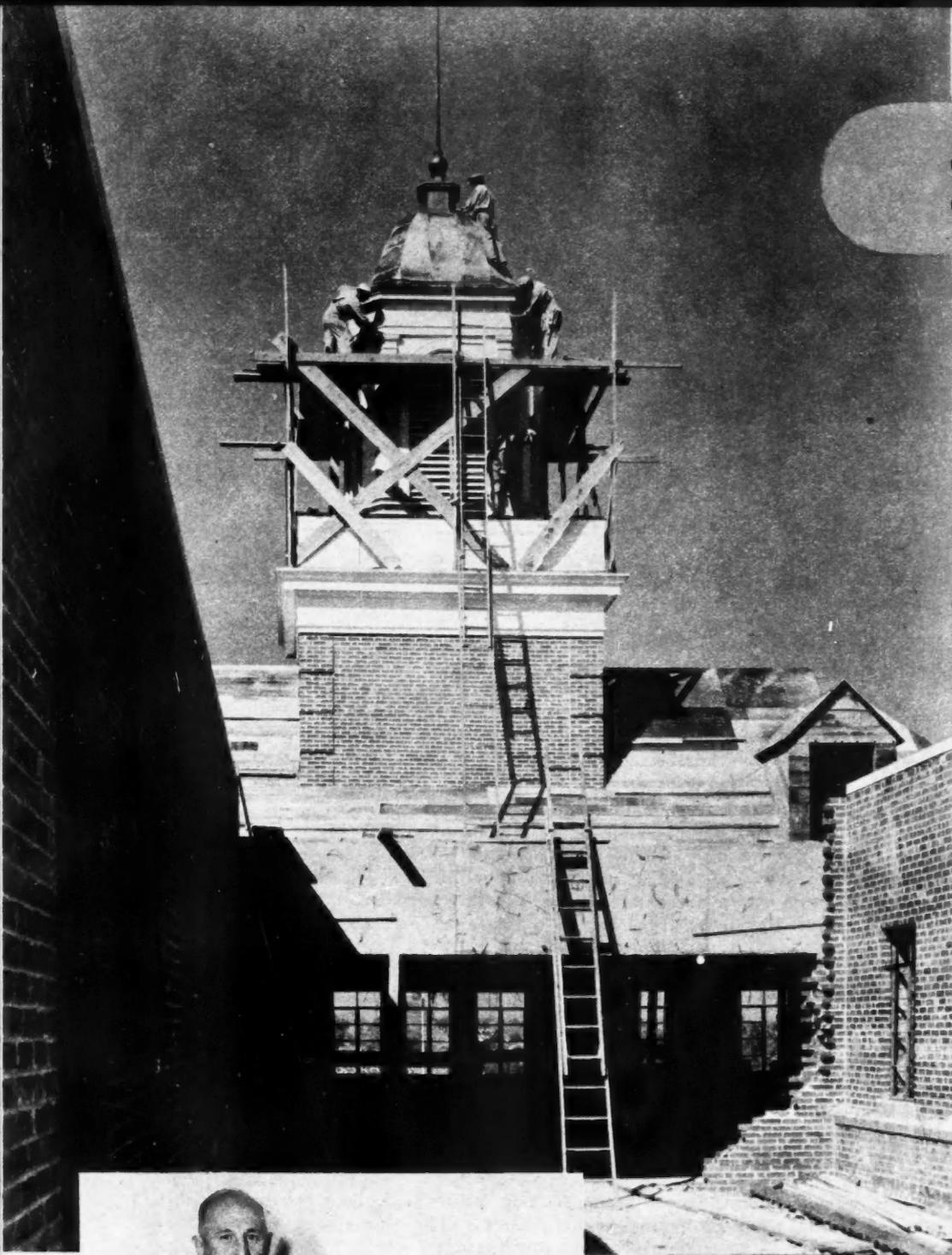
There are four major reasons for nationwide and area shortages of building materials: The forced abandonment or curtailment of production in some industries under the dead hand of OPA in 1946, and the lack of incentive in some cases and time in others to return to or step up production; the lack of desire on the part of labor in an employees' market to do at least a prewar day's work; wartime disruption of a finely balanced distribution system that cannot be reorganized in a matter of months due to car shortages and changed area demands; tremendously increased buying power and resultant demand, far in excess of anything experienced by manufacturers during or before the war.

Not only will the investigators bring to light nothing that is not already available to them, but neither they nor Mr. Truman and his bureaus will be able to do anything to change the facts or their effect on prices. There are a few immutable and recognized laws of nature, such as the rotation of the seasons, and the effect of light, air and moisture on crops that man cannot change. There is another law that has to do with man himself, one that socialist regimes in this country and in England, and fascist and communist regimes in other countries seem to think they can change. That is, that the individual profit motive in a competitive economy is the only way to get men to work and produce at peak efficiency, create more goods for less money, and, thus, raise the living standard of all. There will be shortages as long as the government continues to tinker with that natural law.

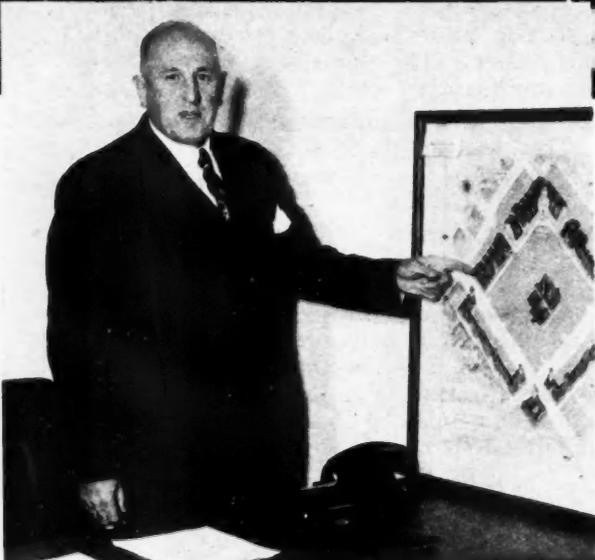
There is an equally immutable economic law. It is that the relationship of supply and demand alone determines prices. There never will be an equalization of supply and demand, and resultant equitable prices as long as government continues to tinker with that law.

Shortages will cease and become an unpleasant memory only when time and the ingenuity of management have erased the devastating effects of OPA regulations in 1946; when all, who work for a living, again realize that wages and the purchasing power of wages cannot be set by law or bureaucratic edict; and that a job can pay only what the individual job holder makes it worth. If the Congressional investigators really want to speed the end of building material shortages, they should call off the investigations of facts that already are well known, tell a few simple although possibly painful truths to the public, go back to Washington, abolish the bureaus, and get the government entirely out of the building industry.

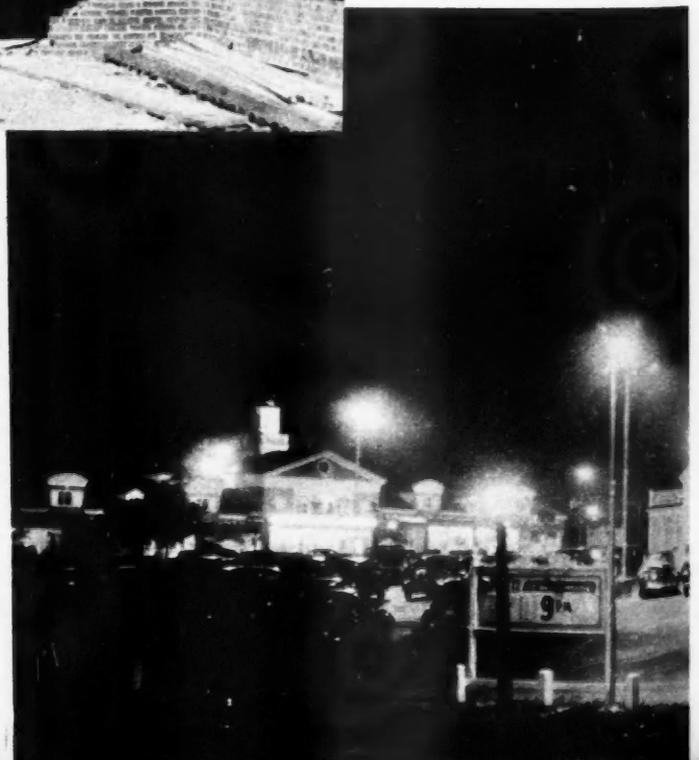
HAMPTON



AMPLE medical and dental facilities will also be available to Hampton Village visitors when the new two-story building, portion of which is shown at left, is completed. With retail stores on the first floor, the second floor will be devoted entirely to medical offices which will be centrally located in relation to hospital facilities, a convenience for both patients and doctors. Below, is a portion of the Village as it appears after dark



HARRY BRINKOP, builder of Hampton Village. The slogan pinned to the architect's perspective reads: "Make no little plans—they have no magic in them to stir men's souls."



VILLAGE—Gives Shoppers a Place to Park

Fourteen million dollar project in center of rich St. Louis residential neighborhood will have three square feet of paved parking space for each square foot of retail store area

THE nearest shopping center is the one where you can park." This thought prompted Harry Brinkop to begin planning the world's largest drive-in shopping center more than 18 years ago. Today, in the center of one of the richest residential areas of St. Louis, he and members of his organization are well on the way toward completing 11 buildings to house more than 120 retail tenants. Space in the 25-acre plot has been carefully allotted to buildings, streets, walks and parking areas, based on formulas that provide the facilities required for automobile-age shopping.

To obtain adequate "fender room" for shoppers, about three square feet of parking area is being allotted for each square foot of retail floor area. Parking grounds are paved and provided with drains so they will be clean and dry. Because Hampton Village is designed to draw trade from a wide area of the city, easy access from all points was of major consideration. It is located at the hub of five U. S. highways and two state highways. These thoroughfares, passing through or within five minutes of the center not only make it convenient to urban and suburban shoppers, but to outstate shoppers. Potential regular trade is in an area of some 600,000 population surrounding the center.

Procurement of a 25-acre plot in the midst of such a prosperous urban residential area was not an easy nor fast accomplishment. Piece by piece, the land was acquired from dozens of different owners. As the

property was acquired, zoning restrictions had to be removed and streets had to be closed so they would not bisect the shopping center. During the 18 years it took to assemble the property, 19 pieces of litigation and legislation had to be handled through the city council of St. Louis.

As conceived by Mr. Brinkop and his associates, Hampton Village is arranged in a town-square layout with buildings around the four sides. A huge parking lot in the center as well as front, close-up parking before the buildings, makes it but a short walk from any point in the center to a car parked on the premises.

Preston J. Bradshaw, prominent St. Louis architect, has designed the buildings in the Williamsburg Colonial style, with natural red brick, white trim, and green Ludowici-Celadon tile roofs. There will be no single-story buildings and height at the present time is being limited to two stories. To provide for possible future expansion by tenants, basements are constructed with ten-foot ceilings, and if that additional space is not sufficient, second floors can be utilized in most instances for additional quarters. Some of the larger buildings, to be finished later, will have 17-foot ceilings on the ground floor to permit addition of mezzanines. Space expansion up to 150 per cent is possible without outward alteration of the present and proposed structures.

Basic structural members of all buildings are of reinforced concrete. Curtain or non-supporting walls are of hollow tile, plastered. In most instances the floors are terrazo with marble baseboard and ceilings are of U.S.G. slotted acoustical tile. In some units, especially on second floor jobs, Kentile asphalt tile is being used on the floors. Ceilings are insulated with Fibreglas. Kawneer fronts and special aluminum-awning frames have been used with Libbey-Owens-Ford plate glass. In the newest building, the glass



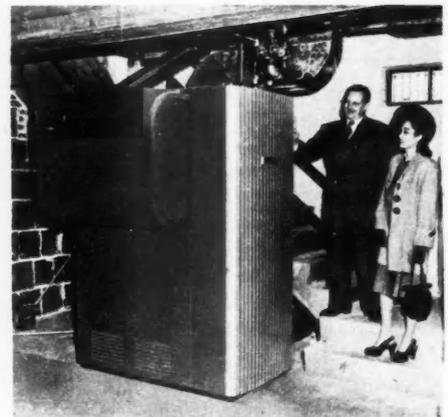


WILLIAMSBURG Colonial architecture, with natural red brick, green tile roofs, and white trim, adds dignity and exclusiveness to the appearance of project buildings, day or night

double doors and transom for the entrance to the dry cleaning shop in the center portion of the structure were made by the Al-Bro Manufacturing Co. of St. Louis.

Basic frontage of retail units is 20 feet and depth of the units in present structures varies from 55 to 106 feet.

Hampton Village is the only, completely air-conditioned, major shopping center in the world. Each basic retail unit in all buildings erected to date has an individually-controlled, year-round, Serval air-conditioning unit. Temperatures may be adjusted, summer or winter, to suit the requirements of individual tenants. To assure that all tenants make full use of the air-conditioning facilities for the comfort of shoppers, a clause in



RETAIL stores have individual year-round air-conditioning supplied by Serval units

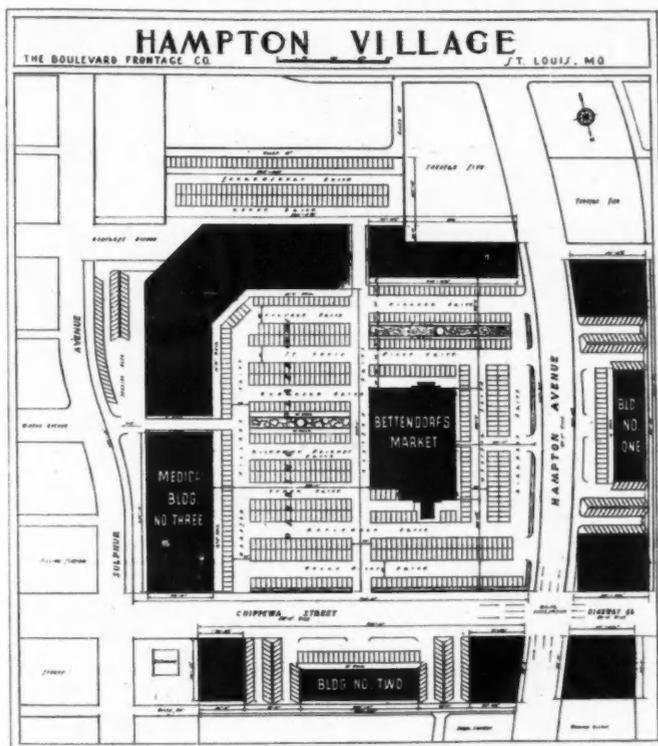


each lease specifies that the tenant must use the cooling system any time outside temperature exceeds 85 degrees F.

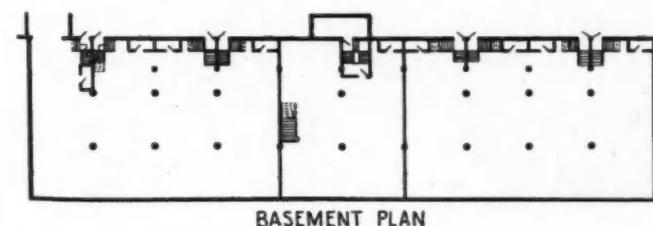
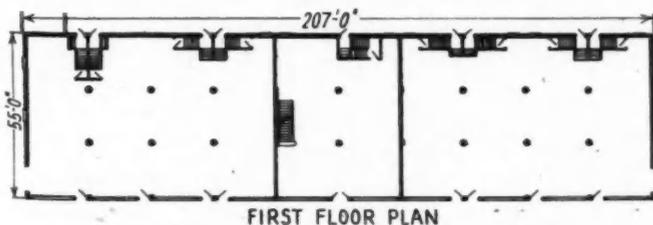
Each Serval unit is installed in the basement at the rear near the stairway. Although the automatic control is in the main floor shop, the unit can also be used to maintain uniform basement temperature when that portion of the structure is used for sales or office space. Conditioned air is brought into the shop at ceiling height at the rear and returned to the unit through a grille installed in the floor below the large display window at the front. The Laclede Gas & Light Co. of St. Louis handled the engineering and installation of the Serval units in Hampton Village. At the present time two lessees in



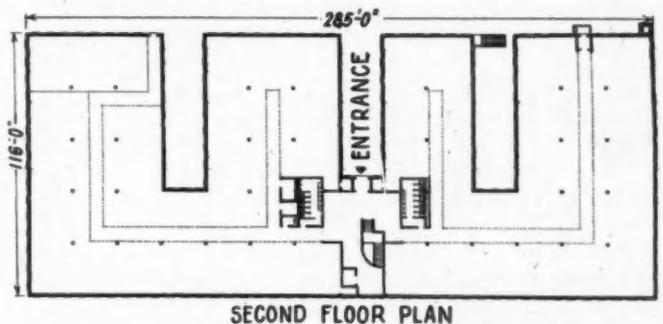
THE new medical building is now nearing completion. A portion of the paved and well-drained parking area is in foreground



PLOT plan showing the location of buildings and parking areas



PLAN of building at left which is typical of other structures



the center, one operating a cocktail lounge and the other a restaurant, have installed Bryant dehumidifiers to supplement the Serval units to take care of excessive humidity conditions created by the nature of their businesses.

The newest and one of the largest structures in the shopping center is the medical building now under construction. This two-story building will house shops on the first floor and medical offices on the second. It is placed at the east end of the plot on a grade so that the rear portion of the building, fronting on Sulphur Avenue, will be at street level at the second floor to permit medical patients to enter doctor's offices without climbing stairways or riding an elevator which is necessary when entrance is made from the front of the building facing the inner court of the Village.

This building conforms in style and construction with the others in the project except that Fenestra metal casements are being used and year-round air-conditioning will be provided by a large centrally-located Carrier installation. All woodwork in this building, as in the others, is being provided by the Fox Millwork Co. of St. Louis. Store interiors in the medical building will be finished like the other structures.

Interior as well as exterior lighting is an important phase of promotion and merchandising in Hampton Village. Fluorescent lights throughout interiors in the project make interior lighting uniformly bright. Spotlights erected at strategic points in the Village illuminate structure exteriors and parking lots every evening until 11 o'clock, and each tenant is required to keep window and store interior lights turned on until that same hour.

The tremendous drawing power of Hampton Village has already been well demonstrated by the experience of Bettendorf's super grocery market, which is the only structure to be erected within the Hampton Village square. Last year this store grossed more than \$3,500,000 and drew customers from every section of St. Louis, as well as the surrounding area.



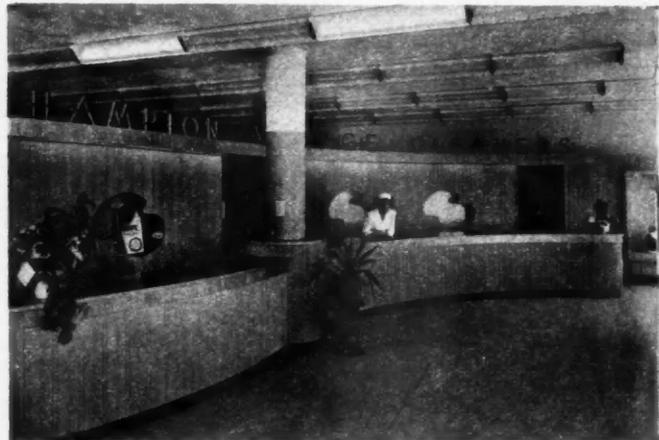
MEMBERS of board of directors of Boulevard Frontage Co. Standing, l. to r.: Fred J. Hoffmeister, Ray Vertal (not a member), Carl Stifel, Thomas Lynn Remley, Theo. M. Vollmar, David Remley, A. Donald Anderson, Lewis Lueking, Melvin Eiling, Lester Lueking, Harry C. Vollmar, William Brinkop. Seated: Harry Brinkop, Roger Dahlhjelm (not a member) and Sam Breadon. Mr. Dahlhjelm operates the Farmers' Market in Los Angeles, and Mr. Vertal is his plane pilot

Careful selection of tenants is a prime requisite in operation of a centrally-owned and controlled shopping area. Mr. Brinkop once interviewed more than 2,500 applicants to select 20 lessees. In addition to carefully selecting tenants, a rigid set of restrictions on merchandising and display practices is enforced. Uniformity of signs confined to the front of buildings without projecting over the sidewalk is an important point. Each tenant also contributes a small percentage of the gross volume toward an advertising and promotion campaign for Hampton Village.

In addition to Harry Brinkop, who is president of the Boulevard Frontage Co., ownership unit for Hampton Village, he has associated with him his brother, William Brinkop and Theodore Vollmar, builders who are in charge of all construction. These individuals, as well as Mr. Brinkop, have been in the business of building homes and small commercial structures for many years. Harry C. Vollmar, who has retired from the building business, is serving as vice-president of the Boulevard Frontage Co. The operating firm for the new shopping center is the Hampton Village Realty Co.



PLASTERED walls, marble base, terrazzo floors and acoustical tile ceilings are standard finishes in Hampton Village shops



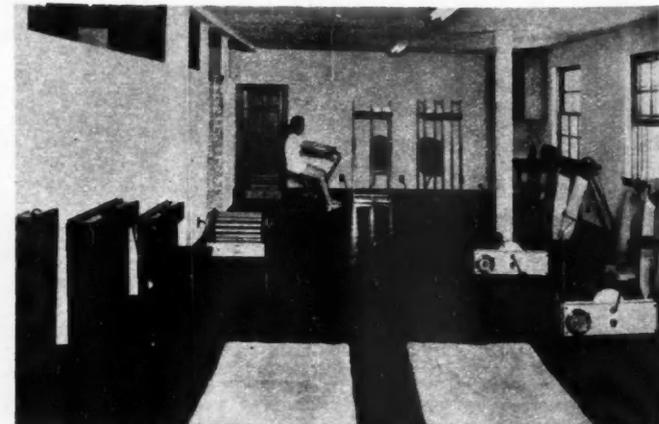
THE attractive curved counter, rear partition and fixtures in this dry cleaning firm's lobby are built of striated plywood



INTERIOR of small, well-appointed cocktail lounge which occupies a corner of one of the large new buildings in the Village



PARLOR of the Village beauty shop. All important services and activities of interest to women are being included in the project



A WOMEN'S reducing salon occupies the entire second floor of one wing of a building. Partitions are of 2-inch solid plaster



THE individual shops in this building are clearly defined and set apart from each other.

Photo, by Nowell Ward, Chicago, Ill.

"Colonial Shops," a Rental Property

"COLONIAL SHOPS," a rental property located in Evanston, Ill., is designed primarily to attract the best possible occupant in an area abounding in commercial buildings of similar quality.

Through the use of good, sound materials in construction and the latest improvements and by careful planning and design, this building fulfills every requirement of a discriminating tenant. Thus, all available space has been in great demand. The large number of applicants made it possible to obtain, after carefully screening, a group of tenants that would complement and patronize each other.

The well-balanced and finely proportioned exterior is designed in the Williamsburg Colonial manner. Breaking up the front wall, which would otherwise have been a large flat expanse, with projecting bays, added interest and variety to the building. The front wall is further enhanced by the extended roof line

Formal and dignified building attracts good tenants and draws a discriminating clientele



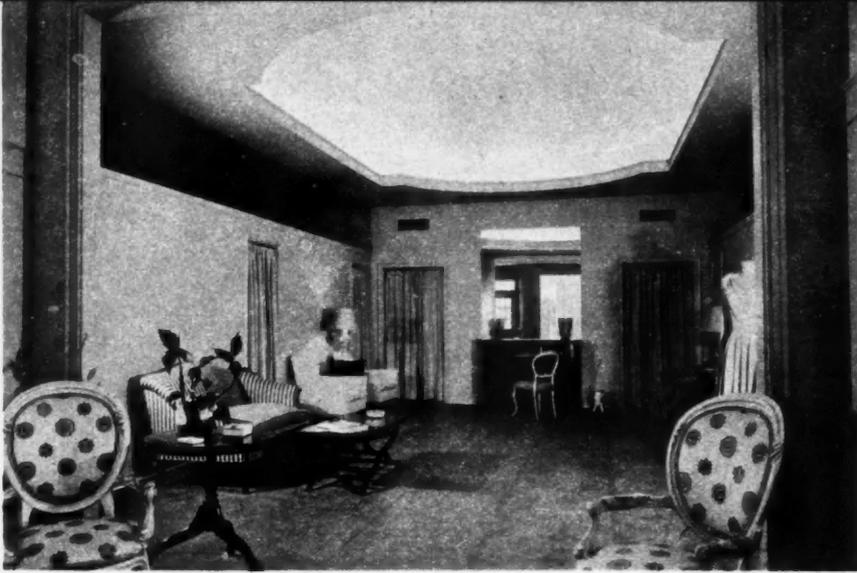
which is terminated by the nicely detailed cupola.

In order to maintain the high character of the building, the Williamsburg Building Corporation, owners, restricted the use of display signs to the two wall plaques placed on each side of the large window of the tea room, the lettering on the windows and awnings of each store.

All shops except the tea room are provided with a gas Servel air-conditioner. The service is metered, permitting each tenant to control his own unit. The cost of operation is in addition to the rental. The tea room, because of its size, is controlled by the Carrier system of cooling.

Each shop is styled to conform to the needs and requirements of the tenant. Wall fixtures are of special design and make. Lighting is in-

FEATURED motif on front is the large center-bay shown in partial view at left. This bay frames show window and entrance to shop



FOSTER'S is typical of the individual shops where special planning has been provided

Photo, by Nowell Ward, Chicago, Ill.



Photo, by Chicago Architectural Photographing Co., Chicago, Ill.

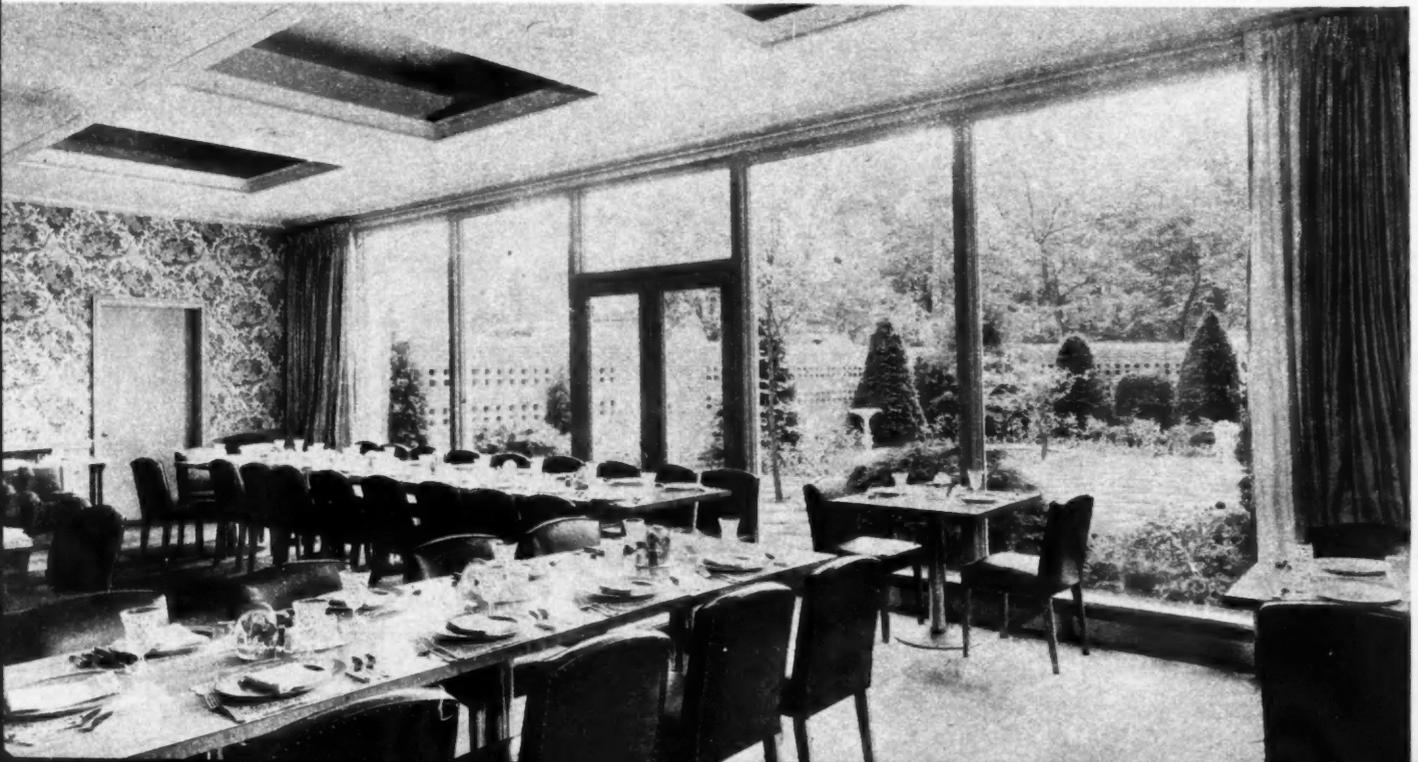
direct, being concealed behind recessed ceiling panels. Special treatment is employed on walls and ceiling of the tea room, including wood paneling and a generous use of glass.

A large paved parking area at the rear of the property is maintained for the use of customers of the various shops. This space is well-lighted with an attendant in charge during store hours. The public parkway, in front of the building, is completely landscaped and maintained by the owner. Flowers are changed with the seasons.

This building was constructed by William E. Schweitzer & Co., contractors, Evanston, Ill., for \$255,000, from plans by Maher & McGrew, architects, also of Evanston.

Exterior walls are of brick, with Williamsburg, mottled red-faced brick on front and alley walls, as well as the walls enclosing the formal garden. The rest of the walls are common brick. The first floor is a concrete slab, laid over Jones & McLaughlin, Junior steel beams. Ceiling and roof framing are wood. Finished floors are carpet, wood and asphalt tile. Walls and ceiling throughout are plaster. The pitched roof is covered with Bangor slate, the flat portion with a built-up roof. Four-inch rock-wool insulation is applied to the underside of all roof surfaces. The building is designed to carry a future second floor.

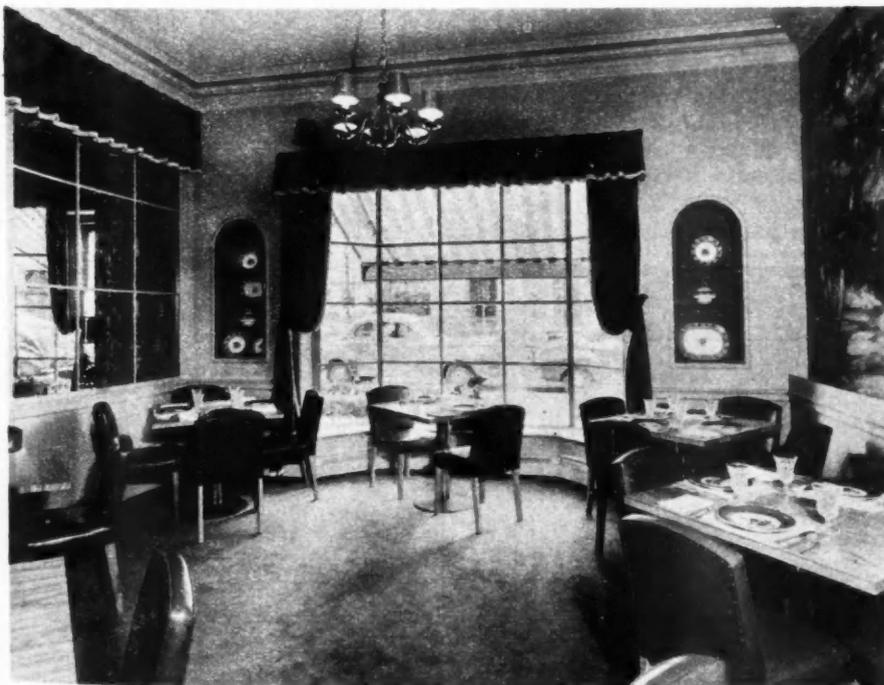
THE special arrangements in the interior of the "Tally-Ho" tea room are clearly indicated in the photographs shown at left and below. Thermopane glass which extends across the entire rear wall overlooks a formal garden for the use of patrons



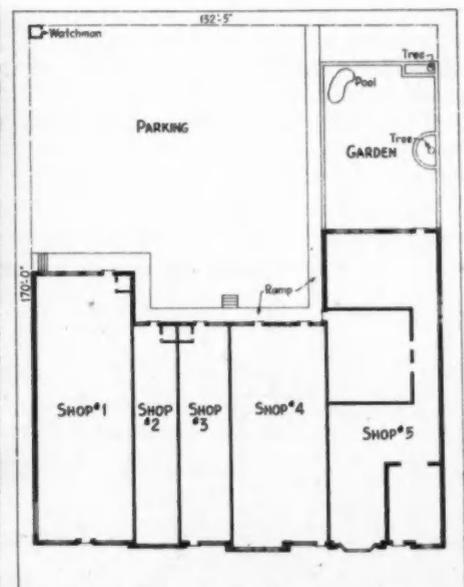


Photo, by Nowell Ward, Chicago, Ill.

"COLONIAL SHOPS" building, which is composed of a group of individual stores placed under one roof, has been designed in the best Williamsburg manner. A deft sureness in scale and proportion, a skillful choice and use of materials are manifested throughout



Photo, by Chicago Architectural Photographing Co., Chicago, Ill.



BUILDING occupies approximately one half of the lot area. Balance of property is devoted to customer parking and formal garden



THERE are many design and structural problems in cold storage plant building, not encountered in ordinary construction

Locker Plant Construction Calls for Special Technique

A summary of lessons learned by Don Clark, locker plant builder, of Topeka, Kansas

THE biggest enemy of successful cold storage plant construction is moisture. The basic principle to keep in mind is that the interior of any cold storage plant is a low pressure area, constantly sucking warmer air toward the interior through every possible hole or along any structural member that may serve as a conductor, no matter how small, eventually leading to trouble of a major nature.

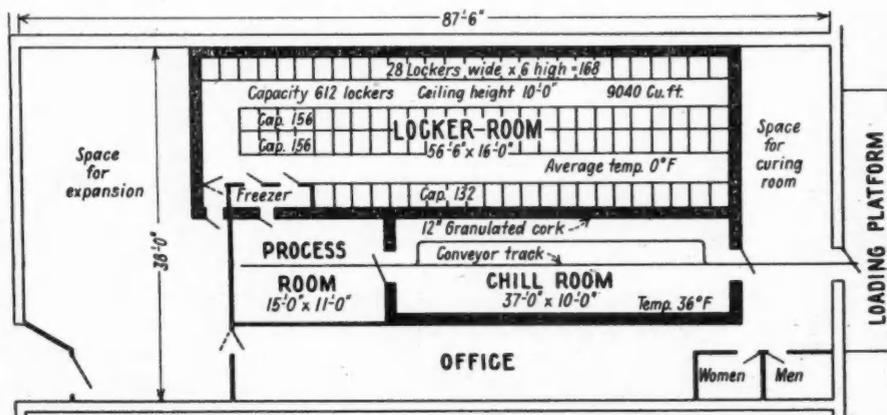
To avoid seepage of air, and the moisture it carries, every possible precaution must be taken to thoroughly seal insulated walls, floors and ceilings. The buildings and insulated walls, which are usually from 6 to 12-inches thick, should be built so that no structural members will project through the walls or ceilings and come

in direct contact with outside air. When this happens, the members not only act as conductors of moisture, but also reduce the insulation value of the wall or ceiling which is penetrated.

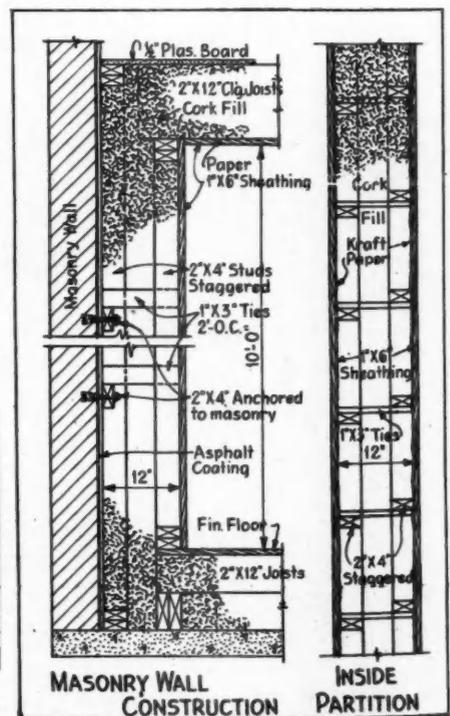
The ideal situation in building a locker or cold storage plant is to start with a new structure from the ground up and with a design prepared by an architect who thoroughly understands cold storage plant construction and operation. In many areas of the country, however, existing buildings of masonry or frame construction are converted to storage plant use. This practice is the usual situation in most cases. Older buildings, if they are sound, can be converted successfully if proper methods are used. A good roof is essential because seepage of

water anywhere will cause untold difficulties.

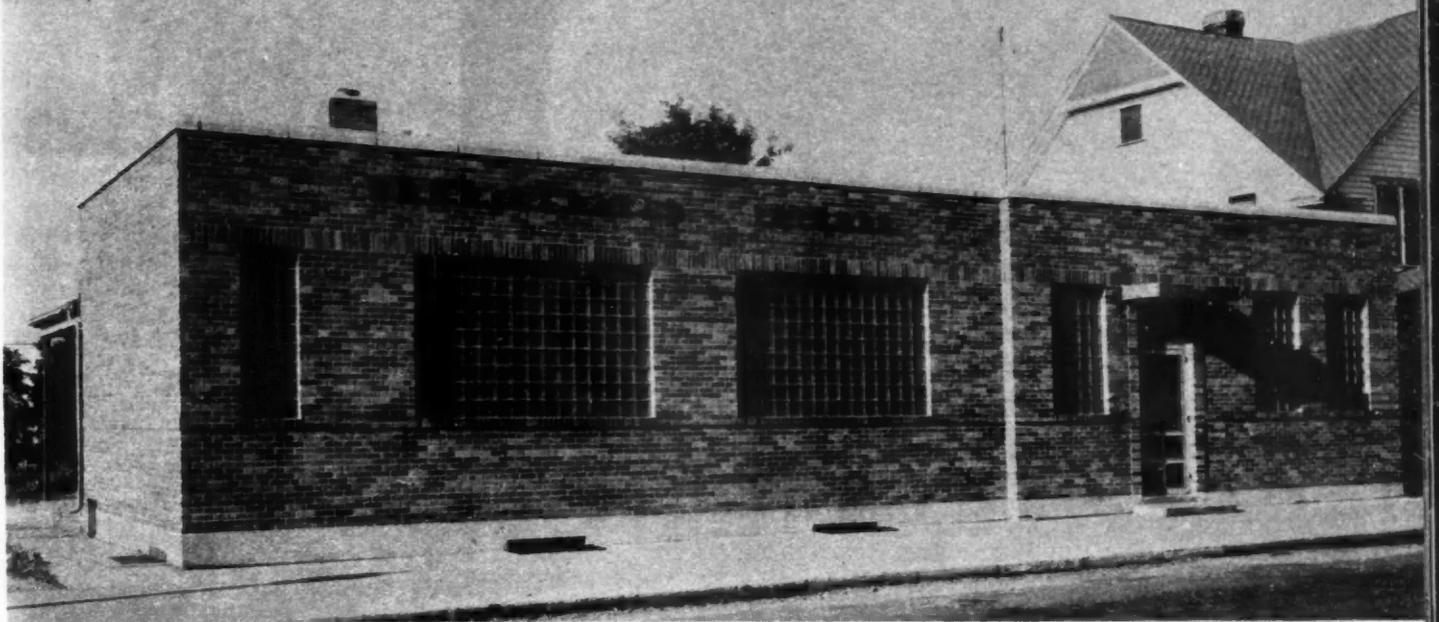
It is always wise to get close to multiples of 8 feet in the locker room because standard lockers are 2½ feet in depth. Two rows of lockers plus a 3-foot aisle totals 8 feet. A 16-foot room will accommodate four rows of lockers with two aisles and no waste space. The chill room should have a minimum of six-tenths of a square foot for each locker. Thus, a 300-locker plant would have 180 square feet in the chill room. The sharp freezing room does not have to be any larger than necessary to accommodate one day's cutting. It is not necessary to insulate the processing room be-



FLOOR plan shows typical layout of a locker plant with additional room for expansion

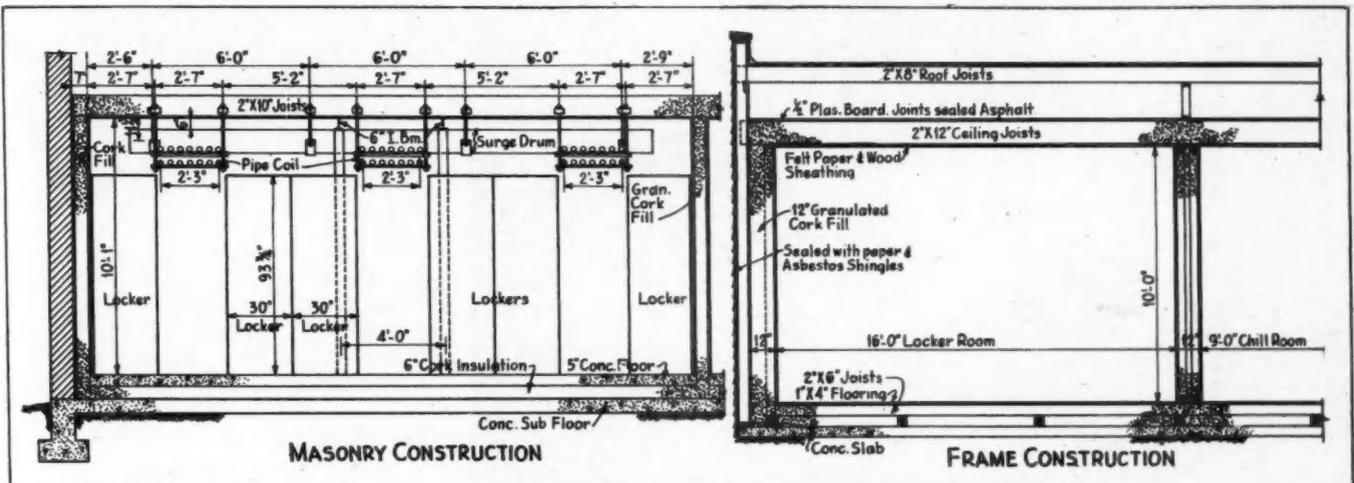


STUDS in fill insulation walls should always be offset for best insulating results



THIS type of construction has become a specialty operation because of the many unusual problems that must be solved

Photos. courtesy All-Steel Equipment, Inc.



THE PRINCIPLE components of frame or masonry cold storage plant walls are shown in the two detail drawings above

cause products are very seldom in the room long enough to harm them.

It is important that the site for any cold storage plant has exceptionally good drainage of surface moisture. Construction of a locker room or plant should never be attempted in a basement because moisture is too much of a problem there. It is possible, how-

ever, to build a plant over a basement, using a floor arrangement similar to that illustrated in the detail on insulation in a frame structure.

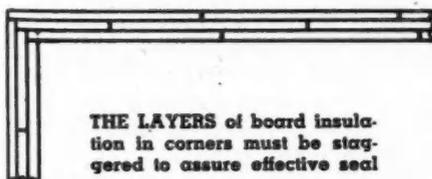
The best plan is to have a basement-less structure with a concrete floor. A concrete slab of desired thickness is first laid down, and thoroughly sealed with asphalt and paper. Then a board-type insulation of the desired thickness is laid, sealed and covered with another concrete slab. Floor drains are not practical in locker rooms or chill rooms because the drains freeze. It is best to slope the floor slightly toward the door so the room can be

swept out easily during cleaning and defrosting operations.

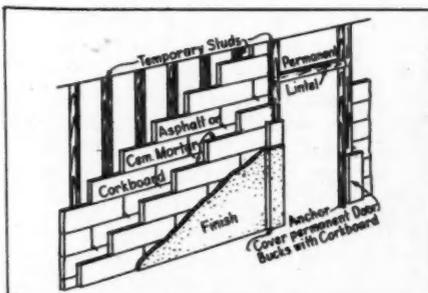
When a masonry building is put to locker plant use, the interior walls are first plastered, troweled smooth and hard and thoroughly sealed at every point before any insulation is applied. The detailed drawing on this page illustrates major components of the actual insulation wall.

In a frame building, gypsum board may be used over the studs, tightly fitted and thoroughly sealed with asphalt and paper before any insulating is started.

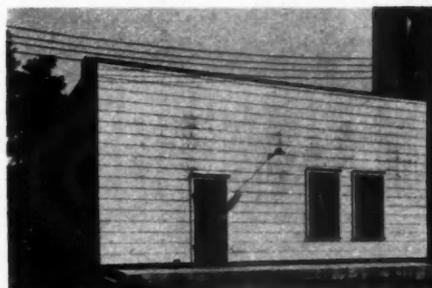
(Continued to page 150)



THE LAYERS of board insulation in corners must be staggered to assure effective seal



PARTITION wall can be built entirely of board insulation by using temporary studs



THE SAME caution is required in constructing small locker plants, like these, as in large projects. It is expensive construction when correct practice is followed

Factories Can Be

"NOTHING is too good for baby." That might have been the slogan that inspired the structurally beautiful and functionally efficient industrial showplace that Johnson & Johnson, baby products manufacturers, have erected in Cranford, N.J., at a cost of \$1,125,000. The plant is in the center of a 30-acre plot to permit future four-way expansion.

Completely modern in interior finish and furnishings, its well-lighted work rooms are as antiseptic as a hospital. Employees escape entirely any "factory" atmosphere.

The building is of unglazed, speed wall tile, trimmed with terra cotta and aluminum. It has a continuous strip of windows, all double-glazed to permit air-conditioning. Glass is a light-refracting product which cuts down glare. The single-story structure is 250 feet wide by 315 feet long and has a floor area of some 120,000 square feet.

The interior arrangement is unusual. All employees and visitors enter through a single entrance into a large, attractively decorated reception lobby and lounge, which is partitioned off from the manufacturing area by a large glass window. This window permits a full view of manufacturing operations in the plant. The lobby is decorated with hardwood plywood panels, has an acoustical ceiling and fluorescent strip lighting.

Off this lobby are rest rooms and the plant offices. At the end of the corridor leading from the lounge, is the employee's cafeteria, an after-luncheon employee's lounge and a completely equipped modern kitchen. Adjacent to the cafeteria, is the plant broadcasting system which pipes musical programs, radio broadcasts and special plant announcements throughout the plant.

The manufacturing area has acoustical ceiling and strip fluorescent lighting. It is a single room, 50 feet wide by 285 feet long, and is devoid of columns.

Machinery is laid out in a U-shape, so that operations that are cumbersome can be carried out in the adjoining warehouse section, rather than in the manufacturing section. The manufacturing section is completely air-conditioned.

The Johnson & Johnson plant has an unusual color scheme, worked out by experts in the psychology of color. Floors, walls and equipment are of colors known to minimize fatigue and eye strain.



JOHNSON & Johnson employees' recreation room is air-conditioned, has acoustical ceiling and strip fluorescent lighting. A fluorescent trough circles walls for extra illumination

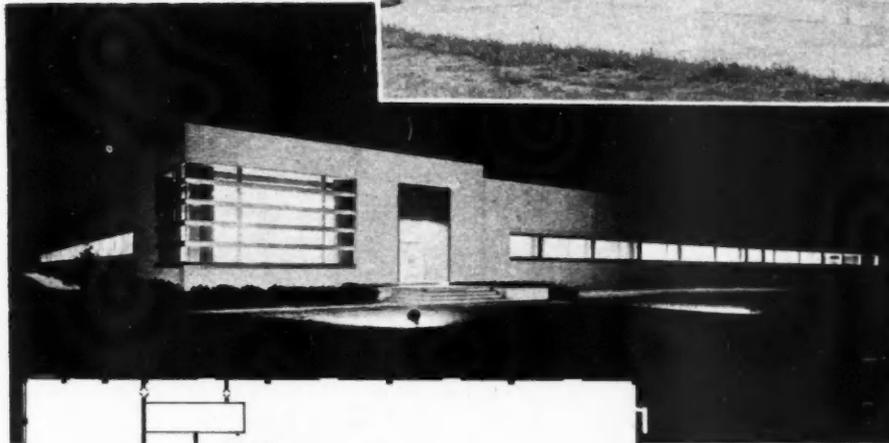
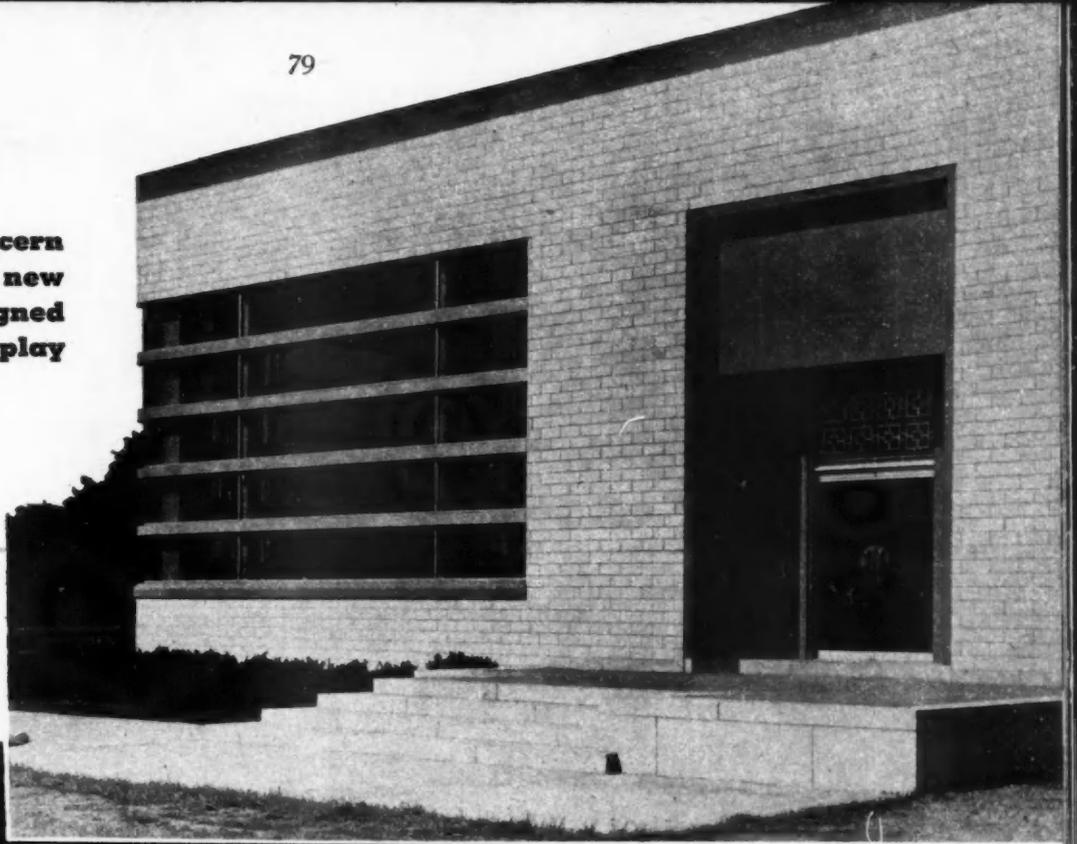
PLANT manager's office where modern furnishings contrast with pastel walls and ceiling



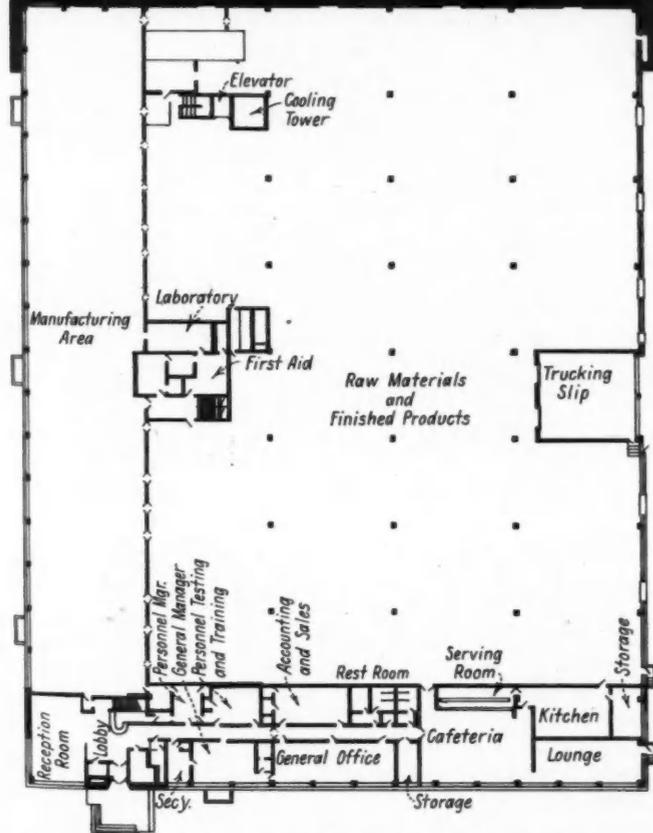
"Showplaces"

Johnson & Johnson concern makes baby products at new modern factory, designed for efficiency and display

DETAIL of double-glazed corner windows and entrance to the new plant. Note glass doors. Lower picture of floodlighted factory at night shows continuous windows



BOTH employees and visitors enter plant through front door into reception lobby shown below. At extreme left of reception room is huge window, shown fully at bottom, which overlooks manufacturing area



PLAN shows how Johnson & Johnson plant separates long manufacturing showplace from warehouse storage area, where the more cumbersome jobs are done. First aid room adjoins the work areas



New Storefront

Plate glass is used to give greater visibility to store interiors. Selections of colors and materials depend on merchandise



SIGNS should be distinctive. Canopy cuts down window reflections

THE trend in storefront modernization is to modern design and modern materials, with a careful use of color and good visibility of interiors. A recent survey of architects shows 90 per cent favor modern design over traditional in commercial building.

Contemporary store designs must, however, make provision for the display of traditional merchandise. They should also be flexible so that complete renovation need not be made too frequently.

The design and appointment of each individual store is a problem that can best be handled by the store owner or his architect and designer. But there are some problems in contemporary store design that must be met by most store owners. There are new trends and practices with which they should become familiar.

Today, in smaller stores particularly, large plate glass windows are used to give an unobstructed view of the store interior. This practice presents some new problems. First, the front itself has only limited space in which to show radical changes. The interior becomes a part of the display, along with its furnishings. Obviously, these furnishings must be in keeping with the exterior of the store.

Reflections from plate glass windows always have caused annoyance. Sometimes these are eliminated by tilting the windows—usually in at the bottom—to reflect only dark pavements, instead of brightly lighted shops opposite. One of the best ways to eliminate reflections is to use light pastel tints inside the store for wall surfaces and fixtures. When they are well-lighted, they reduce reflections out-of-doors to a minimum. Occasionally, windows are beveled at an angle to reflect a more distant spot which is less bright than one close by.

Colors should be selected carefully to feature the merchandise displayed instead of diverting attention from it. It has been found that it is not a particular color that pleases, but the association of one color with another.

Lighting of exterior colored surfaces is important because it can make them vivid or dull. Cold light, like some fluorescent or daylight, goes well with such cold



LAVISH use of glass—decorative for front, blocks for light

colors as blue or green. Warm light, such as filament and pink and gold, goes well with warm colors like red or yellow.

In smaller stores, the off-center entrance adds breadth to the store front. It also gives different dimensions to show windows so that, at least, two different types of display arrangements can be made. The off-center entrance also permits more freedom in plan. It allows irregular interior arrangements to dramatize and make merchandise more appealing.

Mirrors play an important part in store design today because they can reflect and give an illusion of width or depth to what would otherwise be a narrow span. They suggest a spaciousness in keeping with the greater visi-

Trend Is to Modern Design

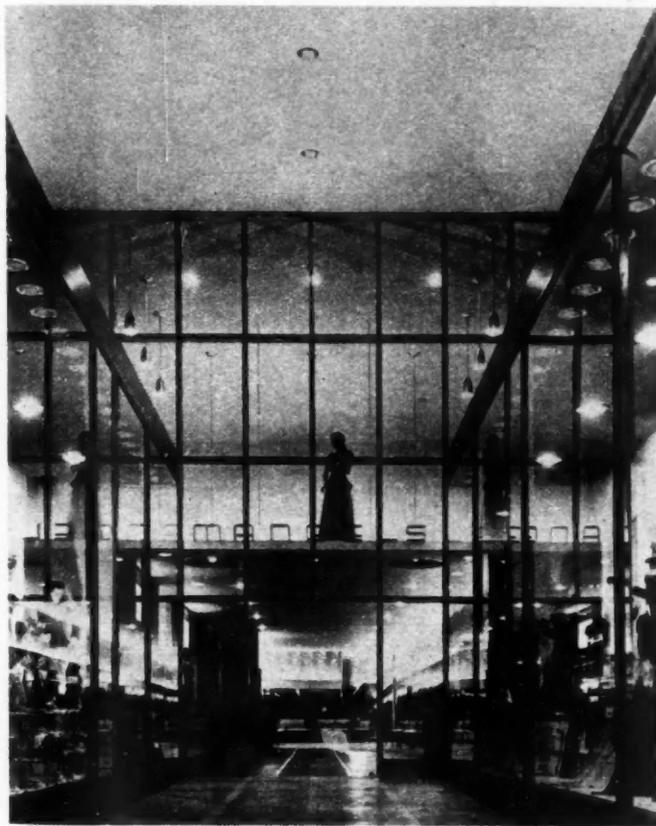
bility and more open effects now popular. Their use on columns does much to decrease the apparent size of the columns and, in some cases, the columns seem to disappear.

Signs, and symbols of identifications should be chosen carefully. Distinctiveness can be achieved if there is some particular style which is individual and which will be recognized readily as the symbol of an establishment. Clear, simple and well-proportioned lettering is always safe and decorative. Lettering should be large enough to be visible for some distance. If it is placed horizontally on the buildings, it will not have to be changed if zoning should prohibit projecting signs.

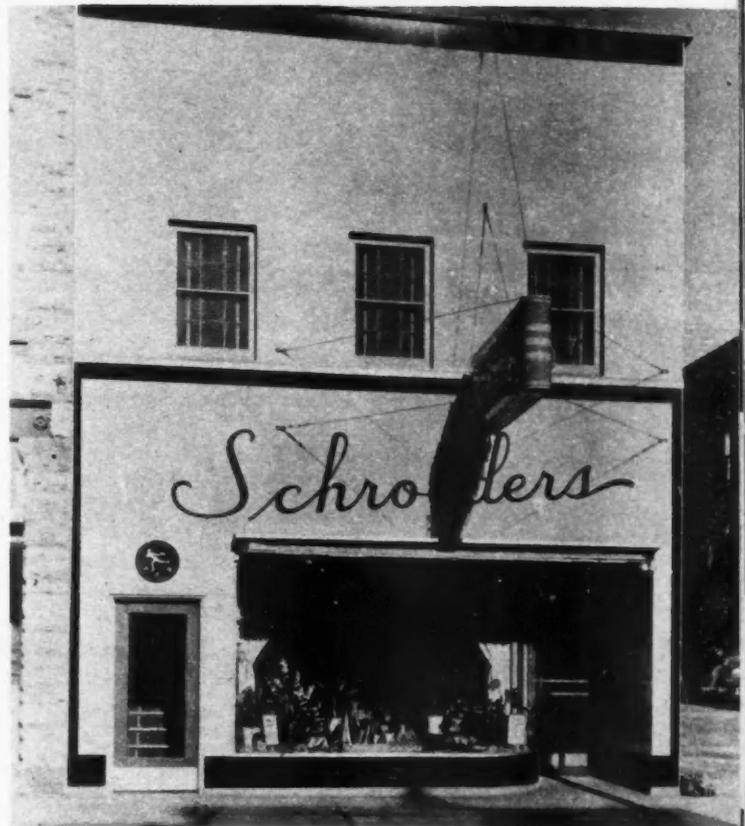
Because materials and labor have been scarce, much storefront renovation has been put off for several years. Current demand for work of this character is high. In some communities, merchants have found it economical



TILTED plate glass windows reflect only dark pavement below



THE entire store becomes one huge show window for passersby



TREATMENTS, above and below, enhance merchandise displays

to cooperate in working out modern storefronts for an entire block of establishments. In addition to the savings in cost accruing from group modernization, the display value of the modernization is increased manifold.

Because the design is worked out for all units, each harmonizes with its neighbor. The eye-catching effect of an entire renovated block is of tremendous advertising value. Individual stores can be made to seem wider because the front of one unit blends into the next. Each store gains the effect of two extra pier widths—one on either side—which is shared with a neighbor. A different color can be used on each side without destroying this effect. Sometimes, a projecting canopy along the whole block shelters customers during inclement weather.



Residences Converted to Commercial



RESIDENTIAL property which is approaching obsolescence, if located in a commercially zoned area, sometimes offers opportunities for profitable conversion to business use. Changes in such a property in Pasadena, made at half of the acquisition cost, trebled the income from that property after remodeling.

C. Lester Jones, of Jones & Gloege, Pasadena designers and builders, collaborated with a Pasadena dentist to purchase a 10-unit residential court for \$50,000. By spending an additional \$25,000, they transformed it into an attractive medical center. Each unit now brings in \$100 a month for business use, where formerly it brought only \$32.50 under the ceiling at which OPA had it pegged.

As residential property, the court was in the deterioration stage. But it is situated ideally for its new use, just a half block from the main street and about a mile from the business center where there was a congestion of doctors and dentists.

Each of the 10 units in the court was 30x22 feet and contained 660 square feet of floor space. This was divided into a living room, bedroom, kitchen and bath.

A CANOPY, with interesting arrangement of supports, ties units together. Recessed lighting furnishes plenty of illumination

al Treble Earnings

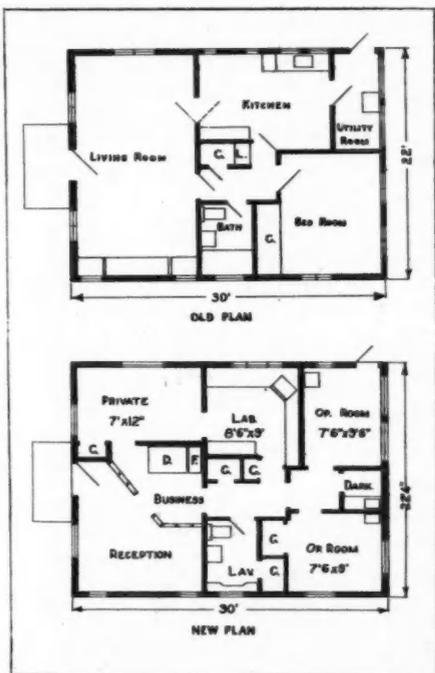


THIS Pasadena 10-unit residential court was nearing obsolescence but was located in a commercial zone



A MODERN medical center emerges from transformed court. Clever design has given a clean, sweeping, horizontal emphasis that pleases

which is if lo area, es for ss use. Pasa- sition n that es & and Pasa- 0-unit . By , they active now siness t only which



It was decided to convert each unit into quarters large enough for two doctors, or for one doctor with extra space for laboratory work. Today the living room is partitioned into a reception room and operating room. The bedroom is a private office. The kitchen takes over duties as a business room or operating room. A former service porch has become a laboratory.

According to usual practice, tenants bore the cost of temporary partitions that were installed to their specifications. Average cost of such improvements was \$1,000 for doctors and \$2,000 for dentists.

The exterior of the development is completely changed. The several units are tied together with a well-designed canopy along the facades

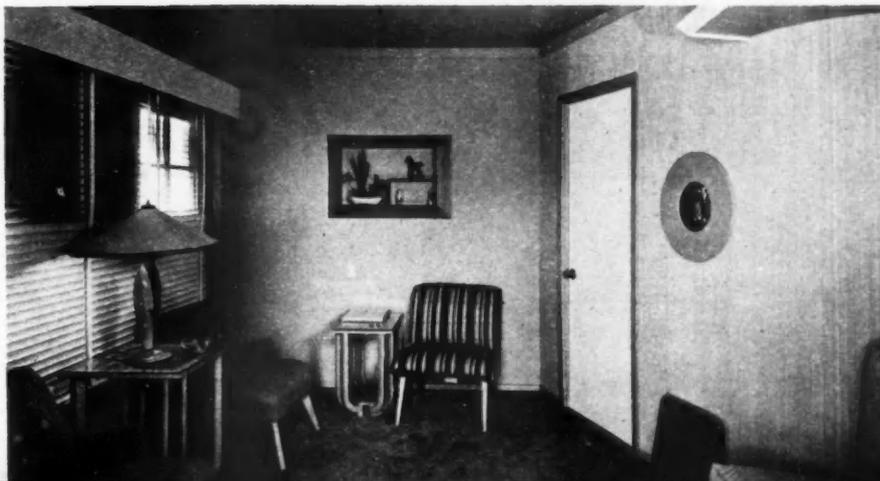
which imparts a modern, horizontal feel to the arrangement. The canopy is supported by posts set at an angle to produce an unusual and interesting effect. The canopy also is carried across the front of the court to make an impressive entrance.

Plantings of shrubs and flowers along the borders of the court and between the units add to the appearance of the medical center and soften the straight lines of the structures.

Conversion of this residential court into a commercial development already has trebled the former income from the property, and there is a chance for still greater income. There are 10 garages which can be remodeled to suit tenants. Three are being made into offices now and the other seven will be done later.

SKETCHES show how floor plan of the residential unit was revamped to provide laboratory and office space in the new center

PORTION of a former living room is now the reception room of a doctor's office, modern both in finish and in furnishings



court . But new main in the was a ntists. court d 660 s was bed-

ment of cessed ination



Don't Overlook Glass

A basic material, it adds beauty, comfort, and convenience to homes and commercial structures

SO OLD its origin has never been discovered. So useful, it has long been classified as a major building material. Because of it, human life has been lengthened. Without it, the whole scheme of human existence would be well-nigh unthinkable, and housing would be little more advanced than pre-historic days. Such is the thumbnail history of glass.

Today, through the development

of new manufacturing techniques, glass is achieving new importance in the home building field. Rooms are walled wholly or in part with transparent glass to gain spaciousness. Dark corners are brightened, and the illusion of depth and size achieved through the use of mirrors. Windows, planned originally as openings for the admission of light and air, are now designed to blend the out-

doors with the indoors. And, where windows are not practical, glass blocks may be used to provide extra light.

One of the most versatile of all building materials, glass is produced in a variety of forms for diverse structural purposes. There is an opaque glass facing for exterior and interior uses; tempered and laminated glass for doors; bent glass for store windows; bullet-resisting glass for banks; architectural glass for decorating; carved glass murals for ornamentation; and double glass with air space for transparent insulation. In addition, there are the standard window glass and plate glass.

Window glass is used in the greatest quantity and differs a great deal, depending upon the ingredients used and the methods of manufacture. A quality window glass is made of only the purest and most carefully selected ingredients. It provides clear, true vision and transmits the true colors of all objects seen through it. Protected in manufacture from foreign substances of any kind, a brilliant, reflective, and unmarred surface on both sides of the glass is produced. This type of glass is generally used in glazing the more modest residence.

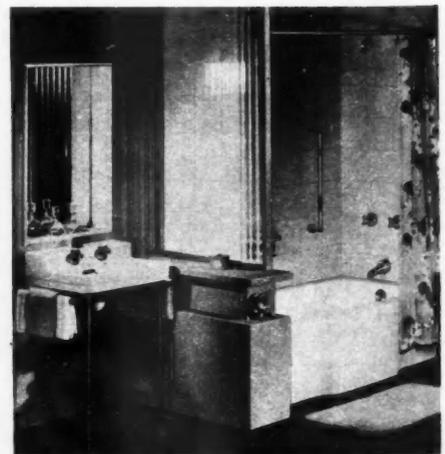
However, when large window areas are specified, which is particularly true of the new type home of



LARGE plate glass windows bring the outdoors in, lengthen horizontal lines of the house



CONVENTIONAL window panels flank large double glazed insulating window; below, quality plate glass mirrors, installed with rosettes, add depth and beauty to living room



GLASS is increasingly popular for baths

JUDICIOUS use of glass highlights the beauty of commercial building

modern design, both large and small, the use of a fine plate glass will add a note of elegance. Glass of this quality is now available at a cost low enough to warrant its wide use, and of a thickness which can be glazed in standard $1\frac{3}{8}$ -inch sash with standard sash weights.

The double-glazed picture window consists of two panes of glass, separated by hermetically sealed air space and held in place by a stainless steel band. This window lends itself to homes, large or small, of modern, traditional or semi-traditional pattern. Normally, polished plate glass is used in these units; however, other kinds of glass or combinations of glass can be substituted.

This type of installation permits the use of larger windows, decreases the load on air-conditioning equipment; reduces heating costs; minimizes cold downdrafts at windows; and adds comfort and health all year. Originally available on a custom-made basis only, these windows are now produced in a number of standard sizes. They offer a practical answer to heating and air-conditioning problems when large windows are desired.

There is a heat-absorbing plate glass with a greenish cast which absorbs about 57 per cent of the sun's heat. Manufactured in $\frac{1}{4}$ inch thickness only, it is very practical for



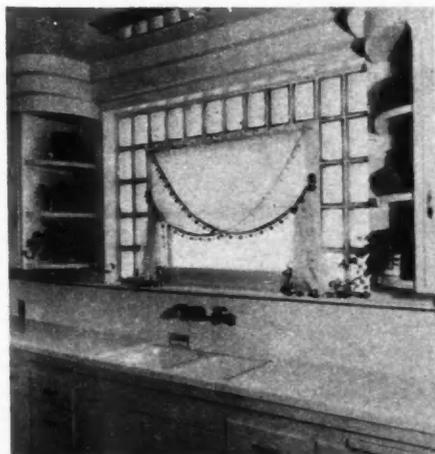
glazing eastern, western, and southern elevations, especially in the warmer sections of the country.

Partitions, decorative panels, shelving, shower bath enclosures, valances and table tops can be fabricated from heavy plate glass. Manufactured in thicknesses of $\frac{3}{8}$ inch to $1\frac{1}{4}$ inch, this type of glass has considerable strength, which increases in direct proportion to the

square of the thickness. This strength combined with the beauty of the mirror-like surface of heavy plate glass increases the decorative as well as the utilitarian possibilities of this building material.

Opaque glass was the first type of structural glass developed. Made just like fine plate glass—mechanically ground and polished to a high luster
(Continued to page 154)

FLUTED glass in foyer forms an effective background for plants in home of modern design

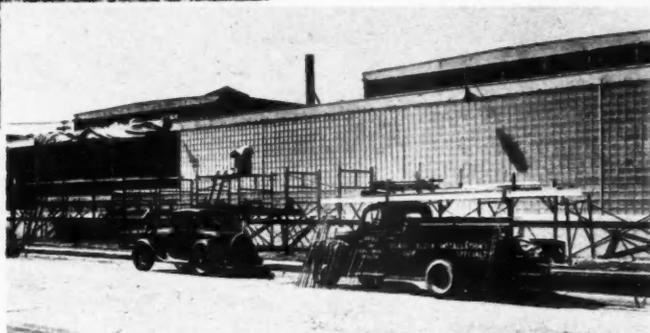


EXTRA daylight gained with glass block



Specializing in Glass Masonry

Detroit builder works out and patents jigs and fixtures to speed laying of block and improve quality of joints in the finished masonry



DEMOUNTABLE scaffolding advances as installation progresses

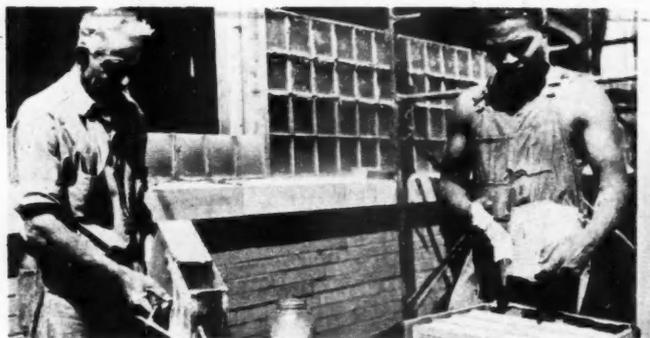
ONE of the nation's first masonry contractors to specialize exclusively in glass block installations employs special tools to speed and improve the quality of its jobs. Using carefully trained masonry crews and its own patented jigs and fixtures, the Detroit firm of William Bortolotti & Sons is equipped to handle glass block jobs of any size.

Manufacturers' specifications are followed rigidly, and the Bortolotti system functions like a well-oiled assembly line. The senior Bortolotti, who made his first glass block installations in South America soon after the block was introduced originally, supervises every job. Each of his foremen is specially trained in the firm's techniques by the Bortolotti sons, Rudolph and Alfred.

The jigs used in every installation were developed and patented by William Bortolotti. They consist of a set of jigs into which individual glass blocks are placed while vertical mortar joints are buttered. Other fixtures are used to allow fast, easy troweling of horizontal mortar beds to the correct thickness.

Buttering jigs are box-like, made of 12-gauge sheet steel, welded. They are shaped to hold the block at a convenient angle while mortar is applied. One size takes the 12-inch block, another normally holds the 8-inch block and is fitted with wooden shims to handle the 6-inch block.

Horizontal mortar joint fixtures are made of two 1x1-inch steel angles, joined by metal spacers welded in place. The angles are spaced to the thickness of the



A JIG holds the glass block while vertical joints are buttered

block. A set of fixtures consists of 11 pieces of varying lengths to provide continuous $\frac{1}{4}$ -inch mortar beds for openings of various widths.

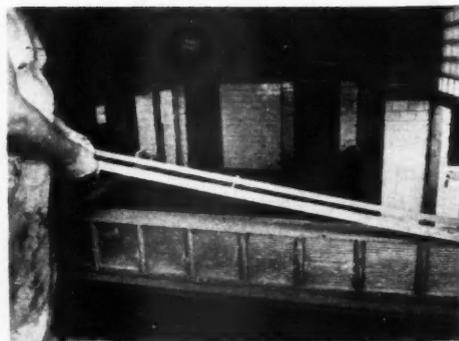
Mr. Bortolotti states that the fixtures permit use of a relatively dry mortar mix, making it easier to fill each mortar joint completely without causing the mortar to sag or the block to "float."



HORIZONTAL mortar joint fixture goes in place atop the first course of block; will be filled with mortar



TROWELING becomes a simple operation of leveling off the mortar bed. Fixture permits a relatively dry mortar mix



FIXTURE is removed, leaving smooth, continuous bed of mortar stiff enough to prevent "floating" of glass block



SCORED, stucco walls, separated by piers faced with quarry tile, provide an economical and attractive exterior

Unusual Design for Automotive Building

A combination of standard materials produces an attractive structure well-adapted to its special use

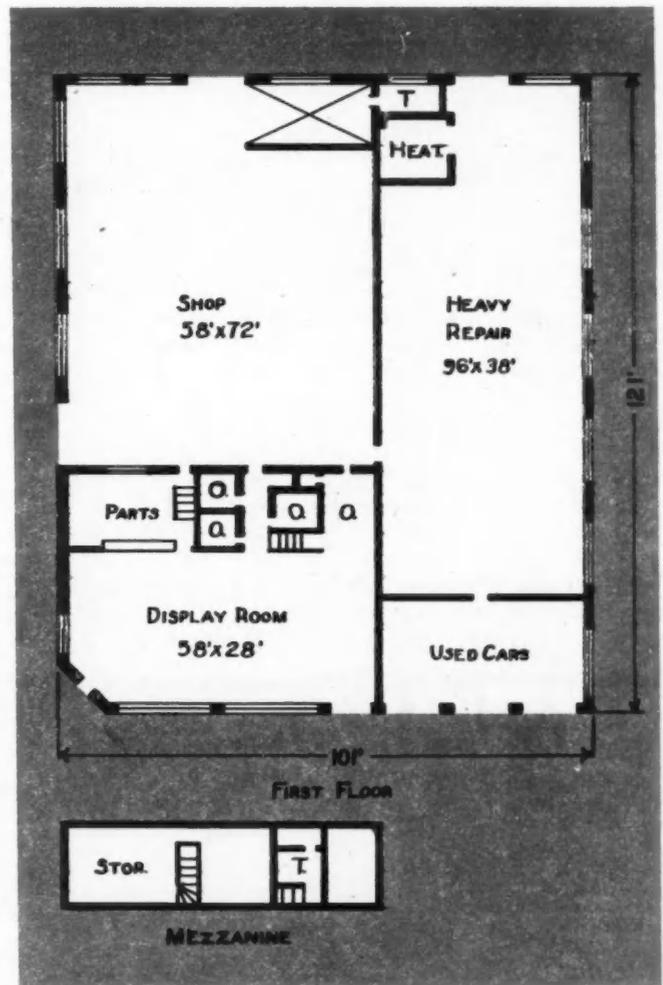
IN the automotive sales and service building recently completed in Everett, Wash., architectural prominence was given to the projecting canopy, a structural member which adds rigidity to the continuous beam over the windows. This canopy extends across the entire street front and adds interest to the exterior design. The underside of the canopy serves as the head of the windows, permitting glass to be placed at an angle, which, in turn, eliminates unnecessary glare.

Another feature, worthy of special comment, is the manner in which the display signs have been made an integral part of the design of the building. Recessed areas have been provided by the builder for installation of signs. In their completed form, the signs complement and enhance the effectiveness of the exterior appearance.

Walls are built throughout of concrete blocks, with stucco applied to the exterior surface; the front wall is scored into two-foot squares. The outside piers around the show room are covered with 6x6-inch, red, quarry tile. Entrance doors are of stainless steel, with the door to the show room surrounded by glass blocks. The walls and ceilings of display rooms and offices are finished with lath and plaster. Floor of the display room is of magnasite. Work shops are provided with large skylights.

Designed by William Arild Johnson, A.I.A., and Associates, architects and engineers, Everett, Wash., for the L.&R. Motor Co., the building was erected by Ole Sather, contractor, at a cost of \$47,000.

THE plan provides for complete separation of the various departments; all easily supervised by the central office



Walk-Over



Meeting Modern Requisites

New storefronts and clever lighting provide an old building with new dress



WALK-OVER shoe store is lighted with 30 foot-candles throughout; windows with 150

A GOOD job of face lifting was done to turn an old building into the trim, modern Walk-Over shoe store that now serves patrons in Elgin, Ill. The shoe company, forced to seek a new location, leased an antiquated building with a typical, over-large, elaborate cornice. Old floors needed leveling; walls and ceilings had to be replastered.

That was the material given Elmer Gylleck & Associates to mould into an up-to-date retail shop. The architectural and engineering firm designed the store, including furnishings, heating, engineering and decorating, and supervised the construction.

Since the building is on the north side of the street, a 3-foot canopy projects over the sidewalk to keep out the sun. Windows are recessed another 5 feet. Flush glazing gives an

open feeling, yet enough show window space is provided to display shoes.

The lower face of the building is dark green porcelain enamel. An aluminum canopy and store-front gives the necessary contrast plus a neat appearance. Sign is of porcelain enamel with white neon tubing.

The store fronts and all aluminum above and below are Kawneer design. At the front of the store and show windows, structural glass panels are installed. The name "Walk-Over" which can be seen through them is of a plastic material which picks up ultra-violet rays from the sun and glows like a neon sign.

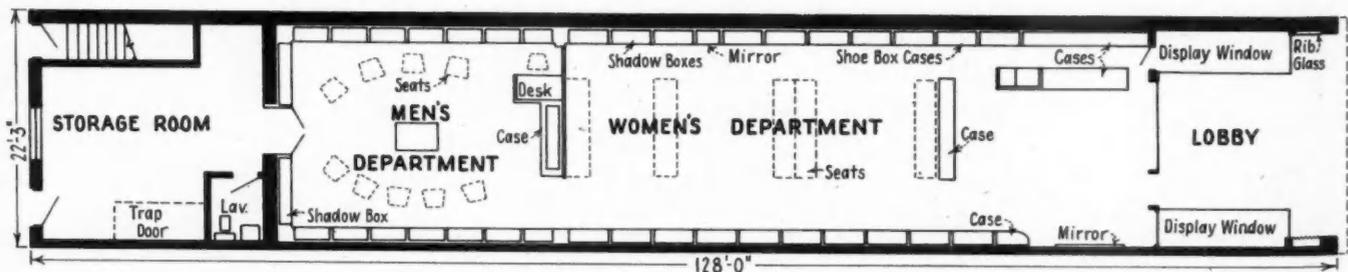
The old building cornice was removed and a new one built. The face of the building was painted a pastel green above the glass.

An interesting feature is the fluo-

rescent light trough that starts under the canopy and extends the full length of the store. Mirrors above the storefront glass give it the illusion of passing directly through the store wall. Illumination is designed for 30 foot-candles throughout the store and 100 foot-candles in shadow boxes. Show windows have from 100 to 150 foot-candles.

The men's department at the rear of the store is given a dark finish for a homey, club-like appearance. The women's department is done in pastels. Carpeting is dark burgundy. Ceilings are warm gray and curtain walls are buff. Ceilings and curtain walls are of metal lath and plaster.

Curtain walls conceal heating and ventilating ducts. Heating is from unit blast heaters with future cooling provided for.



FLOOR plan of store shows men's department at rear; women's, at front. Fluorescent light trough runs full length of store



EACH type of small commercial structure has its own particular heating problem; needs individual consideration

Heating Commercial Buildings

By J. L. Shank

Consulting Engineer

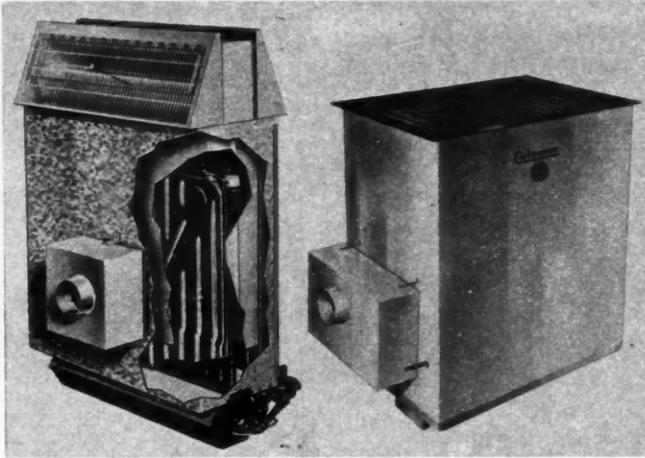
SELECTION of a suitable heating installation for a commercial structure involves considerations of all factors pertinent to that particular structure. The size and type of the building, the nature of the business to be conducted therein, space requirements and limitations—all are equally important. Economic considerations will combine a study of initial installation costs, maintenance costs and operating costs.

For any small commercial structure, the heating system should cost at least 10 per cent of the overall cost of the building. If the proposed heating system is to cost less than this amount, a complete survey had better be made of just what is being installed, for it is quite likely that the installation will prove inadequate. Often the cost will run higher than 10 per cent, and it seldom can be less.

While each structure presents an individual problem, we can consider separate types of commercial buildings and list the various heating systems that can be used for each type, pointing out advantages and disadvantages of each system for a particular use.

Probably the simplest commercial structure is the small, monitor building occupied by the neighborhood service type of business—small grocery, bakery, tavern, shoe store and others of this type. Floor space usually is at a premium and a heating system should not take up much space for radiators, registers or grilles. A floor furnace, unit heater or radiant panel installation are suggested, according to the type of business and the amount to be spent for the system.

If the structure has a basement, a hand-fired pipeless furnace, or a gas-fired or oil-fired floor furnace can be



TWO types of floor furnace, often used in small one-room stores

used. These types will provide sufficient heat, but much dirt is collected in the grilles from traffic over them. Mud and sand is scraped off shoe soles, necessarily, and accumulates in the heater.

The floor furnace takes up less space than a pipeless furnace which is placed on the basement floor. A floor furnace is a factory-made and encased assembly of the entire heating unit and heating is by means of gravity warm-air distribution.

It has a heating element and burner for either gas or oil, contained in a common enclosure which can be set into the floor. A grille is placed over the unit flush with the floor.

Installation of a floor furnace is relatively simple and economical. The units themselves have a low cost per unit of capacity. They offer considerable flexibility where a heater of small capacity is called for. They do not come in large capacities.

A properly designed and applied floor furnace should circulate the air through the building slowly so as not to create objectionable drafts. It should also prevent or remove the cold stratum of air usually found at floor level.

For certain kinds of business in the small structure, the unit heater can be utilized, getting away from the need for floor space, since it is suspended from the ceiling. The disadvantage of the unit heater is that it does not warm the floors adequately, so it should be used only where there is a lot of in-and-out traffic and where workers are moving about.

The unit heater consists of a combination of heating element and fan in a common enclosure. It usually is fitted with directional outlet grilles or adjustable louvres and is designed primarily to handle recirculated air. A properly designed and applied unit heater installation will circulate the air at a rapid rate without objectionable drafts.

It must maintain a reasonable temperature differential between the floor and ceiling.

An excellent heating installation for the small monitor commercial structure is a radiant panel installed in the ceiling. The ceiling type of installation is preferred because it fits more types of businesses. In a good many small businesses, refrigeration units are used—display cases, ice cream and fountain coolers, beverage coolers and the like. A floor panel for radiant heating will increase the operating costs of these refrigeration units by directing heat upward toward them. The ceiling panel does not. It directs gentle heat downward, but does not set up air currents sufficient to deposit dust and cause dirt smudges.

Radiant panel heating has much to recommend it, but the installation should be planned by a competent heating engineer. It needs a good temperature control system and its capacity must be figured carefully.

Let us consider next the type of one story building that is usually divided into three sections—a display room, offices and a service room or shop. This type is exemplified by the commercial garage, automobile sales and service establishment, or by an implement store or building materials dealer shop and service setup.

A commercial building of this type can be heated by any one of several methods. Direct-fired unit heaters with supplemental self-fired radiators, or combinations of unit heaters with radiators or convectors supplied from a central steam or hot water system can be used. Forced-air heating will give satisfactory results.

The general shop area of such a structure can be



UNIT heaters provide flexibility, fit such situations as this

heated nicely with a unit heater installation, either of electric, gas, steam or water type. If gas or electricity are used, the direct-fired installation would be quite economical.

The office portion of the structure, however, will need electric or gas steam radiators for the comfort of workers to eliminate cool floor drafts which would be caused by the unit heaters. Whether or not this supplemental heating will be necessary in the display room, will depend on the type of business. If the merchandise is of the type requiring customers to sit down and look over samples, radiator heating is desirable in the display room. In an automobile display room, the unit heater installation will be satisfactory.

If coal or oil is to be used for heating fuel, the multi-purpose, one-story structure described above can have a central heating system. Forced air, steam or hot water can be used. Steam or hot water can combine with the unit heaters already described, with radiators in the office space and display room if necessary. With a proper control system, the results will be about the same as with a direct-fired installation of unit heaters, but operating costs will be lower. Initial installation costs, of course, will be higher.

If the central heating system is steam or hot water, cast iron radiators or convectors can be used for heating the entire structure. This type of system can be zoned so that each section of the building can be maintained at a different temperature level, if desired. Radiators and convectors will eliminate cold drafts across the floors, contributing to comfort of employees. The

radiator or convector system will entail a higher installation cost than the unit heater system, but operating costs should be lower.

Radiators for use with steam or hot water systems usually are of cast iron. Present-day units are of the small tube type. Small tube radiators occupy a minimum amount of space and are suitable for both exposed or recessed installations. Since a large percentage of the heat from radiators is by radiation, an enclosed or recessed radiator will have to be larger than a free-standing installation. Radiation is less from an enclosed or recessed radiator.

Convectors emit practically all of their heat by conduction to the air surrounding them. The heated air is transmitted by convection to the rooms or spaces to be warmed and there is little heat by radiation. A convector usually consists of a heating element of



SUPER-MARKET groceries often are heated with blast unit heaters

ferrous (cast iron) or non-ferrous (aluminum or copper) metal having a large fin surface encased in an enclosure, usually made of furniture steel. The enclosures have an opening near the floor line just below the heating element. Air enters this opening, passes around the finned heating element and is emitted through another opening near the top of the unit.

Radiant baseboard heating is also becoming quite popular and can be used instead of radiators or convectors, where desired. They are heating units supplied with heat from a hot water boiler, and are installed in the baseboard. Some emit their heat entirely by radiation, some by a combination of radiation and convection. They usually are installed along outside walls, thereby controlling the body heat loss by radiation to the cold surfaces.

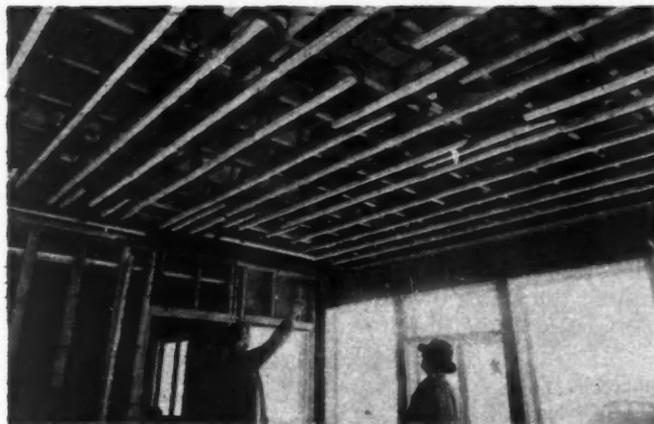
Details of various steam and hot water systems will be taken up later in this article, since they apply to other types of commercial structures as well as those just described.

A forced-air heating system is suitable for the display-room, office and service-shop type of structure being considered. It must be properly installed to insure good results. There should be a fresh air connection to the heating unit to eliminate recirculation of return air from the service section of the structure. What normally would be return air from this section should be vented to the outdoors. Enough heat is supplied to the service area by this arrangement, but the air reaching the office and display space is not contaminated by odors originating in the service section.

The type of commercial structure under consideration can also be heated by a radiant heating panel installed in the floor. The system can be designed for zone heating so that different temperatures can be maintained in the various sections of the building. Radiant panel heating in the floor slab eliminates cold floors or cool drafts over the floors, creating ideal working conditions. There are no blasts of warm air directed at workers either, since virtually all drafts are eliminated. The radiant panel system customarily is used with a hot water system. Wrought iron or copper pipe is laid in the floor slab. Considerable engineering goes into computations to determine heat requirements, the length of pipe for each panel unit, zone controls, and so forth. Design of a radiant panel heating installation is much more than just a plumbing job.

We can now pass on to the more complicated problem of heating a multi-storied structure having storerooms on the first floor and offices or living quarters on the upper floors. A warm-air heating system seldom is installed in this kind of structure because the necessary recirculation of air will carry disagreeable odors from some parts of the building to all other parts. It would not be pleasant to live in an apartment where the heating system carried in odors from a hamburger stand or fish market located elsewhere in the same structure. Nor would it be pleasant to have the odors from a doctor's or dentist's office mixed with those of a grocery and recirculated through a lawyer's office.

If a warm air system were to be used, it could include gas or electric steam radiators in each room occupied by living quarters and offices, with either gas or electric unit heaters installed in the stores. This system would be inexpensive to install and would enable the owner of the building to let each tenant provide his own fuel.



OVERHEAD radiant panel heating fits many types of businesses



RADIANT floor panel installation going into small office area

Maintenance costs and operating costs would be relatively high, however.

More commonly used for the multi-storied, multi-purpose commercial structure are steam or hot water systems. Either one-pipe or two-pipe systems can be used in combination with various type of heating distributors. Each type of installation offers certain advantages and certain disadvantages which we can discuss in detail.

A one-pipe steam system can be used with either cast iron radiators or convectors through the upper stories and unit heaters in the storerooms. Its chief shortcoming would be the difficulty of controlling temperatures throughout the building. Operating and maintenance costs would probably be high. Perhaps the only way to control the system satisfactorily would be to maintain pressure at all times. The unit heaters in the storerooms could be operated by room thermostats to deliver heat as required. The control of radiators or convectors would have to be manual.

With a one-pipe steam heating system, the radiator supply valves should be operated entirely open or entirely closed. A partial opening or closing of the valves would restrict the opening through which the steam and condensate flows, causing the radiators to fill up with water. In this situation, they either pound or fail to deliver heat.

This lack of control raises operating costs because tenants will control the temperature by a partial closing of the valves, lowering efficiency, or by opening windows with a resulting waste of heat.

A two-pipe steam system with traps on the heating units, or a two-pipe vacuum steam heating system has been used extensively in the past in this type of building. The installation is quite similar to that of the one-pipe steam system. Radiators or convectors can be used throughout the upper stories with unit heaters in the storerooms. Either of these two systems will give about the same results as the one-pipe system.

The control of heat, however, is much more flexible. In the two-pipe system, it is possible to modulate the steam flow to the heating units by partially opening or closing the valves. Heating efficiency is not lowered by this practice as it is in the one-pipe system.

Maintenance is important in any type of steam installation if fuel consumption is to be kept to a minimum. The system must be kept free of leaks commonly found around the stems of radiator valves, through air vents or radiator traps. Such leaks are caused by fouling or



CONVECTOR heating units are neat, good for office space heating

sticking of the valves and traps, or because the thermostatic elements have failed. Steam lost through such leaks means extra fuel consumed. A good maintenance program calls for a complete check of the system before each heating season. Radiator valves should be repacked annually. Air valves, quick vents and thermostatic elements in the traps should be replaced about every 18 months, since this is their approximate life.

A forced hot water system in the type of structure described above is satisfactory. Heating units can be the same as in the steam systems. Or they can be radiant baseboard panels or radiant pipe panels built into the construction. Control of a hot-water system is easy because the temperature of the heating medium can be changed as the outside temperature changes. A low operating cost results.

There are both one-pipe and two-pipe hot water systems with either gravity flow or forced flow. The forced-flow systems offer greater control of temperature fluctuations in shorter time intervals. Maintenance costs of the forced hot water system are low. There is only one moving part, the booster pump, which is driven by an electric motor. Installation costs are relatively higher and maintenance relatively lower than with other types of systems.

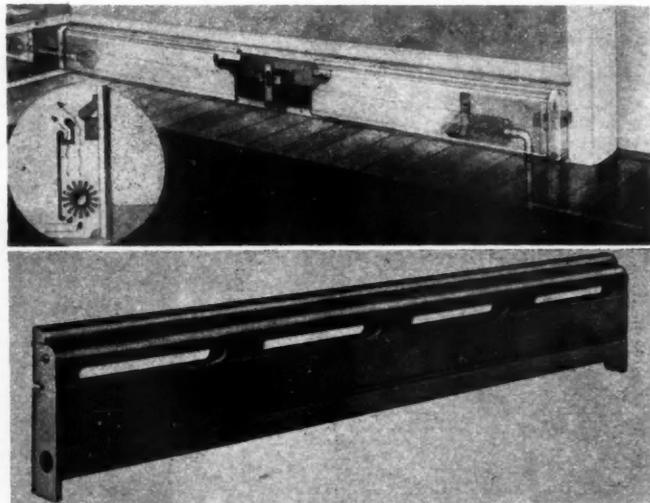
We can now consider the details of various steam and hot water systems.

Steam heating systems may be classified according to the pipe arrangement and the accessories used. However, the one commonly termed a vapor system is one that operates at pressures above atmospheric and below eight ounces. The straight steam system operates at pressures above eight ounces. A vacuum steam system normally operates at less than atmospheric pressure.

The one-pipe steam and one-pipe vacuum steam system utilize one main and a piping connection to one end of a radiator only. The steam as well as the condensate flow through the one pipe and usually are returned to the boiler by gravity. The difference in the one-pipe steam and one-pipe vacuum steam systems is in the accessories.

In the one-pipe steam system, the air vents on the radiators and quick vents on the ends of the mains permit the air to be released from the system when steam is being generated. They also permit air to return into the system when the pressure drops and no more steam is being generated.

A one-pipe vacuum steam system, like the one-pipe steam system, also has air vents on the radiators and quick vents on the ends of the mains. However, they



TWO types of baseboard convectors. Use where space is limited

are of the vacuum type and will permit the air to be released from the system as the steam is generated, but will not let the air back into the system when the pressure drops and steam is not being generated. Thus, when the system cools, if it is otherwise air tight, a vacuum will be formed and during the next heating cycle the steam will circulate through the system at less than atmospheric pressure. The one-pipe vacuum steam system will show a lower operating cost than the one-pipe steam system.

The two-pipe steam system is similar to the one-pipe steam system. Air vents are used on each radiator or heating unit and quick vents are used at the ends of each main. However, a two-pipe steam system has a steam main to carry the steam and a return main to return the condensate, both of which gravitate to the boiler. There also are two connections to the radiator, unit heater or other heating unit—one for supplying the steam and the other for returning the condensate.

With some two-pipe steam heating systems, traps of the thermostatic or float-and-thermostat type are installed on the return from the heating units and the steam mains, eliminating the air valves and quick vents. If a system is installed in this manner, all the air is eliminated at one common point through some mechanical means, such as a boiler-return trap or a pump.

A vapor steam system is similar to a two-pipe steam system in many respects. It utilizes traps on the heating units and the ends of the steam mains and eliminates the air at one central point. However, in place of having some mechanical means for returning the water to the boiler, the condensate is returned by gravity. There also is a protective device installed so that, should the steam pressure exceed eight ounces, the entire system will become equalized, thereby preventing damage. In addition, the radiator supply valves usually are the modulating type which will control the volume of steam entering the heating unit. Thus the heating unit can be made to supply the desired heat by just opening or closing the valve.

The vacuum steam heating system usually is installed in large commercial buildings, because it is economical to operate from a fuel standpoint. It also requires considerably less piping than is used in a straight steam heating system.

A vacuum steam heating unit is similar to a two-pipe steam heating system, installed with traps and a pump. However, with the vacuum system, the pump returns the condensate to the boiler, eliminates the air from the system and creates a vacuum within the system. The vacuum permits the steam to flow quite freely, as air has been expelled. This allows smaller pipe sizes, as it is unnecessary to provide an area within the pipe for air.

Hot water systems, like steam heating systems, fall into several categories. There are the one-pipe and two-pipe gravity systems which depend on the difference in weight of heated and cool water to cause them to operate. There are the one-pipe and two-pipe forced hot water heating systems which depend on a booster or circulating pump to cause the water to flow.

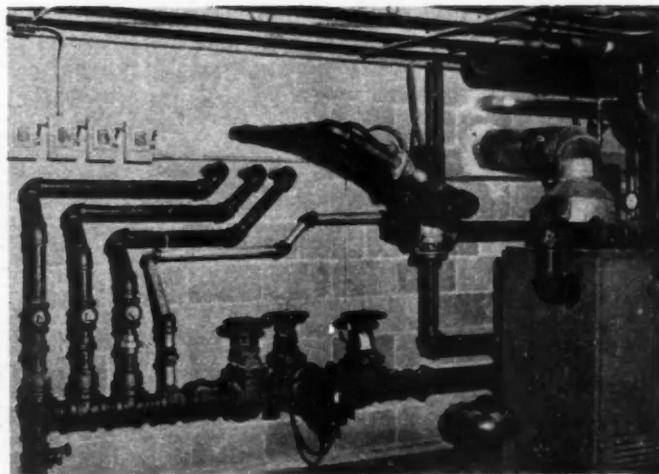
The gravity hot water system utilizes heating units having large heating surfaces. They also require use of large pipes to keep pressure drop to a minimum. Large pipes insure good circulation, if properly installed, and will prevent excessive temperature drop of the water between the boiler and heating units. This is essential for good operation. One-pipe and two-pipe gravity hot water systems are economical to operate, when properly installed, because of the low temperature of the heating medium.

Forced hot water heating systems, both the one-pipe and two-pipe design, utilize heating units having a minimum amount of heating surface. The amount of heating surface depends upon the design temperature. Both the one-pipe and two-pipe systems also use smaller pipe sizes. Friction and head resistance is overcome by means of the booster or circulating pump. It might also be said that, through the use of forced circulation, a more even temperature can be maintained. Heat is supplied to the heating units only at such times as it is required. A sudden temperature drop outside would start the booster pump pushing hot water through the system until the necessary extra heat was supplied. Conversely, a sudden rise in outdoor temperature would cut off the booster pump and the small supply of water in the system, because of small pipe sizes, would cool relatively rapidly.

The two-pipe forced hot water heating system has a supply main and a separate return main. The piping usually is arranged so that the first heating unit to be supplied with water is the farthest to return condensate to the boiler. By arranging the piping in this manner, uniform temperatures will flow to each heating unit.

In a one-pipe forced hot water heating system, the heating units are supplied and returned to the same main. However, there is a supply and a return connection piped to each heating unit. With a one-pipe system, special shunt or orifice type fittings are installed at the connection to each radiator. These fittings set up a resistance within the main, causing a portion of the water to flow to the heating units. The return water from the heating units mixes with the water in the main so that a portion of the water from the heating unit nearest the boiler may be circulated through each of the other heating units. The circulation of the water through the system is so rapid, however, that the small difference in temperature between the water leaving the boiler and the water returning will have little effect on the overall heat output of the heating units.

The heating system in any building is one of the most important parts of the structure. No matter how fine the architecture or how sound the construction, no matter if the best of materials are used elsewhere, unless a properly designed heating system is installed, the building will be uncomfortable and, therefore, unsatisfactory. The suggestions given here will help in determining what types of systems will function satisfactorily in the various types of commercial structures considered, so that an adequate system may be selected to meet a given set of conditions.



GAS-fired boiler supplies hot water to heating zones in garage



KNOTTY pine exterior and interior gives this shop distinction

BIG Opportunities In Small Commercial Jobs

Keeping the nation's retail merchants in modern quarters is a huge undertaking, being executed by thousands of small builders in trading centers everywhere

KEEPING retail merchants in modern quarters with up-to-date storefronts is another job which the nation's light construction industry is doing in the regular course of business. Typical of thousands of small operators engaged in this phase of building is Wm. Grebler and Sons of Springfield, Ill., whose numerous, small, commercial exterior and interior modernization projects are scattered throughout the business district.

Prior to World War II, the firm completed the first extensive housing development in Springfield. Since the war, work has been confined almost exclusively to commercial jobs, with the demand for the firm's services exceeding ability to handle all requests for work. During the busy spring, summer, and fall months of the year, from 20 to 25 men are maintained on the payroll regularly.

Because Mr. Grebler considers his completed jobs as his best advertising, he injects many of his own ideas into modernization jobs. His long experience with all types of building materials, plus his experience in design, enable him to make many constructive suggestions to clients and architects, not only to improve appearance, efficiency and durability, but also to hold costs down.

A small but well-equipped woodworking shop enables the firm to turn out most of the trim and woodwork needed. Fixtures can be tailored to fit the tastes and needs of the merchants for whom work is done. Most of the fixtures and woodwork are made up in the shop and hauled to the job knocked down. Especially detailed or fancy fixtures are completely finished in the shop, and special trim and wood-wall finishes are run to pattern. Several of the jobs recently completed have required knotty pine, and the firm runs the wood to its own pat-

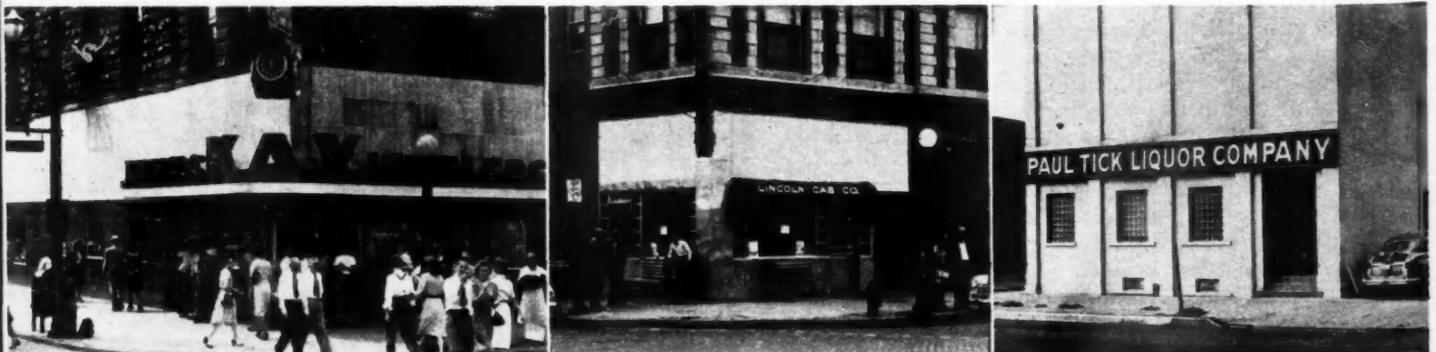


LEFT TO RIGHT: Arthur Grebler, vice president; William Grebler, president; Henry Grebler, secretary and treasurer of the firm

tern in order to fit the different needs of the clients.

Some of the more recent jobs completed by Wm. Grebler and Sons include a new front and interior, with fixtures for a sportswear shop; new front and interior for a large jewelry store; new front and interior for a candy shop; new front and interior for a cocktail lounge; new front and interior for a small taxicab office; a basement remodeling job to provide additional sales floor area for a large book store; a new exterior, and interior offices for a liquor warehouse. Numerous other jobs consist of small repairs or changes to existing structures, either inside or out.

The scarcity of materials has forced this firm, like many others, to resort to considerable ingenuity in adapting materials that were available to the particular needs of the job under way. A sizable quantity of military, surplus airplane poplar and birch plywood was purchased in several thicknesses and used to good advantage on a



SEVERAL, typical, small commercial remodeling jobs by Wm. Grebler and Sons are shown at bottom of this and the opposite page



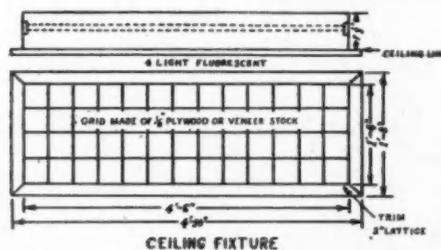
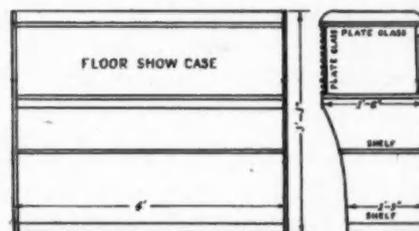
ALL the knotty pine fixtures and trim for this basement book room were finished in the firm's woodworking shop

number of commercial projects for interior wall finishes. In order to obtain stainless steel doors to match stainless steel and colored glass store fronts, a novel plan of covering a conventional wood door with stainless steel was worked out and has proved successful.

William Grebler is firmly convinced that it is more important than ever to hold prices at the present time at the lowest point possible, so that the building industry will not price itself out of the market. His firm is willing to cut profits now to help keep prices from running away.

A cost limit is set; and then when the job is completed, if the cost is below the limit, the client is charged that price plus the firm's regular profit. Only union men are employed, and a consistent plan of training for war veterans is a part of the setup. As many war veterans as possible are employed at all times, and inexperienced men are placed on jobs with those who can train them for specialized work in the building industry.

AT RIGHT, is detail of novel, knotty pine, display cases, designed and built for sportswear shop shown at top of the opposite page



SHORTAGE of light fixtures prompted this alternate, built of airplane plywood with egg-crate cover over fluorescent tubes



AT EXTREME RIGHT, William Grebler and his sons stand in front of partially completed hardware store they will open soon

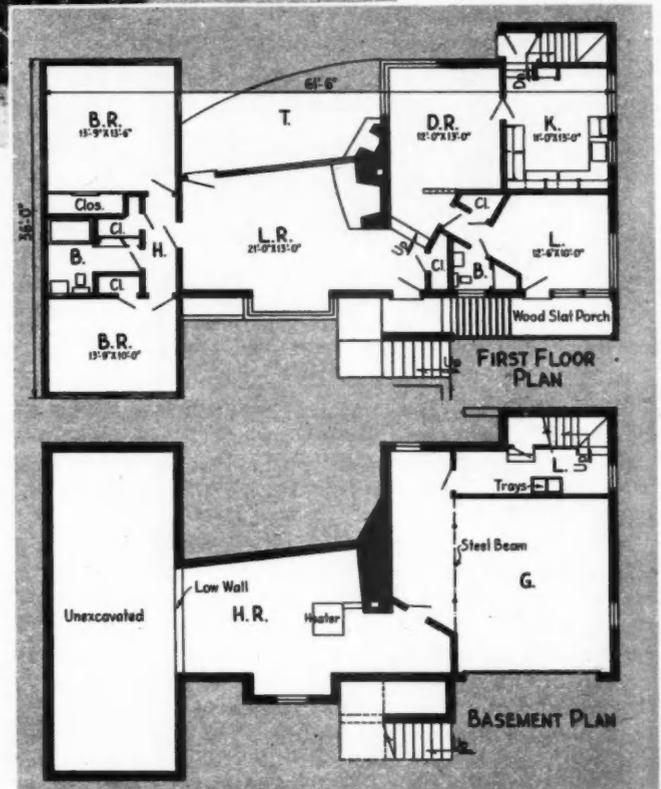


LARGE window near center adds spaciousness to the living room. Bedroom privacy is achieved by the use of small windows in the wing at the right

A SLOPING LOT becomes an asset with this type of house

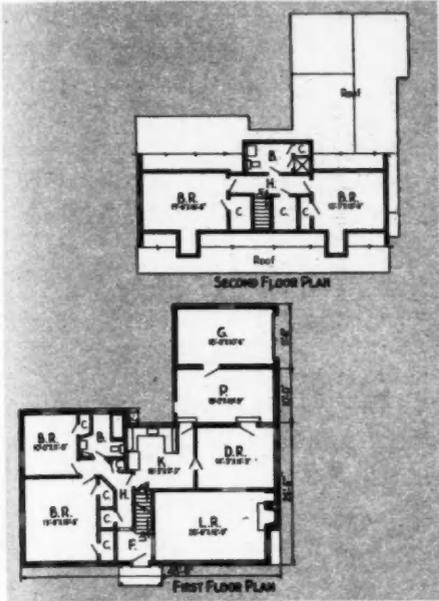
Individuality Plus Luxury and Value

CAREFUL consideration of terrain and surroundings in the design of houses has produced some eminently satisfactory results for Newell & Daniel in their Lake Success, L. I., development. Judicious variance of conventional exterior materials in attractive combinations on the individually-designed houses, all well oriented on the curvilinear streets, imparts an unmistakable impression of luxury and dignity. The firm has been building houses in Lake Success since 1940, and at the end of this year will have completed about 150 homes there. This year's operation includes houses priced from \$18,500 to about \$30,000, although the bulk of them will sell for less than \$22,000. Porter O. Daniel, who is superintendent of construction, designs the houses, and LeRoy Newell handles sales and business management for the firm. The Newell & Daniel houses shown on these pages are in the higher-priced bracket.



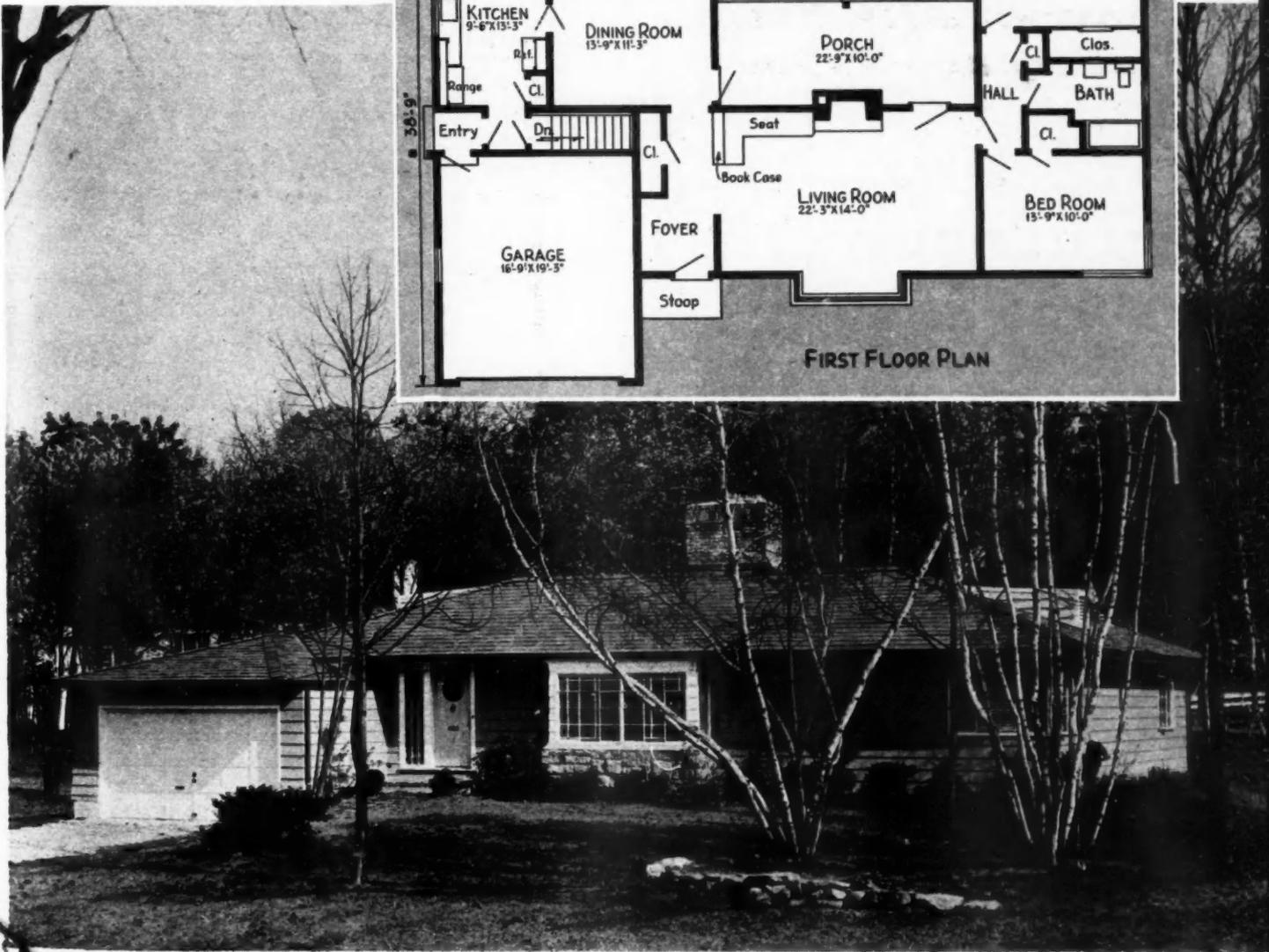
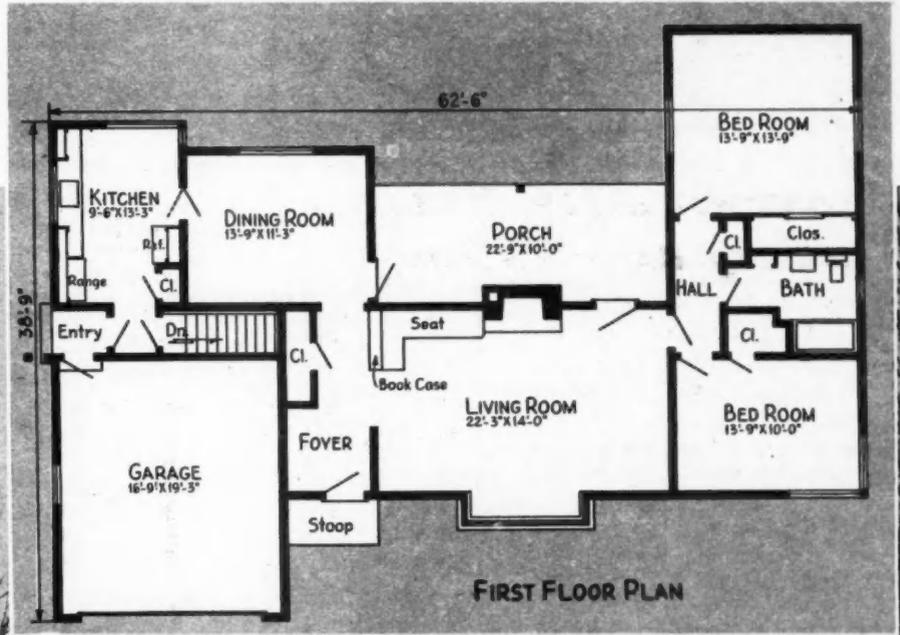
PART of basement is unexcavated in two-level floor plan

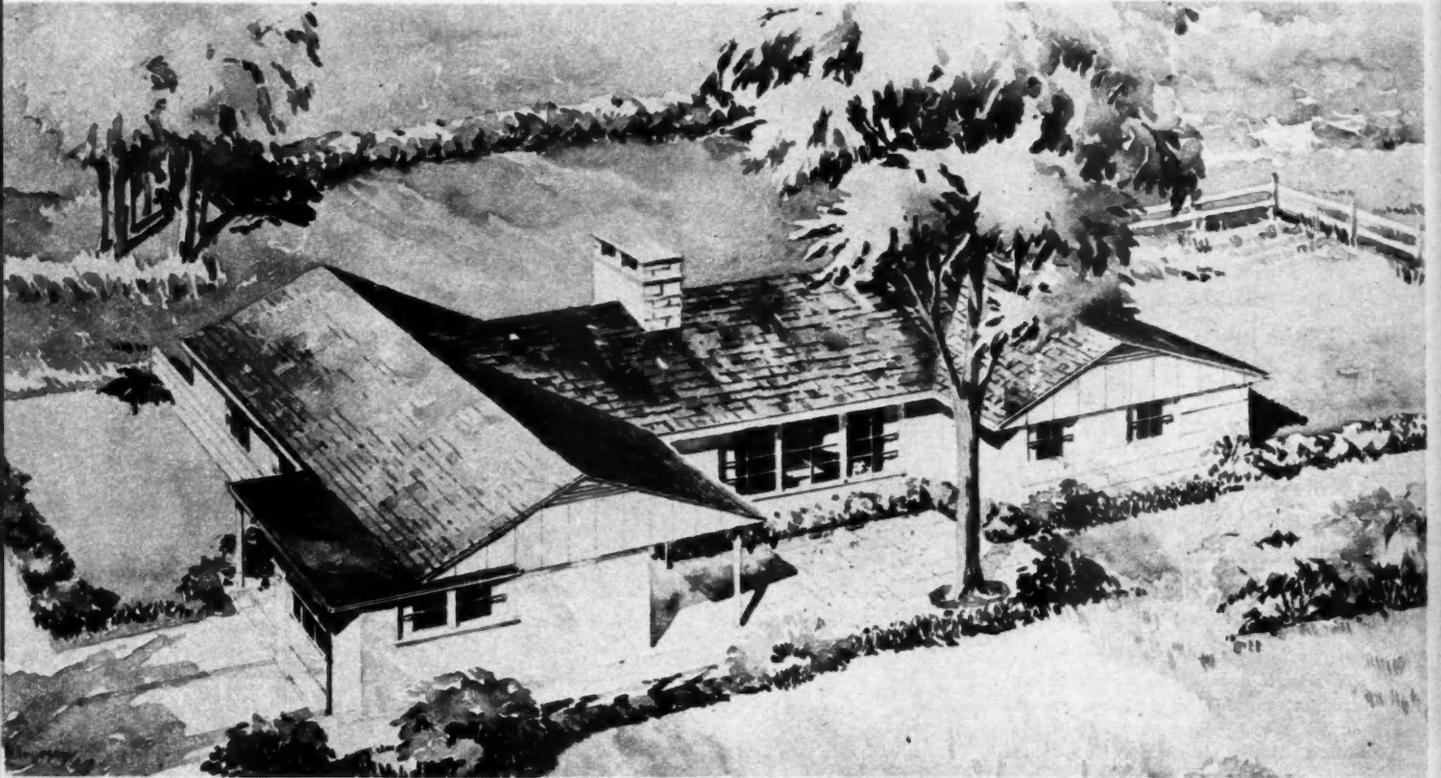




ONE of the Newell & Daniel story-and-a-half houses of more conservative design

EXTERIOR lines of the house below are accentuated by varied use of native stone, glass block, shingle siding and a low-pitch slate roof





FOLLOWING the trend of today, this house turns its back to the street with living room on the side facing an attractive garden

Anicka
**BLUEPRINT
 HOUSE No. 10**

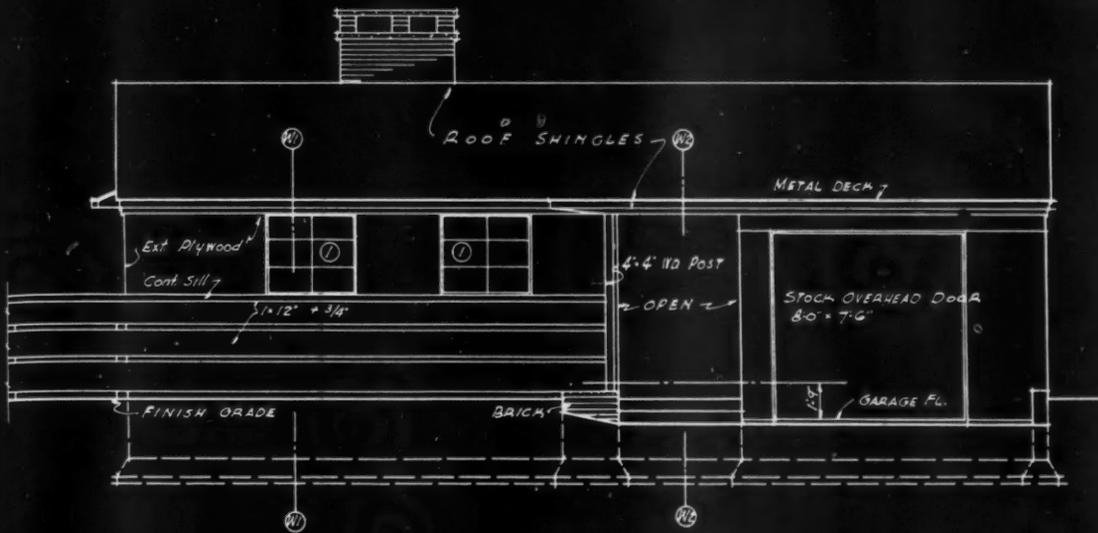
Privacy on a City Lot

DESIGNED for a 45-foot wide urban lot, this house affords the utmost in privacy and out-of-door living for today's house-buying public. The 1,260 square foot area contains six rooms, utility room, bath and ample closet space, exclusive of garage. It represents one of the best of the series of blueprint houses that have been presented to the readers of *American Builder*.

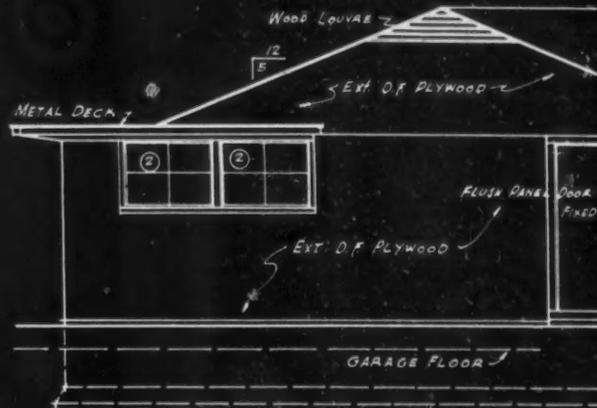
Designed by Walter T. Anicka, architect of Ann Arbor, Mich., the house follows the general trend and pattern that he has found successful in the past.

In this plan, Mr. Anicka again turns away from the street for the placement of his major rooms. A covered passageway is formed by the walls of the house and garage. This leads direct to a large open court yard which is surrounded by one wall of the house and garage, and by screened planting on the two open sides. Privacy is thus obtained. Entrance to the house is protected by an extended garage roof which forms a porch, facing the court yard. Living room windows look directly over this outdoor area.

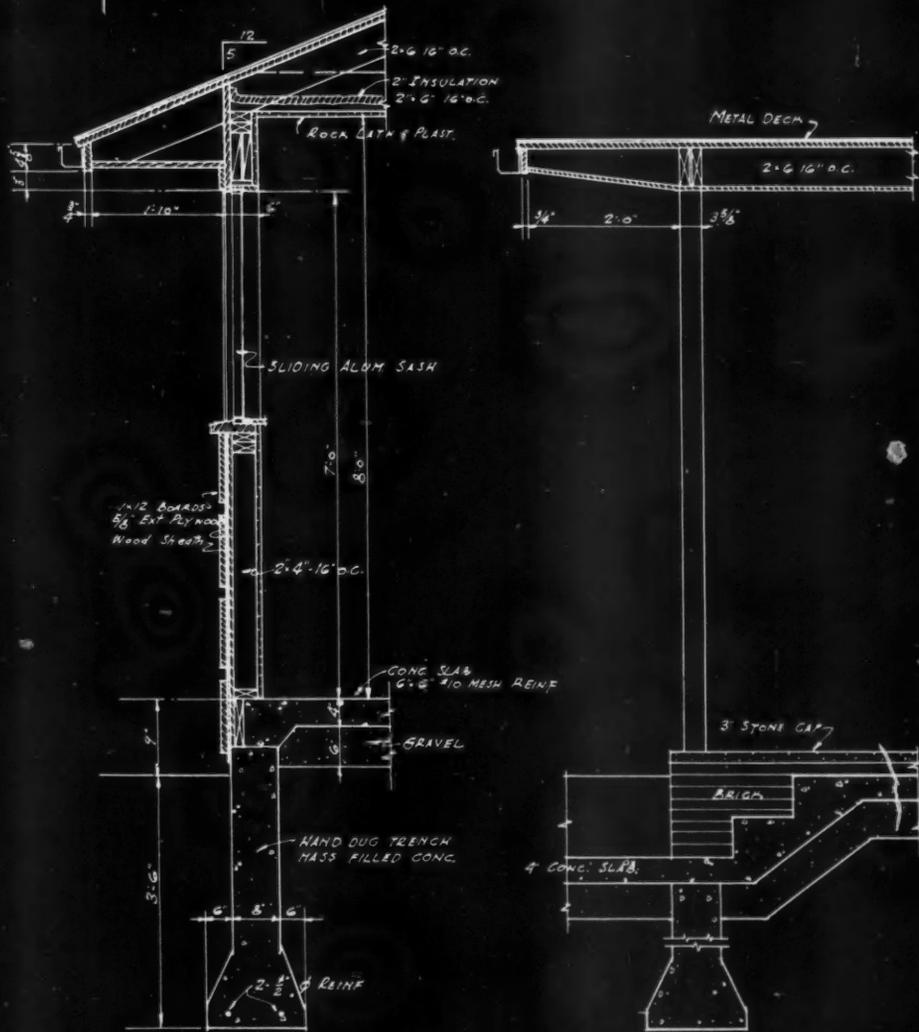
The exterior design is fresh in concept with its wide use of plywood and wood shingles on the sidewalls, horizontal sliding sash in the windows, and wood shingles on the roof. An unusual feature in the design of the lower portion of the front wall, is the use of 1x12 inch horizontal boards spaced 2 inches apart and placed over the plywood surface. These are a continuation of the wood members on the adjoining fence, which extends to the property line.



FRONT ELEVATION.



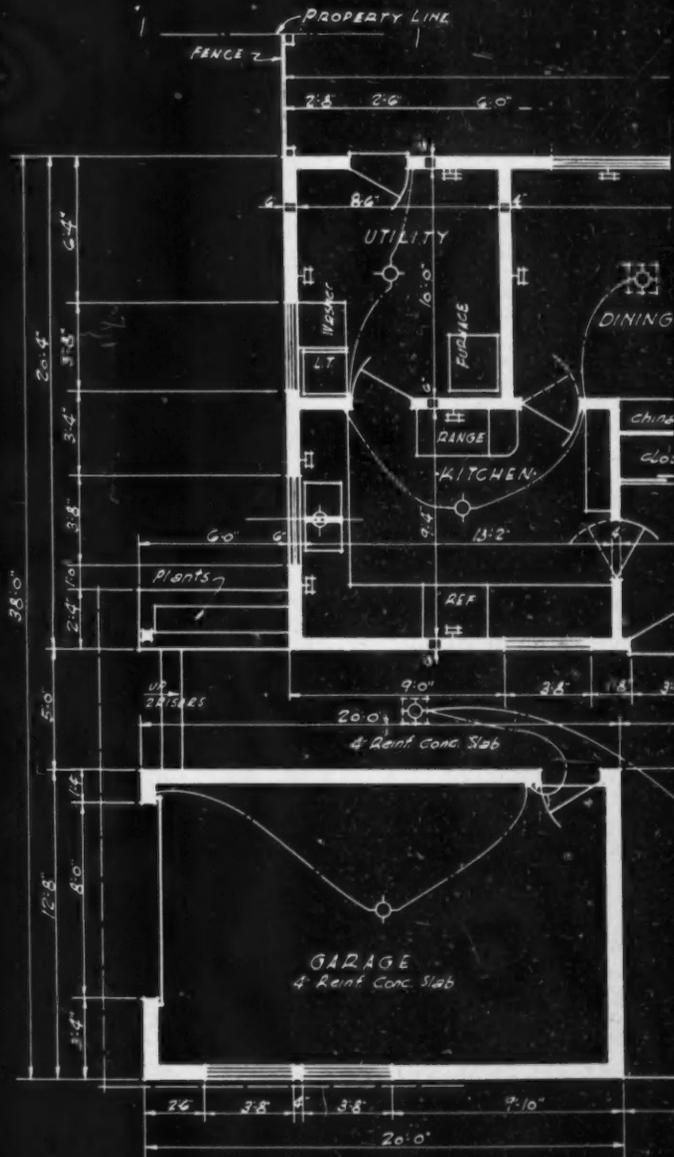
MIN. FOOTING DEPTH DETERMINED BY LOCAL BUILDING CODE

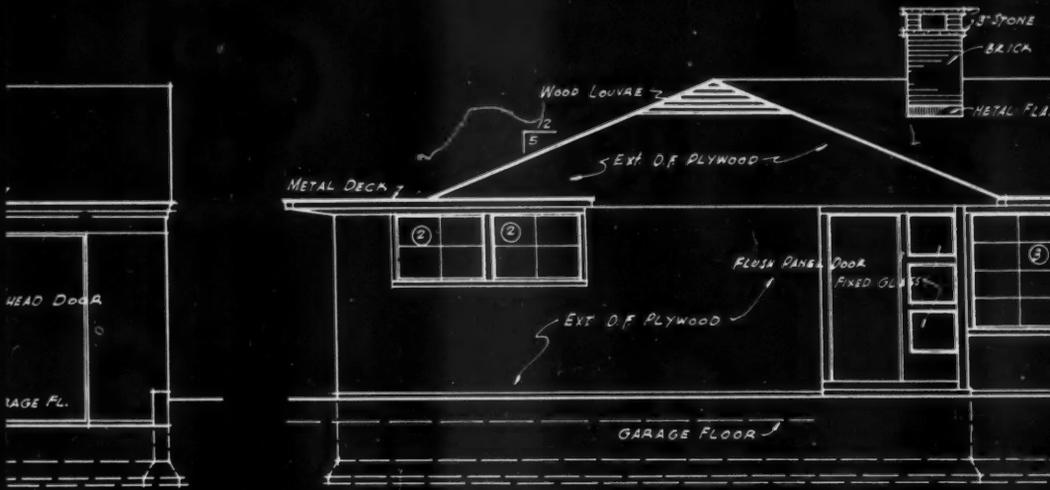


W-1

W-2

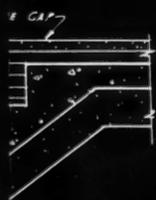
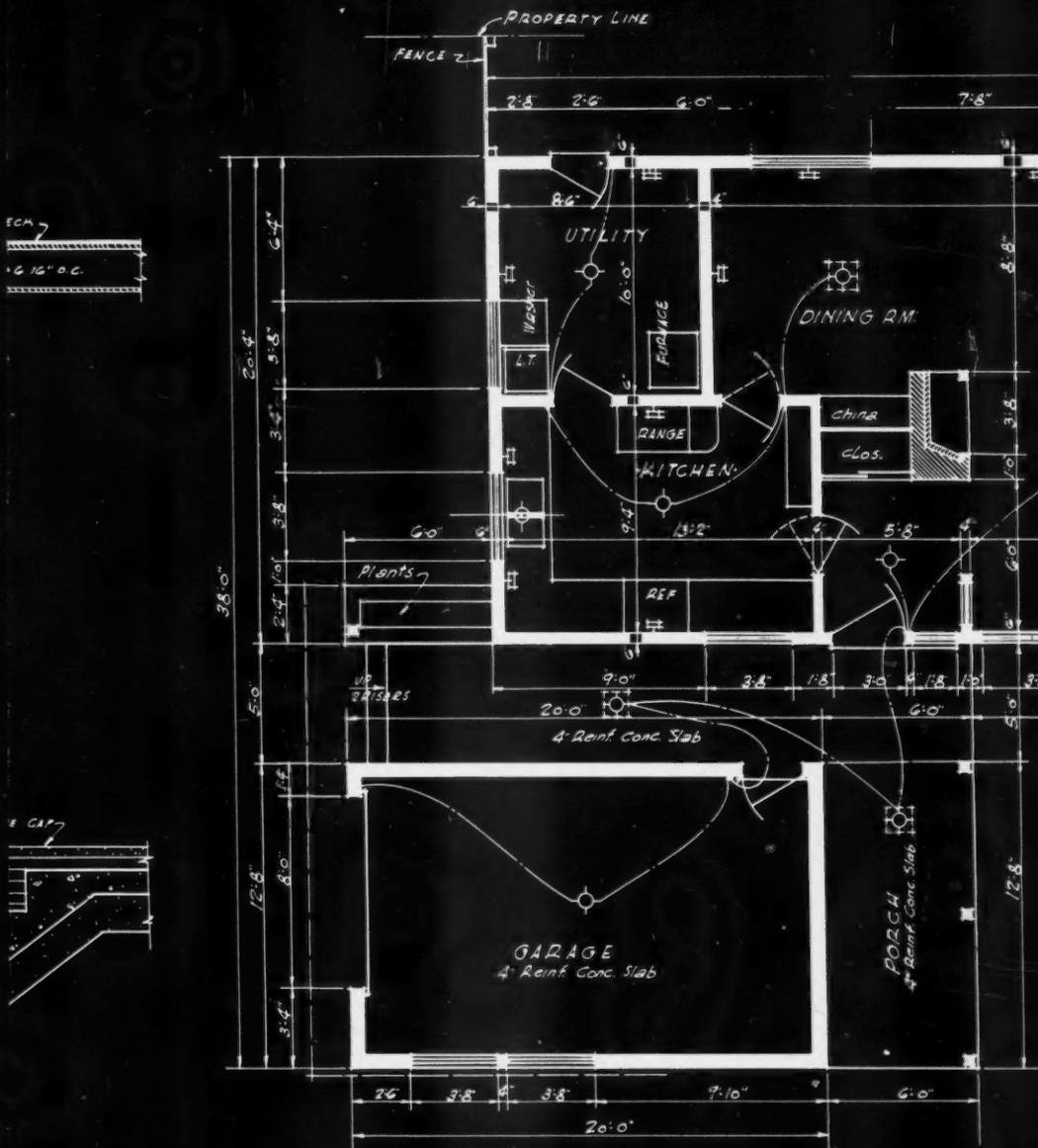
SECTIONS.
SCALE 3/4" = 1'-0"

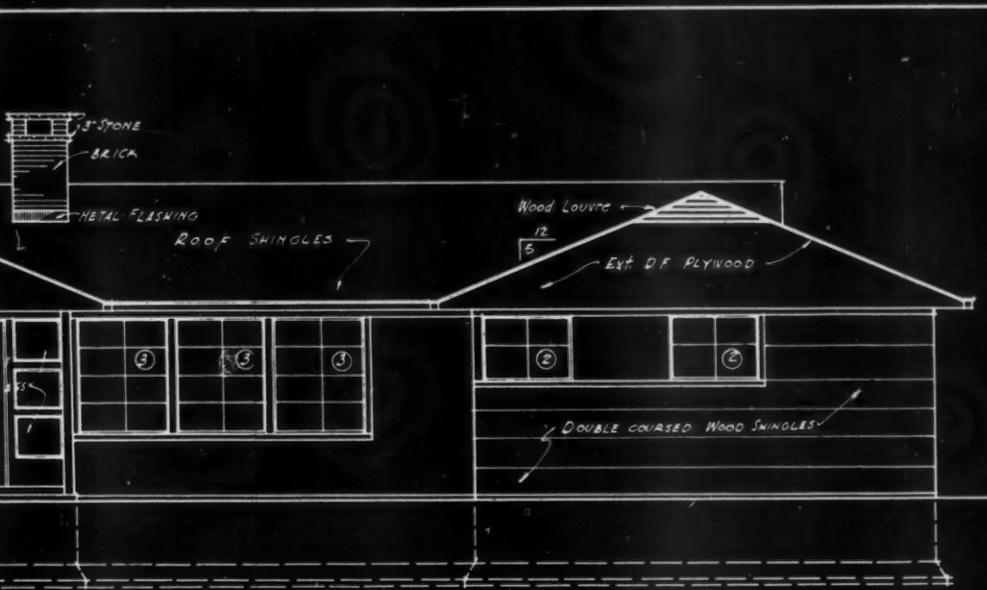




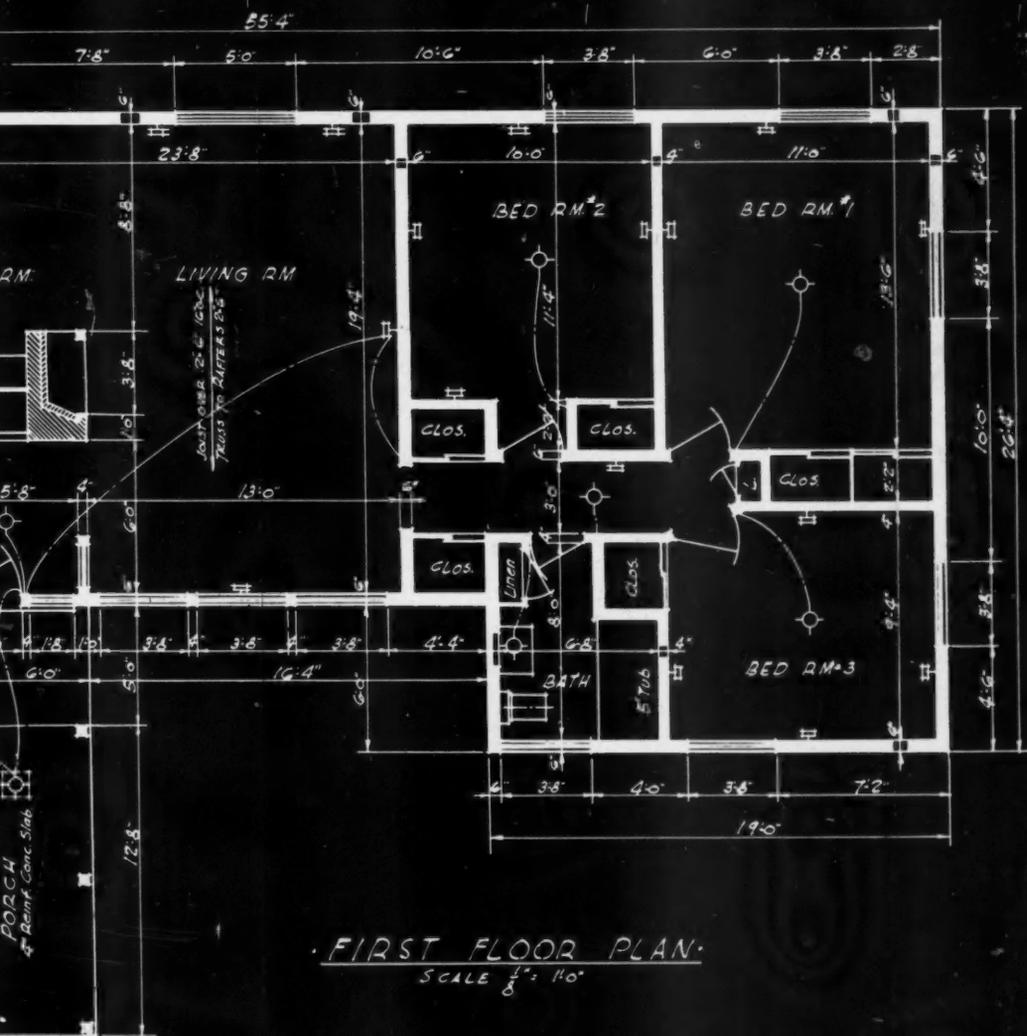
MIN. FOOTING DEPTH DETERMINED BY LOCAL BUILDING CODE

RIGHT SIDE



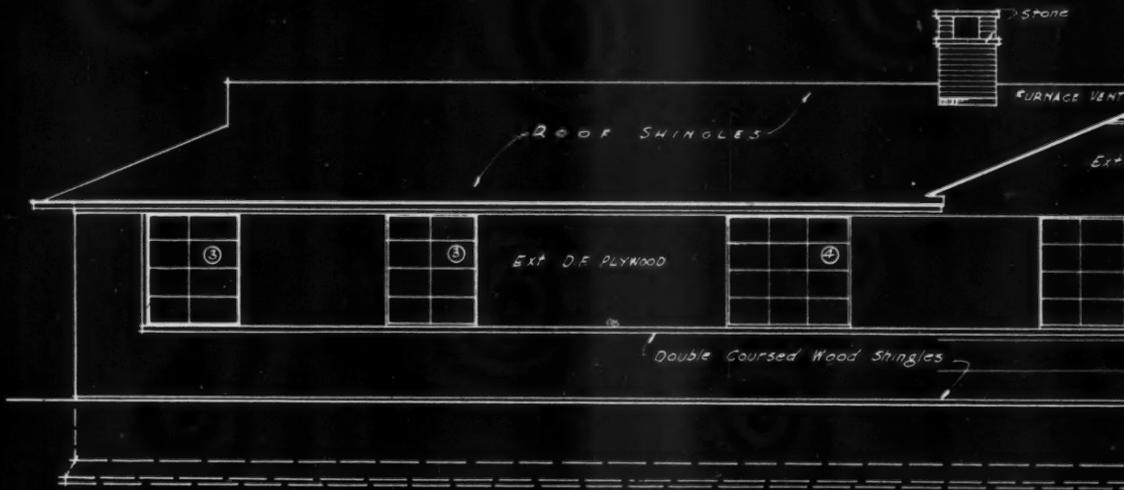


RIGHT SIDE ELEVATION.



FIRST FLOOR PLAN.
SCALE $\frac{1}{8}'' = 1'-0''$

DESIGN NO. AB 123	
AMERICAN BUILDER BLUE PRINT SERIES	
Designed By	
WALTER T. ANICKA.	ARCHITECT.
Ann Arbor,	Michigan.
<small>Simmons Boardman Pub. Corp. 105 W. Adams St. Chicago, Ill.</small>	



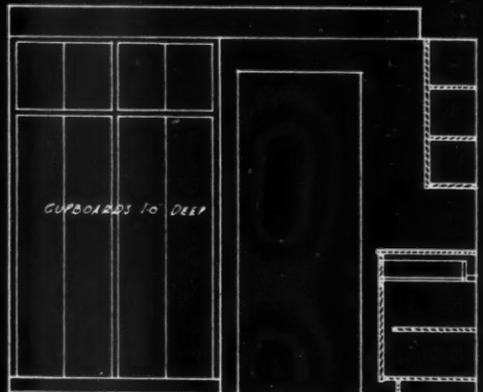
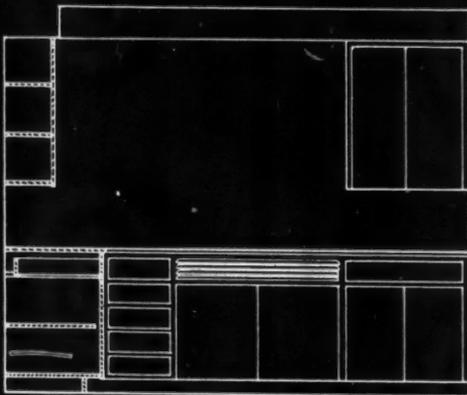
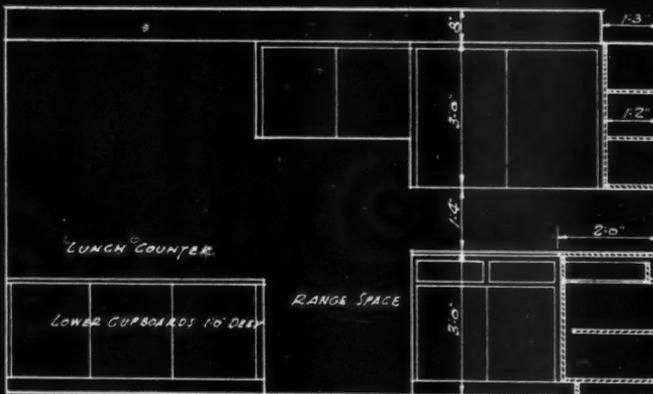
RIGHT ELEVATION

$\frac{1}{8}'' = 1'-0''$

WINDOW SCHEDULE

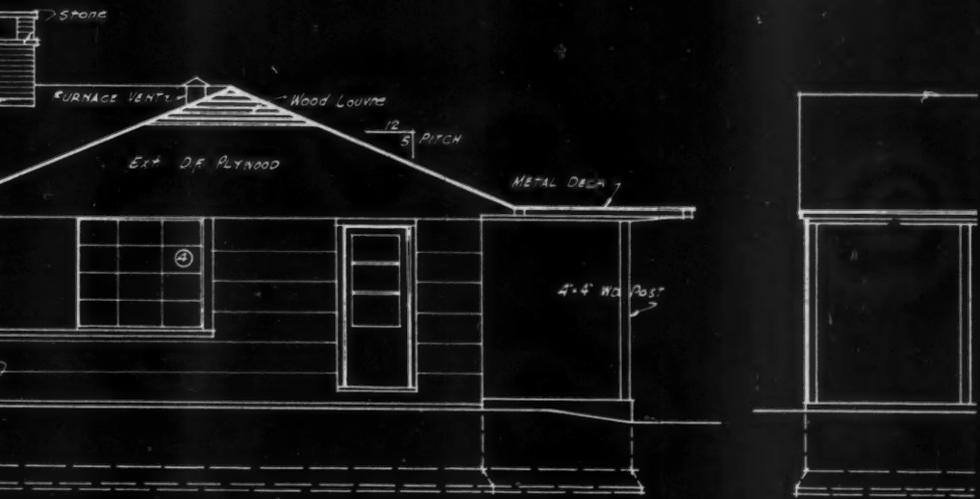
NO	WIDTH	HEIGHT
W-1	3'-8"	3'-4"
2	3'-8"	2'-8"
3	3'-8"	4'-0"
4	5'-0"	4'-0"

NOTE: ALL SASH HORIZ. SLIDING ALUMINUM

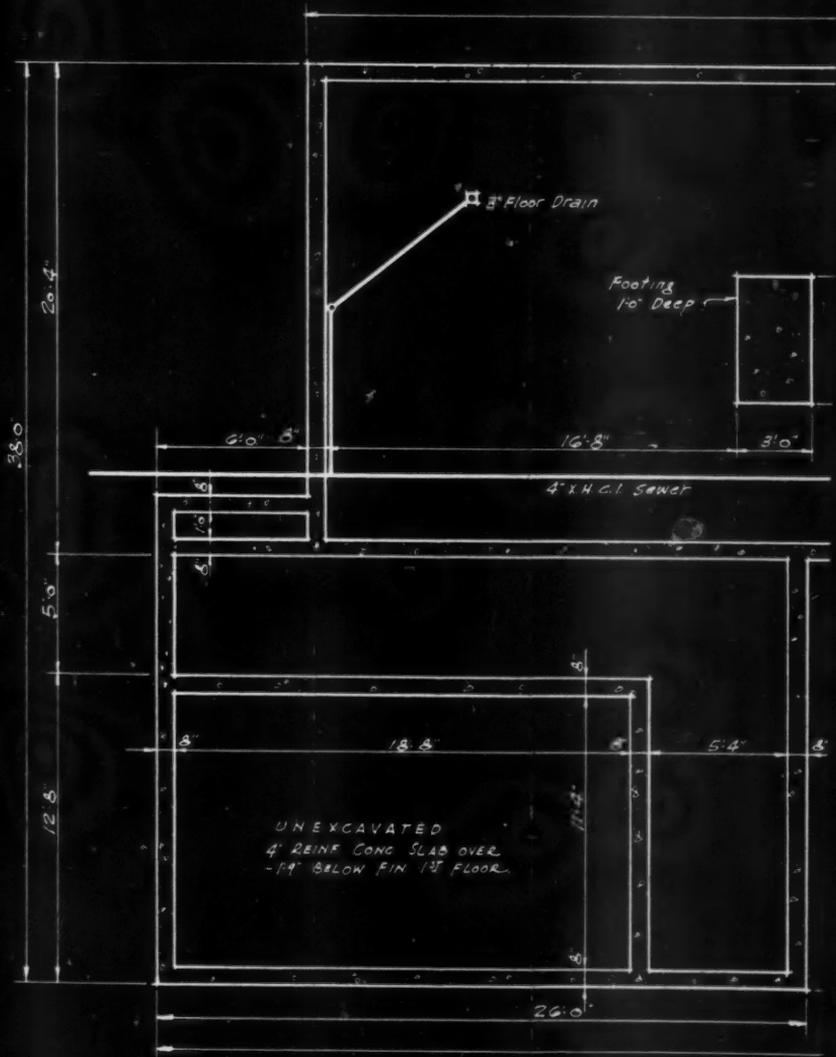


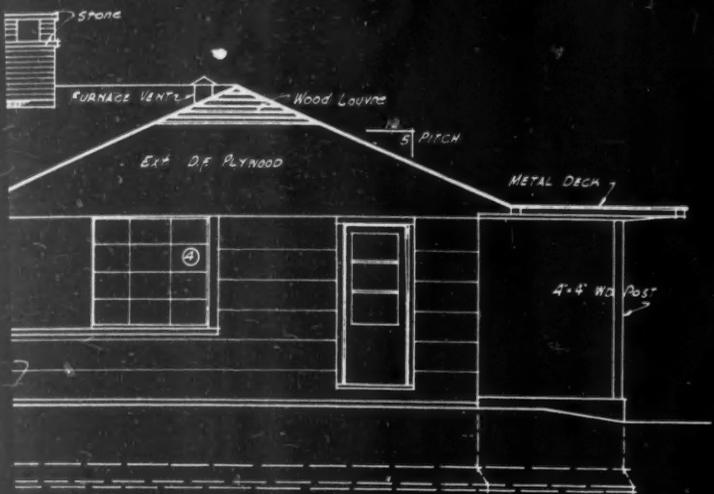
KITCHEN CABINETS

SCALE $\frac{1}{4}'' = 1'-0''$

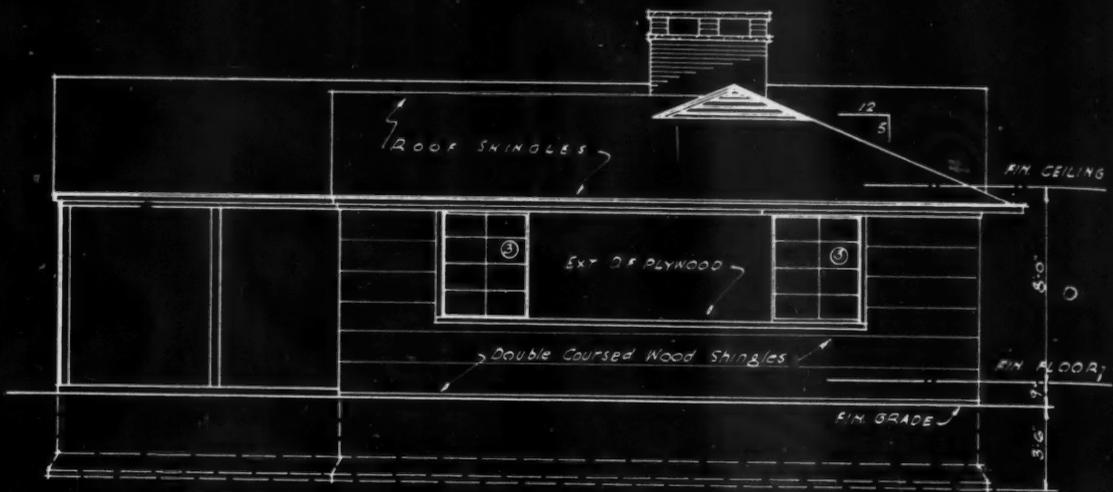


ON:



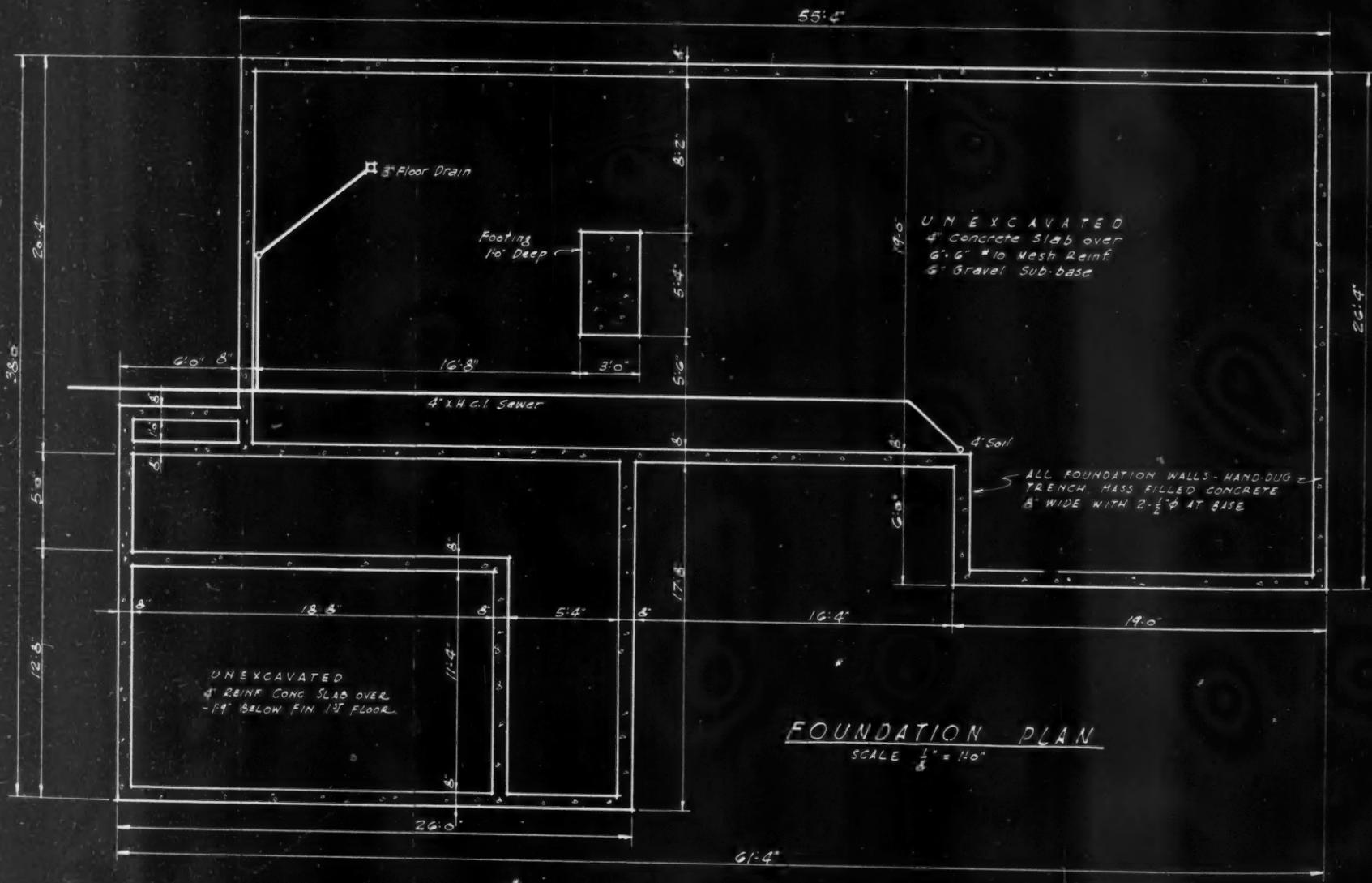


FRONT



REAR ELEVATION

1" = 1'-0"



FOUNDATION PLAN

SCALE 1" = 1'-0"

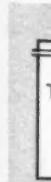
Am

Pr

Lea
lab
of

A sw
out-of
from
wind
room
ed br
the
wall
for c
place

S
the
of a
held
ican
With
requ
C
Build
of d
teria
mini
befo
T
Hom
were



GOO

Prize House—A Cooperative Effort

Leading firms of the city collaborate in the construction of St. Paul's model house

A sweeping view of the out-of-doors is obtained from the group of large windows in the living room. Chimney of painted brick, which encloses the major portion of wall of house, provides for an additional fireplace on the outside



SPEARHEADING the second annual St. Paul Home Show, produced by Saintpaulites Incorporated and sponsored by the Builders Exchange of St. Paul, is the model house shown on this page. At the conclusion of a city wide competition among architects and designers, held under the auspices of the local chapter of the American Institute of Architects, the design submitted by W. J. Witherspoon, architect, was selected as best meeting the requirements set forth by the committee.

Cooperating in every respect were members of the Builders Exchange and others, who opened the channels of distribution for a free and uninterrupted flow of materials to Lindstrom and Anderson, builders, who had a minimum of time at their disposal for construction work before the opening date.

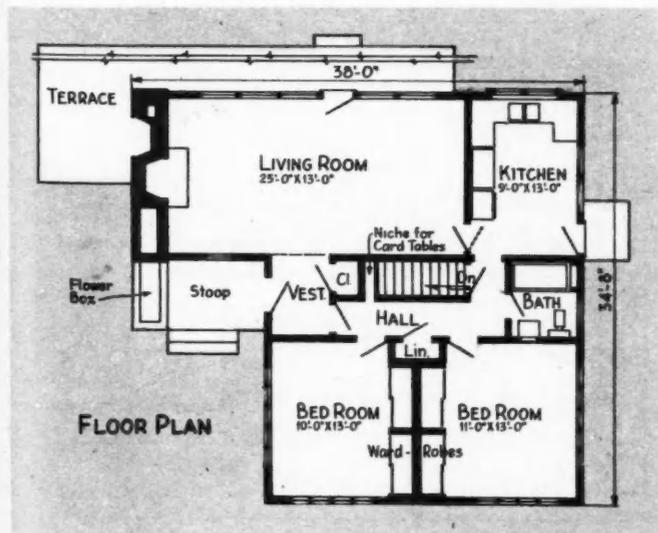
The model house was built on a site apart from the Home Show proper for permanent occupancy. Materials were selected for their long life and durability. One of



NIGHT view of front of house. Note high windows in bedrooms

the requirements that was given special consideration by the judges in the selection of the plan, was the need for free and unimpeded circulation throughout the house. This has been accomplished by the well-placed hall that permits access to each room, without making the living room a traffic lane.

The solar principle of design is carried out in this house by the large battery of windows in the living room. Windows in the bedroom are placed at a height that permits arrangement of furniture along three walls. Many other features contribute to this well-planned prize house.



GOOD circulation throughout plan. Ample light and air provided



CORNER in kitchen. Efficiency of U-shaped arrangement indicated

Multiple Housing Finds Ready Market

Baltimore builders claim group house gives construction economies and low maintenance costs



NORTHWOOD group houses of eight or nine family units built in Baltimore by Joe Meyerhoff and designed by Kenneth C. Miller

WHILE it is distinctly a regional practice, multiple group housing, as carried on in Baltimore and other eastern cities, has staunch advocates. The group house, they argue, is more economical to build, less costly to maintain, and affords more persons a chance to live in heavily populated areas with more privacy than is provided by individual houses on small lots.

The group house also fits in well with the common Baltimore practice of paying ground rent instead of buying land outright. Ground rent generally is misunderstood by those unfamiliar with it, and is described as being not really rent at all, but a first lien on a property, taking precedence over the first mortgage.

The group house today is an offshoot of the old "row houses" for which Baltimore and other old eastern cities

are famous (or infamous, according to the point of view.) As group house planning has developed, largely within the last two decades, comfortable, economical buildings have evolved.

The builders do not claim that a group house can replace individual cottages on suburban lots of adequate size—but they do argue that few urban lots are large enough, and that the group house is an improvement over an individual house on a narrow lot.

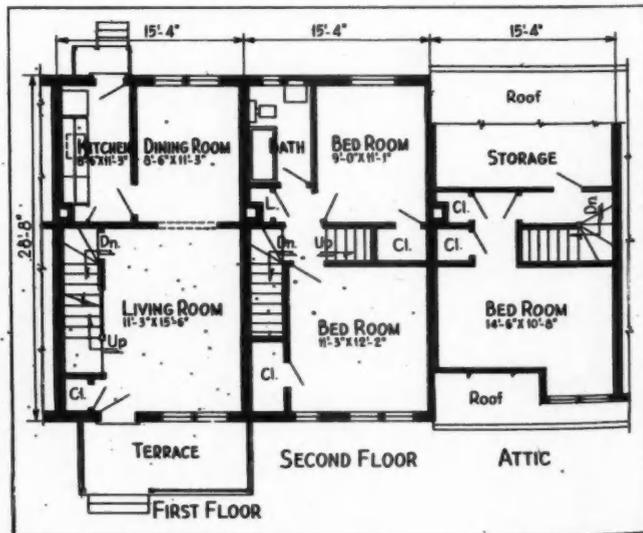
Architecturally, the group house offers certain advantages. There are fewer buildings on a given frontage, each building being from 75 to 150 feet long. The purchaser buys a complete unit, surrounded by four walls with a front and back lawn, but he pays for only three walls. His deed reads from the center of the partition line on one side to the center of the partition line on the other side. The front and back walls, which are the shorter, are the only ones exposed and subject to architectural exterior treatment.

In the group masonry house, the long partition walls are built of cinder or concrete block. The exterior walls are of brick, usually furred with one-inch strips to insure a damp-proof and insulated wall. The estimated saving in construction costs of the average group dwelling over a free-standing dwelling of the same dimensions is between \$1,000 and \$1,200.

There is a distinct saving in cost of the necessary land. A group dwelling of 20-foot width requires only 20 feet of land frontage. A free-standing house of the same size would require a 35 to 40-foot lot. The practical effect of this land economy is that the operator can afford to pur-



MONUMENTAL Homes group built by Frank B. and Robert A. Bready



FIRST and second floor plans for one unit in group house at left

SEMI-
AT r

chase
whic

Br
hous
in th
and
once
done
type
the r

W
smal
men

H
pora
each
heat
sash
\$8.0
Nor
with
G
pop
the
effe
gag

U
at \$
repr
the



SEMI-DETACHED multiples in Baltimore built by Joe Meyerhoff. AT right, first and second floor plans of unit from these houses

chase more expensive land in more desirable locations on which to erect his houses.

Builders point out that maintenance of the group house is low in cost. Generally, there are three windows in the front and three in the rear, with a front entrance and rear service door. Painting of sash and doors, done once in about three years, is such a small job, it often is done by the occupant. The roof usually is of the built-up type, always guaranteed for at least 10 years. Coating the roof area every three or four years usually will make the roof last for 20 years.

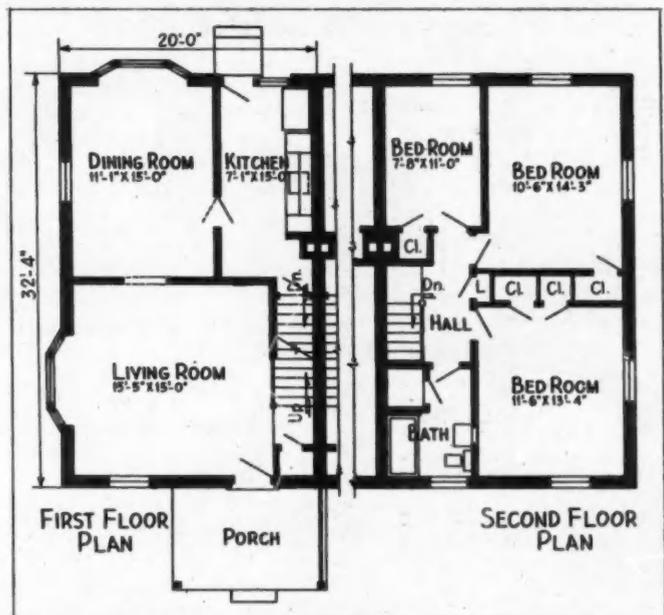
With only two exposed walls, heating units can be smaller than for a free-standing house and fuel requirements are less.

How do costs run? In the Monumental Homes Corporation group shown at the bottom of the facing page, each dwelling has three bedrooms, automatic hot water heater, tile bath, modern kitchen, hardwood floors, steel sash and weatherstripping and insulation. Price is about \$8,000 with a \$90 annual ground rent. Units in the Northwood development, shown on this page, cost \$8,500 with a ground rent of \$96.

Ground rent generally is misunderstood. Contrary to popular belief, it has no bearing on the overall cost of the house and ground combined. A ground rent is, in effect, a mortgage ahead of the conventional first mortgage. For example, under the ground rent system:

Land cost, improved.....	\$1,000
Cost of house.....	7,500
Builder's profit.....	1,000
Total selling price.....	\$9,500

Under these conditions, the house might be advertised at \$7,500 with a ground rent of \$108, the latter figure representing 6 per cent on \$1,800, the artificial value of the \$1,000 lot. This 6 per cent also is an artificial figure.



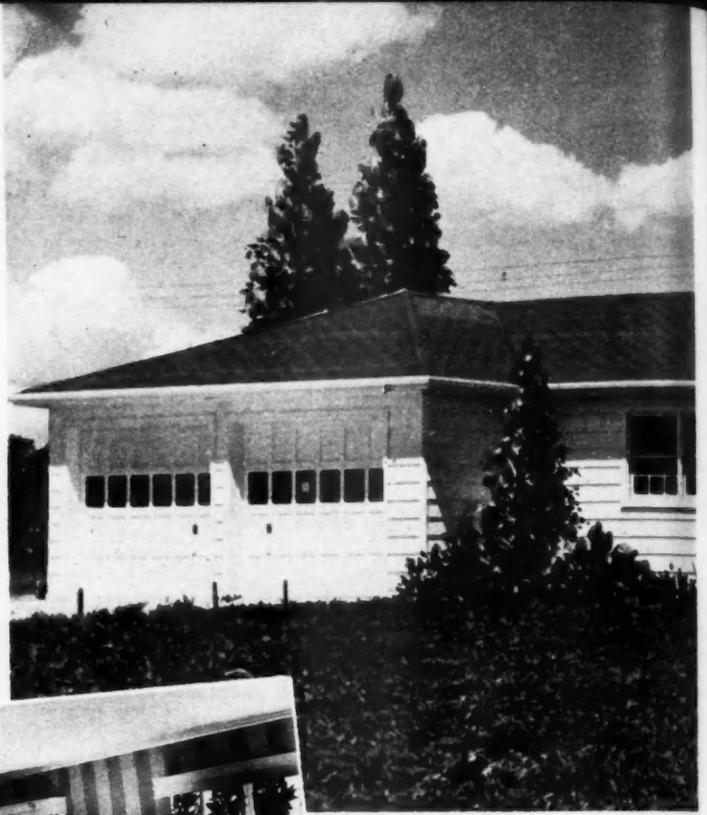
No investor expects to get 6 per cent on his money today. He cuts that return by paying a premium to the builder.

It is evident that a cash payment of \$1,000, plus a first mortgage of \$7,500, plus land cost of \$1,800 adds up to only \$9,300, leaving the builder \$200 short of his \$1,000 profit. So the investor pays the builder \$2,000 for the title to the lot so he can collect the \$108 ground rental. Instead of a 6 per cent return, therefore, he collects only 5.4 per cent.

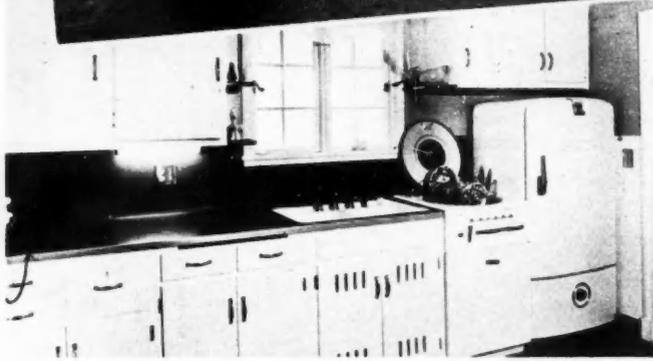
The house owner pays the \$108 ground rent and the taxes on the land. After five years, the house owner may redeem the ground rent for the agreed price of the land—\$1,800. When he has redeemed the ground rent, he then has title to the land. The \$1,800 figure cannot be changed until the house owner or a subsequent owner of the house elects to purchase the land outright by redeeming the ground rent.

Basementless House Has Novel Floor Construction

Builder includes novel features and new appliances and materials in modern home, then opens it to public for demonstration purposes



LEFT: Photographs showing large glass areas and mirror over the fireplace; and electrically-equipped kitchen with the exception of the hydraulic dish washer



WHEN William Dane, member of the Dane Lumber Co., built his new home near Beloit, Wis., he and his father, who is the head of the company, decided that it had unusual features that warranted using it for a limited period as a demonstration house.

A one-story basementless house, the floor construction is interesting. Footings were carried down below the expected frost line in the vicinity, and a shallow excavation was partly filled with gravel. On top of the gravel, a one-foot thick layer of cinders was placed. With this cushion and insulator, a concrete slab was poured, with Insulite Bildrite placed between the slab and the footing wall. In the slab, sleepers were embedded with their tops flush with the surface of the slab. Nailing strips, three-quarters of an inch thick, were fastened to the sleepers, and at right angles to them. Before placing the nailing strips, the slab and the sleepers were waterproofed. Softwood flooring was nailed in place through the nailing strips, and the floor areas then were covered with inlaid linoleum in the bathroom and kitchen, and with carpet for the other.

The heating system is forced warm air by means of an oil-fired furnace. The unit is located in the utility room with a Coleman water heater, a Bendix washer, a Majestic incinerator, a Cutler-Hammer multi-breaker electric control box, and a shower stall.

The recreation room is distinguished by the use of Amerwood shot-blasted pine walls, with wax applied over

AB
and
the
syn
righ
wo

the
is
ex
tit
hav

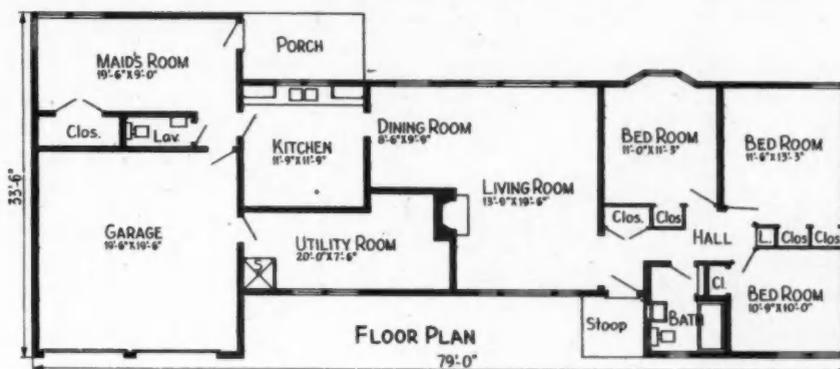
Fr
are
Pit

Da
ing
an
tw
con
nin
thr
the
str
tur
int

ro
re
the
Si
ele



ABOVE and at the right: Photograph and floor plan of the Dane house. Note the low-pitch roof and the approximate symmetry of the front. At lower right: Recreation room is paneled with waxed, shot-blasted pine walls



the natural finish. The floor is asphalt tile, and the ceiling is Insulite insulating tile. Windows throughout the house, except the large ones in the living room, are Curtis Silentite. Doors are Curtis flush panel. All doors in the house have three hinges.

The kitchen is equipped with an electric range, a Frigidaire and a Kaiser dish washer. Walls in the kitchen are Marlite. The large windows in the living room are Pittsburgh Plate Glass Co. Twindows.

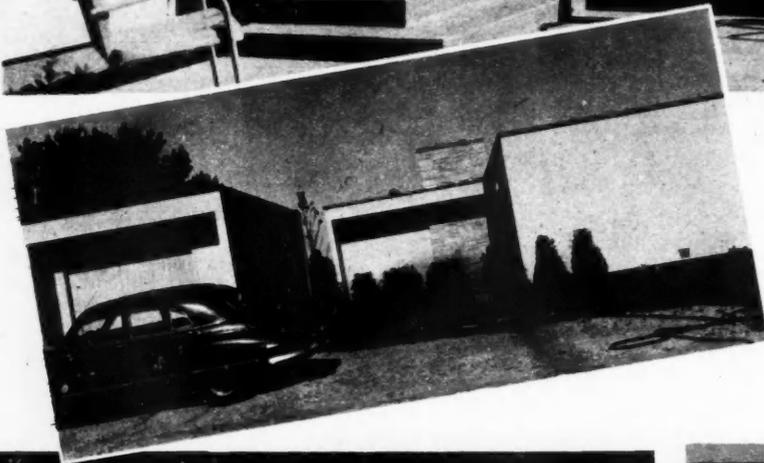
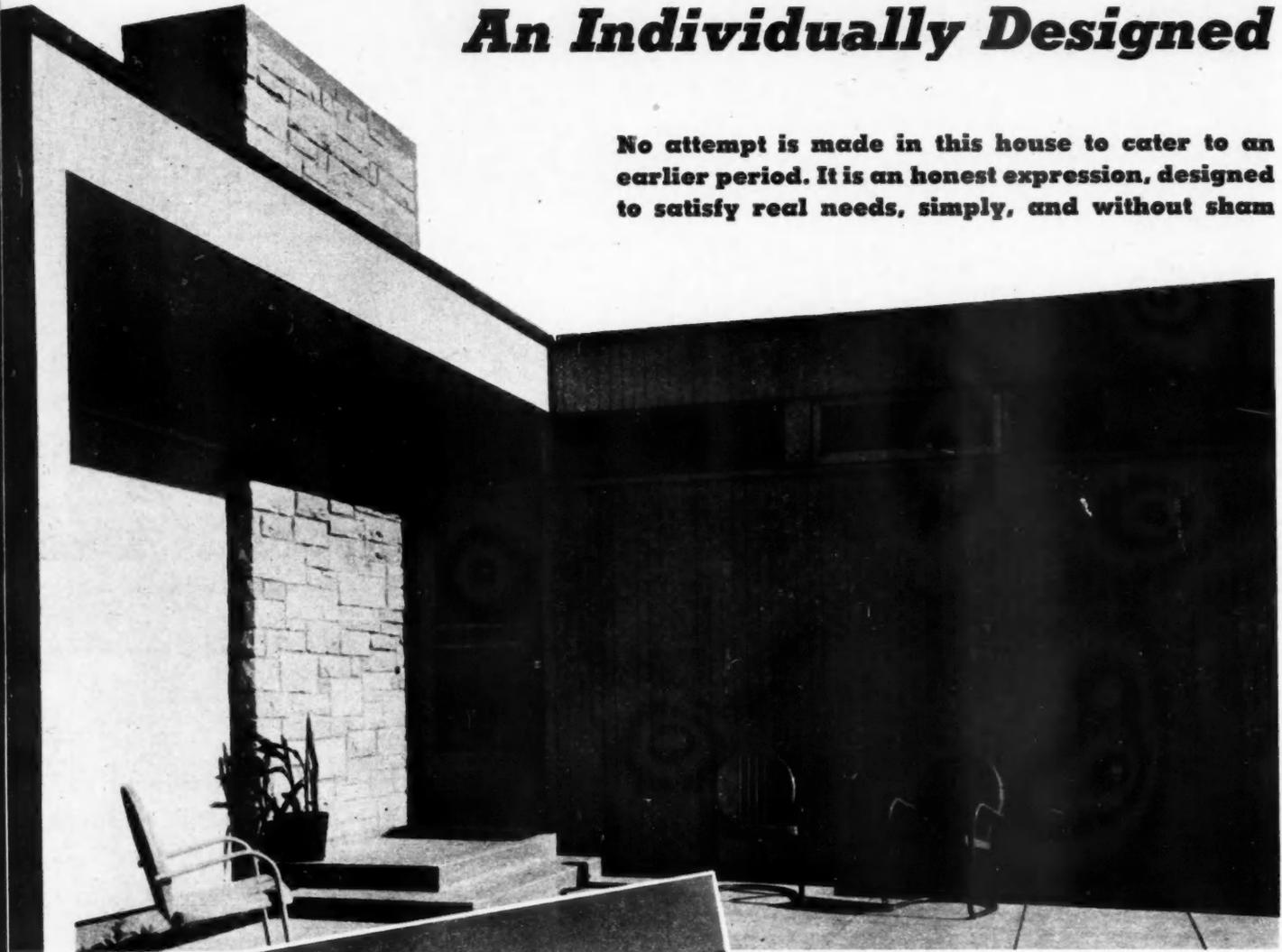
When the house was completed and furnished, Mr. Dane advertised it as open to public inspection. The visiting hours were from two to five o'clock in the afternoons, and from seven to nine o'clock in the evenings. On the two Sundays that the house was open, visiting hours were continuous from one to nine o'clock. In the course of the nine days that the house was open, 5,500 adults went through it. Visitors were brought into the house through the garage. Both visible and hidden architectural and structural features were explained, and descriptive literature about the appliances was available to all who were interested.

The arrangement and size of windows in the living room provide an illusion of much greater size than is represented by the actual dimensions. The plan from which the house was built is a slight modification of a stock plan. Siding is wood, and the roof is asphalt shingles. Multiple electric outlets are provided in ample quantities.

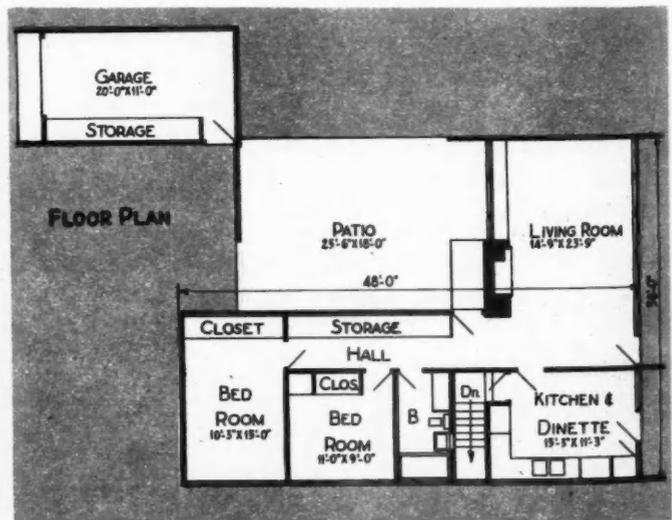
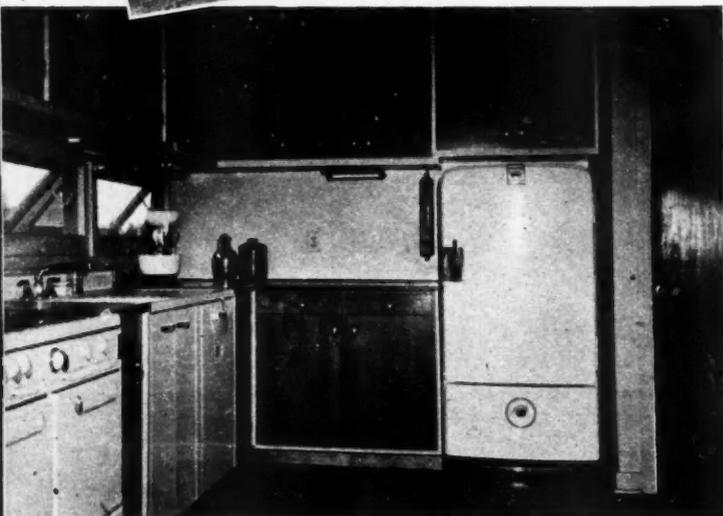


An Individually Designed

No attempt is made in this house to cater to an earlier period. It is an honest expression, designed to satisfy real needs, simply, and without sham



THE two views of the exterior, and the plan on this page, indicate the unusual placement of the garage in relation to the house. A patio is thus formed, and it will be eventually screened from public view by planting. Entrance to the house is at the intersection of right angles. Hinged windows in the kitchen light the area between counter and cupboards



Modern Home

UNLIKE most people, Dr. and Mrs. Lee Gladstone of McHenry, Ill., have always been enthusiastic about contemporary architecture. They wanted all the light and air possible in a house, as well as the greatest amount of living space for the money expended. These requirements, they were satisfied, would be best met in a house of modern design. Living in a simple, modern, yet entirely functional home, the Gladstones now know that their requirements have been completely fulfilled.

Among the novel features of the Gladstones' house is the use of wing walls on both the rear and front exterior elevations and on the garage. The wing walls give depth and interest to the exterior appearance. Another feature of note is the large paved patio, formed by the position of the garage to the house. Planting on the two open ends will eventually enclose this area, making it an outdoor living room.

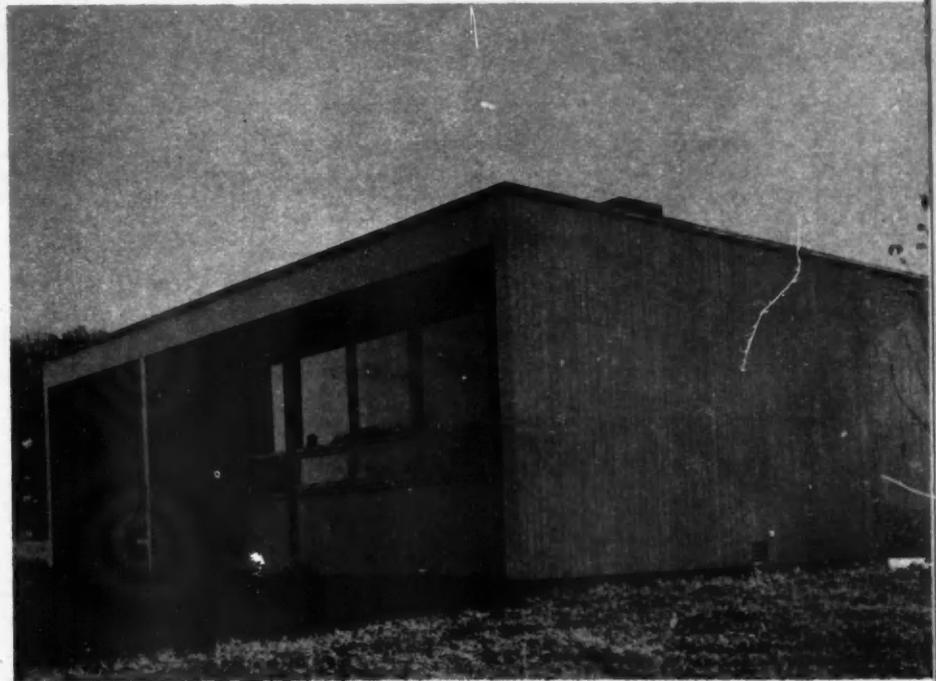
The exterior walls of this modern house are constructed of frame and placed on a concrete foundation. The walls are then faced with 3-inch T&G vertical siding, and capped with a sheet metal stop and drip. The entire roof surface is covered with a three-ply built-up roofing, sloped to drain into a 4-inch roof drain, in an inside partition.

The house completed in the spring of 1947, contains approximately 1,600 square feet including garage. It was built by the Tonyan Construction Co., McHenry, Ill., at the cost of \$8.50 a square foot. It was designed by R. Rapson and J. Vander Meulen.

STORAGE space, below a continuous run of windows, extends along corridor wall



NOTE extra depth of opening in fireplace and omission of hearth; built-ins adjoining

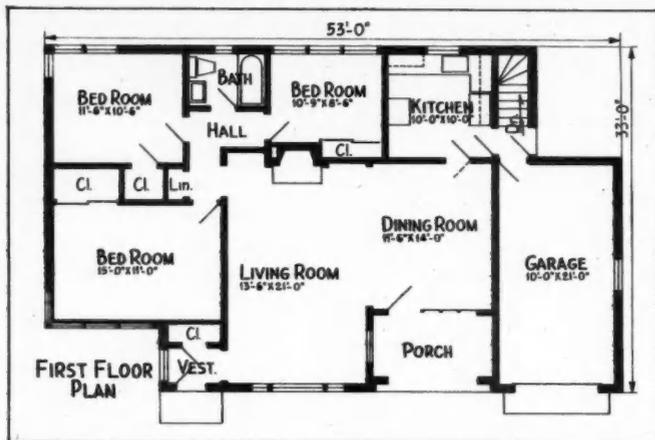


WING walls divide living and service areas. Separation of house, garage shown below



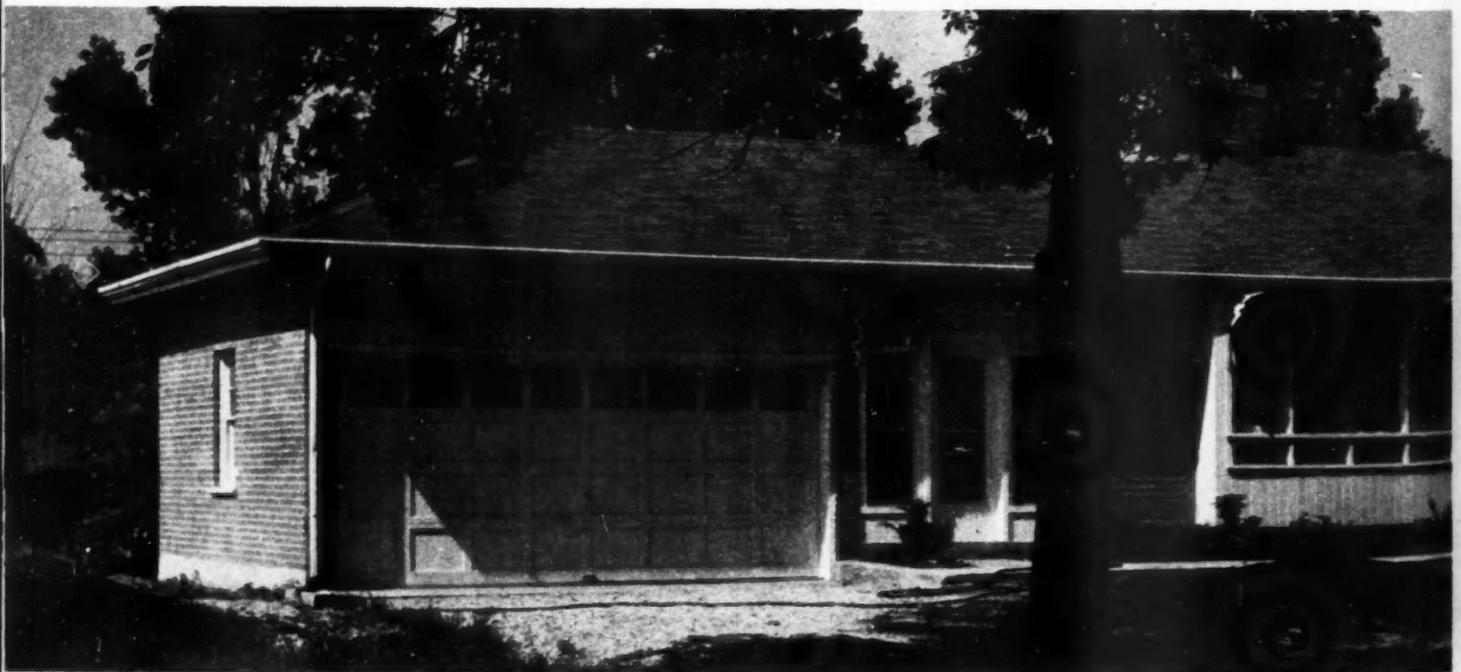


THIS well-designed ranch type house was delivered in a complete package to owner from plans prepared especially for him by these builders. Plan at left



Unique Service Given

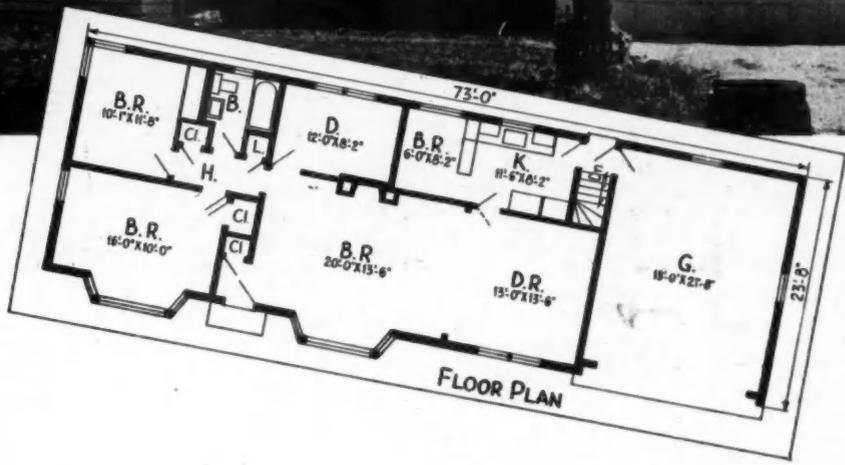
GREEN Valley Homes, Inc., Lombard, Ill., operated under the direction of Charles M. Cress and M. Viktor Moyer, is able to render to this community a complete building service, because of its widespread activities. This service includes the acquisition of the site, the planning and design of the house, complete construction of all buildings on the property, the insurance and financing of the house. This packaged service permits the prospective home owner to select his own site and plans and to have the house built



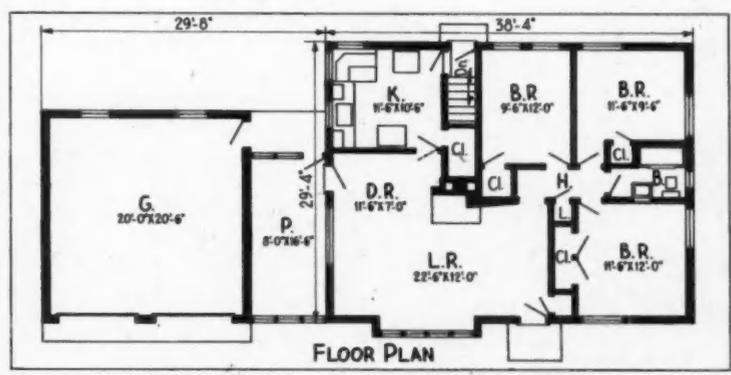


By Builders

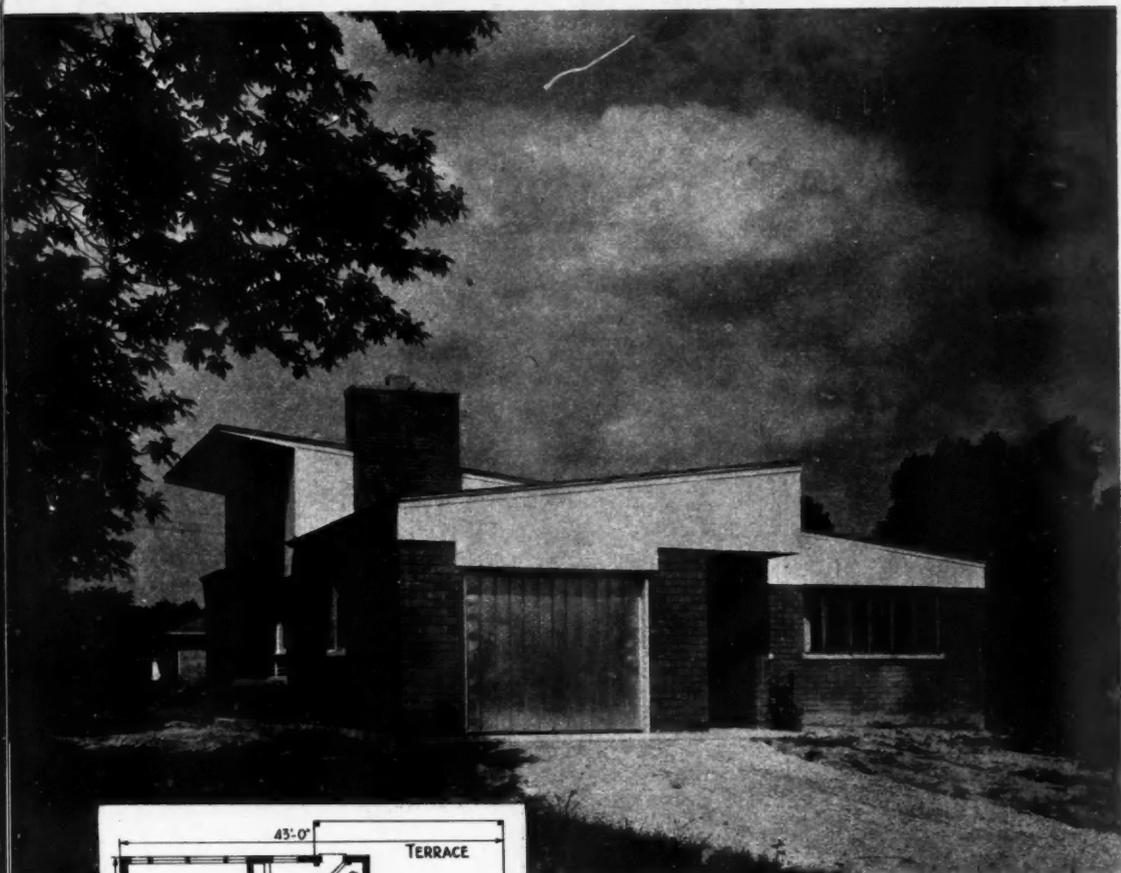
Customers are relieved of all details relative to their building problems through the complete service rendered to them by enterprising firm



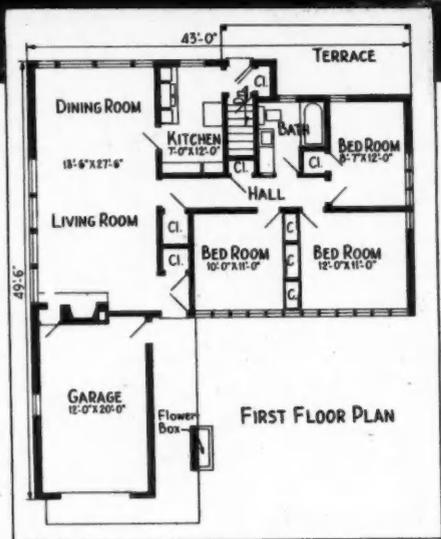
ANOTHER interesting variation of the ranch type dwelling, together with plan, is pictured above. This house, also, was individually designed and built under the complete control of Green Valley Homes, Inc., Lombard, Ill.



THIS house follows the general trend of the other two shown on these pages. Through its window fenestration, a distinctly different appearance has been achieved in this house. The plan, as pictured above, provides a good circulation to all areas

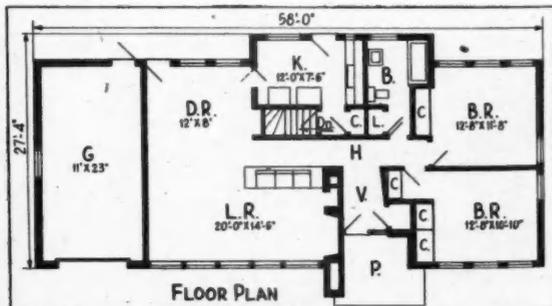


A dramatic effect has been obtained in this house by the unusual roof lines, and the vertical siding in relation to the horizontal lines of the brick walls. A large fixed studio window occupies one wall of the living room, with fixed wood louvres below for ventilation. Plan shown below and at left



according to his own requirements. Green Valley's operations are more or less typical of the large operative builder. In addition to the custom built houses that are shown on these pages, it has begun with a program of houses built for sale in the Green Valley subdivision. It is the intention of the builders to have a varied type of architectural design in all these homes, thereby giving an individualistic appearance to the subdivision. The builders have found that this method has gained widespread acceptance. Home designs that have proved successful in the present op-

eration, will be used in a new development with appropriate variations. Green Valley Homes, Inc., employs its own unskilled labor crews, carpenters and bricklayers, and crews for rough and finish concrete. The remaining operations are sublet. As its operations increase, the corporation will try to absorb within its own organization as many crews as possible in order to decrease the cost of the finished house. A large shed, devoted to pre-cutting operations, where the latest labor saving equipment is employed, is located close to the main entrance of the subdivision.

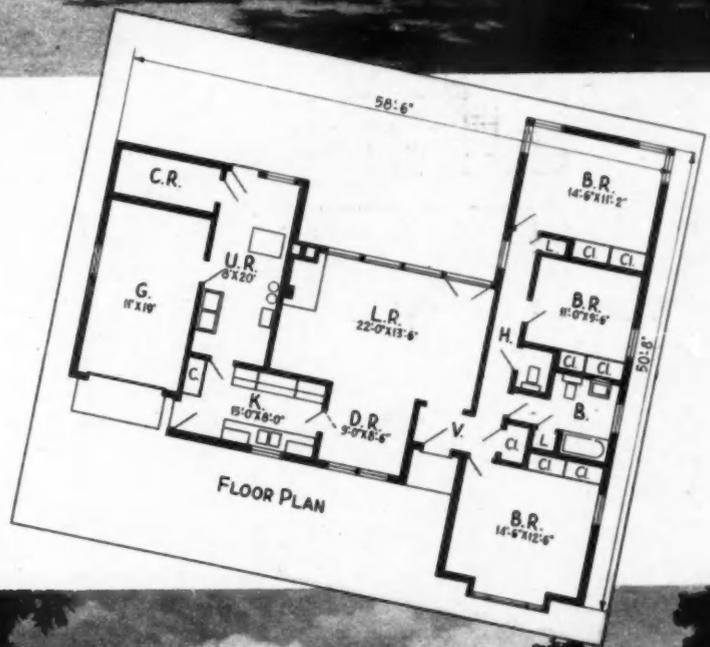


THIS house is located in the new Green Valley Homes subdivision, where construction of homes proceeds at a rapid rate. Placed in a commanding position in the area, this house has had a direct influence on the design of the other houses, because of its simple and effective lines. Chimney and large windows are features



and is used for all the cutting operations of the company.

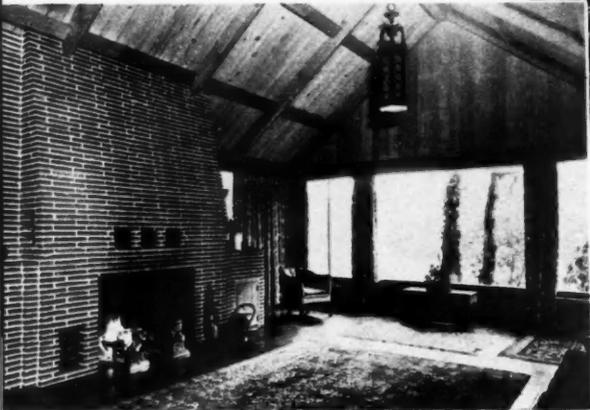
Construction of the houses shown are standard. Brick walls are supported above concrete foundation walls. Reinforced concrete floors are employed chiefly where radiant heat pipes are used. Flintkote Mastic and Zonolite concrete are used over wood sub-floor in connection with asphalt or rubber tile floors. Roofs are covered with asphalt shingles in variegated shades. All the houses are provided with attached garages. The garages have aluminum and wood doors with upward acting hardware.



REAR and front views of the same house are shown above and at the right. Outdoor living is enjoyed on the large terrace placed between the two projecting wings at the rear of the house. The full height windows and doors of the living room overlook large lawns in the rear and front

LAKE COTTAGE Of Stone and Fir

Finish of exterior blends home into surroundings and double glass windows make the most of beautiful view

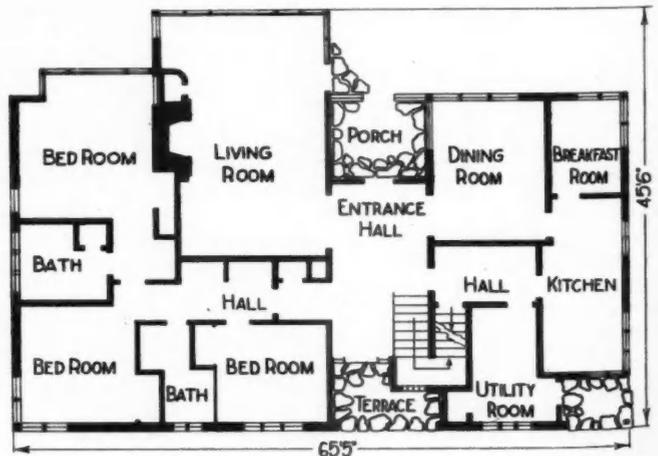


IMMENSE brick fireplace is central feature of living room. A hand-wrought iron balustrade, fabricated by the owner, highlights the entrance hall. Paneling is vertical-grain, clear fir. Modern kitchen has continuous, counter-high work top; plenty of windows

AN outstanding home in the Oregon Oswego Lake area is that of Mr. and Mrs. Paige Newton, designed by Mr. Newton. Flat Stayton rock and fir siding have been utilized by the builder, Burt Smith, to provide an exterior appropriate to the setting.

Oil heating is used. Herematically-sealed, double glass windows in both the living room and bedroom frame the scenic view of Lake Oswego. The living-room is dominated by a huge circulating fireplace. House has no rafters; type of ceiling support is shown in living-room photograph. Same type of ceiling is used on the second floor. Floors are of oak plank.

Outdoor living facilities around the house include an outdoor fireplace with picnic table and benches. A small boathouse is built at the edge of the lake.



Am
H
S
dra
mat
tary
M
the
in t
educ
all o
sma
of e
of t
A
tem
of c
dec
med
that
hur
A
vel
bee
sal
Bu
to
the
ans
con
pri
ing
cal
del

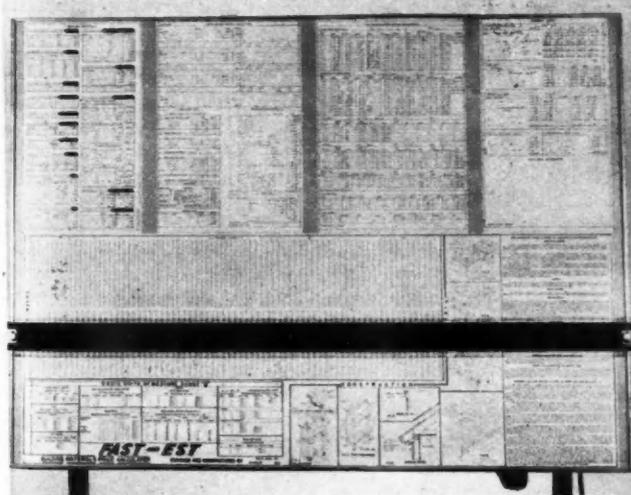
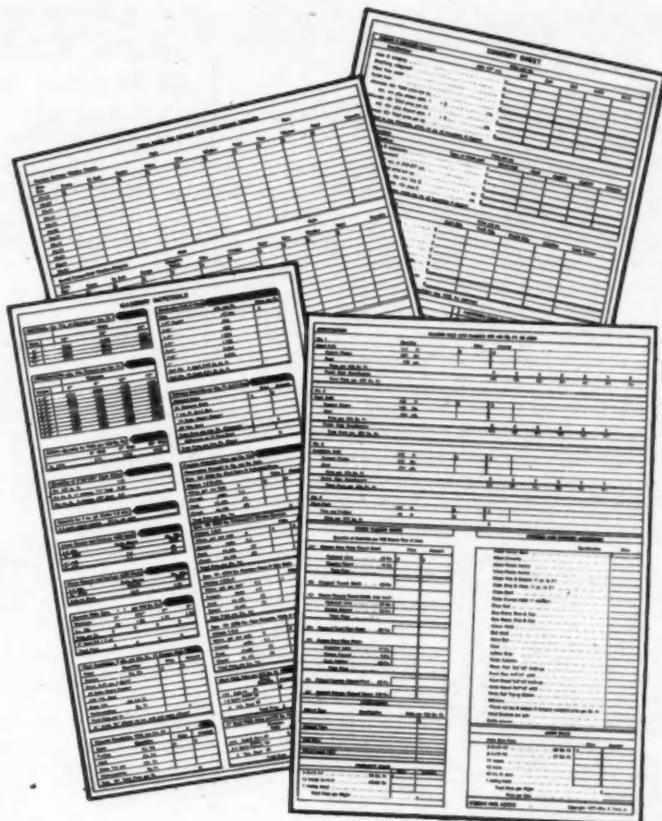
How Much Will It Cost?

Architect announces perfection of new estimator that reduces estimating time, and eliminates chances of most errors in multiplication

SET up in the form of a machine rather than a book, easy to operate, and with all unit price information and instructions mounted on a standard 30x42-inch drawing board, is the brief description of the Fast-est estimator, given it by its inventor, William Piehl, Jr., secretary of the Miller-Piehl Lumber Co., Seymour, Wis.

Mr. Piehl, a graduate of the school of architecture of the University of Minnesota, has spent his working life in the lumber yard. Upon completing his architectural education, he returned to the lumber yard, and assumed all of the duties having to do with design for homes and small commercial and industrial plants, as well as the task of estimating bills of materials for the builder customers of the yard.

After searching for an estimator or an estimating system that would speed his work, and minimize the chances of error in computing quantities and prices, he finally decided to develop his own method. His aim was a partly mechanical estimator rather than a system—an estimator that would speed the work, and eliminate the need for



PHOTOGRAPHS of calculator with price charts, contract and listing forms, and straight edge mounted on standard 30x42-inch drawing board

hundreds of multiplications of quantities and unit prices.

After more than five years of experimentation and development, he announced recently that his estimator had been perfected, and that it was ready to be offered for sale to builders and retail lumbermen. Called the Fast-est Building Materials Price Calculator, the device, according to Mr. Piehl, has the same value as an additional man in the estimator's office. It is capable of giving a ready answer to any price question for any part of any type of construction. It is dependable and accurate, and includes pricing for the whole broad field of building materials.

In addition to basic price charts mounted on the drawing board under a glass the same size as the board, the calculator includes illustrations of various construction details for walls, partitions, floors and roofs, together

with contract and listing forms. Lumber pricing tables are presented in such a manner that price changes in lumber do not affect the calculator. The price of any quantity of lumber of any kind at any unit price can be obtained instantaneously in board feet or square feet.

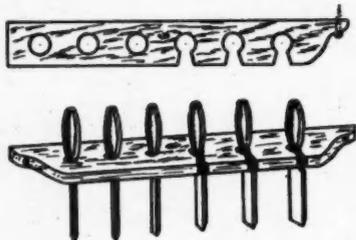
According to Mr. Piehl, operation of the calculator is so rapid that a builder can quote a guaranteed price on a building while the customer waits in the office. He states also that the calculator will earn more money for its operator than any other piece of equipment he owns, and that it will pay for itself in time and accuracy in a short time.

"The value of the calculator," said Mr. Piehl, "has proved itself to me in my own estimating work. I now have for the first time an instrument that does all of the things I want it to do, both rapidly and accurately."



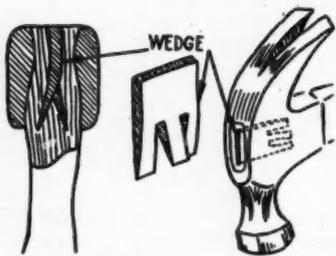
How-To-Do-It Pointers

How to Make a Tool Rack



IN submitting this idea, George T. Mann, Fort Meyers, says: "In order to hang chisels and other round handled tools uniformly, the following method is suggested. Bore holes down the center of 1x2-inch piece to fit the ferrules of each tool. Space holes for easy handling of tools. The tools will slip easily into place up to 3/4-inch sizes. For the larger blades, cut a slightly wedged-shaped slot into the side of the holes."

How to Prevent Hammer Handles from Loosening



HERBERT E. FEY, New Braunfels, Texas, in presenting this suggestion says: "This wedge can be made from a flat piece of metal. It is slotted in two places to provide three equal parts or tangs. These are bevelled or tapered, two on one side, and the center tang on the opposite side. When a wedge is driven into the end of the handle, the tangs will bend slightly in opposite directions, securing the wedge firmly in place."

How to Save Time In Pulling out Nails



TO SPEED up a job where hundreds of nails are to be removed, and to save removing each nail from the claw of the hammer by hand, allow a nail to get firmly stuck in the "V" of the claw hammer, then there will be no room for another nail to stick.

The pulling action may be done with a quick snap of the wrist, and the same motion will throw each nail clear of the claw as it is pulled. NORM MANSON, Middletown, Conn.

How to Round Corners Without Templates



IN offering the following, Richard M. Barner, Colwyn, Pa., says: "Here is a method, I use to round off corners without the aid of a template. The method is both fast and accurate. Lay out radius full-size on board. Scribe first and second offsets as shown."

How to Keep Handles From Splitting



TO KEEP wooden handles from splitting when driven by hammering, use left over ends of plumbers nickel and chrome-plated trim as a band for the end. GEORGE T. MANN, Fort Meyers, Fla.

AMERICAN

Modern House Gives Prominence to Kitchen-Dining Space

By R. J. Alexander

IN PLANNING houses today, the rear elevation of a house is made just as attractive as the street front. The kitchen-dining space, in the plan detailed on the opposite page, has been given prominence in the exterior design, as well as in relation to the balance of the layout.

This practice has not always been the case, as a number of designers, especially those employed by lumber companies or contractors, have been inclined to spend a great deal of time placing the emphasis upon the front elevation to the neglect of the other three walls. The narrow lot of the past is gradually being superseded by a larger and more expansive area, which, in turn, challenges the designer to consider all the walls as being equally important.

This trend has given rise to a general reversal in the position of major rooms, so that they now look out over the rear yard which is generally landscaped. Thus, that portion of the lot, which at one time used to be a catchall for the winter's accumulation of ashes and tin cans, has now been transformed into an outdoor living room. These areas today are used as recreation spots, having outdoor fireplaces, play areas and flower gardens, as well as the usual vegetable garden and clothes drying space. The number of added features will depend on the amount of ground available.

In this popular change in house design and layout, which was caused by widespread public demand, the rear elevation of a house is made to appear just as attractive, if not more so, than the front of the house.

The kitchen-dining space, shown on the opposite page, is taken from the floor plan of a house, designed with the idea in mind of meeting these new requirements in house planning. The details and general design of the exterior are simple and straight-forward, without any unnecessary cornice ornamentation. The iron rail around the platform and the interesting flower-pot holder which is placed under the casement windows, are added to the rear elevation because of its increased importance.

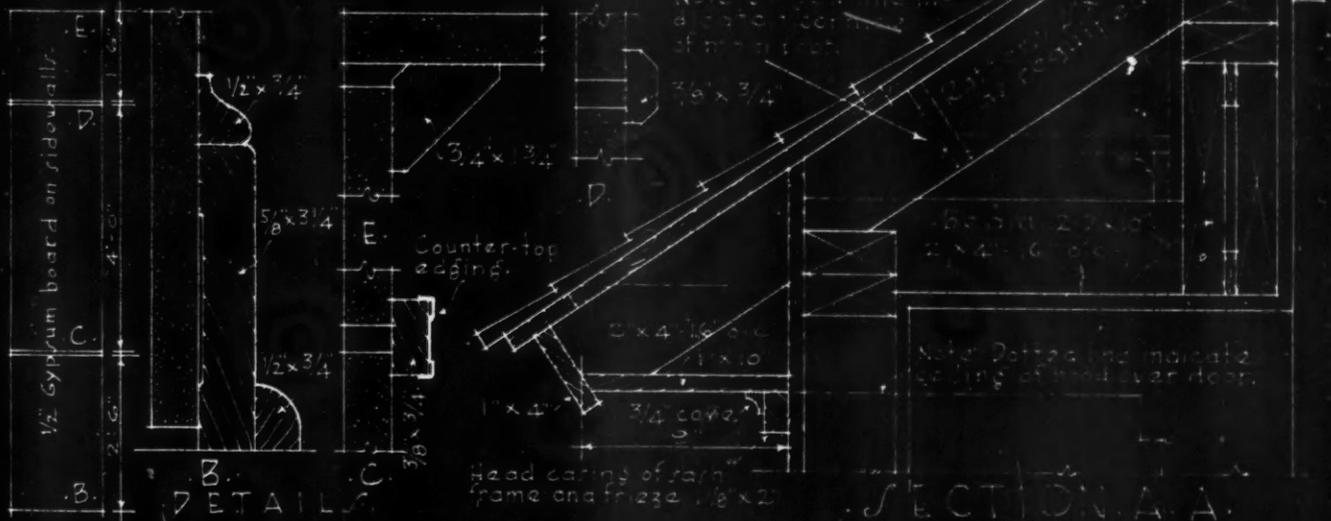
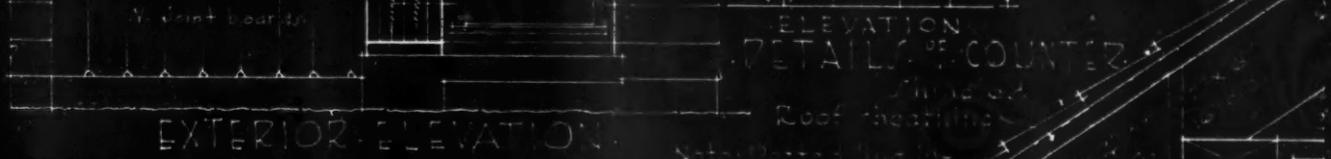
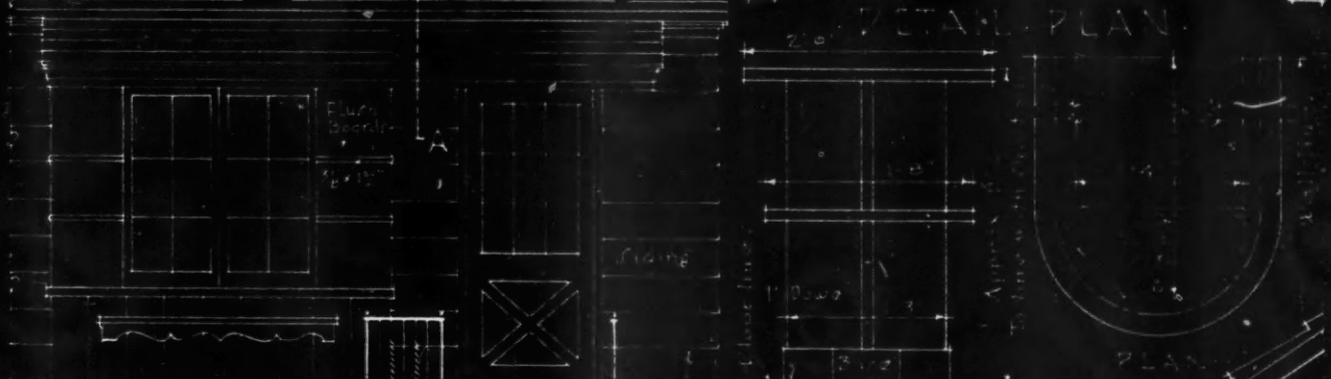
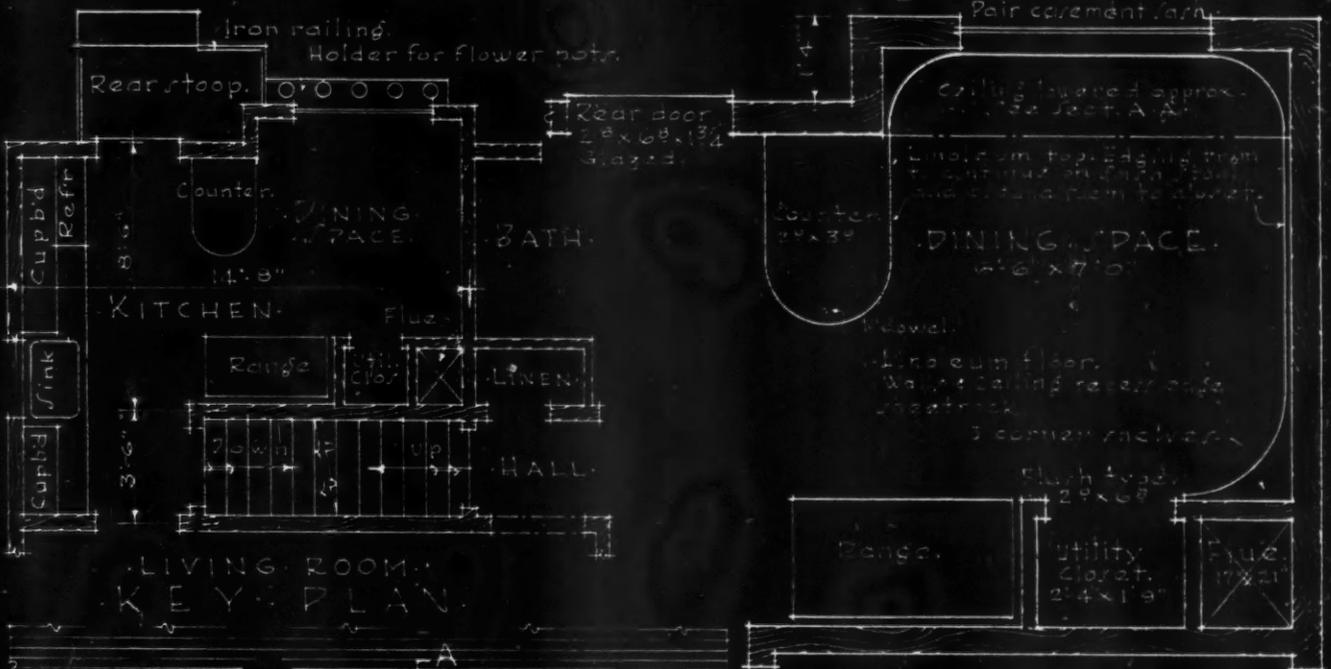
The inside of the kitchen-dining space keeps the same character as the exterior. The walls and ceiling are covered with recess-edge gypsum board. The lower and upper areas of the sidewalls are painted; the center section of the sidewalls together with the ceiling are covered with a gayly colored wallpaper.

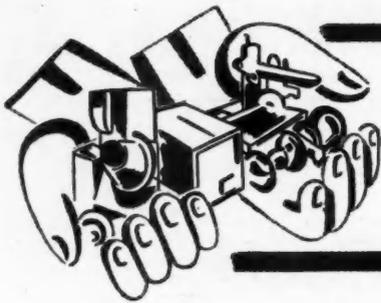
BUILDER'S BETTER DETAIL PLATE

American Builder, November 1947.

117

NO. D-37. DETAILS OF REAR ENTRY & DINING SPACE.



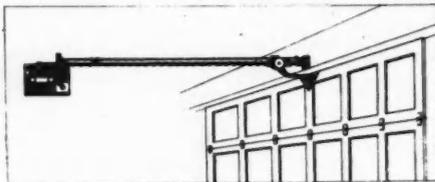


NEW PRODUCTS

Offered by Manufacturers

GARAGE DOOR OPERATOR AB11714

Federal Industries, Inc., 19720 West 8 Mile Road, Detroit 19, Mich., manufacturers of the Electronic Serviceman garage door operator, is now producing a new type unit designed



for installation on garage doors of the upward swinging type. The unit is activated by the entirely new radio wave principle used by the canopy type operator. Shown here, the unit features simplicity as well as efficiency and installs in a minimum of space on the garage ceiling.

ALUMINUM ROOFING AND SIDING

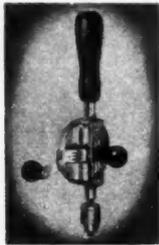
AB11710

The newly organized New Holland Metals Co., Leola, Pa., is now manufacturing a complete line of aluminum corrugated and 5 V-Crimp roofing and siding, plain aluminum ridge roll, and aluminum roofing nails with neoprene plastic washers. Aluminum plain sheets for heating and ventilation duct work are also available from this firm. The corrugated and 5 V-Crimp roofing and siding is fabricated in 6, 8, 10 and 12-foot lengths in .019, .024, and .027-inch diameter thicknesses.

IMPROVED HAND DRILL

AB11716

A hand drill with the entire mechanism fully enclosed has been announced by the Oxwell Tool Co. Ltd., 928 Broadway, New York, N. Y. So designed, the mechanism is protected from dirt, dust, and wood chips, and the danger of finger nicks are eliminated. The casing is of two-piece cast construction (aluminum finished alloy metal).



Other features of construction are two pinion gears, red-stained handle and knobs, and nickel-plated knurled chuck with hardened steel jaws.

AIR CONDITIONING REGISTER

AB11702

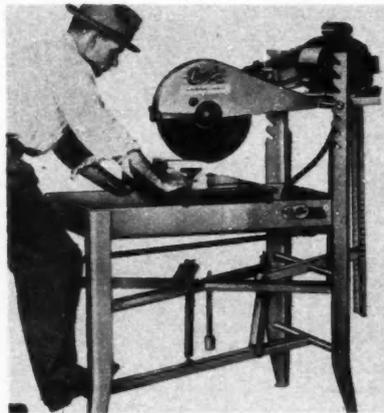
A new type of register for forced warm air heating systems has been developed by the Minneapolis Honeywell Co., Minneapolis, Minn. The register is designed with a curved ex-

tension front equipped with individually adjustable diffusion vanes, volume and shut off damper, and turning vanes. The diffusion vanes permit any shape of room to be evenly blanketed with air. The damper blades make possible complete control of volume. This modern compact unit is installed flush with the wall. Its curved front extends slightly into the room, making extremely wide deflection possible and preventing ugly streaks from marring the wall.

DUSTLESS MASONRY SAW

AB11713

A circulating water system to eliminate dust, a snap-on blade cover, multiple belt drives, and a handy stabilizer control for locking the cutting head at any desired position are among the outstanding features of the new HD-48 Clipper Masonry Saw now



available from the Clipper Manufacturing Co., 2800 Warwick, Kansas City 8, Mo. "Wet-cutting" blades, especially developed for this model are another new feature. These blades quickly and easily cut hard masonry materials, whether they are wet or dry. Multiple cutting and the foot pedal control, both exclusive Clipper features, are incorporated into this unit, which operates exactly the same as the standard Clipper masonry saw.

ALL PURPOSE TOOLS

AB11706

Resumption of the manufacture of the Bevil-Devil All-Purpose Set of tools is announced by the Kimball Manufacturing Co. Inc., 1629 Sycamore, Royal Oak, Mich. The tools are used for slicing, grooving, beveling, and rabbeting insulation board. A set consists of three tools: one for slicing, another for grooving, and a third for beveling. By setting up all

three when a job is started, no time is wasted for adjusting, changing blades, or attaching parts. These tools, made of selected hard maple, will not discolor or scuff-up the painted surfaces of insulation boards. They are light in weight and easy to work with.

FLAT SASH BALANCE

AB11723

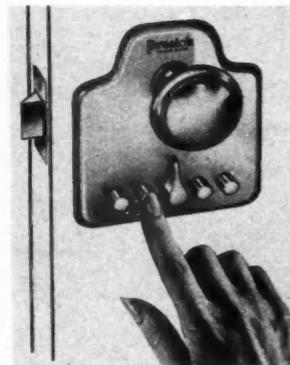
An adjustable flat sash balance that eliminates the need for pulleys, weights, cords, and window boxes, and requires only a simple plank frame for installation is manufactured by Duplex, Inc., 634 North LaPeer Dr., Los Angeles 46, Calif. To balance any sash from 4 to 48 pounds, only four sizes of these balances are necessary; two sizes meet 98 per cent of all residential building needs. This sash balance is especially adaptable to the many-windowed homes of modern design where only very narrow mullions and trim are used.



KEYLESS DOOR LOCK

AB11705

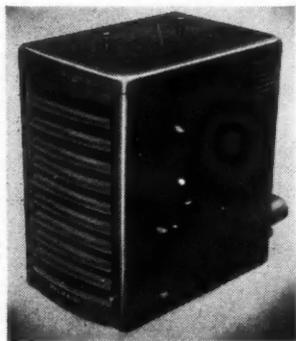
A push-button combination lock, which fastens at the flick of a lever and opens when the proper combination is tapped out on four small buttons, has just been released to the trade by the Security Lock Corporation, Walden, N.Y. According to the



manufacturer, the lock is practically burglar-proof since only the correct combination will open it, and the number of combinations possible is almost unlimited. This lock eliminates the key completely, is of modern design, and may be installed on all standard 1 3/4-inch wooden doors.

SUSPENDED UNIT HEATER AB11707

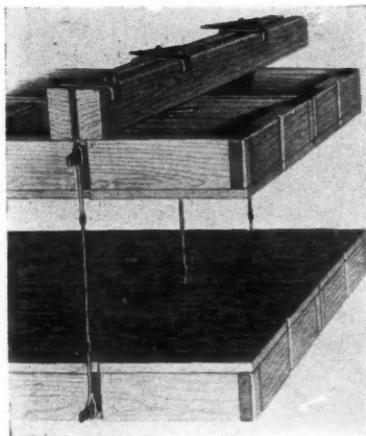
A suspended type gas-fired unit heater, with an 80,000 BTU input, specifically designed for business and industrial heating, is available from The Palmer Manufacturing Corp., Phoenix, Ariz. Outstanding features of



the unit are a compact design to permit low ceiling installations, corrugated steel heating elements to increase heat transfer efficiency and reduce operation noises to a minimum, adjustable air deflectors, a slow-speed heavy-duty motor, choice of fan or blower, and easily accessible controls and burners for inspection and adjustment. This heater, called Palm-aire, can be equipped with thermostatic control.

PANEL FORM SYSTEM AB10718

A uniform foundation and fast setup and stripping are accomplished through the use of the Symons Panel Form System, according to the manufacturer, Symons Clamp and Manufacturing Co., 4249 W. Diversey Ave., Chicago 39, Ill. The standard panel system is used with the tie rods in the standard panel anchored from the



sides of the panel. Thus they hold both ways and save the time spent in fishing for the tie openings on the opposite panel. This method also eliminates the need of drilling for ties and plugging up old tie holes. When dismantling the forms, as soon as the connecting bolt to which the ties are anchored is removed they may be

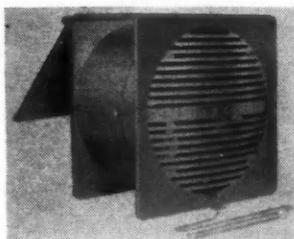
lifted straight up or back. The panels do not have to be forced away and disengaged from protruding ties and washers.

MASONRY DRILL SETS AB11726

A complete line of carbide tipped masonry drills in handy kits and boxed sets are available from the Super Tool Company, 21650 Hoover Road, Detroit 13, Mich. The kits contain five of the most popular size drills, and the boxed sets contain eight. Both are available with drills having either round or Super-Grip Hex Type shanks. A chart which indicates the proper size drill to use in drilling masonry for all types of expansive screws, bolts, bolt shields, and anchors is also included. Super carbide tipped masonry drills provide for adequate chip clearance for fast accurate drilling of holes in cement, tile, brick, asbestos, composition wall board, limestone and all plaster compositions.

HOME VENTILLATING FAN AB11703

The Westinghouse Electric Corp., 306-4th Avenue, Pittsburgh 30, Pa., manufactures a ventilating fan with an insulated outside door. This door, which prevents the passage of heat through the opening when the fan is not in use, is kept tightly closed by a strong spring. Designed for installation in the wall of a kitchen or home



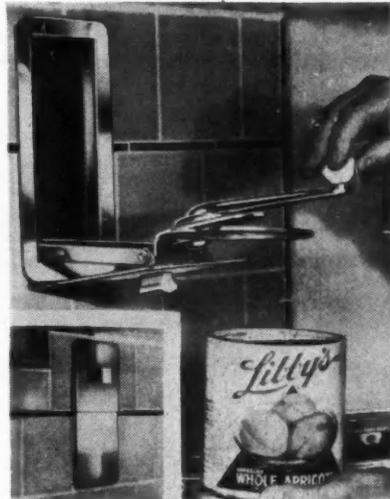
laundry, this ventilator can move 350-cubic feet of air a minute, sufficient to change the air in a 9 x 12 x 7-foot kitchen every two minutes. When installed, the fan is concealed behind a slotted aluminum grille that will blend, unpainted, with any kitchen finish or which may be painted without requiring a ground coat of paint. This product is named the Poweraire Home Ventilator.

PORTABLE ELECTRIC DRILL AB11709

A comfortable pistol grip handle with trigger switch control and a newly designed air-cooled Universal AC-DC motor are the outstanding features of a new lightweight high power portable electric drill offered by Portable Electric Tools, Inc., 255-59 West 79th St., Chicago 20, Ill. Ideal for industry, shop and home workshop, the tool also features a lightweight stator housing, made of seamless aluminum tubing; screw on drill chuck; oil retaining bronze bearing and a 6-foot, heavy-duty, flexible, rubber-covered cord and plug.

BUILT-IN CAN OPENER AB10706

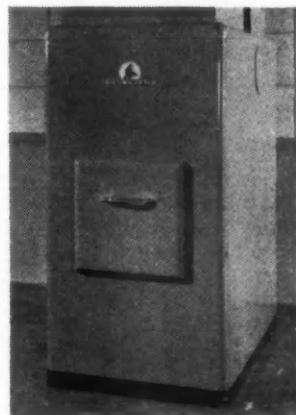
A can opener encased in a chromium-plated box for permanent installation in tile, plaster, wood or any wall finishing is the new product of the Robert H. Clark Co., 9330 Santa



Monica Blvd., Beverly Hills, Calif. Designed to fit flush against the wall, the can opener when not in use is completely out of sight. Trade-named Genie, this can opener has no blades or levers. It simply shears the lid smoothly from the can, directly under the bead and holds the lid until the can is removed. It opens any size or shape can without adjustment.

FURNACE UNITS AB11722

A self-contained furnace unit (Airborne) and boiler unit (Waterborne) that heat, clean, humidify, and circulate the air have been designed by the Iron Fireman Manufacturing Co., Box 450, Portland, Ore. The Airborne unit, illustrated, produces a luminous

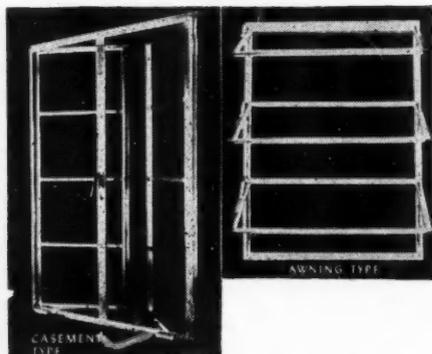


flame and is available in both oil and coal burning models. The Waterborne unit, almost identical in appearance with the Airborne, is also available with either a built-in oil burner or coal stoker. Unusually large primary heating surfaces are provided in the Waterborne's automatically-fired boiler units for steam, hot water, or vapor heating. A built-in hot water coil to provide hot water throughout the home may be installed in this unit.

ALUMINUM WINDOWS

AB11715

A line of aluminum casement and awning type windows are available from Ware Laboratories, Inc., of Miami, Fla., and 21 West Street, New York City. Both types of windows are of aluminum alloy with the vent section heavier than the usual construc-

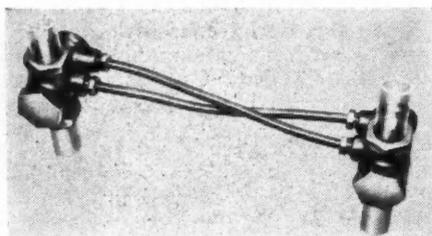


tion. All joints are electrically flash-welded. Hardware is of aluminum throughout, with stainless steel pins for the hinges. Operation from the inside is achieved through roto controls. The windows are prepared for aluminum screens and storm windows. Immediate deliveries are promised by the manufacturers.

VALVE PREVENTS SCALDING

AB11704

A unique device which guards against variations in the temperature of running water in a shower bath is being marketed by the Milton-Griffith Co., 8619 Mack Ave., Detroit 14, Mich. It is a pressure-controlled valve de-



signed for use with any type of shower fitting. Installed between the last water line branch-off and the adjusting valves of a shower bath, this device is completely controlled by sudden pressure drops, to which it responds instantly, balancing the hot and cold volume at the selected temperature. It is being distributed through plumbing and heating supply houses and carries the trade-name Aquatemp.

FLUID ASPHALTS

AB11719

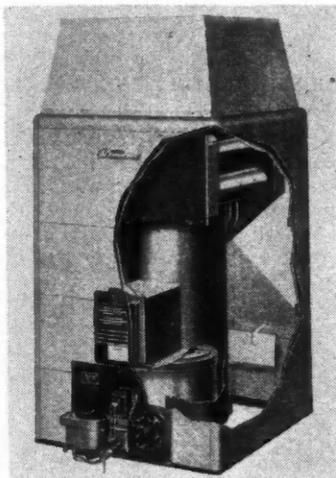
The American Bitumuls Co., 200 Bush St., San Francisco 4, Calif., produce emulsified asphalts and asphalt composition products under the registered trade name "Laykold." These products are designed for use in insulation construction, a usage which requires the most durable types of asphalt. All of the products are used without heating and require a minimum of special equipment and skilled

labor. Of particular interest to builders is the Laykold Fibrecoat which contains mineral fibres for high strength and mineral flakes for surface protection. A tough protective coating, it preserves the life of steel, galvanized iron and other metals, concrete, brick and stucco, composition and other bituminous roofs, and all types of surfaces except wood.

OIL-FIRED FURNACES

AB10721

Two new oil-fired units, designed for small and medium size homes, have been added to the Mueller Climate-control line, the L. J. Mueller Furnace Co., Milwaukee, Wis., has announced. These units are the Type 201 Gravity Furnace with input of 90,000 to 135,000 B.T.U.'s per hour, and the Type 202 Winter Air Conditioner with inputs of 100,000 and 150,000 B.T.U.'s per hour. Both furnaces employ the same heavy-gauge steel drum and



tubular radiator of multiple pass design, and the same type vaporizing burner. This burner features an air damper which automatically adjusts the supply of combustion air as the burner changes from high fire to pilot fire. Both furnaces are designed to burn gas as well as oil, having gas-fired ratings identical to those above. Where gas is to be used, a packaged gas burner assembly is available.

CELLAR WINDOW CATCH

AB11701

The Stanley Works, New Britain, Conn., announces new styling and major improvements in the No. 1763 Cellar Window Fastener. The former friction element has been replaced by

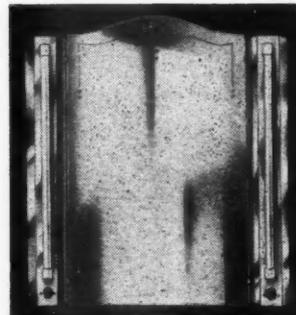


a steel, dished washer which is now located between the catch and plate for protection and long-lasting performance. In addition, the mounting plate has been redesigned to permit a flush application of the fastener to the window frame.

BATHROOM CABINET

AB11712

This bathroom cabinet with chrome finished fluorescent side fixtures is the deluxe model of the bathroom cabinet line produced by the Mirro-Glo Cabinet Co., 3131 West 49th St., Chicago, Ill. On one side of the cabinet is an outlet for electrical razors, or other

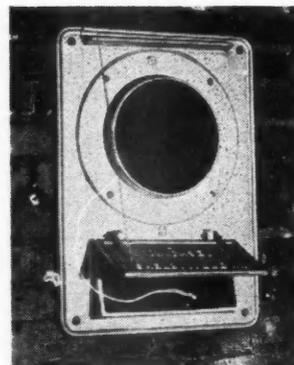


electrical appliances, and on the opposite side, a separate cabinet light switch. The plate glass mirror is held in position on the door by cork-lined mirror clips, and the door is attached by a plated piano hinge which holds the weight evenly and eliminates sag. All wiring connections are soldered and completely enclosed.

THIMBLE AND CLEAN-OUT

AB11718

A new type basting-thimble and clean-out to be used on furnace chimney flues has been developed by the D. A. Casey Co., 421 East Main St., Shelbyville, Ky. This thimble, fabricated of cast iron, comes in three parts: the main plate, attached to the flue by four expansion bolts; a collar, the size of the furnace pipe to be used,



which is attached to the main plate by four bolts; and a clean-out door and check draft. The clean-out door is directly under the smoke pipe which makes it possible to clean the flue without disrupting the furnace pipe. It also eliminates the need of a check draft door in the furnace pipe; by attaching the draft regulator chain to the bottom of the clean-out door, the furnace can be checked and the flue cooled.

ALUMINUM HARDWARE

AB11717

Coat and hat hooks, sash fasteners, door stops and bar sash lifts of cast aluminum are some of the items of a moderately priced hardware line being

(Continued to page 122)

"Up-Front" Doors

THAT ARE AS GOOD AS THEY LOOK

It takes only a glance to note the good looks of Ro-Way Overhead Type Doors. But look closer. See how their simple, clean lines blend with any type of architecture . . . discover the careful engineering, the skilled workmanship, the fine quality materials that go into every Ro-Way Door.

Now go *behind* the door and examine Ro-Way's extra-value features: "Friction-reducing" Track; Double-Thick-Tread Track Rollers; "Tailor-Made" Power Springs; "Crow's Foot" Outer Bearing Support; Parkerized and Painted Rustproof Hardware.

No matter *how* you look at Ro-Way Doors, they look good because they *are* good.

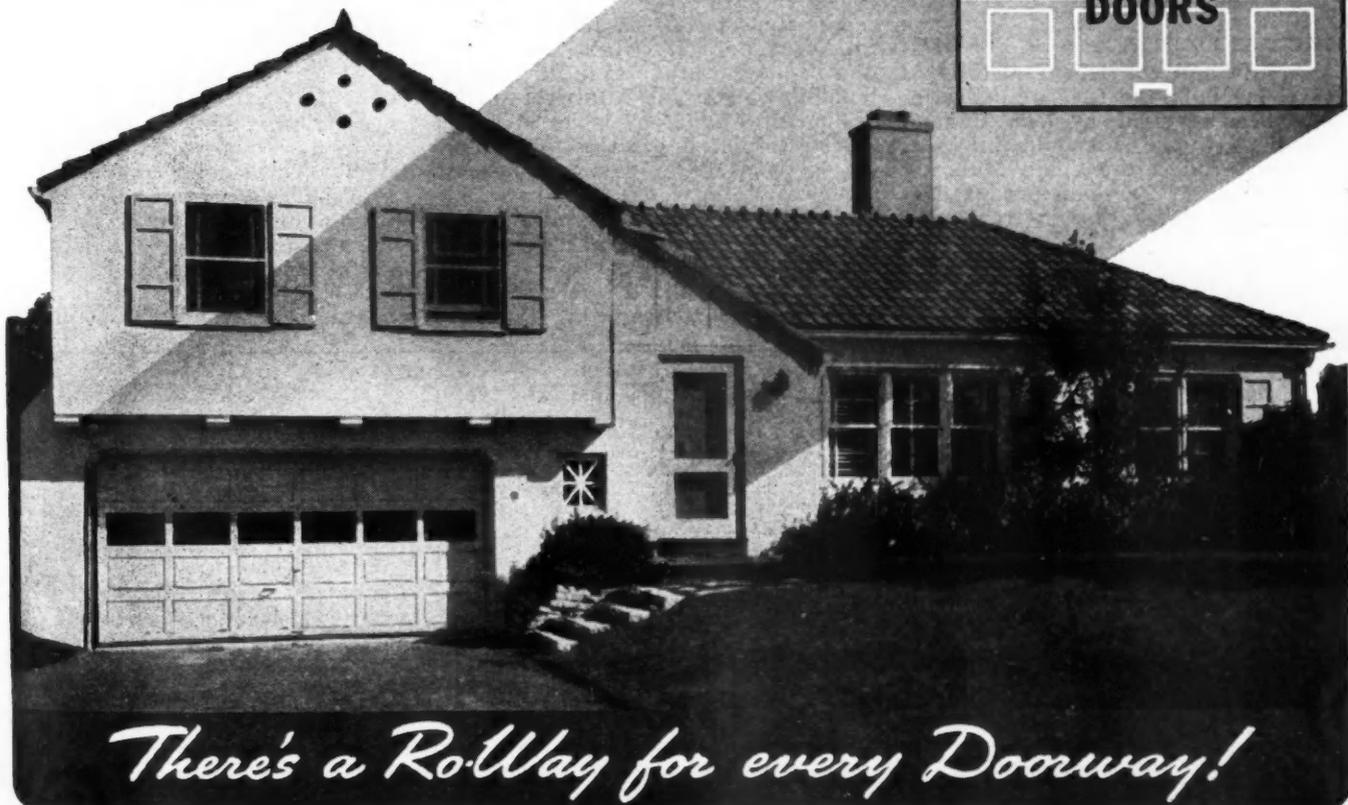
They're manufactured *completely* in Ro-Way's own plant. Meantime, write for Ro-Way's four latest folders on Residential Doors, Industrial Doors, Commercial Doors and Ro-Way Door Accessories.

NATIONWIDE SALES AND INSTALLATION SERVICE

Ro-Way Distributors in all principal cities.
Consult your classified telephone directory, or write for distributor's name. See our catalog in Sweet's.

ROWE MANUFACTURING COMPANY

728 Holton Street, Galesburg, Illinois



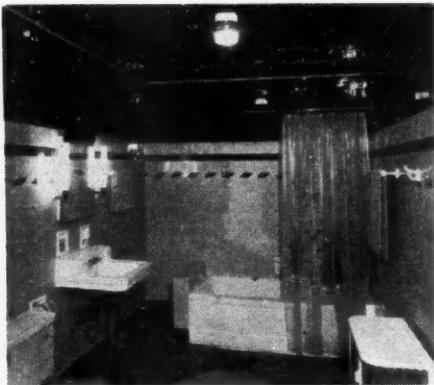
There's a Ro-Way for every Doorway!

(Continued from page 120)

produced by the H. B. Ives Co. of New Haven, Conn. These products are lightweight, durable, non-rusting, have lasting finishes, great strength, and resist oxidization. They are available in a variety of finishes: brass plated, bronze plated, burnished aluminum, nickel plated, bright and dull, and black.

STEEL WALL TILE AB11711

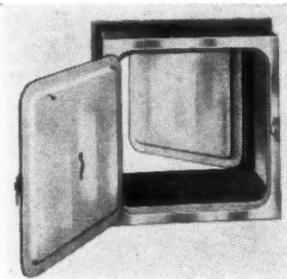
A steel wall tile that can be installed over old plaster, new plaster, wall board, sheetrock, plywood, or any smooth surfaced wall material is made by the Steel Wall Tile Co., 1706 W. North Ave., Chicago, Ill. This product has a tough, high-gloss, baked-on enamel finish that will not chip, crack,



craze or buckle. To install, each individual tile is embedded in a mastic cement to provide a completely waterproof finish for the wall. This tile is produced in a variety of colors, and can be ordered for immediate delivery in small or large quantities.

PACKAGE RECEIVER AB11724

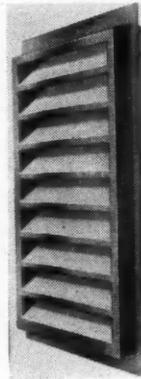
A safe and convenient method of receiving milk and package deliveries has been devised by Air Control Products, Inc., Coopersville, Mich., in its new product the Leigh Milk and Package Receiver. This product, designed for installation in frame and



masonry walls, eliminates the intrusions by deliverymen while providing a clean, insulated compartment for foodstuffs or packages. It is built of heavy gauge steel and has an attractive baked-aluminum finish. The doors are insulated to protect contents from heat or cold. They have rugged hinges and positive latches. The inner door cannot be opened from outside.

SELF-FRAMING LOUVERS

A new series of ventilating louvers for attic wall installations are being produced by The Leslie Welding Co., 2937 W. Carroll Ave., Chicago, Ill. The unit shown is a center-flanged, self-framing louver designed for employment in new construction. It is shipped ready for installation, including a detachable screen in the rear. This series of louvers are made in five sizes, fabricated from either 26-gauge galvanized iron or .025-inch aluminum.



AB11721

NEW TRANSLUCENT MATERIAL AB11720

A semi-structural, light penetrating, glass fiber laminate named Alsynite has been developed by the Allies Synthetics Co., 4654 DeSoto Street, San Diego 9, Calif. According to its manufacturer, this material is weather-proof, rotproof, durable, does not discolor, is not affected by the sun's rays, will not decay or be attacked by vermin or other type insect pests, will resist mild acids and bases and is completely free from odor. It is applied by nailing, screwing, or bolting to various types of framework, and can be sawed. Standard sheet sizes are 26-inches wide and from 8-feet to 10-feet long in 4-inch increments. For quonset radius the sheets can be curved. It is also available in flat sheets, 30-inches wide, the same lengths as above. This product comes in two weights, medium and heavy.

ALFOL INSULATION AB11725

The Reflectal Corp., 155 East 44th St., New York 17, N. Y., offer two new insulation products in their Alfol building blanket and Alfol asbestos.

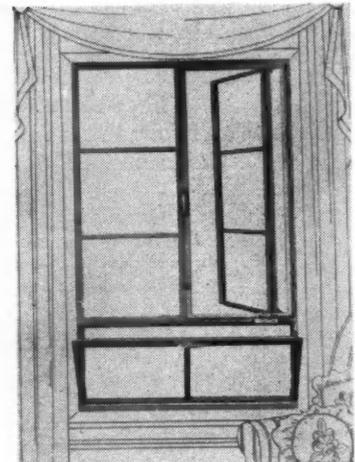
The Alfol building blanket is a reflective insulation suitable for applying to open studs, joists and rafters of new and old wood frame or wood furred structures. Easy application is obtained by an automatically expanding blanket, creating air spaces with one or two separated layers of pure aluminum foil backed on the exposed

side by tough, heavy water-proofed Kraft paper with plenty of salvage for stapling in place. This material is packaged in rolls and comes in standard widths of 16, 20 and 24-inches.

The Alfol asbestos is a lightweight insulation consisting of a layer of pure aluminum foil laminated to a 1/4-inch corrugated asbestos. It is recommended for high temperature applications such as ovens, boilers, radiator enclosures, pipe and duct insulation. It reflects 95 per cent of all radiant heat, is completely fire resistant, and requires small storage space. It is easy to cut, to fit, and to apply, and comes in 250-square foot rolls, 36-inches high.

STEEL BEDROOM WINDOW AB11708

A Fenestra steel bedroom window that features an in-tilting vent at the sill was recently announced by the Detroit Steel Products Co., 2250 East Grand Blvd., Detroit 11, Mich. When opened, the in-tilting vent sends air currents upward toward the ceiling,



and protects the room's interior by deflecting rain, snow or sleet to the outside. It also protects against drafts and falls. The vent opens by finger-tip control and stays open automatically in any desired position. Like other Fenestra windows, this window is made of steel, which won't warp or shrink, and is precision fitted at the factory.

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 105 West Adams Street, Chicago 3, Illinois

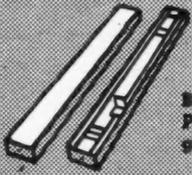
NAME.....ADDRESS.....

CITY.....STATE.....

AB11701	AB11705	AB11709	AB11713	AB11717	AB11722
AB11702	AB11706	AB11710	AB11714	AB11718	AB11723
AB11703	AB11707	AB11711	AB11715	AB11719	AB11724
AB11704	AB11708	AB11712	AB11716	AB11720	AB11725
				AB11721	AB11726

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.

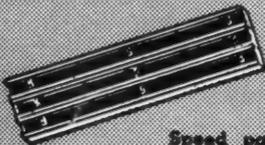
THE A. B. C.
of ATLAS
Pre-Eminence



Basic unit, the Speed Panel, made of rugged steel.



Ingenuous, quick-action, wedge bolt, for rapid joining or stripping.



Speed panels combine into units of two or more for quick handling.



Forms are quickly and easily positioned for floors.

Light and sturdy. Easy wall assembly. Rapid stripping.



Forms assembled in to multi-unit panels for rapid crane handling.

They had cheap labor and plenty of wood...

But they sent ATLAS STEEL FORMS to OKINAWA

Wood was cheap and plentiful, native labor was freely available, and yet for Army construction on Okinawa they brought Atlas Speed Forms all the way from the States. The Okinawans quickly learned to assemble and strip the simple Atlas Speed Forms, a minimum of stateside labor was involved, which drastically reduced labor costs.

Whether the concrete is poured in Oklahoma or Okinawa, on the East Coast or in the Far East, Atlas Speed Forms will reduce form costs and form labor costs in half, and speed up the completion of the job. For more details, ask an Atlas engineer—fill out the coupon below.

SO LIGHT
A CHILD CAN
LIFT THEM



**IRVINGTON
FORM & TANK
CORPORATION**
IRVINGTON 57, NEW YORK

Address mail inquiries to Irvington Office.

BOSTON, MASS.
294 Washington Street
DENVER 2, COLORADO
1800 West Colfax Ave.

HOUSTON, TEXAS
3815 Garrott Street

MIAMI, FLORIDA
93 N.E. 20th Street

NASHVILLE, TENN.
PHILADELPHIA, PA.
Broad St. Station Bldg.

SAN FRANCISCO, CAL.
Sixth and Hooper Sts.

TACOMA, WASH.
2412 N. 10th Street

WASHINGTON, D. C.
805 G Street

NEW YORK, N. Y.
43 Cedar Street

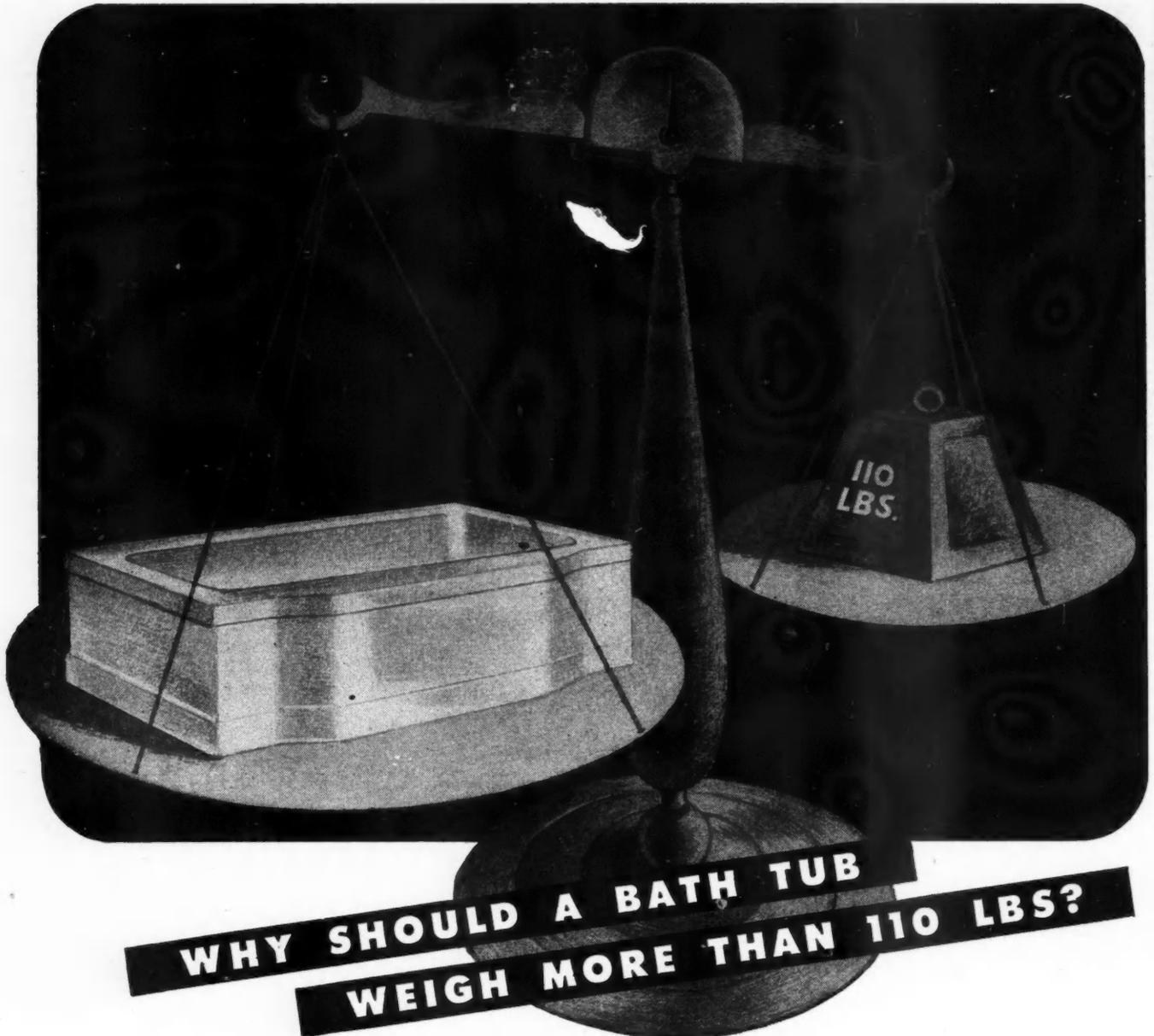
Please send me information on Atlas forms. I am particularly interested in forms for Walls Floors Tunnels Bridges Sewers Columns

NAME

FIRM

ADDRESS

.....



More than 1,500,000 Briggs Beautyware porcelain enameled, steel plumbing fixtures have been produced since 1933. These modern smartly designed, long life plumbing fixtures are still giving the same satisfactory service as the day they were installed. This confirms what Briggs engineers determined 14 years ago . . . that much useless weight could be eliminated and still make a superior fixture. Result: the finest in plumbing ware.

The demand for Briggs Beautyware now is greater than ever. The architect, plumbing dealer, the builder and consumer all are aware that Briggs Beautyware has the high quality and extra value that the modern home owner must have.

Briggs bath tubs are styled for the modern home

. . . durable, neat, modern and safe. Yes, Briggs has those much in demand features and extra values that make money for you. Briggs' exclusive safety bottom makes sit-down and shower bathing safe. Flat bottom for more and safer bathing area . . . stainproof (acid resisting) porcelain enamel—so easy to clean, at no extra cost. Integral lip flange—a permanent seal tub to walls . . . so important to architect, plumbing contractor and builder.

No wonder Briggs Beautyware today is the modern name for plumbing ware. No wonder Briggs plumbing ware dealers are so enthusiastic—so sold on Briggs Beautyware. Write for complete details today.

BRIGGS MANUFACTURING COMPANY
3025 MILLER AVENUE
DETROIT, MICHIGAN

BRIGGS *Beautyware*

no



Front

3. Horiz
4. Large
5. Ribs
6. Locat
7. Botto
8. Super
9. Heat
10. Smoke
11. Side
12. Inner



Rear an
metal c
of fireb
air to a

S
EAST OF
WI NOR
Also N

HEATFORM

The Superior Heat Circulating Fireplace

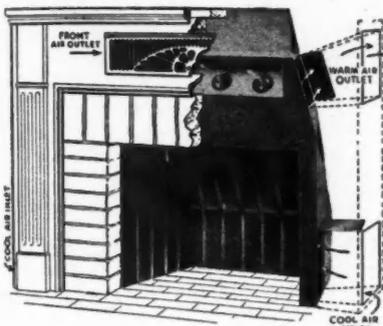
now available to Building Supply Dealers

EAST OF THE MISSISSIPPI RIVER
from our new

BALTIMORE PLANT

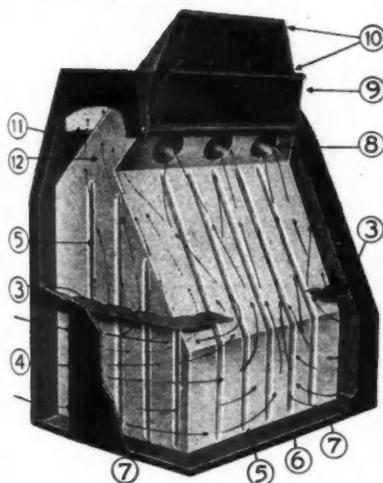
The HEATFORM FIREPLACE

the most efficient and durable of all fireplaces!



Front view. Part of masonry cut away . . . Key to photo below . . .

3. Horizontal baffle plates which direct a large volume of air intake to the lower rear heating chamber and over the hottest of the metal.
4. Large air inlets at floor level.
5. Ribs individually die formed into the boiler plate add strength and neutralize expansion.
6. Location of rear cool air inlet.
7. Bottom view of air heating chambers.
8. Superheating, connecting round air passages through the throat.
9. Heat control damper has underlump poker friction control to regulate draft.
10. Smoke dome.
11. Side air passages from lower to upper heating chamber.
12. Inner lining of the throat.



Rear and Side View—with part of outer metal cut away showing the inside lining of firebox and arrows showing contact of air to all heating surfaces.

WHY HEATFORMS PRODUCE MORE HEAT . . .

The HEATFORM has more heating surface per size unit because the air contacts the hot metal of the firebox, upper front and side walls of the throat, and also the heating surface of the round air passages through the throat.

The HEATFORM has no dead air-pockets because the lower and upper heating chambers are connected at each end of and directly through the throat, which increases the volume and velocity of air circulation.

The HEATFORM is so designed to force the larger volume of cool air intake over the hottest of the metal, which is the lower sloping back wall of the firebox, and the heating surface through and around the throat. This is where 90% of the heat is generated.

The HEATFORM gives greater volume of warm air circulation because of larger heating chambers, larger air inlet and outlet capacity.

WHY HEATFORMS GIVE MORE YEARS OF SERVICE

The ribbed construction of the firebox adds strength and controls warpage. The ribs do not stretch the boiler plate metal because they are individually die formed. The connecting round air passages add strength to the construction of the throat and prevent it from sagging and interfering with the operation of the damper.

passages through and around the throat provide for a larger volume of air to pass over the hot metal, thus removing the heat faster.

There are no exposed metal parts beneath the chimney to rust out. The rear outside lining slopes forward and is covered with masonry, forming a downdraft or smoke shelf.

The HEATFORM is designed to prevent the metal from reaching deteriorating temperatures because the multiple air

The HEATFORM . . . proved by 26 years of use in homes all over America.

WRITE FOR COMPLETE DEALER AND DISTRIBUTOR INFORMATION

—Some distributorships still open.

SUPERIOR FIREPLACE CO.

EAST OF MISSISSIPPI RIVER
61 NORTH POINT ROAD, BALTIMORE, MD.

WEST OF MISSISSIPPI RIVER
1700 E. 15th ST. LOS ANGELES 21, CALIF.

Also Manufacturers of Form and Blade Dampers, Fuel Grates, Ash Dumps, Cleanout Doors and Drape Screens



TILE-TEX* ASPHALT TILE

If completion of your jobs is being slowed down by scarce materials—get in touch with your Tile-Text Asphalt Tile Contractor. He is equipped to offer fast, expert installation of a flooring material that's perfect for new home, store, office—and many other types of construction.

Tile-Text is made to give exceptional wear; and delivers long years of service. It's available in a wide range of smart, attractive colors and patterns to permit greatest possible design freedom. We will gladly send you the name of the Tile-Text Contractor in your area, plus a copy of "Floors That Endure." Write The Tile-Text Company, Inc., Chicago Heights, Illinois.

*REGISTERED TRADEMARK OF THE TILE-TEXT COMPANY, INC.



Catalogs and HOW-TO-DO-IT INFORMATION

372—MODERN BATHROOM PLANS—is the title of a booklet devoted to the planning and arrangement of bathrooms and powder rooms to obtain the utmost convenience, safety, and usefulness. Published by the Plumbing and Heating Industries Bureau, 35 East Wacker Dr., Chicago 1, Ill., the booklet contains 34 plans, drawn to scale by an architect who specializes in bathroom arrangement and design.

373—VINYL COATINGS COLOR CHART—released by the Amercoat Division, American Pipe and Construction Co., Los Angeles 54, Calif., suggests recommended uses for these coatings, in addition to showing the various shades available. The coatings can be applied to many materials, such as concrete, plaster, linoleum, metals, brick, wood and stucco.

374—LEIGH CATALOG 47L—describes and illustrates the many convenient items, produced by Air Control Products, Inc., Coopersville, Mich., to make a house more livable. Dust chutes, clothes chute doors, milk and package receivers, built-in mail boxes, and ventilators are among the products featured.

375—VIKON TILE—product of the Vikon Tile Corp., Washington, N. J., is described and illustrated in a colorful four-page pamphlet prepared by the manufacturer. Contents cover sizes and colors available, installation instructions, and recommended uses.

376—WATERPROOFING BASEMENTS—from the inside against hydrostatic pressure is the topic of a 12-page two-color booklet issued by E. Manley and Associates, 1568 Arcade Bldg., St. Louis 1, Mo. According to the authors, the preparation recommended is guaranteed to make leaky basements, pits, dams, and cellars absolutely moisture-proof.

377—COTTON INSULATION—its flameproof, fire retarding qualities are the highlights of two four-page pamphlets recently issued by the Insl-Cotton Division, Taylor Bedding Manufacturing Co., Taylor, Texas. Of particular interest, are the experience stories relating to two major Texas fires.

378—HOW YANKEE HANDYMAN TOOLS—"Make Good Mechanics Better" is the subject of a 51-page, pocket-size handbook published by North Brothers Manufacturing Co., Philadelphia, Pa. Comprehensive descriptions and complete specifications of the tools are generously illustrated with pictures of the company's full line. Tips on how to choose a tool and specific uses for certain tools are included.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department (November 1947)
American Builder,
105 W. Adams St., Chicago 3, Ill.

Please send me additional information on the following product items, or the catalogs, listed in this department:

Numbers

Name

Street

City..... State.....

OCCUPATION*

Please note that occupation must be stated if full service is to be given.

As
bo
Ye
liv
val
fir
lon
at
du
mo
19

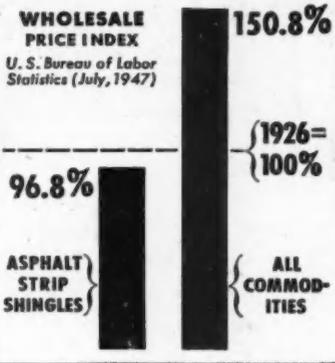
SPONS

FUNCTIONAL...
even to its Color!



**Asphalt Shingle Prices
 3% Below Those of 1926**

**WHOLESALE
 PRICE INDEX**
 U. S. Bureau of Labor
 Statistics (July, 1947)



PERFORMANCE-WISE, COST-WISE
Asphalt belongs in today's plans...

Asphalt Shingles are *made* to be both practical and beautiful. Year after year they have delivered to the home owner extra value in weather protection, in fire safety, in color, in looks, in long, low cost service.

Today, these extra values are at an all-time peak. With production of Asphalt Shingles at more than 2¾ times the level of 1926, wholesale prices are actually

below those of that active building year. And today's Asphalt Shingles are a better product than ever; better made, better looking, better wearing. They are construction's biggest dollar's worth!

The book pictured above, illustrated in full colors, prepared with the help of architects, offers some new thoughts on the design and color possibilities of Asphalt Shingles. Write for a free copy.

**CONSTRUCTION'S BIGGEST
 DOLLAR'S WORTH**

**ASPHALT
 SHINGLES**

ASPHALT ROOFING INDUSTRY BUREAU
 Room 1701 • 2 W. 43rd St. • New York 19, N. Y.

The ASBESTOS shingle that's

easy to sell...

American Colonial is the most popular asbestos roofing shingle Johns-Manville has ever developed.



Note the staggered edges and beautiful weathered appearance of American Colonial Asbestos Roofing Shingles.

Attractive—colorful—low in cost!

Because of their new beauty and ease of application, demand for these improved, fireproof roofing shingles has grown tremendously.

Backed by the Johns-Manville name, these shingles are easier for you to sell.

Overwhelming consumer acceptance is being constantly developed by one of the most effective advertising campaigns in the industry—the Johns-Manville Radio Program, "Bill Henry and the News."

Built to last 35 years PLUS

Thousands of J-M Asbestos Shingles have been in service 35 years and more. They're still as fireproof, rotproof, and weatherproof as the day they were applied. No signs they won't last another 35 years or more! That's why we say American Colonial Asbestos Shingles last 35 years PLUS.

Permanent as stone, the American Colonial costs the home owner less per year of service than *any other roof*.

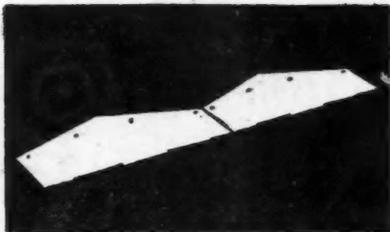
Get the facts about American Colonials. Write for new full-color brochure, AS-85A, showing the many pleasing colors and blends. Address: Johns-Manville, Box 290, New York 16, N. Y.



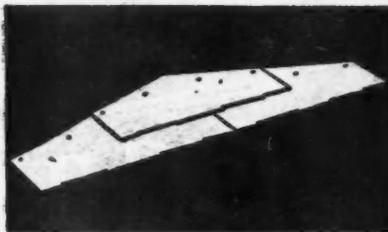
Johns-Manville

...easy to apply!

Study these pictures. They show how easily these shingles are applied.



1. APPLIED LIKE ANY STRIP SHINGLE—Each American Colonial is an asbestos strip, equivalent to 5 ordinary shingles.



2. SELF-SPACING FEATURE SAVES TIME—Second course shingles are lined up by placing the shoulders over the points on the preceding course.



3. AUTOMATIC ALIGNMENT—No chalk lines necessary, no delays measuring courses. Any roofer could actually lay American Colonial Shingles blindfolded.



4. EASY TO HANDLE—Bundles weigh about the same as asphalt strips. Use only 80 pieces per square. Only 4 nails per shingle, in pre-punched holes.



5. EASILY APPLIED ON RIDGES—Special Hip and Ridge shingles supplied in exactly the same textured grain, the same beautiful, weathered appearance and colors as the main roof shingles.



6. CUTTER SPEEDS APPLICATION—When shingles must be cut to fit around valleys, dormers, along the rake, etc., a shingle cutter does the job easily, quickly—right on the roof.

"American Colonial" Asbestos Roofs

Where can you get your kind of Real Estate Loan?

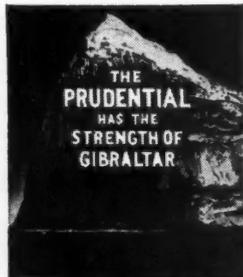


ANSWER: From Prudential.

For Prudential offers a *complete* financing service: conventional, F. H. A., construction, G. I., individual building sites, subdivisions, residential, suburban, apartment, industrial, mercantile.

And Prudential makes every size of loan—from the smallest to the largest type of building project.

Prudential *convenience*, too, is something for you to consider.



There are Prudential Mortgage Loan branch offices in principal cities, representatives in most principal towns. They understand and are sympathetic to local conditions and problems. They can give you "on the ground" financing—swift, efficient closings, no red tape.

Get in touch with your nearest Prudential branch office or representative. Or write to Mortgage Loan Department C, The Prudential Insurance Company of America, Newark 1, N. J.

America's Foremost Home Lender

PRUDENTIAL

HOME OFFICE: NEWARK 1, N. J.



Faster, Easier Application
Cuts
 INSULATING COST
 with
FIBERGLAS

Fiberglas, long the standout insulating material, now offers still greater advantages to the builder and contractor.

The recognized leader, because of an exclusive combination of features, this *inorganic roll blanket* insulation (with self-contained vapor barrier) now comes to you in a new compression package.

Smaller, tighter packages are easier, faster to handle on the job. Released from the compression package, Fiberglas is easily fluffed out to full insulating thickness, clearly demonstrating the remarkable resilience that marks it as the non-crumbling, lifetime insulation that *stays put*. There is no problem of carton disposal.

Moisture-resistant, noncorrosive, odorless, non-combustible and providing no sustenance for vermin, lightweight Fiberglas comes in roll blankets (also batt blankets, utility batts and pouring wool) for fast, permanent installation to suit every application.

Available everywhere from top-line lumber and building supply dealers. For further information, contact your dealer or one of the four national distributors listed below. Owens-Corning Fiberglas Corporation, Dept. 2018, Toledo 1, Ohio.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario

Here's one more reason!
COMPRESSION PACKAGING!

AVAILABLE THROUGH 4 DISTRIBUTORS

OWENS-CORNING
FIBERGLAS
THE FIBERGLAS COMPANY
 BUILDING INSULATION



ARMSTRONG
 CORK CO.
 Lancaster, Pa.



CERTAIN-TEED
 PRODUCTS CORP.
 Chicago, Ill.



THE FLINTKOTE
 COMPANY
 New York, N. Y.



KELLEY ISLAND
 LIME &
 TRANSPORT CO.
 Cleveland, Ohio

*Fiberglas is the trademark (Reg. U. S. Pat. Off.) for a variety of products made of or with glass fibers by Owens-Corning Fiberglas Corporation.

Better Homes and Gardens

READ BY MORE THAN 3,000,000 FAMILIES
NOVEMBER 1947 • 25¢

WHY are all these ads in Better Homes & Gardens?

It's because all these companies in your field have found out that BH&G's 100% service content gets the readers who are really interested in what advertisers have to say, and who are at the buying — not the dreaming — stage in homemaking. BH&G gives you over 3,000,000 such

families with high incomes. In the November issue, *Structural Glass* (description and uses in homes), and *If We Had It to Do Over Again* (remodeling), November, are part of our program of putting across the best ideas in home planning and building.

These brands are advertised in the NOVEMBER issue of Better Homes & Gardens

FLOOR COVERINGS

Armstrong Linoleum
Nairn Linoleum
Pabco Linoleum

HEATING

Airtemp
American-Standard
Bell & Gossett
Dearborn
Delco
Heatway
Heil
Janitrol
Kalamazoo
Master Kraft
Mueller
Norge
Palmaire
Pacahontas Pipeline
Petro
Rheem
Superflex Furnaces
Williams Oil-O-Matic

HEATING, MISCELLANEOUS

Arvin Portables
Bennett-Ireland Fireplace
Dust-Stop Air Filters
Electreem Portables
Electromode Portables
Emerson Portables

HEATING, MISCELLANEOUS (Cont'd)

Gardener Radiator Enclosures
Heatilator
Minneapolis-Honeywell Controls
Research Filters
Surf Season-air Portables
Victor Portables
Varnadofan Portables
Wittie Portables

INSULATION

Baldwin-Hill
Balsam Wool
Carey
Chamberlin
Gold Bond
Homosote
Kimsul
Nu-Way Weather Stripping
Moritte Weather Stripping
Presstite Weather Stripping

KITCHENS

Kitchen-Kraft

LIGHTING & WIRING

Burgess Batteries
Cutler-Hammer Controls
Onan Power Plants
Sylvania Lamps

LUMBER

U. S. Plywood
West Coast Woods

MAJOR APPLIANCES

Bendix Washer
Boss Range
CP Gas Ranges
Cadillac Vacuum
Caloric Range
Dexter Washer
Easy Washer
Estate Range
Filter Queen Vacuum
Frigidaire Range
GE Dishwasher
GE Range
Grand Range
Harderfreez Freezer
Hoover Vacuum
Kaiser Dishwasher
Kalamazoo Stove
Kelvinator
Lindemann & Hoverson Range
Magic Chef Range
Majestic Incinerator
Monarch Range
Norge
Philo Refrigerator
Premier Vacuum
Royal Vacuum

MAJOR APPLIANCES (Cont'd)

Servel Refrigerator
Voss Washer

PAINTS

Cuprinal
DeVoe
Flatlux
Kyanize
Lapidolith
Luminall
Sapalin
Truscon

METALS

Alcoa
Anaconda Copper

PLUMBING

American-Standard
Briggs
Crane
Deming Water System
Eijer
Evans Water Heater
Frigidaire Water Heater
GE Water Heater
Mertland Water Heater
Norge Water Heater
Permutit Soft Water
Rudd Water Heater
Smithway Water Heater

PLUMBING (Cont'd)

Thermojet Portable Water Heater
White Water Heater

ROOFING & SIDING

Johns-Manville

STRUCTURAL MATERIALS

Portland Cement

WINDOWS

Alcoa
Eagle-Picher
Fenestra Steel Casements
Libbey-Owens-Ford
Pella

MISCELLANEOUS

Acme Venetian Blinds
Bell Telephone
Cloday Blinds
Columbia Blinds
Dutton Lanson Mailboxes
Edwards Chimes
Flexalum Venetian Blinds
Knappe & Vogt Closet
K-Veniences
Lorenzen Blind Levelor
National Homes Prefab
Onan Power Plants

CIRCULATION OVER 3,000,000

America's First Service Magazine



Sixth of a Series: The Crane Sunnyday Kitchen

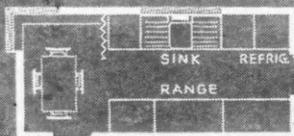
a **Sunnyday**
for home buyers

Home buyers brighten up at first sight of this new Crane Sunnyday Sink. Here is *beauty*—sparkling vitreous enamel that wipes clean in a flash. Here is *convenience*—an extra deep basin . . . two generous drainboards. And here is *Dial-ese*, the amazing Crane faucet that harnesses water pressure to aid in closing, yet opens at the barest touch of a finger!

Features like these carry through a wide range of Crane sinks, embracing a style for every taste

and a price for every building budget. And the quality that goes with them—always associated with this best-known name in plumbing—you'll find *that* kind of quality in beautiful Crane bathrooms, too. You'll see it again in heating, whether for hot water, steam, or warm air . . . for coal, coke, oil, or gas.

See the Crane line in the 1947 Sweet's Builders' File—or write us for a copy. For information on products and delivery, call your Crane Branch.



Approx. Size: 11' x 7' 6"

At left is the floor plan of the kitchen shown. Of course, the Crane Sunnyday Sink lends itself to smaller arrangements, too, as suggested in the two kitchens on the right.



Approx. Size: 8' x 10' 6"



Approx. Size: 9' x 8' 7 1/2"

CRANE

CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVE., CHICAGO 5
PLUMBING AND HEATING
VALVES • FITTINGS • PIPE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

Get This Blueprint Plan Book NOW!



Use this new Blueprint Plan Book as a sales tool. Use it to accurately estimate building costs. Use it for ideas on Built-Ins and ideas on garage styles that will harmonize with the exterior design treatment of the house.

12 COMPLETE BLUEPRINTS
21 HOUSE DESIGNS
GARAGES — BUILT-INS

\$2.50



Order TODAY

American Builder and Building Age
Simmons-Boardman Publishing Corp.
Book Service Department
30 Church Street, New York 7, N. Y.

Gentlemen:

Enclosed is a check or money
order for \$2.50 for which please send a copy
of your Blueprint Plan Book to:

Name.....

Street.....

City.....

State..... 11-47

AMERICAN BUILDER'S New Blueprint Plan Book will be a valuable sales aid to you. The blueprints open up to 16½ inches by 11½ inches, suitable for accurately estimating construction costs of these attractive homes and garages. Colorful plastic binding permits it to open and stay flat while in use. You can help you customers visualize the house from all sides, as *all four elevations are shown*. Furthermore, the large size plans assist your customers to obtain a better idea of the relative sizes of rooms than is possible with ordinary "plan books." In addition, important details are shown and each plan is illustrated with a large, clear photograph of the house. In fact, no customer can fail to be impressed with the splendid material in this book. All homes in this book have been designed by nationally famous architects.

Q. Is there an efficient and inexpensive method of insulating plumbing pipes in exterior walls to prevent freezing?

A. See Balsam-Wool Application Data Sheet Sec. C, No. 2.



Q. How can the proper lower size be established for use in gable walls to ventilate attic spaces?

A. See Balsam-Wool Application Data Sheets Sec. E, Nos. 1 and 2.

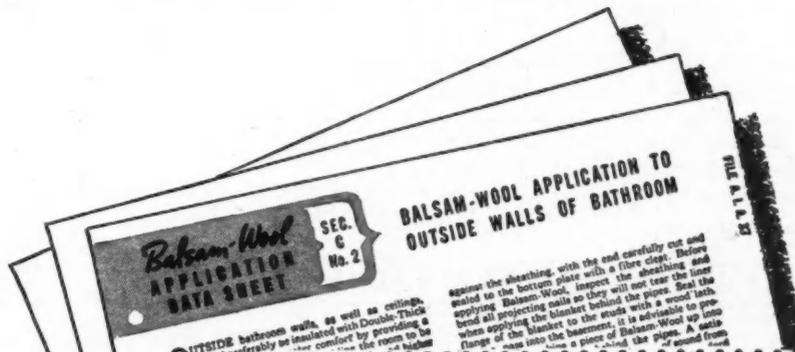
Q. What is the most practical method of insulating floor construction built above grade over an unexcavated area?

A. See Balsam-Wool Application Data Sheet Sec. C, No. 3.

Get this File-Drawer "LIBRARY"

... Balsam-Wool Data Sheets

Years of experience in insulation application are "boiled down" in these factual, helpful Balsam-Wool Data Sheets. Packaged in an A.I.A. file folder, they form an authoritative source of information on application problems. Wood Conversion Company offers these data sheets without cost or obligation as a contribution to progress in providing better insulation for every type of dwelling. Mail the coupon for your set!



Balsam-Wool

SEALED INSULATION

*REG. U. S. PAT. OFF.

BALSAM-WOOL • Products of Weyerhaeuser • NU-WOOD

OUTSIDE bathroom walls, as well as ceilings, should preferably be insulated with Double-Thickness Balsam-Wool to give larger reduction in heat loss. In showers are also stud spaces are the tub or shower wall areas are the rest of the wall areas are difficult to insulate. Considerable plumbing quantity insulating purpose. A sheeting of Balsam-Wool is used.

BALSAM-WOOL APPLICATION TO OUTSIDE WALLS OF BATHROOM

Wood Conversion Company
Dept. 119-117, First National Bank Building
St. Paul 1, Minnesota

Please send me set of Balsam-Wool Application Data Sheets.

Name

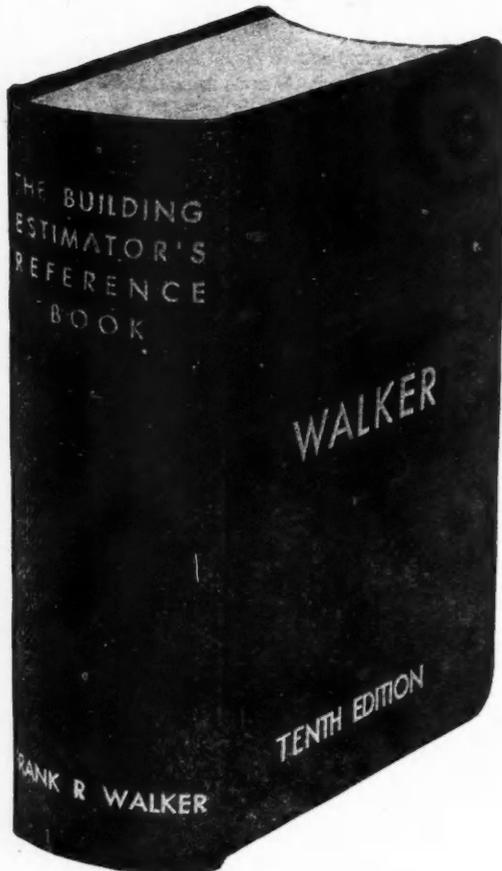
Address

City State

Tenth Edition . . .

The Building Estimator's Reference Book

By Frank R. Walker



1700 pages, 1000 illus., 1000 tables,
25-page index, 4½ x 6½, flexible

COVERS

Excavating, Foundation Work, Reinforced Concrete, Framing, Millwork, Lathing and Plastering, Painting and Decorating, Glass and Glazing, Structural Steel, Masonry, Sheet Metal, Marble and Tile, Heating and Air Conditioning—and many other building subjects.

The new Tenth Edition contains latest estimating and cost data on everything that goes into house construction, from foundation to finish. It can be used in any locality, regardless of local prices or wage scales. It covers all types of small and large building construction.

For 30 years Walker's handbook has furnished contractors and estimators the most complete compilation of estimating and cost data available. The new edition has been revised and improved in the light of postwar conditions. Thousands of items that enter into construction estimates are logically arranged and tabulated for ready reference. A complete cross-index enables the user to quickly locate any subject.

HELPS PREPARE BETTER ESTIMATES

A copy of this new edition will help any builder, contractor or estimator in figuring and performing work at minimum costs. It will reduce the chance of overlooking an important item in an estimate. New methods of doing various kinds of work are explained and new building materials that have come on the market since wartime restrictions were lifted are fully described.

SEND FOR A COPY TODAY

Send for a copy of the new Tenth Edition of THE BUILDING ESTIMATOR'S REFERENCE BOOK today. Take advantage of the many opportunities it offers for increasing your profits through better estimates. Money back if not entirely satisfactory.

FILL OUT THIS GUARANTEED ORDER FORM

American Builder and Building Age,
Simmons Boardman Publishing Corp.
30 Church Street, New York 7, N. Y.

Enclosed find \$10 remittance for which send me a copy of the New Tenth Edition of THE BUILDING ESTIMATOR'S REFERENCE BOOK and a Free copy of THE VEST POCKET ESTIMATOR. If I do not find the books entirely satisfactory I will return them within five days of receipt and you will refund my \$10.

Name

Address

City..... Zone..... State.....

A.B. 11-47

FREE

With The Building Estimator's Reference Book
The Vest Pocket Estimator

This is one of the most popular little estimating books ever used by contractors. It contains 220 pages, 2½ x 5 inches, and is flexibly bound to fit the vest pocket. Estimating and cost data most frequently referred to is presented in condensed tabular form. It can be instantly referred to on the job or in the office.

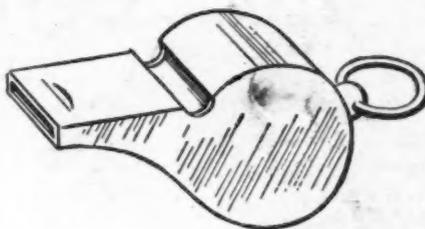
Roddiscraft HARDWOOD PLYWOOD



Faces . . . smooth as a



Edges . . . clean as a



Cut straight as an



COMPARE Roddiscraft hardwood plywood—the faces sanded to satin smoothness — the edges flush, smooth and clean, precision cut . . . absolutely true — no wonder fine workmen always specify Roddiscraft.

Men who work with plywood know that these features mean time saved in fitting, finishing and cutting

— jobs done sooner — bigger profits, better satisfied customers.

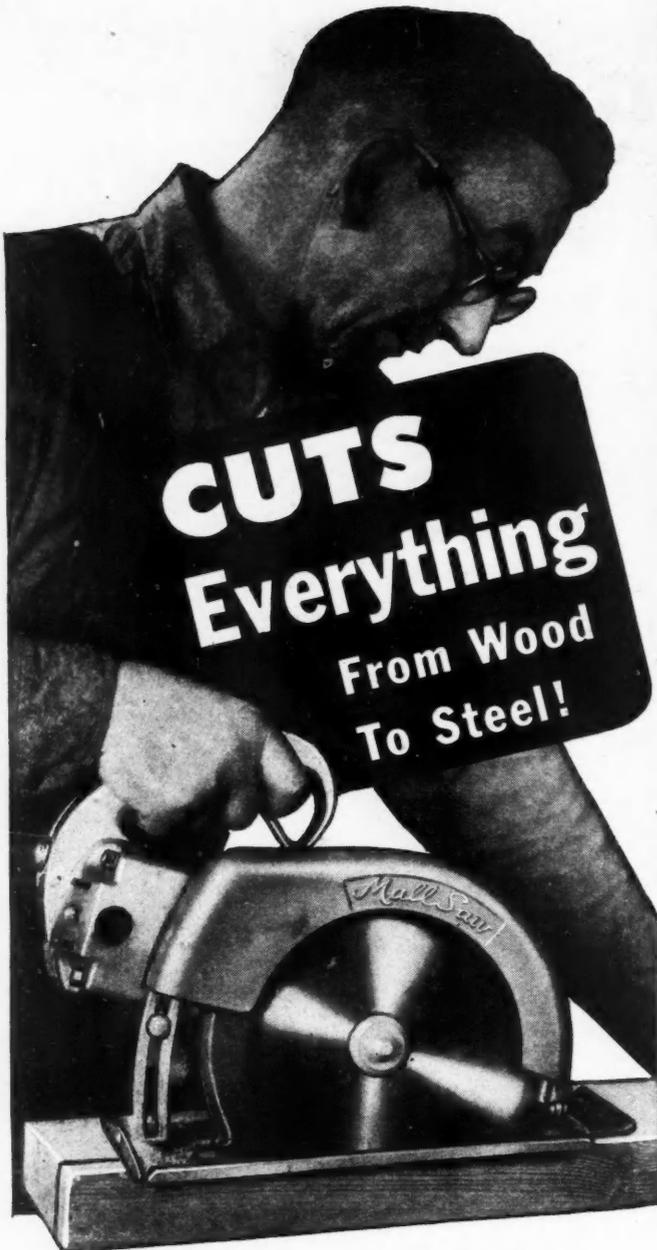
Don't take our word for it — see it for yourself — compare Roddiscraft with any other plywood. You'll see too why Roddiscraft has earned the reputation for quality products.

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Kansas City 8, Mo., 2729 Southwest Blvd.	Long Island City, N. Y.,
Cambridge 39, Mass., 229 Vassar St.	Review & Greenpoint Ave.
Chicago 8, Ill., 1440 W. Cermak Rd.	Los Angeles 11, Calif., 2840 E. 54th St.
Cincinnati 2, Ohio, 457 E. Sixth St.	Marshfield, Wis., 115 S. Palmetto St.
Dallas 10, Texas, 2800 Medill St.	Milwaukee 8, Wis., 4601 W. State St.
Detroit, Mich., 11855 E. Jefferson Ave.	New York City, N. Y., 920 E. 149th St.
Louisville 10, Ky., 1201-5 S. 15th St.	San Antonio, Texas, 727 N. Cherry St.

DEALERS IN ALL PRINCIPAL CITIES

Roddiscraft
Roddis Lumber & Veneer Co.
MARSHFIELD, WISCONSIN



MODEL 70 *Mall Saw*
REG. U.S. PAT. OFF.

By simply changing blades—the MallSaw is adapted to cutting wood, plastics, concrete, metals and hardened steel. This wide adaptability combined with its ease and speed of operation and its ability to cross-cut, rip, bevel and angle cut make the MallSaw indispensable on every construction job. 4 powerful models with 2", 2¼", 2⅞" and 4½" cutting capacities are available for 110-volt AC-DC or 220-volt AC-DC. Ask your Supplier or write Power Tool Division for Free Booklet.

MALL TOOL COMPANY

7737 South Chicago Avenue • Chicago 19, Illinois



**To get it faster look in
SWEET'S FILE**

One hundred and eighty-nine manufacturers' catalogs—1,196 catalog pages—instantly accessible in the 1947 Sweet's File for Builders.

There, right in your office, you will find up-to-date, useful and comprehensive information on forms, characteristics, performance and use of a wide range of materials, equipments and services.

Manufacturers' catalogs in Sweet's File are indexed by company name, by product and by trade name, so that you can find the information you want instantly—whenever you need it.

**SAVE TIME — SAVE TROUBLE
LOOK IT UP IN SWEET'S....**

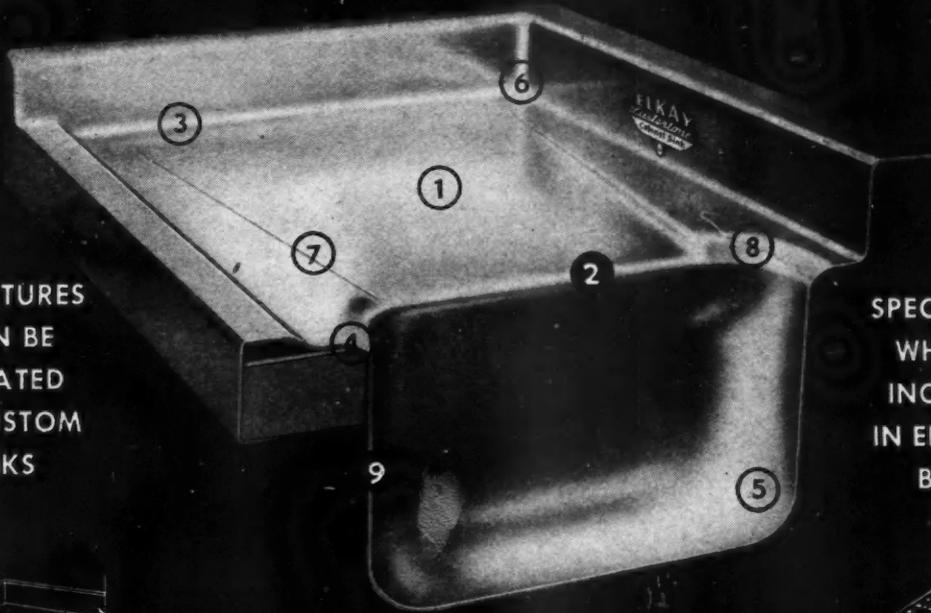
Sweet's is always working to build a bigger and better file of manufacturers' catalogs so that buyers and sellers can get together faster and at lower cost. If you would like other manufacturers to include catalogs on their products in your Sweet's File, please send us their names.

If Sweet's File for Builders is not available in your office, please address request for application to:

**Sweet's Catalog Service
Distribution Dept.**
119 West 40 St., New York 18, N. Y.

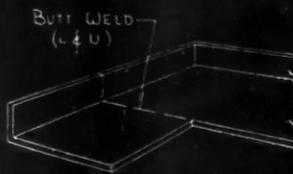
Free
to qualified organizations and individuals

S

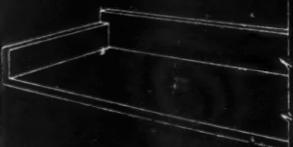


SPECIAL FEATURES WHICH CAN BE INCORPORATED IN ELKAY CUSTOM BUILT SINKS

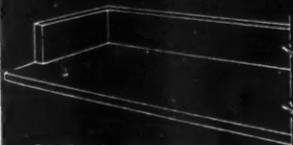
SPECIAL FEATURES WHICH CAN BE INCORPORATED IN ELKAY CUSTOM BUILT SINKS



"L" OR "U" WELD



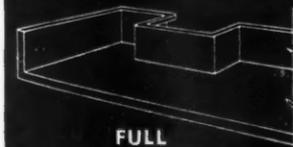
LOW END SPLASH



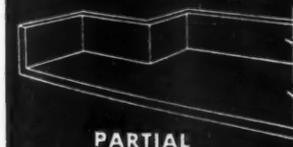
SHORT END SPLASH



FULL WINDOW NOTCH



FULL COLUMN CUT



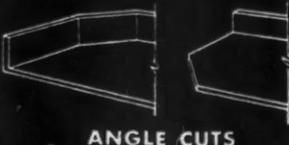
PARTIAL COLUMN CUT



STAINLESS STEEL RADIATOR GRILLE



RADIUS CORNERS



ANGLE CUTS



GAS OR ELECTRIC RANGE OPENINGS



LOUVERS IN BACK OR DECK



DISHWASHER OPENINGS

Why We Can Guarantee ELKAY *Lustertone* Stainless Steel Sinks for the Life of the Building

Note These 9 Exclusive ELKAY Construction Features

- 1 ELKAY *Lustertone* Sinks are built of 18 U.S. standard gauge, genuine 18-8 stainless steel.
- 2 Intersections where sink bowls meet drainboards are welded (not soldered).
- 3 Drainboards, sink bowls, rims, and splashes are welded integral into one sheet of metal.
- 4 The stainless steel tops are bonded to and reinforced with heavy gauge formed metal.
- 5 All corners in sink bowls—horizontal, lateral and vertical—are rounded to a large sanitary radius.
- 6 Intersections where drainboards meet back and return end splashes and where back splashes meet return end splashes have rounded corners.
- 7 Drainboards have definite, liberal fan-shaped pitched (not grooved) area insuring positive drainage.
- 8 Front and back areas adjacent to sink bowls are pitch-beveled to provide additional drainage.
- 9 Entire underside of sink tops and bowls is sound deadened.

ELKAY Custom Building Simplifies Your Kitchen Planning Problems

Illustrated in the margins are just a few of the many Special Features which you can incorporate in any size and shape of an ELKAY *Lustertone* stainless steel sink. Regardless of what your clients' individual requirements may be, we can build an ELKAY *Lustertone* Sink to meet them.



Send us your specifications and write today for beautifully illustrated brochure AB 1147 which will help you solve your Kitchen Planning Problems.

SEE OUR CATALOG IN SWEET'S 1947 ARCHITECTURAL FILE 23-a-8

ELKAY MFG. CO., 1874 South 54th Avenue, Chicago 50, Illinois

YOUR CHOICE OF THESE 2 Finest RUBBER TILES



WRIGHTFLOR
For Easier Cleaning.

WRIGHTTEX
For Greater Resiliency

There's always the best floor for the purpose. After carefully considering the needs and special requirements of each flooring job, more and more reputable builders and architects are specifying time-proven Wright Rubber Tile . . . either Wrightflores or Wrighttex. Whichever you choose, your customers will enjoy three important advantages . . . many years of longer wear, low maintenance costs, and everlasting beauty. As close to being lifetime floors as yet devised, both tiles withstand the heaviest continual traffic because of their superior construction developed by Wright specialists during the past 25 years.

Wrightflores . . . Many installations call for easy-to-clean Wrightflores. Its harder, non-porous surface resists the action of grease, stains and dirt . . . even the lightest cleaning renews its beauty. Maintenance costs are reduced drastically with Wrightflores.

Wrighttex . . . Where quietness is the principal requirement of a floor, Wrighttex is best. Its softer, more resilient surface hushes sounds, while resisting signs of scuffs and wear. Write for color charts and specifications of Wrightflores and Wrighttex today.



WRIGHT-ON-TOP COMPRESSION BASE

This flexible rubber base, Wright-on-Top, attractively and practically joins your Wright flooring to the wall. Easy to install . . . it is set on top the flooring, thereby eliminating border scribing. Hugs the floor despite shrinkage or uneven surfaces.

TAYLOR MANUFACTURING COMPANY
Wright Rubber Products Division
3050 W. Meinecke Ave., Milwaukee, Wisconsin

WRIGHT RUBBER TILE

flooring of Distinction



CUTTING CORNERS?

We need more homes, for more people, more than ever before—and we salute all who put their shoulders to the wheel, to devise the ways and means to help this nation build faster than ever.

But, in the hue and cry of this strenuous period of post-war adjustment there is one grave danger. We must not only build, we must also build durably and well.

In our hurry we should not discard old and proven materials merely for the sake of "cutting corners".

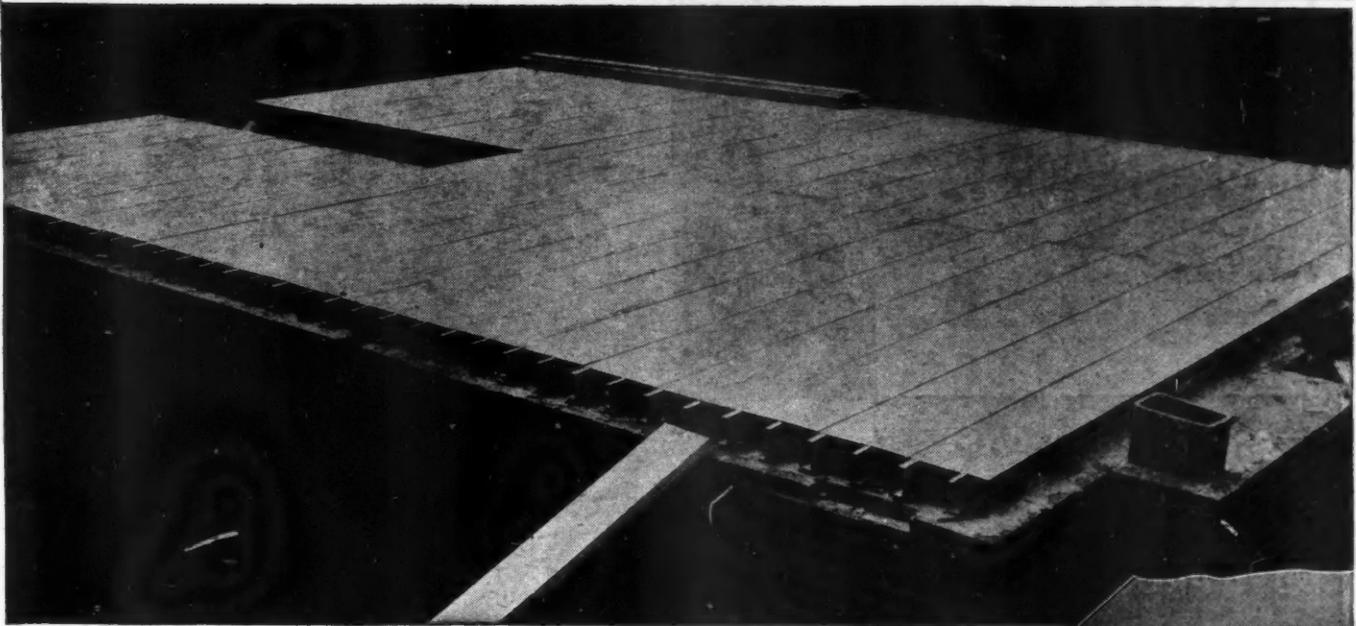
Lime plaster is one of those materials that have served us for centuries. Yet no better material for finishing walls and ceilings has so far been devised. Its monolithic character is without equal. It is durable and fire-resistant. So don't "cut corners" the wrong way. Only a first class plastering job takes care of walls and ceilings, and of all the corners the right way.

When it comes to a choice of finishing lime consider the brands shown here, long known for consistent quality, always uniform, scientifically processed from the world's purest dolomitic limestone. Look for the red zig-zag stripes, your guarantee of quality.

The Ohio Hydrate & Supply Co. Woodville, Ohio



3 MEN laid this floor in 45 minutes!



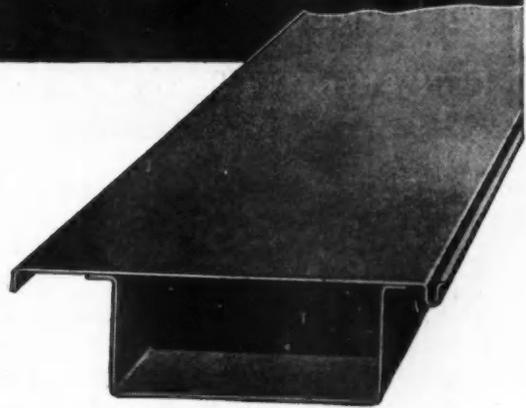
...with Fenestra Building Panels

So reports the builder of this house, Stephen Adorian, of Homewood Builders, Inc., Silver Springs, Md. (suburb of Washington, D.C.). Joists, bridging and subflooring combined laid in that short time . . . ready for finished flooring!

One reason for this speed is the large section—12' long and 16" wide. Another is the ease with which the sections interlock—without special skill or special tools.

The result—a better floor and an attractive basement ceiling . . . a floor that can't warp, shrink or burn . . . the kind of floor that makes home buyers sit up and take notice of the fact that you've built a better house.

Fenestra Type D Panels offer a wide range of opportunities for better floors—faster—in many types of buildings. Other types of Fenestra Building Panels offer moneysaving and timesaving advantages for walls, partitions and ceilings. Mail the coupon for full information.



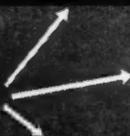
TYPE D PANEL

Box beam formed by welding together two steel sections. Side laps interlock to form continuous flat surface. Cover plates available for open cells to provide two flat surfaces. Standardized in 16" width. Depth 1½" to 9". Gages 18 to 12.

Fenestra

BUILDING PANELS FOR

ROOFS



WALLS

FLOORS

DETROIT STEEL PRODUCTS COMPANY
Building Panels Division
Dept. AB-11, 2260 E. Grand Boulevard
Detroit 11, Michigan

Please send me, without obligation, information on Fenestra Building Panels.

Name _____

Company _____

Address _____

DUPLEX- The ENCLOSED Adjustable, Flat SASH BALANCE

Works Smoothly and Easily
Year In and Year Out



PLASTER TIGHT CASE

RUST PROOF

DUST PROOF

PERMANENTLY LUBRICATED

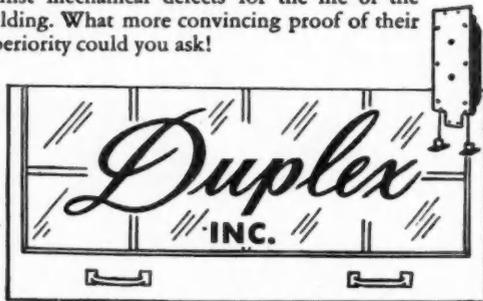


DUPLEX - THE SASH BALANCE THAT KEEPS ON BALANCING . . .

The high-grade American clock springs used in Duplex Sash Balances are permanently lubricated and enclosed in a plaster tight steel case. When installed, a Duplex balance is entirely free acting, with no frictional drag—and it stays that way—year in and year out.

WEATHERPROOF . . . Rain, snow and hail, wind and dust, heat and cold—all the things which sooner or later cripple an ordinary sash balance—have no effect on the operation of a Duplex.

AND GUARANTEED . . . For all the above reasons, Duplex, Inc. is able to guarantee every Duplex sash balance against mechanical defects for the life of the building. What more convincing proof of their superiority could you ask!



DUPLEX, INC., 628 No. La Peer Dr., Los Angeles 46, Calif.

Please send data on Duplex Sash Balances.



● No disfiguring rust streaking on sills or sidewalls, even after four years—Lumite *can't* rust or corrode! And that's just one of Lumite's many points of superiority, just one of the reasons why it pays to specify Lumite screen for every home. This wonderful material side-tracks almost every common screen trouble, builds good will every time it's installed. Here's why:

PROVEN DURABILITY. In recent tests by an outside engineering organization, no other type of screening commercially available showed up as well as the material from which LUMITE is woven (Dow's Saran). It was the only one to earn top rating in every category—from immersion in salt water to accelerated weathering and exposure in a tropical chamber.

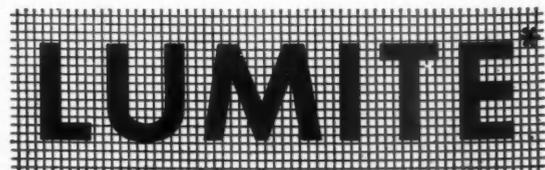
STRONGER BY TEST. A 5-pound steel weight dropping on a framed LUMITE screen couldn't dent it in 42,300 blows. With filament diameter of .015", LUMITE has greater impact strength than metal!

NEVER NEEDS PAINTING. LUMITE requires no painting or protective coating of any kind. Will not "rust out"—will never change color. Keeps its "sheen"; stays clean.



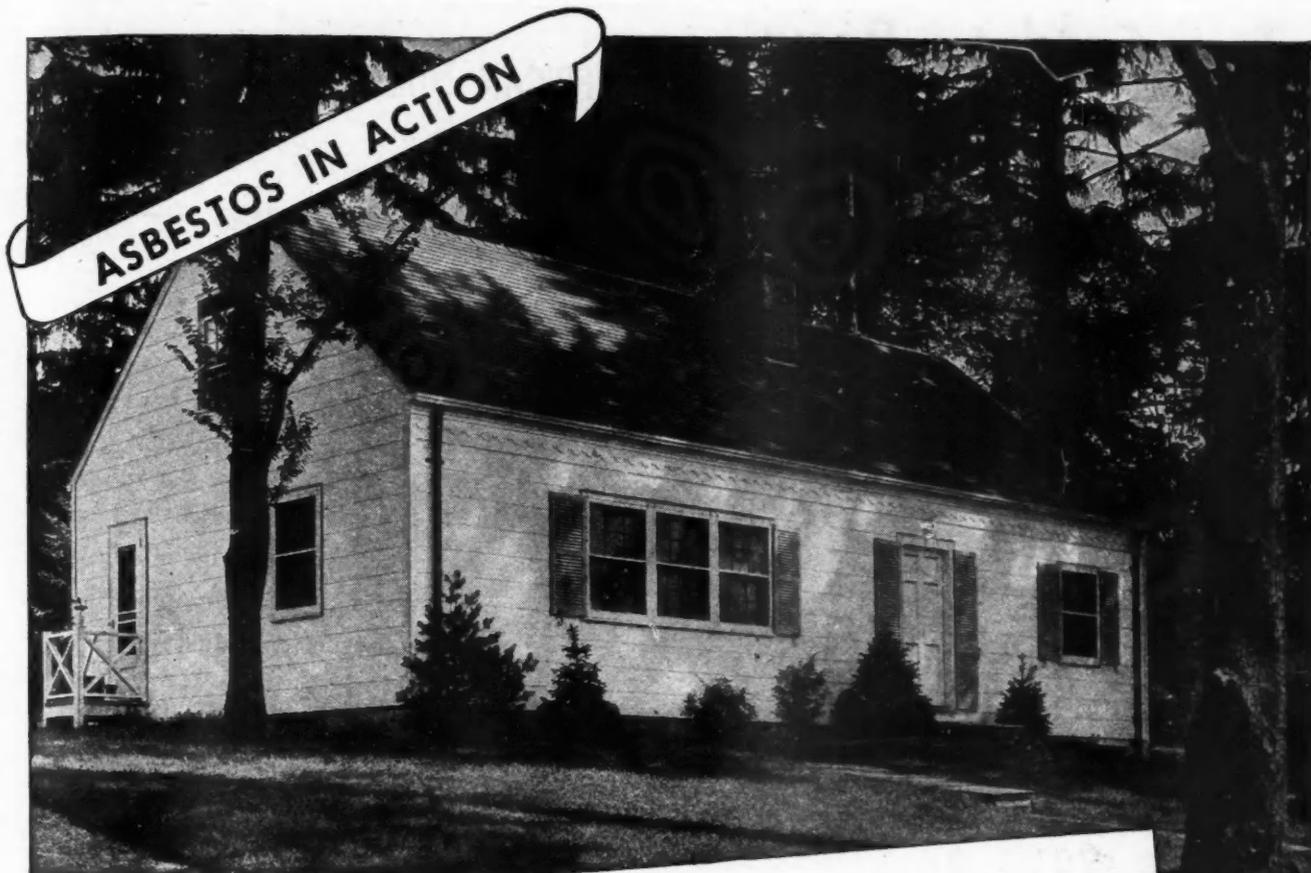
SPECIFY LUMITE SCREENING FOR YOUR CLIENTS
Sold through Hardware and Lumber Dealers
and Screen Manufacturers

LUMITE DIVISION
Chicopee Manufacturing Corporation, 47 Worth St., New York 13



QUALITY INSECT SCREEN CLOTH

Registered Trade-mark



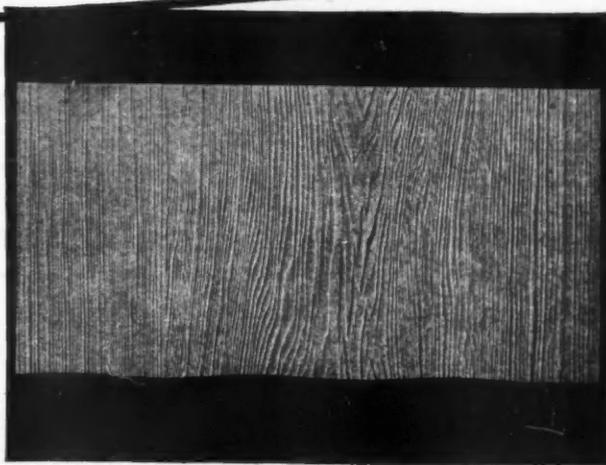
For Lifetime Beauty...
speedy, economical construction...
K & M "Century" Asbestos-Cement Siding

Low-cost housing unit featuring "Century" #57 White Siding.

You're sure to please the owner when you cover his home with K&M "Century" Asbestos-Cement Siding. He'll be proud of its enduring beauty, he'll like its immunity to fire, rodents, termites and weather. And he'll appreciate it more and more as the years roll by without claiming a penny's upkeep for painting.

You'll benefit too... in customer goodwill as well as in speedy, profitable construction. "Century's" large unit size, and ease of application make it ideal for practically all siding requirements.

You can specify "Century" Asbestos-Cement Siding with wavy butline style in two colors: shell white and graytone. See your K&M Dealer... or write us direct for further information.



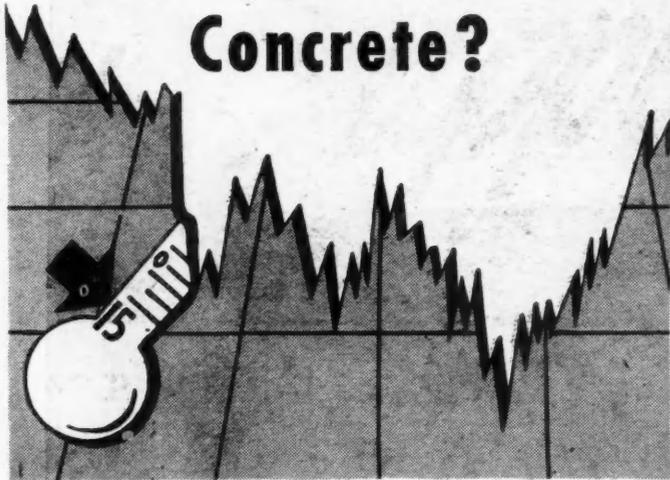
Wavy butline style supplied in two colors: shell white and graytone.

Original manufacturers of asbestos-cement roofing shingles in this Country.

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA



Too Cold to Pour Concrete?



not with **TRIMIX**
the admixture that keeps winter
concrete work on schedule

TRIMIX facilitates the mixing, pouring or laying of concrete at temperatures as low as 15° F. below zero. In addition to dispersing the cement and lowering the water-cement ratio, **TRIMIX** accelerates setting, thus shortening the time ordinarily required to protect concrete with covers and artificial heat.

Result: **TRIMIX** cuts construction costs by saving time between finishing operations . . . allows concrete surfaces to be walked on and additional work done within a few hours after the concrete is poured — *in winter* as in other seasons.

Use **TRIMIX** in all concrete work to make good concrete *better* and speed finishing operations; also in stucco construction, mortar mixes, patching and maintenance, grouting, foundation walls and footings, floor construction, etc.

See **SWEET's** for further information, or for descriptive folder write Dept. B-11.

SONNEBORN

"BUILDING SAVERS"

-
- Floor Treatments • Waxes • Paints and Protective Coatings • Concrete and Mortar Admixtures • Waterproofing and Dampproofing • Caulking Compounds
- Roof Coatings

IF IT'S
WORTH BUILDING
IT'S
WORTH SAVING

Building Products Division, **L. SONNEBORN SONS, INC.**, New York 16, N. Y.
In the Southwest: Sonneborn Bros., Dallas 1, Texas

AMERICAN BUILDER . . .

— Announces —

a limited number of new subscriptions can now be accepted from those who are connected with the building field.

Now is the time to have an up-to-date source of information covering the many changes and new developments now taking place in the light building construction industry.

American Builder now serves over 80,000 subscribers — *YOU* too, can derive the benefits of this service by filling in and returning the subscription order form below.

AMERICAN BUILDER

30 Church Street **New York 7, N. Y.**

SUBSCRIPTION ORDER FORM

Enclosed is \$5.00 to cover a **THREE YEAR** (36 issues) subscription.

Enclosed is \$3.00 to cover a **ONE YEAR** subscription.

Name

Address

City & State
(include Postal Zone No.)

.....
Name of Your Firm

.....
Type of Business

.....
If owner of business, please state

.....
If not, please give title or position.

Good only in U. S., Possessions & Canada

AB-11-47

AN
that
The
it is r
tested
Kohl
Trito
The
shelf
and
match
The
and

K
PLUM



You provide many satisfactions when you specify KOHLER PLUMBING

AN arrangement of Kohler fixtures like the one in the bathroom above has lasting practical advantages that home owners want.

The Cosmopolitan Bench Bath is non-flexing because it is made of enameled cast iron. Cast iron is the time-tested base for the heavy coat of lustrous, pure white Kohler enamel which resists cracking and crazing. The Triton Shower Mixer is efficient and simple to operate. The Gramercy vitreous china lavatory has a roomy shelf. The Wellworth close-coupled closet works smoothly and quietly. All Kohler fixtures are attractive and matched in design, with surfaces that are easy to clean.

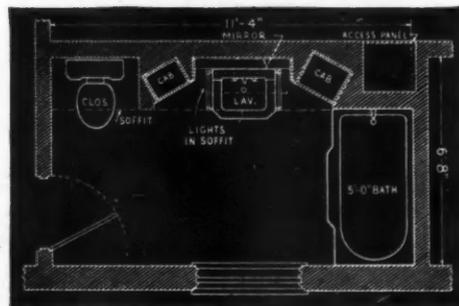
The fittings are of chromium plated brass—durable, and built especially for the fixtures they serve. Your

customers know the name "Kohler" means first quality in every detail.

Shipping crates have been carefully designed for each Kohler fixture, to assure delivery in perfect condition. Kohler products are made in one plant under one supervision. Write for further information.

Kohler Co., Dept. R, Kohler, Wisconsin. Established 1873.

This compact, practical plan, with Kohler fixtures all on one wall, simplifies piping and allows convenient access to fixtures and storage facilities.



KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS



-this NDMA PROTECTION

Their forefathers built homes of wood—the building material of the ages. And today, this young couple is secure in the knowledge that wood is a better building material than ever! NDMA standards of toxic preservation for woodwork such as doors, screens and windows have helped to make it so—have added further assurance of lasting value to wood's natural qualities of endurance.

NDMA Toxic Preservative Standards are backed by the integrity of a great industry—and by the utmost resources of science. Behind the NDMA seal of approval stand the six measures which this non-profit organization maintains in the public interest.



1. An efficient test for measuring effectiveness of toxic preservatives.
2. Minimum standards governing the toxic preservative treating of woodwork products.
3. A seal identifying products treated in conformity with NDMA Toxic Preservative Standards.
4. Mill inspection of treating equipment and practices.
5. Laboratory check-tests of preservative solutions.
6. Educational effort in the public interest.

NATIONAL DOOR MANUFACTURERS ASSOCIATION

McCORMICK BUILDING • CHICAGO, ILLINOIS



Now **PRACTICAL OIL HEAT** for **SMALL HOMES**

The **Kresky** *Automatic* **FLOOR FURNACE**

Listed by UNDERWRITERS' LABORATORIES



NO BASEMENT REQUIRED • DUAL WALL OR FLOOR REGISTER

- Kresky patented mechanical air induction assures instant, clean heat... dependable performance.
- Forced air circulation... automatic control.
- Exceedingly low oil consumption meets the problem of restricted fuel conditions... one reason for the unprecedented demand for Kresky today.
- Simplicity itself, Kresky requires practically no servicing. "Kickproof" for the builder... real satisfaction for the owner.

WRITE FOR FOLDER AND NAME OF LOCAL DEALER

KRESKY MFG. CO., INC.

Pioneers in Oil Burning Equipment since 1910

PETALUMA, CALIFORNIA

EXTRA BUSINESS

AVAILABLE

EXTRA PROFITS



BARRETT LIQUID ELASTIGUM® Roof Coating



BARRETT PLASTIC ELASTIGUM® Roof Cement



BARRETT EVERJET® Paint

**Barrett specialties
increase unit of sale
per customer**

Popular Barrett Protective Products—scarce during war years and always in demand—are now available in increasing supply.

These money-saving Barrett Specialties are just the thing for scores of repair jobs every home-owner and farmer has been putting off.

Stock 'em! Push 'em! You'll soon find you've got a nice steady source of extra income—right from your regular customers.



BARRETT HYDRONON® Paint

THE BARRETT DIVISION

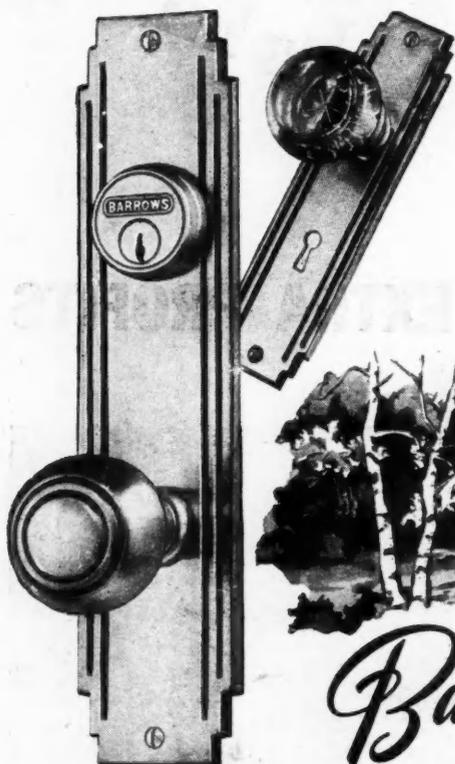
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.
2800 So. Sacramento Avenue Chicago 23, Ill. Birmingham Alabama
36th St. & Gray's Ferry Rd. Philadelphia 46, Pa.



* Reg. U. S. Pat. Off.
† Trade-mark of Allied Chemical & Dye Corporation

BARRETT SHINGLES AND SIDINGS . . . ROLL ROOFINGS . . . ROCK WOOL INSULATION . . . PROTECTIVE PAINTS . . . OTHER BUILDING PRODUCTS

HARDWARE HOLDS A HOME TOGETHER

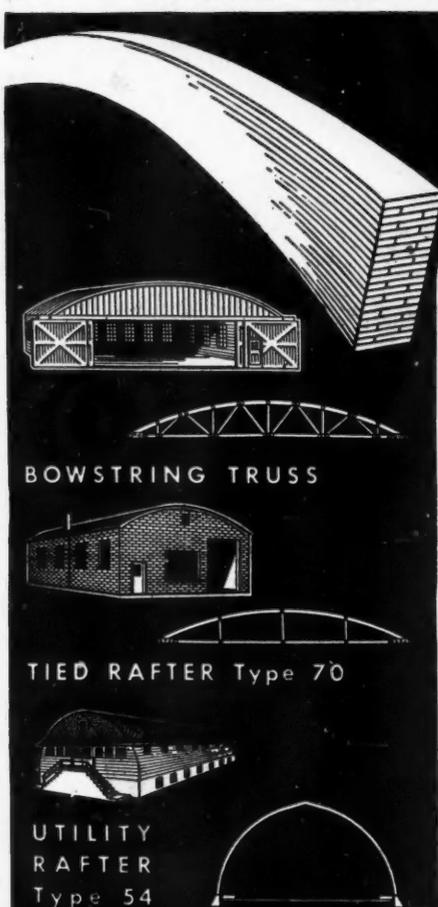


It takes all kinds of hardware to hold a home together, and the most important of these is door hardware. Here, Barrows does the job *beautifully*—in appearance . . . in function . . . with a range of authentic designs to fit all interior and exterior applications. Every Barrows piece is made with precision, for easy, speedy installation . . . for quiet, efficient operation. Today, more people than ever . . . *Bank on Barrows.*



Bank on

BARROWS
NORTH CHICAGO, ILLINOIS



BOWSTRING TRUSS

TIED RAFTER Type 70

UTILITY RAFTER Type 54

RILCO BUILDINGS

Look Better - Are Stronger

● Rilco glued laminated trusses, arches and tied rafters are widely used in airplane hangars, warehouses, stores, garages, factories and dairy barns.

Wherever wide post-free spans and economical construction are desired, Rilco framing offers unusual value.

Rilco glued laminated framing is four times stronger than arches or rafters that are nailed. Rilco framing is engineered for great load bearing strength and wind resistance.

It's no wonder that more and more new commercial structures are being built the Rilco way. Rilco framing makes buildings that are modern and attractive in appearance—strong—easy to erect. There's a Rilco Rafter for *every type of building.*

RILCO LAMINATED PRODUCTS, Inc.
A WEYERHAEUSER INSTITUTION

1667 FIRST NATIONAL BANK BUILDING • ST. PAUL 1, MINNESOTA



It's always Fair weather
with **RED TOP**
Insulating **WOOL**
A name you can trust...

ON the carton the name RED TOP* is assurance of quality in the carton.

RED TOP Insulating Wool is resilient, light in weight, high in insulation value and fire-resistant.

Select raw materials and rigid production standards insure uniform batt size and formation. An efficient vapor barrier attached to one side resists moisture, helps prevent condensation.

Neat, strong cartons protect wool in shipment, insure full thickness on the job. Six modern plants, strategically located, make RED TOP available when you need it.

Comes in batts and granulated form. Both 2 and 3-inch batts made in sizes 15 x 24 inches, 15 x 48 inches, 23 x 24 inches, and 23 x 48 inches for 16 and 24-inch spacings.

*Trade Mark Reg. U. S. Pat. Off.



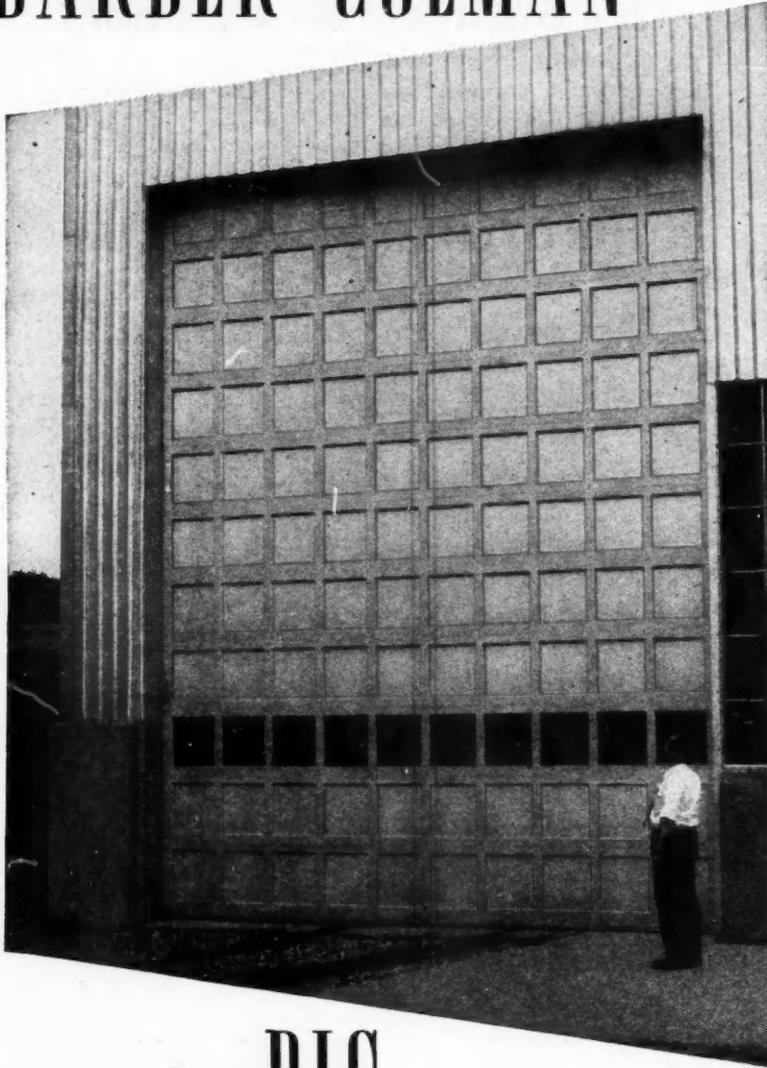
United States Gypsum

For Building • For Industry

Gypsum • Lime • Steel • Insulation • Roofing • Paint

The Barcol OVERdoor

BY BARBER-COLMAN



A GOOD SOURCE FOR **BIG** OVERHEAD-TYPE DOORS

It takes *experience*, coupled with engineering and manufacturing know-how, to construct successfully BIG overhead-type doors like the 17 by 22-foot example shown in the picture. Barber-Colman can claim this experience because, in the 17 years we have been making Barcol OVERdoors, we have designed and built hundreds of large, non-standard-size doors for industrial plants, commercial buildings,

municipal installations, and other purposes. The specialized knowledge gained in this work is available to you when conditions call for big doors. With wide experience on thousands of "standard" installations as well, we are in excellent position to work with you on *all* your overhead-type door requirements. Write for descriptive literature. *Consult your Barcol representative for details.*

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES in PRINCIPAL CITIES



BARBER-COLMAN COMPANY
104 MILL ST. • ROCKFORD, ILLINOIS

Locker Plant Construction

(Continued from page 77)

Ceiling joists in any cold storage plant building should never be permitted to extend through to the outside wall, but should be held as far from it as possible, consistent with safety. In a frame building, the space between all studs on outside walls should be well ventilated with openings top and bottom. Dead air space is no good as an insulation in a cold storage plant.

A prime consideration in construction of any cold storage plant or locker room is that the cold rooms must be thoroughly and completely insulated on all sides, top and bottom from all portions of the structure in which it is built. In other words, it must be completely insulated and sealed. This cannot be over-emphasized.

There are several satisfactory insulations on the market for cold storage plants, both board-type and fill. These include cork board, Fibreglas asphalt-enclosed board, mineral wool board, cork fill, mineral wool fill, wood fiber fill, vermiculite fill. It is well to keep in mind that because the "K" factor, or insulating value, may be the same on two insulations, does not necessarily make them equally valuable for cold storage plant construction from the standpoint of permanency or ease of application.

The problem of how much insulation to use may be determined roughly from the following: To maintain temperatures of from 25 to 40 degrees F., 4 inches of cork board are required; for temperatures to 5 degrees below zero, 6 inches of cork board; for temperatures to 20 degrees below zero, 8 inches of cork board. The amounts for board given above should be doubled when fill insulation is used. Cork board is used in presenting these figures because it is the most commonly used insulation in cold storage plant construction.

All certain non-supporting or partition walls entirely inside any cold storage plant must be as thoroughly sealed as though they were outside walls. It is possible to build a solid non-supporting wall of cork board by using temporary studs, removing them when the wall is finished and then plastering both sides. The seal must be applied on the outside. The detail on this and also on a fill insulation partition wall is shown in the illustration.

In plants using ammonia as a refrigerant, the problem of what to do with the surge tank is often bothersome, because the bottom of the tank must always be above the top of the coils. It is usually most practical to build a raised panel or alcove in the ceiling to accommodate the tank. When this is done, the tank does not have to be insulated, and some additional cooling value is obtained. Because freon is commonly used as the refrigerant on small jobs, no surge tank is required.

The door to a locker room should always have the same insulation value as the walls, ceiling and floor of the room. If 6 inches of board insulation are

(Continued to page 152)

INSIDE-OUTSIDE ROOMS

... united with a
wall of glass



It doesn't take a 10-mile view to make larger windows an asset. This house on a 50-foot lot proves it.

Notice how the glass wall and the patio, in effect, add a room to the house. Even where climate does not permit year-round use it's a worth-while idea. The big window always adds interest and a feeling of spaciousness.

The smartness of good window treatment is enhanced by the use of high-quality glass. Remember that the L·O·F label on windows is assurance of better, clearer glass—worth pointing out to prospective home buyers. Libbey·Owens·Ford Glass Company, 43117, Nicholas Building, Toledo 3, Ohio.



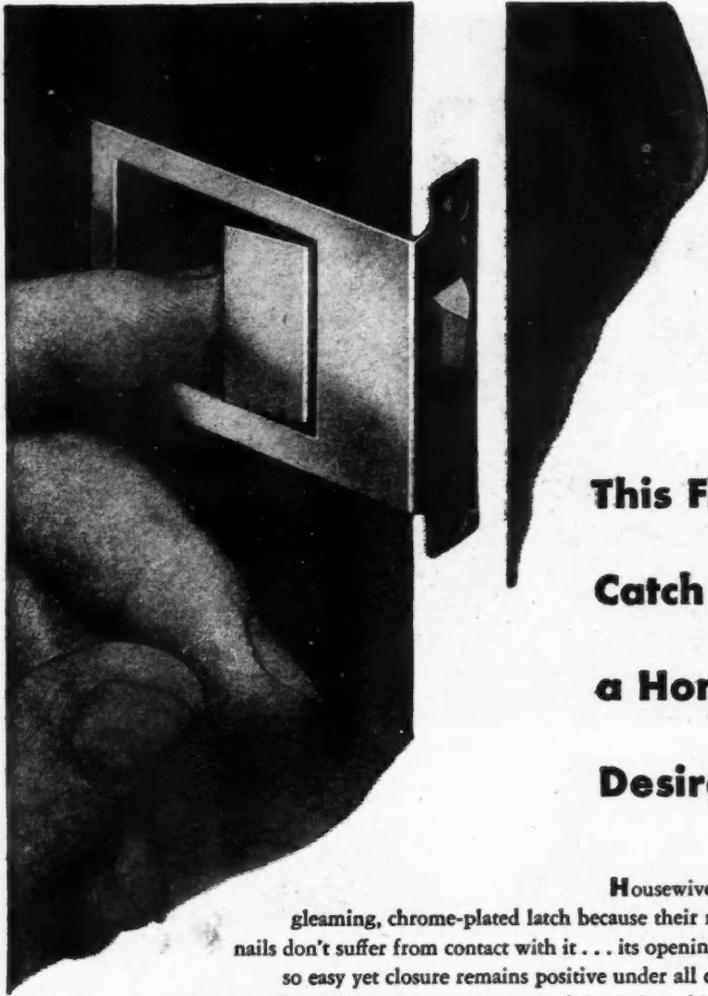
Frederick T. Kline, Los Angeles, Architect and Owner



LIBBEY·OWENS·FORD
a Great Name in **GLASS**

L·O·F also makes plate glass, safety glass, *Thermopane** insulating glass, *Vitrolite** colorful glass facing, *Tuf-flex** tempered plate glass and other flat glasses.

*Reg. U.S. Pat. Off.



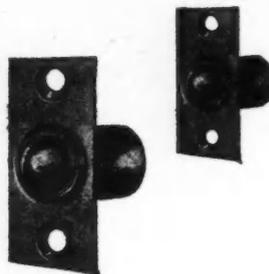
**This Flush
Catch Makes
a Home More
Desirable**

Housewives like this gleaming, chrome-plated latch because their manicured nails don't suffer from contact with it . . . its opening action is so easy yet closure remains positive under all conditions. Specify and install the Adams-Rite No. 16 Catch for cabinets where sleek appearance, easy operation and lasting quality must combine. Many requests for a smaller version of our famous patented Rite Ball Latch No. 234 have resulted in the No. 434 . . . the finest latch of its kind in its size . . . small enough to fit $\frac{3}{4}$ " doors. Become better acquainted with all three of these latch favorites . . . Order today . . . discover for yourself how the modern beauty, smart styling and inherent quality of Adams-Rite solid brass hardware adds sales appeal to a home and increased value in the eyes of its future owners.

FLUSH CATCH No. 16—Chrome plated. (Other finishes optional.) Installs quickly and easily . . . no mortising necessary. Mount on the surface with one simple cut-out for mechanism. Face size $1\frac{3}{8}$ " x $1\frac{3}{4}$ " List Price per Dozen, \$10.32

BALL LATCH No. 234 face size $2\frac{1}{8}$ " x 1". Spring compression and ball protection adjustable. List Price per Dozen, \$10.32

BALL LATCH No. 434 measures $1\frac{1}{2}$ " x $\frac{3}{4}$ ". Spring compression pre-set. Adjustable ball projection. List Price per Doz. \$6.96



QUALITY HARDWARE FOR



NEARLY HALF A CENTURY

ADAMS-RITE MANUFACTURING CO.

540 WEST CHEVY CHASE DRIVE, GLENDALE 4, CALIFORNIA, U S A

(Continued from page 150)
used for the room, then the door should contain 6 inches of board. Where 12 inches of fill insulation are used around the room, 6 inches of board in the door will usually give the same insulation value.

A vestibule entrance to the locker room is of prime importance. Much trouble is encountered with frost accumulating on entrance door gaskets not to mention the terrific loss of cold air which occurs when there is no vestibule, especially where there is the usual amount of steady daytime traffic in and out of the locker room. The vestibule can be small but should be inside the insulated door. The inside door on the vestibule should be one mounted on swinging hinges, with a glass panel. It may be any standard wooden door, which is economical and can be replaced without a great deal of expense, such as that involved in replacement or repairs to an insulated door.

Insufficient insulation, voids or open spots in insulation will always cause trouble. Such a small hole as the corner knocked from a piece of board-type insulation can lead to serious difficulties. All joints must be tight when board-type insulation is used and joints should be staggered for the several layers used. When a self-sustaining or partition board-type insulation wall is built, the layers should be thin and as many used as possible.

Precautions against rats and vermin must always be taken. Rat screens must be installed at all points which might be exposed to invasion because rats like to work in insulation and have been known to drag away large portions of locker plant insulation walls before being discovered.

Roofing Firm Names Mahany Operations Vice President

WALTER J. MAHANY has been named vice-president in charge of operations for Southern States Iron



WALTER J. MAHANY

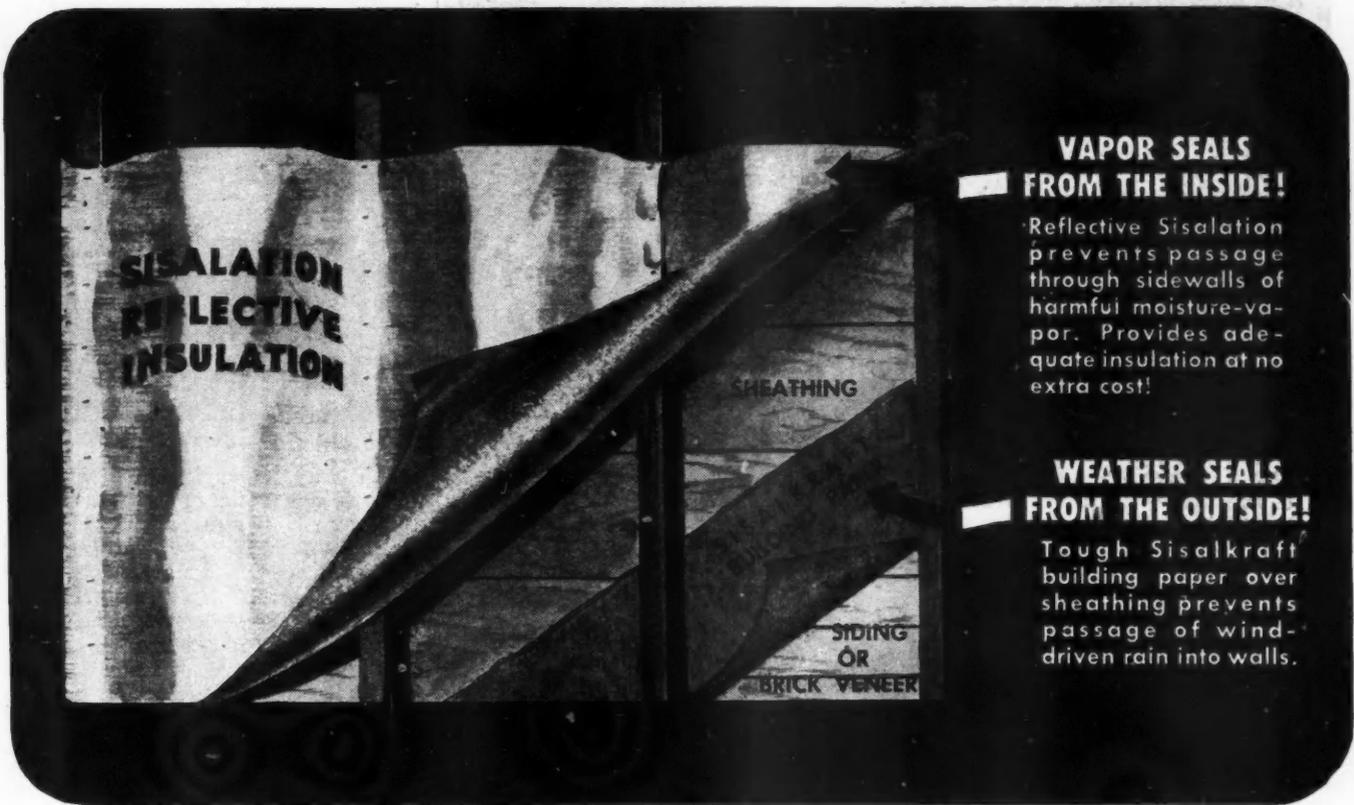
Roofing Co. He has been with that company more than 20 years.

Mr. Mahany, who was elected a director of the firm last year, will be responsible in his new post chiefly for manufacturing, engineering personnel property maintenance, construction and branch supervision.

This Improved Construction Assures a Permanent

DRY WALL

at Minimum Material and Labor Cost!



VAPOR SEALS FROM THE INSIDE!

Reflective Sisalation prevents passage through sidewalls of harmful moisture-vapor. Provides adequate insulation at no extra cost!

WEATHER SEALS FROM THE OUTSIDE!

Tough Sisalkraft building paper over sheathing prevents passage of wind-driven rain into walls.

See for Yourself: New wall construction, utilizing the prime features of Sisalkraft and Sisalation, now enables you to stop the passage of harmful moisture into walls easily and economically. This simple method provides a permanent DRYWALL in homes PLUS all the advantages of adequate INSULATION at no extra cost!

Write today for further information about these two products.

The SISALKRAFT Co., Dept. AB, 205 W. Wacker Drive, Chicago, Ill.

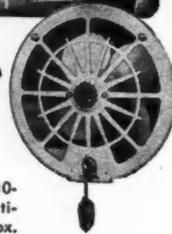


if YOU worked over a
Hot Stove...



you'd remember to specify
EMERSON-ELECTRIC

*Kitchen
Ventilation*



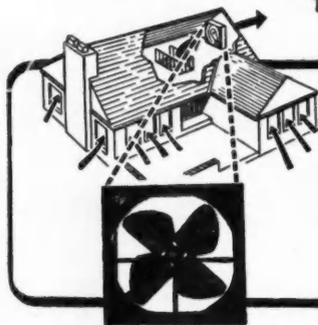
Emerson Junior 10-
inch Kitchen Ventila-
tor with wall box.

If you took time out on every designing or home construction job to sniff the odor of cooking cabbage, chances are you'd never fail to specify Emerson-Electric Kitchen Ventilation.

Fussy housewives become your biggest boosters when your plans provide for kitchen comfort. Again this year, Emerson-Electric is making your client-job easier by selling the idea of proper kitchen ventilation in more than a score of popular magazines reaching thousands of present and prospective home owners.

For detailed specifications on Emerson-Electric Kitchen Ventilating Fans, write for free Folder No. 215 today!

THE EMERSON ELECTRIC MANUFACTURING CO.
ST. LOUIS 21, MISSOURI



Breeze Condition
The Entire Home with an
EMERSON-ELECTRIC HOME COOLER FAN
Installed in attic, this sturdy fan forces out day's
accumulation of hot air, draws in refreshing night
air through open windows and doors.

32

EMERSON  **ELECTRIC**
MOTORS FANS APPLIANCES

Don't Overlook Glass

(Continued from page 85)

—this structural glass is annealed to withstand rigorous use both indoors and out. It will not check, craze, stain, change color with age, nor absorb odors of any kind. It is impervious to grease, grime, chemicals, oils, pencil marks, and is easily cleaned. These practical qualities plus the natural good looks of glass provide a wall material particularly applicable to kitchens and bathrooms. Opaque glass is produced in a wide range of striking colors, hues and shades, and, like plate glass, can be bent. Interior



OPAQUE glass makes an attractive front

panels may be as large as 9 square feet, except toilet partitions whose maximum is 25 square feet. Masonry of almost any kind provides the necessary rigidity and strength required for background, as do lath and plaster on substantial frame construction. The entire background must be painted with a bond coat, and a plastic cement used to hold the panels in place.

Indispensable from a practical standpoint, the mirror has grown in usefulness as an essential element in interior design. It may be hung to reflect the outdoor landscape or to catch the daylight and thus brighten some part of the room that would otherwise be lifeless. Through proper application, a mirror will make a room appear spacious and create a room pattern where none existed.

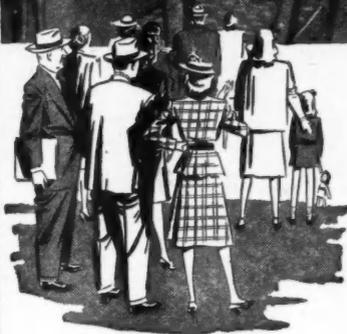
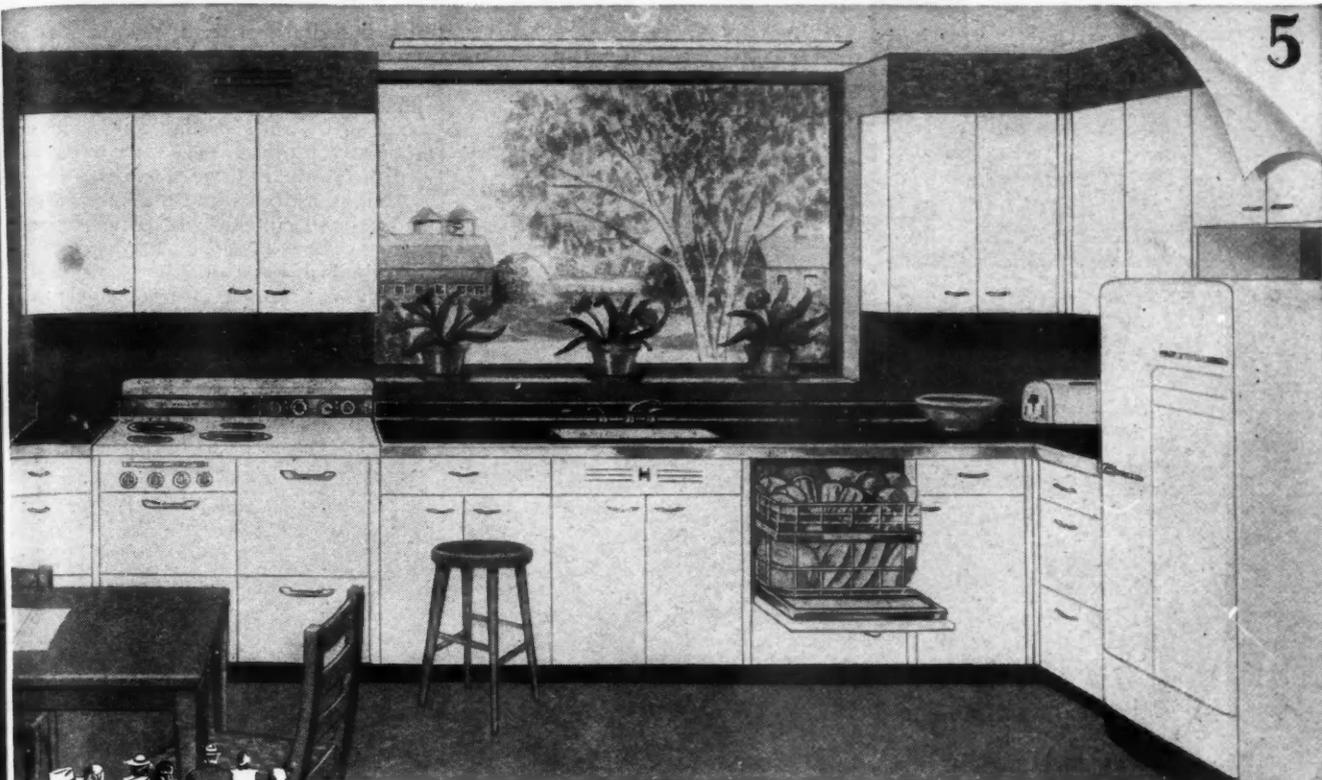
To reflect an accurate and undistorted image, a mirror must be fabricated of polished plate glass. Extreme sizes of plate glass of satisfactory mirror quality are difficult to obtain; however, there are many types and styles of quality plate glass mirrors available in standard sizes at prices to suit every purse. Flesh tinted plate glass mirrors minimize the blues and violets and emphasize the flesh tones. They have warmth and sparkle and flatter the persons reflected. The rich blue of blue plate glass mirrors is restful and lends itself to striking and original decorative schemes. By coating the colored glasses with silver, gold, or sulphite, special decorative effects may be produced.

Copper-back structural mirrors have a high resistance against deterioration and were especially developed

(Continued to page 156)

American

HOT
Has a
Public int
the thous
Service. T
to every
whether
To help
Kitchen
ning and
Portfolio
be a decis



Here's the "MEADOWLARK" kitchen
 ... another reason why
 "Everybody's pointing to Hotpoint!"

HOTPOINT'S hard-hitting advertising of all-electric kitchens started a snowball that now pays big dividends to builders and architects. Public interest in, and desire for, the "Meadowlark" kitchen is proved by the thousands of inquiries received by the Hotpoint Kitchen Planning Service. This powerful trend for time and labor saving kitchens applies to every income bracket. And Hotpoint has a plan to fit every need, whether in building or remodeling.

Get on the Job NOW

To help you do this, Hotpoint offers the Portfolio of Personalized Kitchen Plans. It's full of helpful suggestions and short cuts for planning and installing America's favorite kitchens. Send for this handy Portfolio today. Satisfied home owners with Hotpoint kitchens will be a decisive factor in adding to your prestige and reputation.

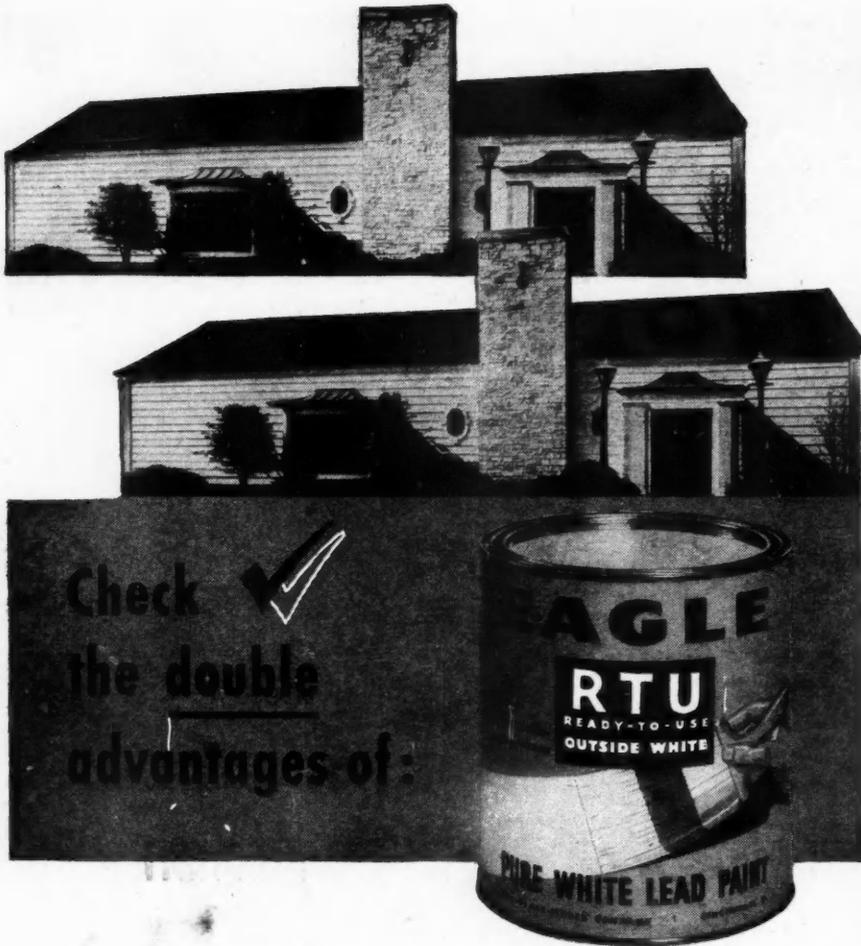
No. 5 in the important "America Picks Its Favorite Kitchen" Series



The Hotpoint Institute
 5641 West Taylor Street, Chicago 44, Illinois
 Without obligation, please send me your Portfolio of Personalized Kitchen Plans. This offer available to architects, builders and contractors only - in the United States, Territories of Hawaii and Alaska.

Name _____
 Firm Name _____
 Address _____
 City _____ State _____

Hotpoint
 HOTPOINT INC. A GENERAL ELECTRIC AFFILIATE



- ✓ Eagle RTU is *pure white lead*. It has all the famed durability, beauty and economy of this most famous of painting materials.
And, Eagle RTU comes factory-mixed for perfect brushing. It goes to the job in the original container, all set to open, stir and apply.
- ✓ Eagle RTU spreads smoothly and easily. It covers completely, leaving no brush-marks, has real white lead hiding and staying power.
And, Eagle RTU makes a smooth, gleaming elastic coat that won't crack or scale . . . defies time and weather, ages evenly by gradual chalking.
- ✓ Eagle RTU is favored by builders for time and labor saving convenience . . . because it enables them to do a *better* job more efficiently.
And, Eagle RTU is preferred by homeowners because of its beauty and durability . . . because of its *whiter* white that stays white *longer*.
- ✓ Eagle RTU is white lead paint in a *modern* form.
And, Eagle RTU is backed by Eagle-Picher's 104-year-old reputation as well as by the 2,000-year-old reputation of white lead.

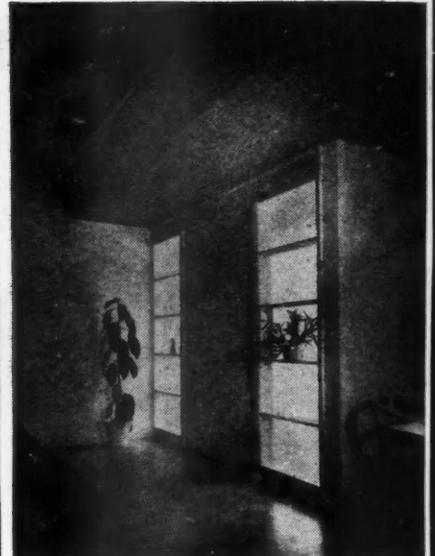
**EAGLE PURE
WHITE LEAD**



THE EAGLE-PICHER COMPANY
CINCINNATI (1), OHIO
Since 1843 *Member of the Lead Industries Association*

(Continued from page 154)

for installation with mastic. These mirrors have a double coat of silver on which a layer of copper is deposited by electrolysis, followed by a coating of pure shellac and a coat of specially prepared mirror-backing paint. They require a special mastic for installation since ordinary mastic is likely to contain ingredients injurious to the mirror backing. When installed against plaster, the plaster must be smooth, sound, and thoroughly dry. If masonry forms the background, it must be entirely free



LARGE glass areas brighten an entrance hall

of any projections that would penetrate the 1/8-inch space allowed for mastic. Where the backs of the mirrors are likely to sweat, ventilation must be provided.

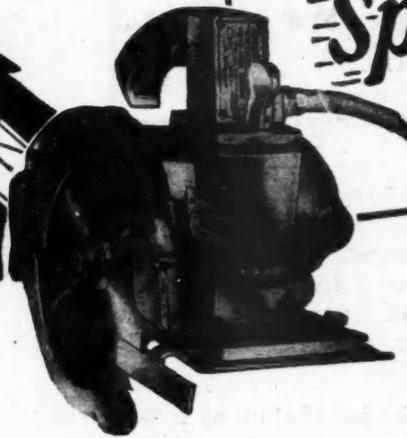
The glass block is unique in that it controls heat, light and sound, minimizes dust infiltration and condensation, lowers maintenance cost, and has almost unlimited design possibilities. This product is made by fusing at very high temperature two halves of the glass in molds. The result is a hollow, water-clear, all-glass unit of unusual strength containing sealed-in dead air space that effectively retards heat loss. The glass block is available in a variety of patterns and a number of sizes and shapes. It blends harmoniously with old and new designs in any style of architecture.

Glass blocks are laid by masons in a manner similar to brick, with standard tools and mortar. All bonding surfaces are coated with a plastic material to provide a strong, permanent bond between the cement mortar and the glass. The panels should never be used to carry loads other than their own super-imposed weight within the limits of allowable panel sizes.

Because of the widespread trend toward the increased use of glass in architecture and building construction, builders should become familiar with the variety of glass products available and their many applications.

Even Inexperienced Men

Produce a Big Day's Work!



Speedmatic SAW

Makes Many Different Cuts

Easier and Faster in Any Position

Like many builders and contractors, you have to employ many apprentices and inexperienced men to do your work. Naturally, they're slow and less skillful. But you can make up for this disadvantage with the Speedmatic Saw. Even in the hands of an apprentice, it cuts straight and fast.

Less Fatigue for Older Men . . .

More Work from Younger Ones . . .



Does More Sanding per Man Hour

PORTER-CABLE TAKE ABOUT SANDER

Smoother finish—On hard or soft wood floors, it does not dig in. Perfect balance eliminates "wrist-twist" . . . practically travels in a straight line without "steering."

Faster—Drive pulley travels at 2700 rpm. Delivers 1500 surface feet of abrasive belt per minute. Sands down without hand pressure.

Lighter—Reduces fatigue because it weighs only 14 lbs. Easily carried from one job to another.

Handy . . . Efficient . . . Economical

- 1. Balanced**—Speedmatic is scientifically balanced for perfect one-hand operation. Cuts light or heavy wood without stalling.
- 2. Steady**—Broad shoe, correctly placed, permits steady rest. Eliminates swerving, veering from line and cramping. One hand holds it.
- 3. Fast**—Blade enters cut at 7000 rpm. This unusual speed eliminates "pushing." Practically feeds itself.
- 4. Adaptable**—The Speedmatic is easily adjusted for angle or depth cutting. Can be used with an abrasive wheel. By attaching a radial arm, you can double utility of the Speedmatic.
- 5. Versatile**—Rips, cross-cuts, bevels. Does mitres . . . dado cutting. Worker does not have to pre-mark a piece of wood for a square cut.
- 6. Long-lasting**—And it's powerful, too. Husky Helical Gear Drive delivers 11% more power to blade. Reduces wear on driving parts to a minimum.

CUT YOUR LABOR ESTIMATES!

Use the SPEEDMATIC on your jobs!

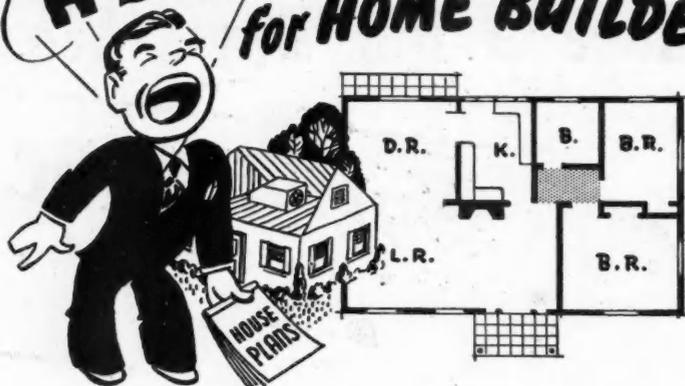
See it at your nearest dealer. Try it. Get the feel of it. Then compare. You'll agree it's the finest power saw on the market.

PORTER-CABLE MACHINE CO.

1721-11 N. Salina Street

Syracuse, New York

HELP for HOME BUILDERS



Many of your customers are planning to build or buy—and they need your help. Naturally they will want the best in materials and equipment. In cooling appliances this means **BAR-BROOK Fans**.

Show them how the installation of a Bar-Brook Breezebuilder* Fan will give them hot weather relief at the flip-of-a-switch. And they're very, very economical.

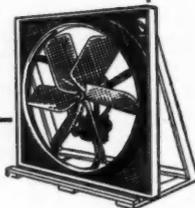
The selection of a cooling system is just as important as the heating system. Remind them of this FHA Approved comfort when they build or buy!

Begin making these extra profits NOW! Write for the name of your nearest Bar-Brook Distributor.



WRITE FOR YOUR FREE COPY

of "The A-B-C of Building Breezes," the most complete manual on attic fans ever published. 48 pages, richly colored, profusely illustrated. A request on your letterhead will bring your copy.



*Trade Mark

The Bar-Brook Window Fan is ideal for permanent installations such as this, in small homes, apartments, offices. May be mounted in either vertical or horizontal position.

BAR-BROOK FANS



BAR-BROOK MFG. CO., INC.
(Formerly Shreveport Engineering Company)

1553 Texas Avenue... Shreveport, La., U.S.A.



Book Reviews

RADIANT HEATING by T. Napier Adlam

THE busy engineer or contractor who wants to apply radiant heating to a residential or commercial building will find this book a most useful tool.

In a practical, comprehensive way information is presented on heat output or input, relation of mean radiant temperature and air temperature, construction details, controls, air venting, effect of floor covering and similar matters.

The emphasis in this book is on the application of radiant heating to actual problems, rather than complex physics and theory. The exact step-by-step procedure in designing and installing radiant heating systems is summarized, illustrated with drawings, working charts, and photographs. The final chapter includes sixty-four charts for the easy direct determination of the pipe size and spacing necessary, covering both iron or steel pipe and copper tubing.

Radiant heating can be utilized for snow melting and summer air cooling. Mr. Adlam pioneered this branch of the field. He gives detailed instructions on how to design and install snow melting systems for driveways, footpaths, steps, airports, stadiums or hospitals. And, in another chapter, describes and illustrates how radiant cooling is achieved by providing chilled walls to absorb excess body heat, with non-cooled but dry air introduced to prevent condensation on the walls.

The author, T. Napier Adlam, is an outstanding authority on the subject of radiant heating. His thirty years' experience, both abroad and in the United States, have more than qualified him to prepare this treatise. Published by The Industrial Press, the book retails for \$6.00.

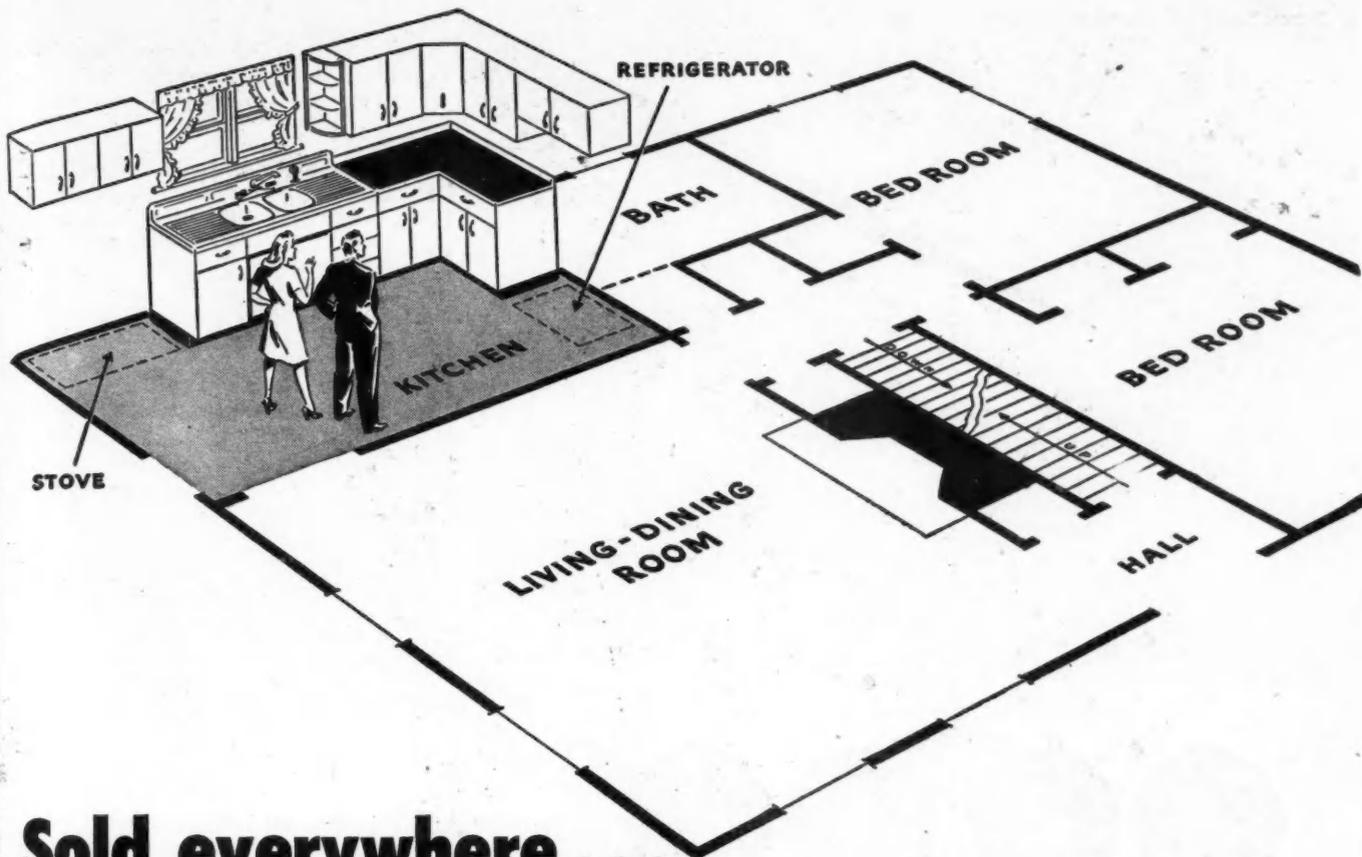
PANEL HEATING AND COOLING ANALYSIS

by B. F. Raber and F. W. Hutchinson. Publisher, John Wiley & Sons, Inc., 601 W. 28th St., New York, N.Y. Price, \$3.50. A three-in-one book written for both technical and practical men in the heating field. First section deals with non-technical information on panel heating and cooling systems. Second section is for design engineers and research workers, and is written also as a textbook for senior and graduate students in engineering. Third section rationalizes design procedure.

HOW TO OPERATE A REAL ESTATE BUSINESS

by Stanley L. McMichael. Publisher, Prentice-Hall, Inc., 70 Fifth Ave., New York 11, N.Y. Price, \$5.00. A complete expository treatise dealing with elementary procedure, and advanced techniques in the transfer of industrial sites, and urban and farm residential tracts. Specially designed for men and women just entering the real estate field, and of genuine value as a refresher to veteran realtors. Should be of value as a textbook in schools, and in of-

(Continued to page 160)



Sold everywhere . . .

another big advantage of Youngstown Kitchens

WHEREVER your building project, whatever its size, a complete Youngstown builder's service is yours in or near your community.

For 60 experienced Mullins' Field Men and 7500 trained Youngstown dealers are strategically spotted throughout the U. S. A. Their job: to work with you in keeping building costs down.

Yet service is only one of the pluses that go with Youngstown Kitchens (see panel).

For *standardized* Youngstown units are *precision-built* and *mass produced* to the highest specifications. Equipment arrives completely finished with hard-

ware in place, ready for fast, smooth installation in just a few hours.

All Kitchenaiders and wall and base cabinets are white-enameled steel. Sink tops are highest quality, acid-resisting porcelain enamel. Units can be combined according to Youngstown Kitchen suggestions available through your dealer, or to fit any idea of your own. Design and finish harmonize perfectly with most any range and refrigerator.

Have you investigated Youngstown Kitchens?

For name of your nearest distributor or field man, just write—

Other Youngstown advantages

- Low cost
- Wide selection
- Easy handling
- Easy installation
- Modern styling
- Top quality

MULLINS MANUFACTURING CORPORATION

WARREN, OHIO

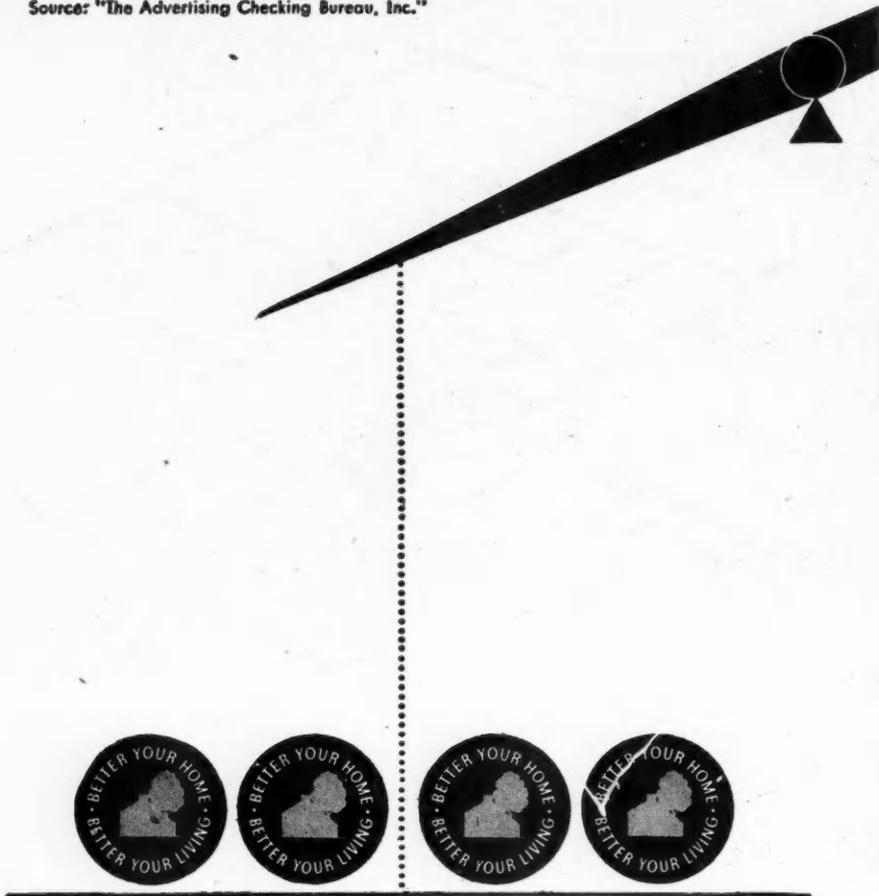
Porcelain Enameled Products, Large Pressed Metal Parts,
Design Engineering Service



Youngstown Kitchens

BY MULLINS

Source: "The Advertising Checking Bureau, Inc."



House Beautiful

receives 4 times more

newspaper tie-in advertising

from retailers

than any other home magazine



American Builder, November 1947.

(Continued from page 158)
fices where courses in real estate procedure are offered to young realtors, particularly veterans who have chosen the real estate field as their work.

ATTRACTIVE LAWN FURNISHINGS, Paul V. Champion, Publishers, The Bruce Publishing Co., 540 B. Milwaukee St., Milwaukee 1, Wis. Photographs and drawings with complete descriptions of numerous types of lawn furniture and furnishings. Sufficient detail to permit manufacture in small shops or in home workshops.

LEASES, PERCENTAGE, LONG & SHORT TERM by Stanley McMichael. Publisher, Prentice-Hall, 70 Fifth Ave., New York, N.Y. Price, \$5.00. Fourth edition of a book dealing with the history and practice of leasing real estate for terms of years. Includes exhaustive discussion of so-called percentage leases. Contains up-to-date information on various types of both long and short term leases.

BUILDING A LOG CABIN by Ben Hunt. Publishers, The Bruce Publishing Co., 540 N. Milwaukee St., Milwaukee, Wis. Price, \$2.75. Deals with the methods recommended to prepare, notch, place and secure logs for construction of small cabins of the type used as summer cottages and fishing cabins.

New York Home Builders Conference to Be Nov. 17

THE Home Builders Council of New York, New Jersey and Connecticut are scheduling a conference on Nov. 17 to consider the housing outlook for 1948. The conference will be held at the Hotel Commodore in New York City.

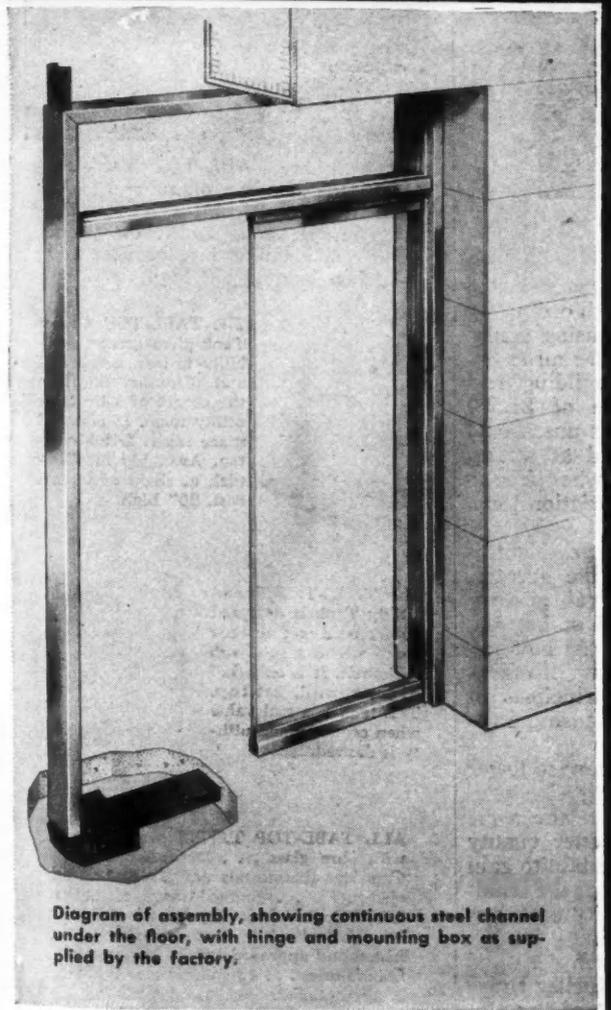
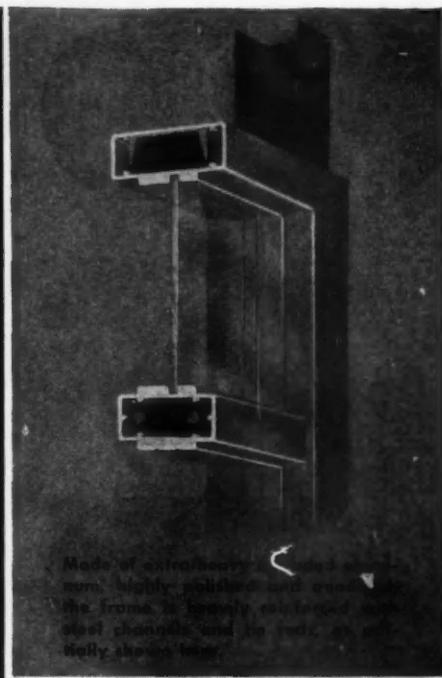
All segments of the building industry—builders, bankers, brokers, material and equipment manufacturers, dealers and distributors—are invited to discuss factors directly affecting the industry today.

Henry J. Shaween, chairman of the Council, announced that Frank Cortright, executive vice-president of NAHB who has just returned from England, will tell of his observations in that country.

Considerable attention will be focused on materials in short supply, such as rock lath, plumbing materials, nails, millwork, flooring and lumber.

James Graham of Long Island is general chairman of the conference, assisted by E. M. Spiegel of New Jersey and Alfred Goss of Long Island as co-chairmen. Others on the committee include Mr. Shaheen, Irving Lipsig, president of the Westchester Association; Willard Closs, president of the New Jersey Association; Kalman Klein, president of Long Island Institute; Lloyd Bremer, Carl Carlsen, Charles Deubel, Jr., Maurice Carroll of New Jersey, Henry Grant of Westchester and O. J. Hartwig of Long Island.

New-Unique
HERCULITE
 DOOR-FRAME ASSEMBLY
by "Pittsburgh"



... affords great simplicity of installation

A "PACKAGED" construction, in one unit, this handsome, rugged and easily installed Herculite Door-Frame Assembly by "Pittsburgh" entirely eliminates all problems of setting and fitting; does away with bothersome details of clearances and many other time- and labor-consuming matters. It replaces the complicated custom-made frames which required scores of different materials and the services of various trades to install.

"Pittsburgh's" Herculite Door-Frame Assembly is available in twelve standard styles to satisfy almost any requirement. It is built to accommodate standard Herculite Tempered Plate Glass doors. It is supplied complete with checking floor hinges and top pivots—ready to bolt into the rough building opening. All clearances on the frame and doors are controlled by accurate factory gauges. These features combine to make possible the greatest simplicity of installation. When the building is ready to receive the doors, they are simply set on the hinge pivot, the top pivot is dropped into the top channel, and the entire structure is complete. Nothing else is necessary.

Further detailed information will be supplied you without charge or obligation upon receipt of the coupon below. Why not send it today?

Pittsburgh Plate Glass Company
 2390-7 Grant Building, Pittsburgh 10, Pa.
 Without obligation on my part, please send me your descriptive literature on "Pittsburgh's new Herculite Door-Frame Assembly."
 Name.....
 Address..... State.....
 City.....



PAINTS · GLASS · CHEMICALS · BRUSHES · PLASTICS

PITTSBURGH PLATE GLASS COMPANY

spray-O-bond
PRODUCTS

Offer Unusual
PROFITS
because

spray-O-bond
PRODUCTS

Do Many
Unusual Jobs
and

spray-O-bond
PRODUCTS

Do All Jobs
Unusually Well

CHECK THIS LIST FOR YOUR IMMEDIATE NEEDS

- Concrete Sealer
- Chemico Coating
- Hydro Check
- Cement Paint
- Concrete Hardener
- Tronseal
- Plaster Bond
- Foundation Coating
- Painting and Patching Mortar
- Plastic Paint
- Asphalt Emulsion
- Aluminum Paint



Ask your Dealer or write

SPRAY-O-BOND COMPANY
MILWAUKEE 12, WISCONSIN

Producer's Council Elects David S. Miller President

BUILDING volume is on the upgrade, costs are stabilizing and materials shortages are disappearing, David S. Miller, newly elected president of the Producer's Council, stated at the council's annual meeting in October. Mr. Miller, sales promotion manager of the Building Materials Division of Armstrong Cork Co., was elected to succeed Tyler S. Rogers of Toledo.

Indicating that the productivity of labor is improving, and that building time is being shortened, Mr. Miller said that removal of outside restrictions would increase output.

"According to BLS reports," he said, "an average of 66,000 new permanent



DAVID S. MILLER

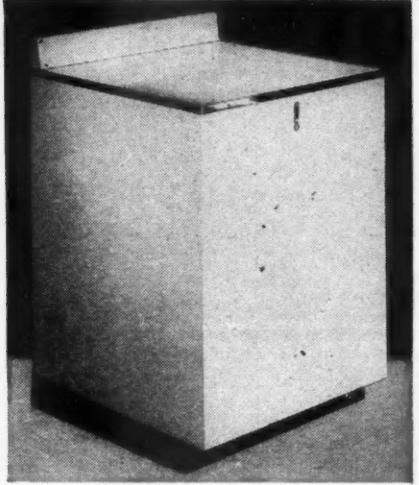
type housing units per month was started in April, May and June which ordinarily are the peak months for housing starts. But in July and August, after all emergency controls on home building had been removed, an average of 81,500 starts was reported. That is unseasonal gain. It can be interpreted as strong evidence that this industry, when free to operate without outside restrictions, can and will produce."

Tyler S. Rogers, retiring president of the council, declared that the greatest contribution that the Federal government can make to the field of housing and construction is to help the building industry speed up the adoption of modular coordination and the principles of the Industry Engineered Housing Program.

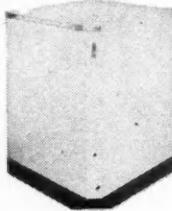
"These projects will do more to lower building costs than anything else proposed today," he stated. "At the same time, both projects mean better quality in construction. They are certain to gain general acceptance throughout the building industry, but the government can hasten their adoption by giving its full approval and active support."

F. L. Riffin, Jr. of the Mueller Brass Company and C. R. Raquet of the Detroit Steel Products Corp. were named vice-presidents of the council. Newly elected members of the board of directors include: James H. Ashley, Libby-Owens-Ford Glass Co.; Arthur S. Brewer, National Fireproofing Corp.; A. Naughton Lane, Monarch Weatherstrip Corp. and C. B. Stainback, Westinghouse Electric Corp.

TABL-TOP
Hot Water
TANKS

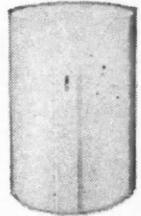


The Square TABL-TOP Tank fits into the counter planning of the kitchen. Its colorful Westplak top assures an acid and stain proof surface, blending into counter and kitchen layout. 36" high.



The TABL-TOP Corner Tank gives greater flexibility in arrangement and planning. Fits into the corner of kitchen or utility room. It is a real space saver. Linoleum top. Available in Westplak at slight additional cost. 36" high.

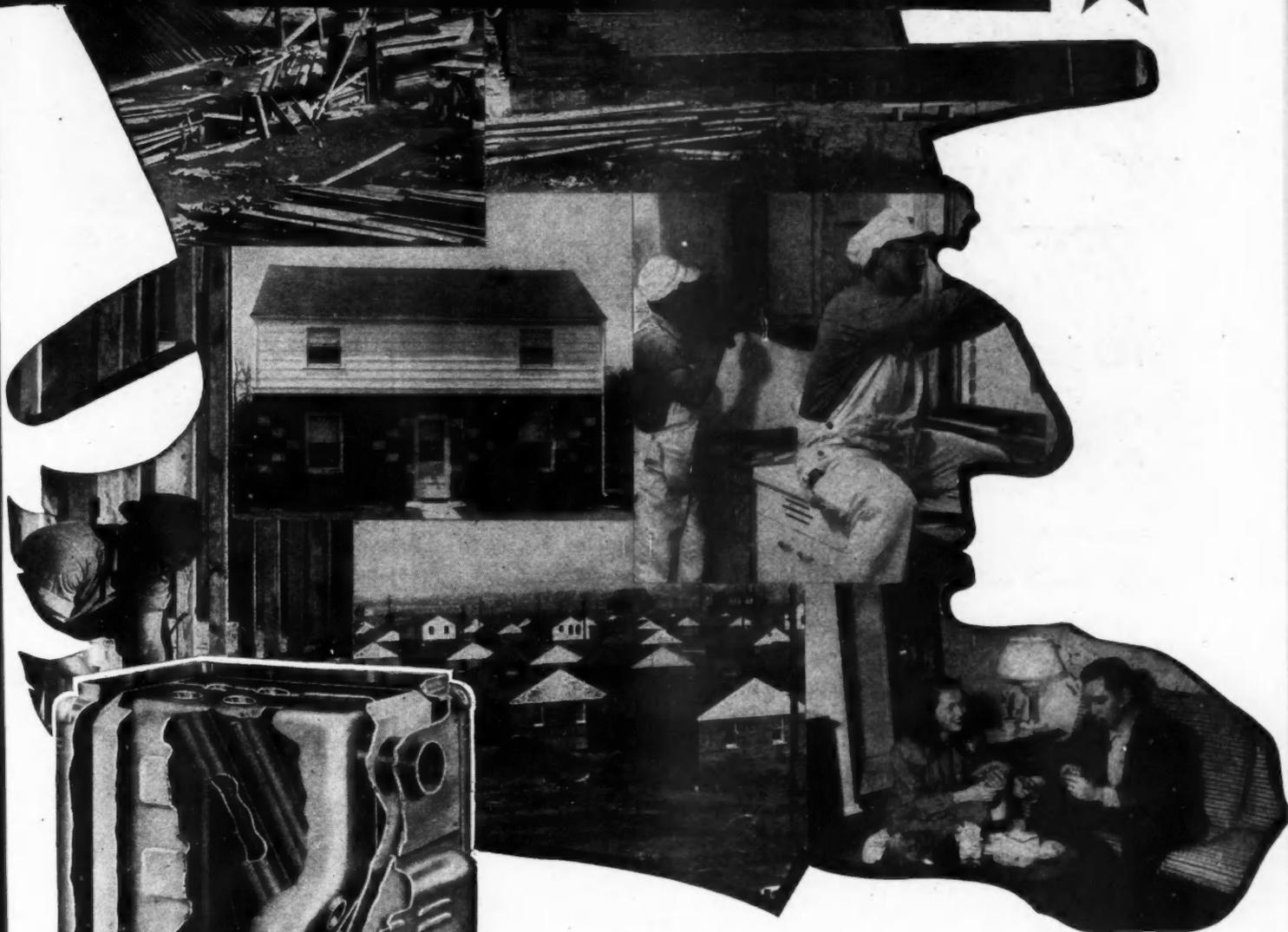
The TABL-TOP Round Utility Tank is designed to fit under counter space where a solid top is desired. It is only 35" high, round, flat top. This tank is a real value when economy and utility is desired.



ALL TABL-TOP TANKS are insulated with fibre glass . . . Dependable, using Cam-Stat thermostats and Treat heating elements . . . Rugged tanks of heavy 3/16" double-dipped galvanized steel . . . baked white enamel casing . . . Listed and approved by the Underwriters Laboratories . . . 40 gallon capacity. Back splash optional.

ABCO
MANUFACTURING CO., INC.
509 WESTLAKE NORTH
SEATTLE 9, WASHINGTON

7.
HOUSING and HEATING the FACE of the NATION!



**Bradford Homes, Inc., builds TWO
"Quantity plus Quality" Homes in Evansville daily!**

**... with MOR-SUN Pressed Steel Forced Warm
Air Furnaces assigned to do the heating job!**

Quality need not be expensive — and it isn't when operative builders like Bradford Homes, Inc., get on the job.

In the first 13 months, Bradford Homes built 350 houses in Evansville — and now they're handing the keys to two Vets per day.

And every house is a quality house — heated by the famous Mor-Sun U-4-G furnace, the #1 furnace on America's heat parade!

Congratulations, Bradford Homes, Inc. — Mor-Sun is proud to be a part of your project!



MORRISON STEEL PRODUCTS, INC. BUFFALO 7, N. Y.

"The Sun Never Sets with MOR-SUN"

Anchor 'Em Down

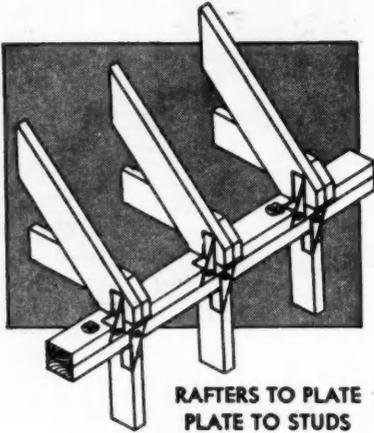
WITH

Trip-L-Grip

FRAMING ANCHORS

Farm buildings don't blow down—they blow up—so tie 'em down—rafters to plate—plate to studs—studs to sill.

And homes and heavy construction use Trip-L-Grip, too.



RAFTERS TO PLATE
PLATE TO STUDS

Write for
FREE booklet

TIMBER ENGINEERING COMPANY

1319 18th STREET, N. W.
WASHINGTON 6, D. C.

Please send FREE copy of "Anchor 'Em Down with Trip-L-Grip".

Name.....

Company.....

City.....

State.....

Modular Dimensions for Clay Flue Lining

THE National Clay Pipe Manufacturers have been cooperating with the Modular Service Association in development of standardized building material dimensions and just recently they have announced a revised design of clay flue lining meeting the modular dimension requirements for modular brick as well as other coordinated modular masonry products. The recommendation, known as ASA Standard A62.4 has been approved by the ASA and the industry will be in a position to proceed with the



NEW modular dimensions for flue lining in multiples of four inches set up by the National Clay Pipe Manufacturers.

production of clay flue lining meeting the new dimensional standards just as soon as the respective market areas of the United States desire flues meeting these requirements. Timing of production of the flues in the respective areas will necessarily tie in with production of other coordinated masonry products. Due to special requirements covering chimney construction in the Pacific Coast area and the resultant special design for clay flue lining in that area it is not expected that changes in design will be made there immediately although producers in that area stand ready to change over whenever the market calls for such a change.

Convactor Radiator Output Exceeds Pre-War Four Times

CURRENT production of non-ferrous convactor radiators for home, office, institutional and other heating needs is well over 40 million square feet per year, almost half the total radiation for heating now being produced according to figures of the Office of the Housing Expediter. This is more than four times the pre-war production.

Hardwood Flooring Output Up

WEEKLY output of hardwood flooring by late summer had reached a peak of 13,600,000 board feet, and industry spokesmen think annual production records may be shattered this year. The 1947 output may exceed 600,000,000 board feet. Even a 12,000,000 monthly average would bring the output to 584,000,000 board feet, equalling 1926 output.



STANLEY NAIL HAMMERS

Put Skill In Your Hands

For a good nail hammer, specify Stanley No. 51½ — first choice of carpenters and skilled woodworkers for its driving and nail pulling qualities.

Head is drop-forged from selected steel, heat treated and hardened for strength and toughness. Handle is shaped from young, straight grain hickory. Head is securely wedged to handle.

Look for the Stanley trade mark on the head of the hammer you buy.

THE TOOL BOX OF THE WORLD

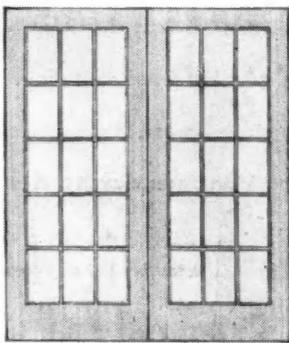


Trade Mark

HARDWARE · HAND TOOLS · ELECTRIC TOOLS



How to be generous – Yet Thrifty



Ponderosa Pine French doors are available in many designs, for either wide or narrow openings. Used in conjunction with Ponderosa Pine casement, fixed sash or double-hung window units, such doors help you to provide the large glassed-in areas which modern taste demands.

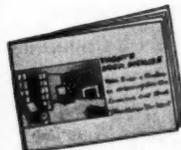
Stock frames of Ponderosa Pine are made for all Ponderosa Pine doors and windows. These frames are properly constructed and kiln-dried—absolutely square—with scientific grooving.

Almost every home owner wants large glass areas “to bring the outdoors in.” But today’s building costs tend to put a brake on the planner’s generosity in providing such areas. Here the simple, practical answer is stock-designed windows of Ponderosa Pine.

Mass-produced, precision-made Ponderosa Pine windows, casements, French doors and frames are practical—and economical. Because they are made of wood, they have natural insulating qualities. Ponderosa Pine, too, is famous for its ability to take paint or other finishes readily—to hold nails and screws firmly. And remember, Ponderosa Pine window units are made in a wide variety of styles for your choice.

“Today’s Idea House”—32-page fully illustrated booklet—contains worthwhile information about the functional use of Ponderosa Pine doors and windows. You’ll want this book for use in planning friendly interiors at moderate cost. Just mail the coupon!

For Friendly Living . . .
Ponderosa Pine
WOODWORK



Ponderosa Pine Woodwork
 Dept. PAB-11, 111 West Washington Street
 Chicago 2, Illinois

Please send me a free copy of “Today’s Idea House.” (Please Print)

Name.....

Address.....

City..... Zone..... State.....

The \$64 Question



...How Much PROFIT?

In the long run, continued profits depend on—

- ✓ **Efficient Application**
- ✓ **Good Workmanship**
- ✓ **Quality Materials**

Check — Check — and Double Check when you use Abesto Cold Roofing Adhesives and Coating Materials with a standard brand of plain roll roofing.

A GOOD ROOF — A GOOD REPEAT BUSINESS. THAT MEANS PLENTY OF PROFIT!

We will be glad to supply descriptive literature and specification sheets free of charge, upon request.
Address Dept. 57



ABESTO MFG. CORP.
Michigan City, Indiana

Howard Myers, Publisher of Architectural Forum, Dies

HOWARD MYERS, for 23 years publisher and editor of Architectural Forum, died Sept. 18 of a heart ailment. He was 52.

Mr. Myers became editor of Architectural Forum in 1919, and was



HOWARD MYERS

made publisher six years later. He devoted almost his entire business career to the building field.

Markets for new building materials were greatly expanded as a result of Mr. Myers' introducing and fostering the modern school of architecture. He was the first editorial champion of the factory-produced house and publicized the experimental ventures of the early twenties.

There Are Tremendous Merchandising Possibilities

In a

HOME SHOW

For Manufacturers, Distributors and Retail Dealers

AN EXPOSITION WILL FOCUS ATTENTION ON THE LOCAL HOME BUILDING INDUSTRY

Our organization produces Home Shows exclusively through Home Builder Association and Real Estate Boards, in co-operation with daily newspapers.

We furnish modern booth equipment—complete stage properties and spectacular set-pieces, including attractive industry dioramas; handle all details—advertising, selling, public relations, and financing.

A trained organization of experts and specialists in showmanship

NATIONAL HOME SHOWS, INC.

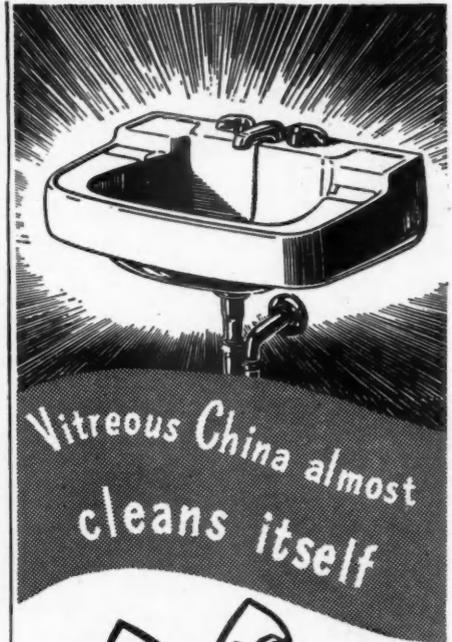
GROVER A. GODFREY, President
JOS. P. TUFTS, Vice Pres. and Gen. Mgr.

JOHN DALY, Director of Sales
Horace Black, Exposition Director

Home Offices—Dallas, Texas
Chamber of Commerce Building Telephone
Riverside 6163

National Home Shows

Shreveport—March 27th - April 9th
Oklahoma City—April 10th - April 18th
Dallas—April 24th - May 2nd



"A wipe and a swipe, and Lifetime vitreous china is again as bright and gay as new, and it retains this easy cleanability for life. Anyone who has lived with vitreous china fixtures knows how much easier they are to keep sparkling clean, day in and year out."



—DON HEROLD, in Universal's latest booklet on Vitreous China.

Send for your supply of these colorful booklets by Don Herold, one of America's ace cartoonists.

UNIVERSAL SANITARY MFG. CO.
New Castle, Pa.

Camden Pottery Div. Pacific Pottery Div.
Camden, N. J. Redlands, Cal.

UNIVERSAL

Lifetime

VITREOUS CHINA PLUMBING FIXTURES

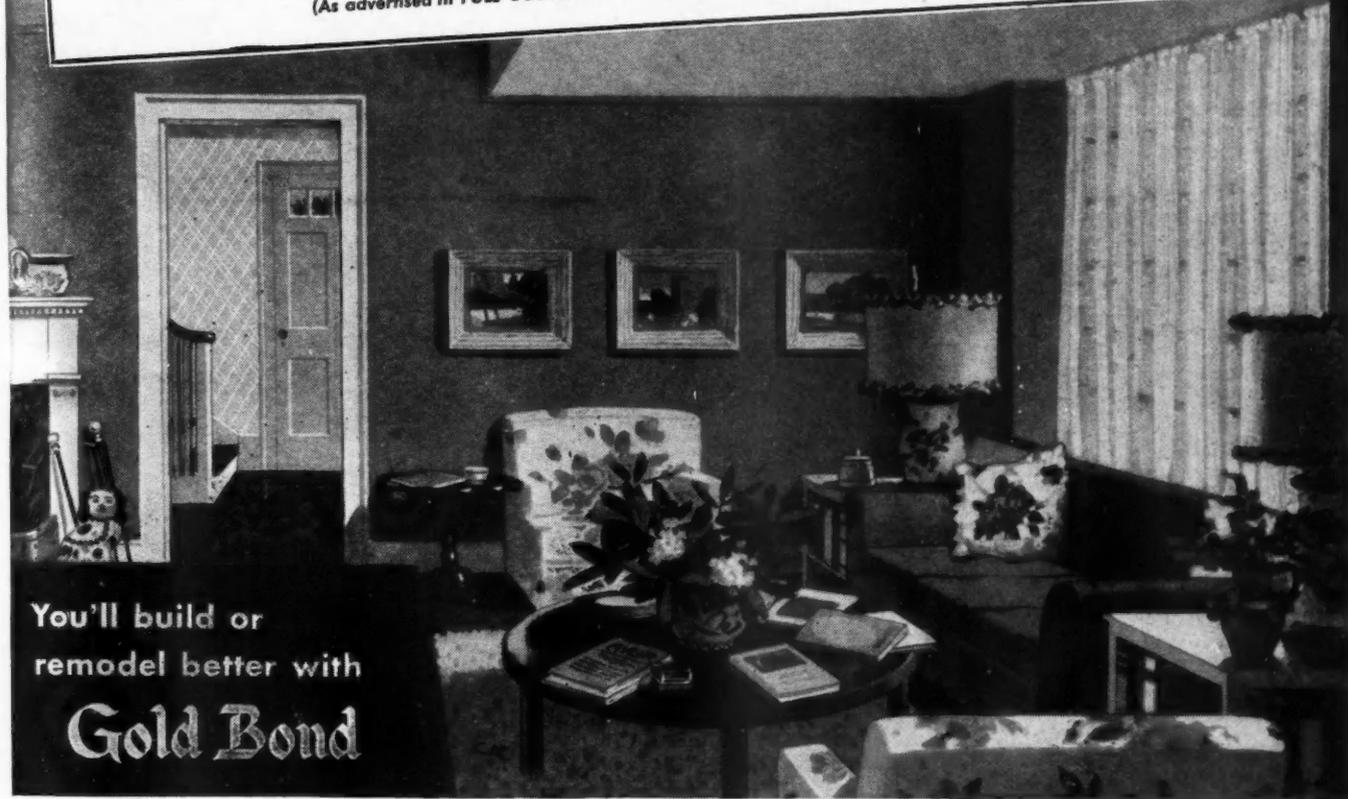
SEE HOW GOLD BOND IS ADDING TO YOUR LIST OF FUTURE CUSTOMERS . . .

For nearly two years the Gold Bond advertising campaign in the Post has been directed at your future customers! It's been crammed with good, sound advice for better building and remodeling.

It sparks new interest in home ownership and improvement. This ad promotes one of those good paying remodeling jobs...good business for you!

National Gypsum Company, Buffalo 2, New York.

(As advertised in FULL COLOR in the November 8 issue of the Saturday Evening POST)



You'll build or remodel better with **Gold Bond**

For the newest in building and remodeling products, see your local Gold Bond dealer first.

How we added six feet to our living room

"With the family increasing and furniture accumulating, our house actually seemed to be shrinking! Especially the living room! Then we got the idea of knocking out one wall and enclosing that little-used side porch. Like magic we added six extra feet...and what a difference it makes!"

Magic transformations like this come easy with big, sturdy panels of fireproof Gold Bond gypsum wallboard. This versatile product goes up fast and takes any kind of decoration you like.

Whether you're remodeling or building, you'll find that research has provided a wealth of new and exciting materials. For instance, take the problem of sheathing, the material that goes on the outside

walls under the clapboards, brick, or other exterior finish. Your house will be stronger and more weatherproof if you ask your architect or builder to specify fireproof Gold Bond gypsum sheathing. It's made by National Gypsum, and comes in wide sturdy panels that actually cost less to buy and install than old-fashioned inflammable sheathing.

For inside walls that are smooth, beautiful and long-lasting, be sure you get Gold Bond fireproof gypsum lath and plaster.

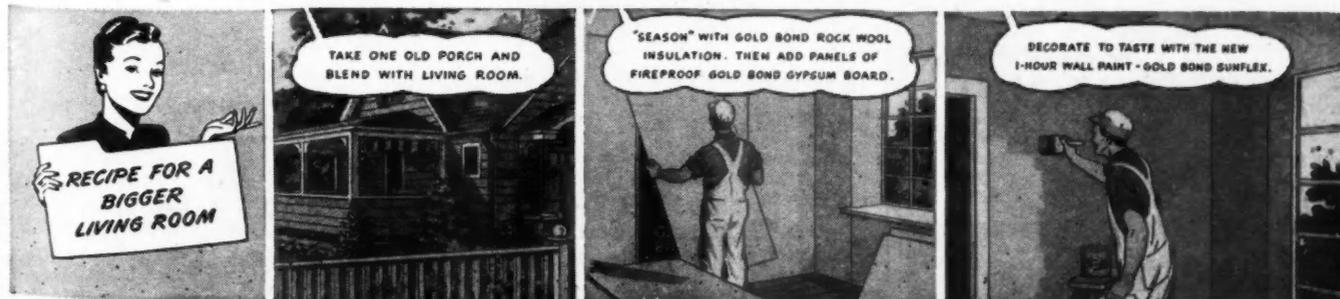
And for something new and better in room decoration, paint with Gold Bond Sunflex. Comes in many charming colors, and dries in 1 hour with no "painty" odor. Your new house will be warmer in

winter and cooler in summer if it's insulated with fireproof Gold Bond rock wool. Pays for itself by saving up to 40% on fuel bills every year! Can also be "blown" into the outside walls and roofs of existing homes with little fuss or bother.

Your Gold Bond lumber and building material dealer can now supply you with over 150 Gold Bond Building Products, each engineered to do its job the best possible way. For up-to-date help and advice, see your Gold Bond dealer first.

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK

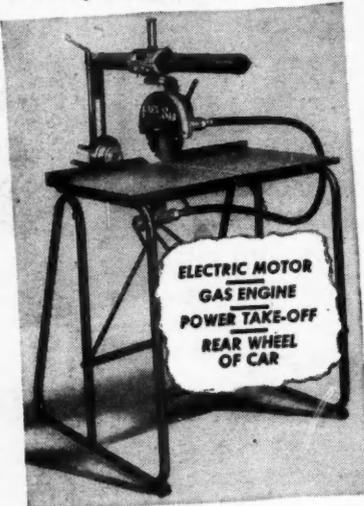
Gold Bond Building Products add greater fire protection, permanency, and beauty at no extra cost. These include fireproof wallboard, lath, plaster, lime, sheathing, wall paint, insulation, metal and sound control products.





DON'T! BE A BEAVER

The beaver does a good job, but he does it the hard way. Don't wear yourself out on the end of a hand-saw, or struggle with heavy, cumbersome mechanical saws that waste your time and are only half accurate.



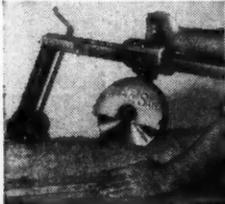
ELECTRIC MOTOR
GAS ENGINE
POWER TAKE-OFF
REAR WHEEL
OF CAR

FLEXSAW MAKES ANY CUT

Use it for Production Work, Construction out on the Job, or in Job Shop or Hobby Shop

A rigid, rugged, accurate, portable saw that makes cuts 3" deep and up to 15" wide. Knocks down into two 55 lb. units for transport in any car. A truly ONE MAN portable saw. Ideal for farm use, builders, hobbyists.

Rapid adjustment for any cut—no wrenches required. Rigid in all positions. Large, easily read dials for setting all cuts, eliminate all guesswork.



Lifetime Fafnir ball bearings. Highest quality, flexible drive shaft. Balanced tubular base.

priced so anyone can own it \$125

SEE YOUR LOCAL DEALER,
OR WRITE DIRECT TO:

Less Motor-
F.O.B.
Factory
GUARANTEED

THE FLEXSAW CO.
PORT AUSTIN, MICHIGAN

Fir Doors to Be Finished To Size at Factories

THE Fir Door Institute has inaugurated an official inspection system designed to assure the highest possible degree of product uniformity and quality for the trade. It also has revised standards for door finish sizes, which it will make effective pending official promulgation by the U. S. Department of Commerce.

The new standards call for pre-fitting fir doors 3/16 inches less in width and 1/8 inch less in height than nominal catalog size. Thus, a nominal 2-foot, 6-inch by 6-foot, 8-inch door is pre-fitted to net 2 feet, 5-13/16-inches by 6 feet, 7 7/8 inches. A tolerance of 1/32 inch, plus or minus, is permitted. Pre-fit machining shall be smoothly sawn and cut square. Scuff strips will be applied to the bottom of each stile for protection in handling.

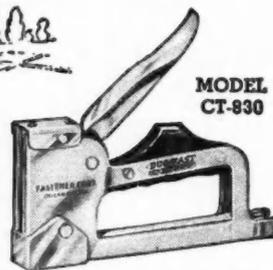
All member companies of the Fir Door Institute using F.D.I. seals manufacture doors to institute standards. The institute inspects regularly to assure standards are maintained.

Analyst for Prefab Group

WILLIAM A. TUCKER of Alexandria, Va., is the new economic analyst and accountant for Prefabricated Home Manufacturers Institute. For the past year, he was economic analyst on the Washington staff of the National Association of Manufacturers.

TACK FASTER with DUO-FAST

Featuring
FOLLOW-THRU DRIVE



There's nothing more helpful than an efficient, quality tool. DUO-FAST Tackers have helped builders all over the country accomplish a quick, neat tacking job. For a true test, try a DUO-FAST Tacker the next time you install insulation.

Ask about our free service and parts policy.

FASTENER CORPORATION
888 Fletcher Street
Chicago, Illinois

ACME

Sash Balances for Double-Hung Windows



TWIN TYPE

Single or double installation. Counterbalancing springs for both upper and lower sash are in one case only 3/4" thick. Does not project beyond back side of pulley-stile.

SIDE TYPE

Mortise type balance. Can be used in either single or double installation.



OVERHEAD TYPE

Fits neatly into frame head of window. Single or double installation.

For wooden or metal windows, for new construction or modernizing Acme Sash Balances incorporate more than 20 years of successful application. Simple to install, easy to weatherstrip; friction-free, finger-pressure window lifting.

See your hardware or building supply dealer or write direct for literature.

ACME

SASH BALANCE COMPANY
1626 Long Beach Ave.
Los Angeles 21, Calif.

**The BENDIX WASHER and
the BENDIX DRYER, too!**
Featured in 100 Ridgcrest homes



Double-barreled sales appeal will be built into the next 100 Ridgcrest houses offered by Carroll, Hillman and Hedlund in this famous Seattle housing development.

These progressive builders have found that the Bendix automatic Washer packs tremendous selling pull. And their next offering of 100 homes will feature both the Bendix Washer and the Bendix automatic Dryer, in a package deal, as basic parts of the house.

Prices on these completely equipped homes range from \$7350 to \$9300. With a down payment of only \$250, monthly installments run as low as \$54.53, including principal, taxes, interest and insurance.

No wonder these builders look for increased customer interest. For the Bendix Washer banishes the drudgery of washday. It washes super-clean, rinses three times, drains itself, cleans itself and shuts itself off. And the Bendix Dryer ends the clothesline ordeal: no more trudging, stretching, waiting for a drying day. No more fear of smoke and soot fouling the drying clothes.

When you can offer a woman all that—in a package mortgage—you've got something! See your Bendix Dealer. Get the "sign of a smart builder" on your house.



Mrs. William Crayle gets her Carroll, Hillman and Hedlund "package mortgage" that includes the Bendix with the house.



BENDIX
automatic
Dryer

BENDIX
automatic
Washer



REZ
 makes
 fine wood finishing
 easier ...
 quicker ...
 more economical

This ready-to-use amber-clear sealer and primer protects floors, doors, sash, millwork, and plywood. It is a synthetic resin, especially formulated to penetrate the wood fibers—leaves a tough resinous deposit, thereby minimizing moisture absorption, grain raise and decay. Also, it acts to assure dimensional stability.

Rez* provides an ideal base for any type of finish—paint, stain, varnish.

See Your Dealer or Jobber

If Rez is new to you, or if you want current supply information on this easy-to-apply, quick-drying sealer and primer, see your dealer or jobber today. MONSANTO CHEMICAL COMPANY, Western Division, Seattle, Wash. . . . District Sales Offices: Los Angeles, San Francisco, Portsmouth, Va.

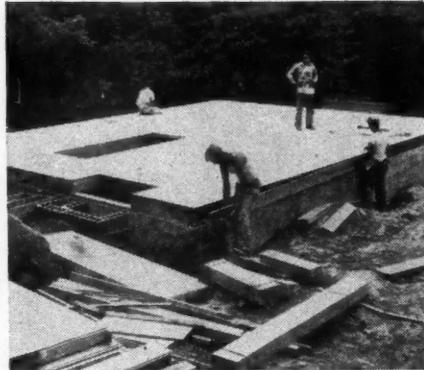
*Reg. U. S. Pat. Off.



SERVING INDUSTRY . . . WHICH SERVES MANKIND

Structural Plywood Surpasses Rigid Tests

AMERICAN HOUSES, INC., large prefabricator of houses, reports that weldwood, one of the plywoods it uses, has proved completely suitable as an integral structural factor. The U. S. Bureau of Standards officially-tested American Houses' structures for



PLYWOOD sub-flooring of partly prefabricated house over which finish is laid

strength and rigidity and found them 10 times as strong as minimum needs.

Floors are required to carry a live load of 45 pounds a square foot. The tests showed floors in the prefabs withstood in excess of 475 pounds. Walls must carry a rackling load of 1,800 pounds a lineal foot on the vertical.

(Continued to page 172)



Eliminate HANDSANDING!

UP TO 75% SAVINGS in time finishing or refinishing cabinets, doors, wood trim, stair treads, etc. A rugged, fast finishing sander for CURVED or flat, WET or dry work. Strate-line, back and forth action cuts no swirls, laps, stutters or gouges.

Write for literature

Detroit Surfacing Machine Company
 7458 W. Davison Detroit 4, Michigan

1000's ARE SAVING WITH IT!
 —Write for Facts!
 RECIPROCATING
ELECTRIC SANDER
Easyl

VAPOR CONDENSATION ON WINDOWS May Help Cupid . . .



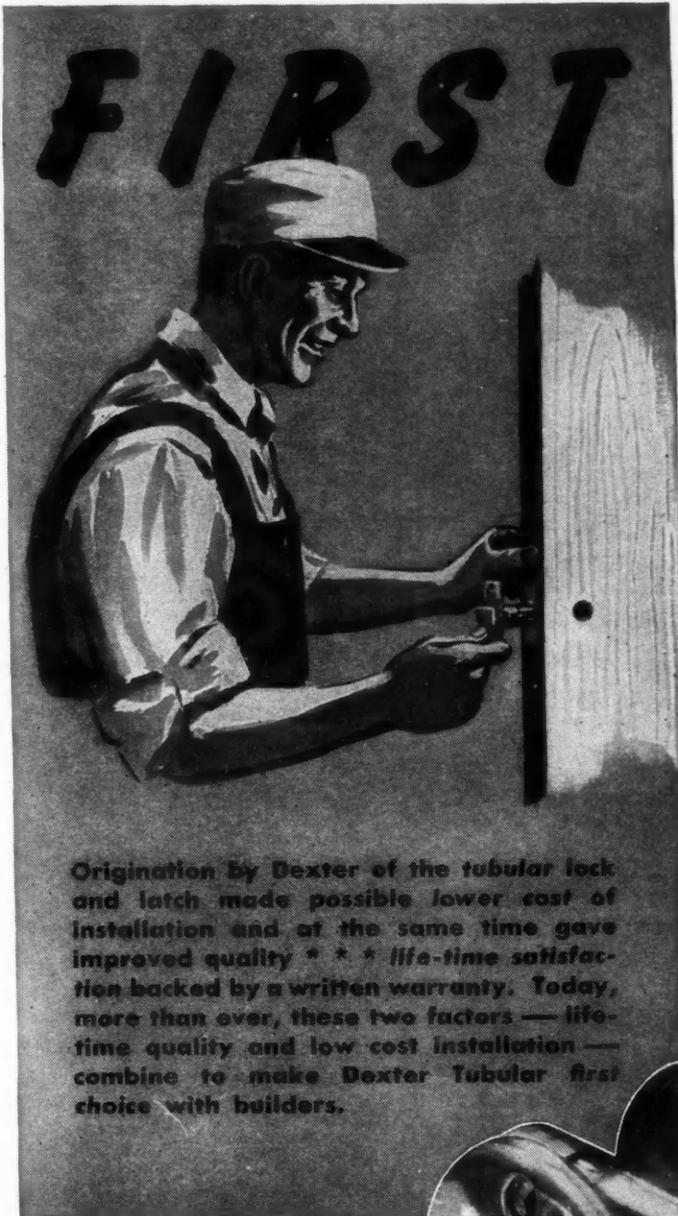
but
"In-wall" Condensation Invites Trouble

"Steam" on the window may be a boon to puppy love, but when the same vapor condenses within walls it can lead to serious trouble. Unchecked condensation may rob insulation of its efficiency, hasten structure rot, cause paint peeling and wall stains. A sure way to prevent "in-wall" moisture damage is with a separate vapor barrier. Architects the country over specify the standard—Bird Neponset Black Vapor Barrier. Applied on the warm side of insulation, Bird Neponset Black repels vapor, keeps insulation at peak efficiency, stops other condensation evils. Costs only about \$20 to protect a \$10,000 building. Consult Sweet's Architectural file, 9b-2. For sample, write Bird & Son, inc., 174 Wash. St., East Walpole, Mass.

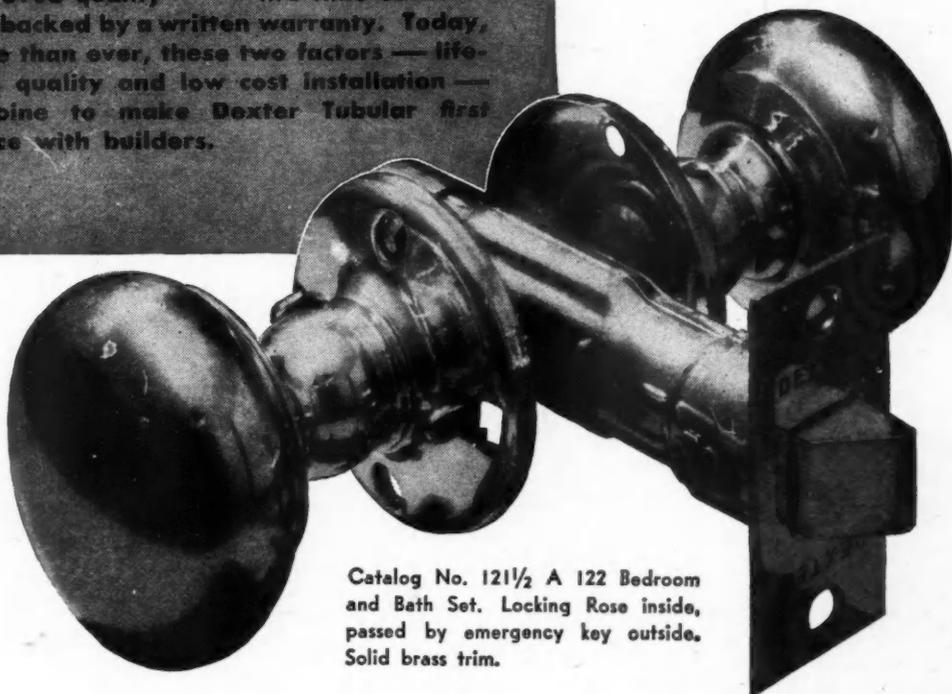
BIRD NEPONSET BLACK VAPOR BARRIER

Specifications: roll width: 36"; Sq. feet: 500; approximate wt.: 50 lbs. Asphalt Saturated. Coated both sides with glossy asphalt surface. Meets Federal Specifications UU-P-536 Grade E.

BIRD NEPONSET BLACK VAPOR BARRIER
 BIRD & SON, inc., E. WALPOLE, MASS.
 CHICAGO NEW YORK SHREVEPORT



**DEXTER
was first
with
LOW COST
INSTALLATION**



Catalog No. 121½ A 122 Bedroom and Bath Set. Locking Rose inside, passed by emergency key outside. Solid brass trim.

NATIONAL BRASS COMPANY

Grand Rapids, Michigan

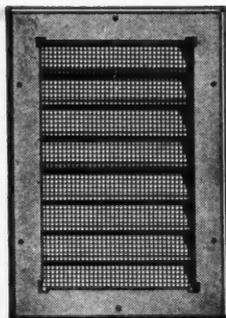
**MAKERS OF BUILDERS, CABINET, SCREEN DOOR
AND SHELF HARDWARE**



If You
INSULATE
You Must
VENTILATE
To Avoid Condensation
When You
Ventilate
Install

Arrow-Line
LOUVERS and You
Install
the Best
!

Your customer will be better satisfied if you install Arrow-Line, and you can sell at least two on every job! Materials are rustproof, acid resisting and corrosion proof. Face frame is Masonite Presdwood, no seams, spotwelds, rivets or screws. Well screened, dipped and sprayed, neutral gray finish. Arrow-Line gives unobstructed air travel, and their construction allows for expansion.

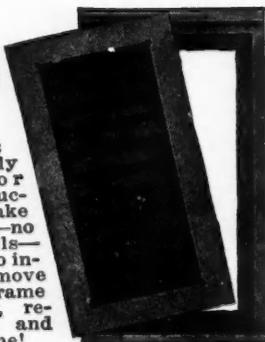


**Standard
Arrow-Line
Louvers**

are good for the life of any standard building. Can be installed from the inside. Made in 11 sizes.

**Special
Arrow-Line
Louvers**

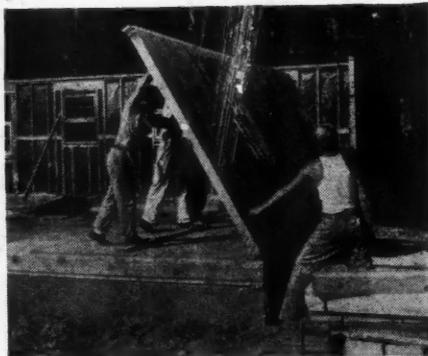
These louvers are especially designed for new construction. They make a neat job—no exposed nails—and are easy to install. Just remove louver, nail frame to sheathing, replace louver, and the job is done!



Get Them from Your Dealer or Jobber
If You Have a Special Louver
Problem, Write Us Because
LOUVERS ARE OUR BUSINESS
A. D. HEMPHILL CO.
Lake City, Minn.

(Continued from page 170)
Walls tested withstood in excess of 18,000 pounds.

American Houses uses plywood in prefabricating parts for residences ranging from small homes to garden-type apartments. Lumber and plywood conform to standard dimensions, with flexibility of choice in architectural de-



SIDEWALL is built with plywood sheathing sign, surfaces, colors, composition and room arrangement.

The company only fabricates parts of houses and the local builder or contractor does the actual construction. About one-third of the lumber in houses for which parts are furnished is plywood.

Roof sheathing is 3/8-inch plywood, although tests have shown 5/16 is adequate. Sub floors are 5/8-inch plywood instead of ordinary boards. Flooring units are 4 feet wide, are plant assembled

(Continued to page 174)



ALL THE EXCITEMENT of the Old West—against a background of modern luxury at the Last Frontier. Name-band dancing in the Ramona Room... carefree hours in the Gay Nineties Bar... 21 Club Casino.

The Early West in Modern Splendor

**HOTEL
LAST FRONTIER**
LAS VEGAS, NEVADA

**FASTER
CUTTING**
...with
Clipper Masonry Saws
Your Special Size and Shape Brick
or Concrete Block can now be
"Tailor-Made" at a moment's notice!



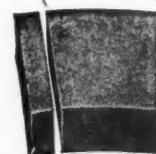
The new Clipper Multiple Cutting Principle makes possible faster cutting of every masonry material regardless of hardness.

Here are a few typical examples of the speed and accuracy with which concrete products and fire brick can be cut.



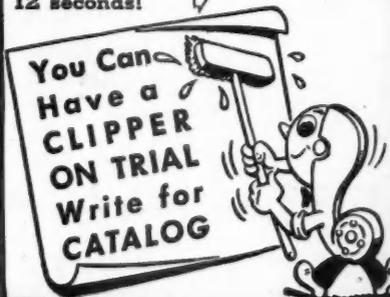
This concrete block, converted into a special size, was cut completely in two in 19 seconds.

One of the many intricate cuts performed on first quality clay brick for heat treating furnaces—made in 8 sec.



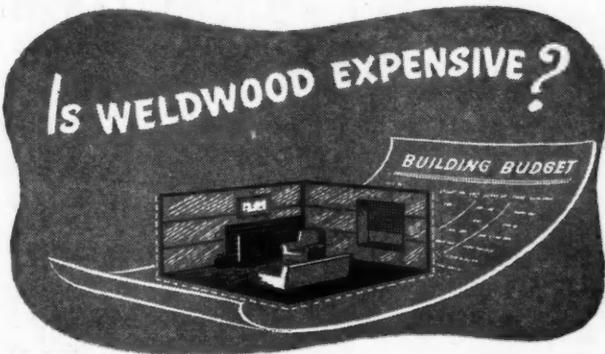
Rotary Kiln Blocks, cut to size for "key" bricks in rotary kilns, require only 10 sec. for completion of cut.

Basic refractories for steel furnaces or cement kilns must be accurately installed. This magnesite brick was cut in 12 seconds!



CLIPPER MFG. COMPANY
2808 Warwick, Kansas City 8, Mo.

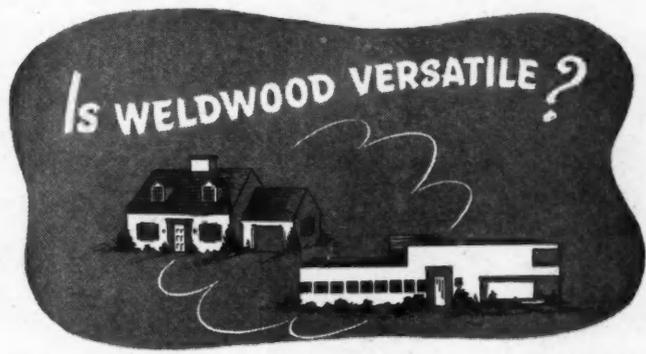
MANY OF YOUR CUSTOMERS CAN ANSWER THESE QUESTIONS...CAN YOU?



No. We'll readily admit a Weldwood-paneled room looks like a million. But when maintenance expense over the years is considered, a room paneled in Weldwood compares favorably in cost with ordinary plaster, paint and paper...both for new construction and remodeling.

Fact is, you can do a 12 x 18 room in Birch Weldwood for less than \$300**. . . materials and installation. Stop and think how little that adds to monthly FHA payments, with a home improvement loan.

Many of your customers know this!



Yes, indeed. Choose your style, then choose Weldwood for the interior. There's a wood for every mood. You'll find exactly what's needed for traditional effects; also beautiful woods for sleek, modern twentieth-century surroundings. Use Weldwood in several rooms, or just one. Do all four walls, even one wall, or simply the dado.

And you can work many clever, "built-in" miracles with Weldwood, for it provides structural strength as well as decorative beauty.

Many of your customers know this!

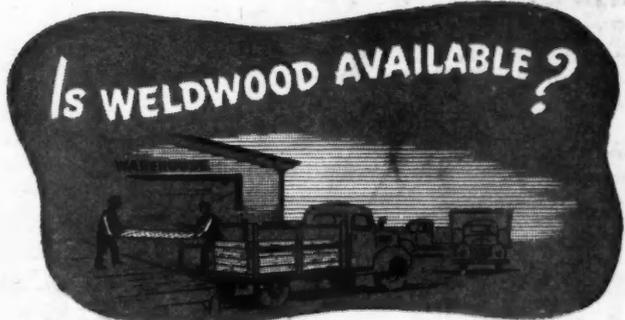


It is. Weldwood Plywood Panels are guaranteed for the life of the building in which they're installed.

And they'll remain luxuriously beautiful with a minimum of maintenance. No recurrent expense for papering and painting.

Durability like this makes Weldwood a good investment. Either in a new home or for remodeling, it adds a permanent value.

Many of your customers know this!



Yes, right now. Most grades and varieties of Weldwood . . . especially the decorative hardwoods . . . can be obtained immediately in the most popular sizes and thicknesses.

Fine domestic woods such as birch, oak, walnut, knotty pine and vertical grain cedar. Rich imported woods like de oro, mahogany, primavera. There's a wood to fit every taste and every pocketbook in the Weldwood line.

Many of your customers know this, too!

Why do your customers know these things? Because, in recent years, we've maintained a steady advertising program to tell them. We've hammered home the advantages of Weldwood in ad after ad.

Beauty. Durability. Versatility. Ease of installation. And Economy.

Has our effort had any effect? Well, a recent independent

survey indicates that 1 out of every 3 home-minded Americans wants wood-paneling in at least one room.

And Weldwood gives it to them at a price they can afford to pay.

Take advantage of this acceptance. You'll find a warm reception for plans that include Weldwood Walls. We'll be glad to send complete data.

**Prices may vary slightly in different sections of the country, due to local conditions.

- Weldwood* Hardwood Plywood
 - Douglas Fir Weldwood
 - Mengel Flush Doors
 - Douglas Fir Doors
 - Overhead Garage Doors
 - Molded Plywood
 - Armorply* (metal-faced plywood)
 - Tekwood* (paper-faced plywood)
 - Flexmeel
 - Weldwood Glue* and other adhesives
 - Weldtex* (striated plywood)
 - Decorative Micarta*
 - Flexwood*
 - Flexglass*
 - Firzite*
- *Reg. U.S. Pat. Off.

WELDWOOD Plywood

Weldwood Plywood and Mengel Flush Doors are products of

UNITED STATES PLYWOOD CORPORATION
New York 18, N. Y.

THE MENDEL COMPANY
Louisville 1, Ky.

Distributing units in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, Fresno, High Point, Los Angeles, Milwaukee, Newark, New York, Oakland, Philadelphia, Pittsburgh, Rochester, San Francisco, Seattle. Also U.S.-Mengel Plywoods, Inc., distributing units in Atlanta, Dallas, Jacksonville, Louisville, New Orleans, Houston, St. Louis. In Canada: United States Plywood of Canada, Limited, Toronto. Send inquiries to nearest point.



Weldwood Plywood is made in both Interior and Exterior types, the former bonded with extended urea resins and other approved bonding agents; the latter with phenol formaldehyde synthetic resin.

ware

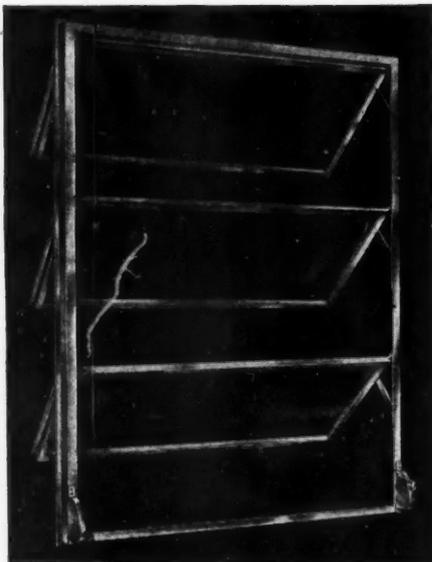
aluminum windows



beautiful windows that need no painting • never rust • never rot • lightweight yet rigid

the heavier window sections of ware aluminum windows assure permanent alignment, storm-tightness. ware aluminum windows are easy to open and close. their clean, silvery beauty remains throughout the years.

ware laboratories, inc.
3700 n. w. 25th st., miami 35, fla.
general sales office
21 west street, new york 6, n. y.



(Continued from page 172)
and are of required length to bear girders and sills. Portions of plywood panels are pre-cut and shipped for field application by the builder.

Wall panels are made of plywood wall sheathing on conventional 2x4 studs, 16 inches on center. They are shipped ready for installation with choice of exterior and interior finish left to the builder.

Header strips of 5/16-inch plywood, ripped to required width, are applied to



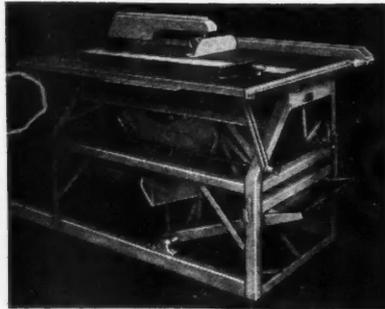
LIVING room and dining alcove in prefab

exterior walls between wall units and foundation. In exterior walls, ribbon strip of 5/8-inch plywood is set into studs flush with the interior face. Exterior faces are covered with 5/16-inch plywood. Sections are factory-assembled into units approximately 8x4 feet.

Window panels are made of 1/4-inch exterior plywood. Gable and panels are assembled into units with sheathing of 5/16-inch plywood.

GET BEARCATS

ON YOUR JOBS



for FASTER SAWING

You'll cut costs *plenty*—with Bearcat! Fast, foot-pedal swing cut-off . . . Rip, cut-off at all angles. Portable from job-to-job . . . Rugged, welded steel frame and top . . . Heavy-duty ball bearings. Two sizes: XCO (above) for heaviest jobs, XJR for home-builders. QUICK DELIVERY.

Write TODAY for Literature!

DEALERS—
SOME AREAS
STILL OPEN

THE PAXSON CO.
57 "A" Ave., Dowagiac, Michigan

BUILDING BEARCATS FOR 25 YEARS



No weights—no cords—no mortising. Just drill one hole, that's all. Nothing could be quicker or simpler.

Vikre New Economy Sash Holders help keep construction costs down . . . save you dollars per opening and time on the job.

Tested and proved for years, Vikre Sash Holders are easily installed . . . and once adjusted require no more attention. Use them wherever there are windows and for windows everywhere.

Vikre New Economy Sash Holders are available in quantity through your building supply dealer For full details write:

J. N. VIKRE CO.
3016 14th Ave. S. • Minneapolis, Minn.



**OWNER
MANAGEMENT**

Guarantees the true spirit of

Hospitality

. . . it always prevails in every perfect detail of the service and atmosphere you'll enjoy at

The
DRAKE
Chicago

Edwin L. Brashears
PRESIDENT





**INSTALL
CHRYSLER
AIRTEMP
HEATING!**

In most of America a house is no more comfortable and livable than its heating system makes it.

That's why builders all over the country are learning from project experience that it pays to install Chrysler Airtemp heating—a name which prospective buyers know means the best in quality and performance.

The silent salesmanship of Chrysler Airtemp *does no more!*

Chrysler Airtemp offers one of the most complete heating lines in America—warm air, steam or hot water; gas, oil or coal fired. Another quality product that helps sell houses is a Chrysler Airtemp hot water heater.

In your next project—or your next house—install Chrysler Airtemp.

**CHRYSLER AIRTEMP G-70 GAS-FIRED WINTER AIR CONDITIONER
HELPS SELL QUALITY PROJECT IN OHIO**

This compact, economical gas unit was chosen for this project of 29 high-quality brick houses built by the Will-O-Beach Improvement Company

in Wickliff, Ohio. It helped sell houses because it's Chrysler Airtemp—which always means top quality, finest performance at reasonable prices.



Automatically Yours



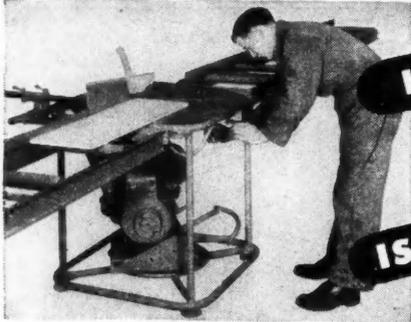
**HEATING • AIR CONDITIONING
COMMERCIAL REFRIGERATION**

**Structural
Reinforcing or
other Blding Steel
Shipped from Stock**

Write for Stock List—
your guide to over 10,000
different kinds, shapes
and sizes of steel for
quick shipment from ten
plants.

Joseph T. Ryerson & Son, Inc., Plants at: New York, Boston, Philadelphia,
Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee,
St. Louis, Los Angeles.

RYERSON



HAS SPEED

Rotating table
speeds up lumber
cutting.

IS VERSATILE

Will cross cut,
rip, miter, bevel rip,
compound miter, ten-
on and groove.

Here is a speedy, money
saving saw adaptable to a
wide variety of applications.
It is portable — easily taken
to the job, can be carried by
two men. It will rip to a
depth of 4 inches and cross
cut a 3" x 12". Furnished
with gasoline engine or elec-
tric motor drive. Write for
Bulletin 132.

- BUILDING CONTRACTORS**
-
- LUMBER YARDS**
-
- CARPENTER SHOPS**
-
- INDUSTRIAL PLANTS**
-
- CRATING AND SHIPPING**

NORDBERG MFG. CO., Milwaukee 7, Wis.

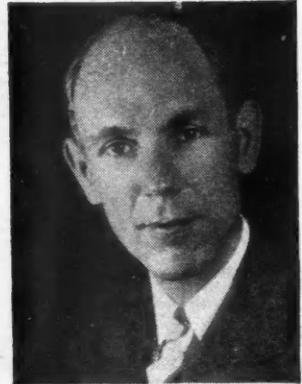
**NORDBERG-BUDAY
POWER SAW**

**American Builder Names N. L. Clark
Editor in East; Rodd in California**

NEWELL L. CLARK has been named eastern editor of *American Builder* by Editor Edward G. Gavin to succeed Sterling H. Albert. Mr. Albert resigned to become chief underwriter of the Federal Housing Administration's Milwaukee insuring office. Mr. Gavin also announces the ap-



NEWELL L. CLARK



WILLIAM C. RODD

pointment of William C. Rodd as contributing editor from southern California.

Mr. Clark brings to *American Builder* 14 years' experience as a writer and trade magazine editor. In addition, he has an educational background and experience in engineering and land planning.

From 1941 until his resignation in September, he was editor of one of several business magazines published by Vance Publishing Corporation of Chicago. For seven years prior

(Continued to page 178)



Mr. Builder...Mr. Architect...



Here's proof that KIMSUL* is a remarkably better insulation for most types of construction

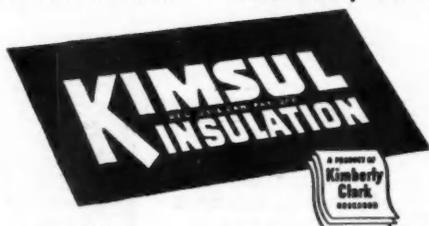
KIMSUL* insulation is equally efficient in homes, commercial buildings and industrial construction. Scientifically designed, its many-layer stitched construction automatically provides uniform protection over every square inch of insulated area. KIMSUL is permanent. Won't sag, sift, or settle—resists fire, moisture, vermin and fungi, is termite-proof. It's light in weight, adds little to structural load. And it's easy to apply. The KIMSUL blanket is prefabricated to fit standard stud and rafter widths; contains no sharp particles to irritate workmen's skin; requires no special installation skill, no expensive machinery.



Send today for this instructive guide on the latest and best ways to insulate your buildings with many-layer KIMSUL. Simply mail a request on your letterhead for a copy of the Application Data File.

Send today for this instructive guide on the latest and best ways to insulate your buildings with many-layer KIMSUL. Simply mail a request on your letterhead for a copy of the Application Data File.

KIMBERLY-CLARK CORPORATION
KIMSUL DIVISION • NEENAH, WISCONSIN

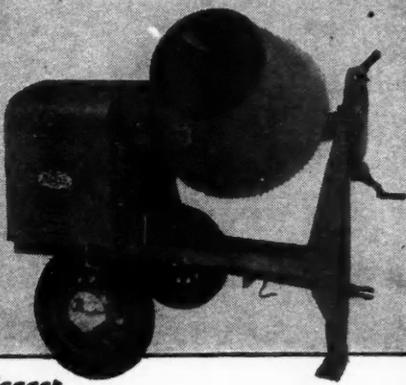


*T. M. Reg. U. S. & Can. Pat. Off.
†Trademark

Check these 6 exclusive KIMSUL advantages...

- 1. Many-layer Construction:** KIMSUL insulation is designed on the many-layer principle. Dozens of layers creating millions of tiny trapped-air cells account for the high insulating efficiency of KIMSUL ("k" factor 0.27).
- 2. PYROGARD† Fire-Resistant Cover:** For added protection, even the cover of KIMSUL is scientifically treated to resist fire and flame—making KIMSUL unique among blanket and batt type insulations.
- 3. Handy Compressed Package:** KIMSUL is packaged in easily handled rolls; comes compressed to 1/5th installed length.
- 4. Excellent Caulking:** Trimmed pieces of KIMSUL are efficient caulking for cracks around window and door frames—where cold air may enter.
- 5. Extra Width:** The KIMSUL blanket is made extra wide to provide fully insulated fastening edges.
- 6. Extra Flexibility:** KIMSUL fits in corners, tucks behind pipes, electrical wiring, and odd-shaped obstructions.

As members of the Producers' Council, Inc., we are cooperating in the Industry-Engineered Homes Program sponsored by the Producers' Council and the National Retail Lumber Dealers' Association.



ECLIPSE
TILTING
DRUM
CONCRETE
MIXER

A Full Half Bagger
AN Improved LOW-PRICED MIXER

A handy, profitable 3½ cu. ft. machine that will handle all classes of work done by the average contractor. The Improved Eclipse 3½ Mixer embodies all the latest refinements in design and is guaranteed as to materials and workmanship. Engine runs in oil and is controlled by throttling governor to insure constant speed and steady power. The engine is completely enclosed in a steel housing. Main bearings are bronze, readily accessible. Sturdily built and easy to move.

Quick uniform mixing — easy to load — visible mixing action — handles coarse or fine aggregate — moves anywhere.

WRITE OR WIRE FOR DETAILS

MANUFACTURED BY
GEO. C. CHRISTOPHER & SON IRON WORKS
 FOR FORTY YEARS THE WORLD'S BEST IN CONCRETE MACHINES
 P. O. BOX 610 WICHITA, KANSAS

(Continued from page 176)

to 1941 he was editor of a home gardening department for the Springfield Union, a metropolitan newspaper in Springfield, Mass. For four years he covered municipal news and business news for that publication.

For two years, Mr. Clark was assistant planning engineer for the City Planning Board in Springfield. His work there was concerned principally with land planning and zoning. He also worked on plat plans for the Board of Assessors of Springfield.

Mr. Clark studied civil engineering at Worcester Polytechnic Institute in Massachusetts and landscape architecture at Massachusetts State College, receiving his degree from the latter institution in 1932.

Mr. Clark is thoroughly familiar with the East. A native of New England, he lived in that section of the country until 1941 when he joined the Vance corporation. For the first two years of his association with that firm, he was stationed in New York City. His headquarters will be in the Eastern offices of *American Builder* at 30 Church Street, New York City.

Mr. Albert, former eastern editor and also director of research for *American Builder*, returns to a position which he held when FHA first was created in 1934. At that time he was named chief underwriter for Wisconsin. Early in the war, Mr. Albert served in the administrator's office of the National Housing Agency until 1943, when he became assistant to Frank W. Cortright, executive vice-president of the National Association of Home Builders. He joined the *American Builder* staff in 1945.

The new contributing editor, Mr. Rodd, is located in Los Angeles and will cover developments in the Pacific Southwest. Currently, he is consultant to the Celotex Corporation. He joined the Celotex Corporation soon after its formation and worked up through the sales department to the position of advertising manager. He resigned in 1945 and went to California where he has done publicity work for the Kaiser Community Homes as well as his consulting work for Celotex.

POL-MER-IK'S BACK!



SEE PAGE 190

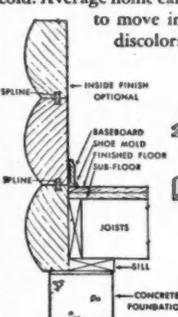
LOG STRUCTURES



For unusual homes of character and distinction... for typical western homes of rustic beauty. Materials available NOW... not 30 days... not next week... but TODAY!

Effects substantial savings in construction costs. No studding required. Meets FHA construction requirements and is easily financed through FHA loans or your local bank.

Conventional or rustic interior finish and modern arrangements... adaptable to any floor plan. Solid wood walls provide best insulation against heat and cold. Average home can be completed in 30 days ready to move in! Chemically treated to resist discoloration, dry rot, and termites.



THE Lowe CO.
 ENGINEERS AND CONSULTANTS
 CIVIL MECHANICAL ELECTRICAL

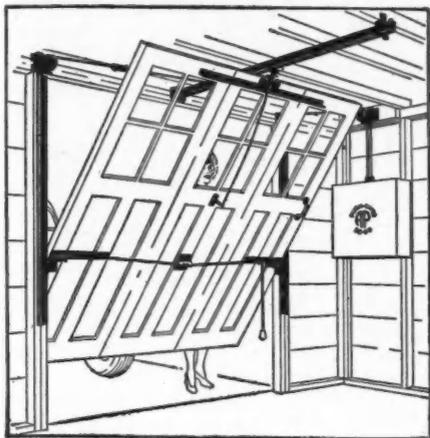
EXCLUSIVE NATIONAL and INTERNATIONAL DISTRIBUTORS
 Dept. AB-11, 244 W. Colorado
 Glendale 4, California

**CABINS
 COTTAGES
 RUSTIC HOMES
 RANCH HOMES
 RESORT BUILDINGS
 MOTELS
 RESTAURANTS**

Planning Consultation Available

Some Choice Exclusive Dealer Territories Still Available

Customer Satisfaction Assured with easy-to-install



ALLITH

50-50 PUSH-OVER GARAGE DOOR HARDWARE

Heavy duty, well engineered garage door hardware. Result: a quickly installed, easily operated, overhead door. Designed to insure **customer satisfaction**.

ALLITH-PROUTY, INC.
DANVILLE, ILLINOIS

Stucco Spraying
Today's Outstanding Business Opportunity



Beauty and protection are sprayed on old and new buildings . . . exterior and interior surfaces . . . by **COLORCRETE**. It's a plastic, water-resistant material, spread evenly over surfaces and forced into cracks by air pressure. Fuses to masonry with enduring tenacity. Many textures. Range of 30 smart colors. Fully proven by 20 years of actual use under all conditions.

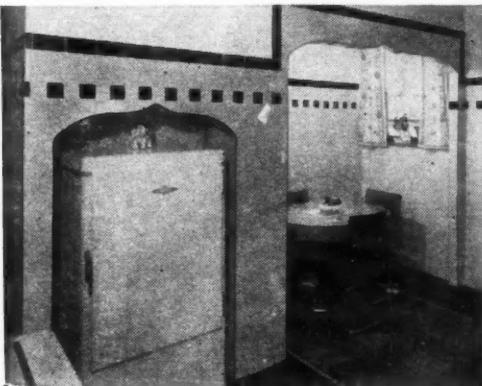
BIG EARNINGS for COLORCRETTERS



Colorcrete ties in with today's huge building program. Renews old buildings. Makes new construction more attractive and enduring. Large waiting market, because building owners get long, lasting beauty and protective values at low price. Yet your selling price can be several times your basic cost. Machine is easy to operate. Moderate investment. Write or wire for complete information.

Colorcrete Industries, Inc.
500 Ottawa Avenue Holland, Mich.

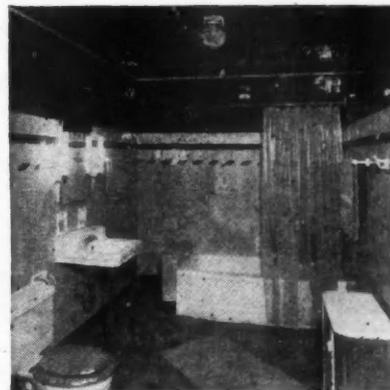
COLORCRETE



IMPORTANT FACTS

you should know about **STEEL WALL TILE**

1. Bathrooms, Kitchens, Taverns, Dairies, Bakeries, Recreation Rooms, Breakfast Nooks, etc., take on new life and character when finished with Steel Wall Tile.
2. Steel Wall Tile makes drab, painted walls sparkle with new life-long beauty, is easy to clean, and will not chip, crack, craze or buckle.
3. Steel Wall Tile is manufactured with a tough, high-gloss, baked-on enamel finish. The steel is protected by a coating.
4. Steel Wall Tile may be installed over old plaster, new plaster, wall board, sheetrock, plywood, or any smooth surfaced wall material.
5. No nails or screws are used to install Steel Wall Tile. Each individual tile is imbedded in a mastic cement to provide a completely waterproof finish for the wall.
6. Steel Wall Tile is heat resistant and yields additional fire protection wherever installed.
7. Steel Wall Tile may be had in a variety of colors to give unlimited color and design combinations.
8. Steel Wall Tile is ready for immediate delivery in small or large quantity orders.
9. This is the house that service and quality built. It's new, modern production facilities are capable of furnishing a high quality product in a continually increasing volume.



For the alert, progressive distributor or dealer the Steel Wall Tile Company has an interesting proposition which will yield a continuing flow of profit for years to come.

SEND FOR DETAILS TODAY!

STEEL WALL TILE COMPANY

Factory and Main Offices
1706 W. North Avenue, Chicago, Illinois

Retail Show Rooms
829 Milwaukee Avenue, Chicago, Illinois



IT costs no more for a beautiful Modernfold Door than a conventional swinging door. And . . . Modernfold gives you not only sparkling, colorful beauty but amazing utility as well. In wardrobes, bathrooms, bedrooms, kitchens, etc., it saves space—for it eliminates the swing of the conventional door. Its cost is comparable because in considering the price of the swinging door, there is not only the cost of the door, but the price of trim, jamb, hardware, erection, painting, etc. Get full details on Modernfold's beauty and space-saving today.

*Cost of door 2' 4" wide x 6' 8½" high. Other doors at correspondingly low cost.

Consult your telephone directory for names of installing distributors.

NEW CASTLE PRODUCTS, NEW CASTLE, IND.

ENJOY THE CONVENIENCE and SECURITY

of *Automatic Circuit Protection*

... in your home



Ⓢ TYPE AC CIRCUIT BREAKER LOAD CENTER

PROTECTS WIRING AND APPLIANCES

When a short circuit or sustained overload threatens to disrupt electrical service in the home the Ⓢ Load Center Circuit Breakers automatically disconnect the electrical current, eliminating the possibility of burned out equipment.

NOTHING TO REPLACE

Merely remove the cause of the trouble and flip the handle of the Ⓢ Circuit Breaker to the "on" position. Full electrical service is immediately restored.

SHOCKPROOF

The Ⓢ Load Center is absolutely shockproof and simple to operate. Add to the convenience and security of the home by installing the attractive Ⓢ Circuit Breaker Load Center now

Ask your electrical contractor for further information, or write for Bulletin No. 75.

Frank Adam
ELECTRIC COMPANY
ST. LOUIS

Dollars Loaned for Home Building Will Reach 115 Year High in '47

SAVING associations will reach a 115 year high in 1947 in the volume of dollars provided for the building of new homes. This report comes from the United States Savings and Loan League. Preliminary reports on construction loans made by the associations in the third quarter indicate that between three quarters of a billion and a billion dollars will flow from this source into the pockets of building tradesmen, builders and dealers in building materials.

The volume of dollars poured into new home building has been increasing each month since September 1945. Throughout 1947, the increase over the same month of 1946 has been upwards of 30 per cent.

Many factors besides the upswing in home building, which has made 1947 memorable to the trade, have been responsible for the savings and loan expansion in construction loans according to Ralph M. Smith, president of the League. Savings and loan associations are better equipped to handle construction loans than they have ever been in their history. More of them are making this type of loan direct to the contractor than ever before. Many have been perfecting their techniques throughout the war years when there was not much construction loan demand but lots of opportunity to iron out details in the buildings for which they did provide money.

Also, the leads they established early in making loans to veterans under the GI Bill of Rights gave them a large demand from veterans as soon as building opened up in sizable volume. Many savings and loan institutions are financing the larger projects in which several homes are planned at once, and some are collaborating in the financing of larger new home developments.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946

Of American Builder & Building Age published monthly at Chicago, Ill., for October 1, 1947.

State of Illinois) ss.
County of Cook) ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Edward G. Gavin, who, having been duly sworn according to law, depose and says that he is the Editor of the American Builder & Building Age and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily, weekly, semiweekly or triweekly newspaper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the act of August 24, 1912, as amended by the acts of March 3, 1933, and July 2, 1946 (section 537, Postal Laws and Regulations), printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, Simmons-Boardman Publishing Corp., 105 West Adams St., Chicago, Ill.; Editor, Edward G. Gavin, 105 West Adams St., Chicago, Ill.; Managing Editor, Lyn E. Arent, 105 West Adams St., Chicago, Ill.; Business Manager, Robert H. Morris, 105 West Adams St., Chicago, Ill.

2. That the owners are: Simmons-Boardman Publishing Corporation, 50 Church Street, New York 7, N. Y.; Stockholders of 1 per cent or more of the total amount of stock are: I. R. Simmons, 15 Hillcrest Dr., Pelham Manor, N. Y.; P. A. Lee, Hopatcong, N. J.; Henry Lee, Hopatcong, N. J.; E. G. Wright, 398 North Walnut Street, East Orange, N. J.; S. O. Dunn, 105 West Adams Street, Chicago, Ill.; C. E. Dunn, 3500 Sheridan Blvd., Chicago, Ill.; Mae E. Howson, 6922 Paxton Avenue, Chicago, Ill.; Marie J. Blecker, Woodbury, Conn.; Ella L. Mills or Catherin S. Mills, Westfield, N. J.; Maude E. Slate, Summit, N. J.; E. H. Thompson, East Cleveland, Ohio; Spencer Trask & Company, 25 Broad Street, New York, N. Y. General Partners of Spencer Trask & Company are: Edwin M. Bulkeley, 817 Fifth Avenue, New York, N. Y.; Acosta Nichols, Cold Spring Road, Oyster Bay, N. Y.; Cecil Barret, Bar Harbor, Me.; C. Everett Bacon, 16 Erwin Park, Montclair, N. J.; F. Malbone Rhodget, 65 Patterson Ave., Greenwich, Conn.; Arthur G. Gilbert, 440 Park Avenue, New York, N. Y.; Henry S. Allen, 407 Highland Avenue, Orange, N. J.; William Kurt Beckers, 39 E. 79th Street, New York 16, N. Y.; Edwin M. Bulkeley, Jr., 40 East 66th Street, New York 16, N. Y.; Charles F. Bryan, 83 Adams Street, Garden City, L. I., N. Y.; Harold H. Cook, 259 South Mountain Ave., Montclair, N. J.; Brittin C. Eustis, Old Chester Road, Essex Falls, N. J.; Anton Henry Rice, Jr., 1 Riverview Road, Irvington-on-Hudson, N. Y.; J. Streicher & Company, 2 Rector Street, New York 6, N. Y.; Partners of J. Streicher & Company are: Joseph Streicher; Ethel Streicher; and J. L. Streicher, all of 2 Rector Street, New York 6, N. Y.; Ingalls & Snyder, 100 Broadway, New York, N. Y. General Partners of Ingalls & Snyder are: Warner W. Kent, Samuel H. Watts, Ralph P. Hinchman, Jr., Daniel S. Monroe, Thorvald H. Tenney, John W. Easton, Chester C. Beldran, all of 100 Broadway, New York, N. Y.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.

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

EDWARD G. GAVIN,
Editor.

Sworn to and subscribed before me this 26th day of September, 1947.
[SEAL]

RALPH E. WESTERMAN,
Notary Public.

(My commission expires February 3, 1949.)

**MAKE YOUR
OLD BRUSHES**

LIKE NEW



Cabot's Brush Cleaner smacks out hardened paint right down to the heel. Leaves brushes soft, flexible, lustrous . . . like new. Harmless to bristles and setting. Non-inflammable. Won't evaporate. Can be used over and over.



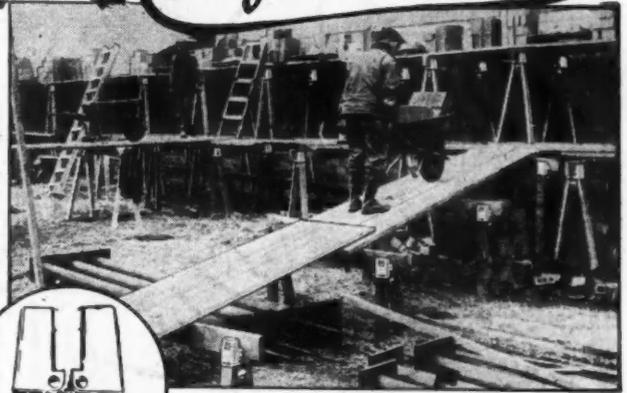
**TRY A
FREE SAMPLE**

Just soak that paint-caked brush in Cabot's Brush Cleaner and rinse in water. You'll find lots of life left in your oldest, hardest brushes. Cabot's Brush Cleaner dissolves and removes paint, tar, asphalt, varnish, shellac, casein. Write today! Samuel Cabot, Inc., 2059 Oliver Bldg., Boston 9, Mass.

Cabot's BRUSH CLEANER



NO NAILS • NO BOLTS
needed to make
Safe SCAFFOLDS



Use **PATENTED DU-ALL** SCAFFOLD BRACKETS

TO MAKE SCAFFOLDS ON JOB—ANY HEIGHT

NO STOCK TRESTLES. Save time and money. Use Standard 2" lumber, build safe scaffolds on the job — quick, easy with DU-ALL BRACKETS. No damage to lumber. 12 gauge steel, anti-slip lugs. Used by general contractors, masons, plasterers, etc.

Write for free information on how to cut your costs with DU-ALL. Some excellent territories still available.

DU-ALL SCAFFOLD BRACKET COMPANY
DEPT. M, 44 EAST BROAD STREET COLUMBUS, OHIO

**SEND THE RIOT SQUAD
POL-MER-IK'S BACK!**



SEE PAGE 190

The
HEATILATOR*
makes any Fireplace
EASIER
to
BUILD!



There's no damper or smoke dome to install, no throat or firebox to form, when you build a fireplace around the Heatilator unit. All these are built-in parts. That's why the Heatilator saves time, money, labor. There's less masonry to lay, fewer parts to handle.

ASSURES CORRECT DESIGN

The Heatilator is a scientifically designed steel form around which the masonry for any style of fireplace is easily laid. It assures correct construction, eliminates faults that commonly cause smoking. The Heatilator circulates heat, too, warms all the room and even adjoining rooms. Proved all over America for 20 years! Write today for free installation data. Heatilator, Inc., 4111 East Brighton Ave., Syracuse 5, N. Y.

* Heatilator is the registered trade mark of Heatilator, Inc.

HEATILATOR FIREPLACE



Asphalt Tile Institute and Government Unit Recommend Standardization of Asphalt Tile

AS A move to help the asphalt tile industry meet heavy current demands for this flooring material, and to effect all possible economies in its manufacture, distribution and use, the Division of Simplified Practice of the National Bureau of Standards, in cooperation with the Asphalt Tile Institute, has just issued recommendations for standardization of the product.

Simplified Practice Recommendation R225-47 is the result of nearly a year's study and approval by manufacturers, dealers and users of asphalt tile.

If adopted, the recommendation will mean that it will be unnecessary to manufacture or stock large numbers of items that are practically duplications, or those for which demand is small. The manufacturer will have less capital tied up in slow-moving stocks and can effect production economies. Distributors can concentrate sales efforts on fewer numbers and consumers will receive better service and values.

The recommendation covers both colors and dimensions, as follows: Color group A; plain colors only, black and dark red. Group B; marbelized colors only, background colors of black, dark brown and dark red, mottled with any one or more of the following—white, red, yellow and green.

Group C; plain colors, dark green, light green, light gray, light red, medium red, tan and buff; marbelized colors of seven background colors and mottled with any one or more colors to make seven color patterns. Group D; plain colors, cream, white and blue; marbelized colors of three background colors corresponding to these plain colors and mottled with any one or more colors to make three color patterns.

The tile would be manufactured in these standard sizes in both 1/8-inch and 3/16-inch thicknesses: 6 x 12, 9 x 9 and 12 x 12 inches; border tile 18 x 24 inches, the required width to be cut on the job from this size; half

(Continued to page 184)

Lemco SOLID STEEL CASEMENTS
America's Oldest Casement Windows



Lemco's thirty years of quality workmanship with over one million casements satisfactorily installed is your guarantee of a perfect job.

Immediate shipments from our large warehouse stock.

See our catalog in Sweet's or write today for your copy.

CROFT STEEL PRODUCTS, Inc.

JAMESTOWN, N. Y.

N. Y. C. SALES OFFICE — 370 LEXINGTON AVENUE, NEW YORK 17, N. Y.

T&S TORRINGTON

Hidalift

100% CONCEALED SASH BALANCE

The trim architectural lines made possible by the elimination of bulky old-style sash-weight boxes appeal to home designers and builders . . . are positive selling points to the prospective home owner. Other important features are:

SELF-CENTERING An exclusive feature of HIDALIFT Sash Balance is the self-centering guide bushing which maintains perfect balance . . . prevents jamming . . . eliminates templates in installation.

EASY TO INSTALL After a sash has been ploughed, HIDALIFT is attached quickly and easily with only two screws.

LIFETIME SERVICE HIDALIFT is sturdily made and all parts are permanently rust proofed. The tension spring is sealed within the tubing to prevent wear caused by dust.

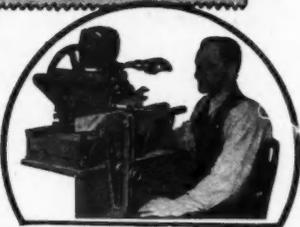
WRITE for completely descriptive literature including installation details and listing sizes and specifications for all standard sash sizes.

TURNER & SEYMOUR MFG. CO.
TORRINGTON, CONN.

SAW-FILING

Carpenters Make up to \$2 or \$3 an hour in Spare Time

With a Foley Automatic Saw Filer you can file hand, band and circular saws better than the most expert hand filer. Cash business, no canvassing. No eyestrain, no experience needed. "Bought a Foley, one year later had all debts paid and \$400 on new home. Many days I earn as much as \$16.00."—J. H. Kellogg. Send coupon for FREE Plan, no obligation. Large Contractors and Builders who have many saws to file can increase production, do better work and reduce filing costs with a Foley Saw Filer. Soon pays its cost. Get the facts.



FOLEY MFG. CO., 1124-7 Foley Bldg., Minneapolis 18, Minn.

- Send Free Plan on Custom Saw Filing.
- I want to file saws for crew of about (10-25-50-100) men (Check No.)

Name _____

Address _____

Hot RAPID-FIRE GLAZING

Drives 'em in at machine-gun speed

Red Devil
AUTOMATIC DIAMOND POINT DRIVERS

Glaze with one hand. Efficient from EVERY position and angle. Securely hold clips of 100 DIAMOND POINTS which won't bend or corrode. Drive into hardest wood. Diamond Points for No. 1 (1 1/2") package of 50 sticks of 100 each (5,000 points); for No. 2 (1") package of 40 sticks of 100 each (4,000 points).

RED DEVIL TOOLS, Irvington 11, N. J., U. S. A.

Glaziers and Painters Tools and Machines Since 1872

Blo-Fan

IT'S A NATURAL

A natural for correct ventilation. BLO-FAN, combination fan and blower—installs in the ceiling—where a fan belongs.

A natural for profit. BLO-FAN makes prospective buyers feel your home is genuinely modern.

Distributed everywhere.
Write for complete information.

PRYNE & CO. INC., Los Angeles 54, California - Chicago - New York

ROCHESTER SPIRAL SASH BALANCE

CONCEALED! NO MORTISING! NO ADJUSTING! IMPROVED!

YOU GET WEATHER TIGHT CONSTRUCTION WITH THESE OUTSTANDING BALANCES!

Elimination of weight boxes assures weather-tight construction... no air leakage through or around the weight box. Insulation can be brought in direct contact with frame. Popular types of weather stripping can be used. Since there are no pulley holes or hollow weight boxes, the so-called "elsewhere" air leakage, which weather stripping cannot prevent, is eliminated.

See your jobber today for complete details or write direct.

Our 53rd Year of Quality Production

MILWAUKEE STAMPING CO.
302 S. 72nd STREET, MILWAUKEE 14, WIS.

All You Need is a Screwdriver to Install Tru-sized DOORS

**NO Sawing!
NO Planing!
NO Fitting!
NO Priming!**

THEY'RE *Tru-sized*

Save up to 85% on your job costs! Order Tru-sized Doors all ready to install—No sawing, No planing, No fitting, No priming!

Tru-sized Doors come to you perfectly sized, squared, and resin prime coated. Also available machined for standard lock and hinges. In just a few minutes—with only a screwdriver—you can have a complete, accurate door installation!

Find out the facts about time-saving, work-saving, money-saving Tru-sized Doors! Write Dept. 8AB for FREE information.

THE WHEELER, OSGOOD COMPANY

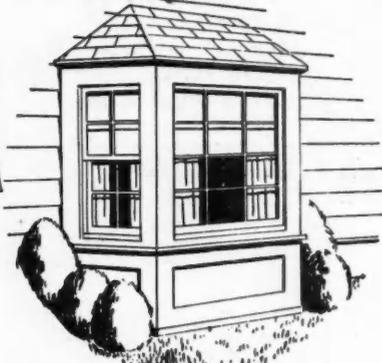
Plants and General Office: Tacoma 1, Washington

NEW YORK OFFICE	1326 Empire State Bldg., New York 1, N. Y.	Penn. 6-2954
CHICAGO OFFICE	134 So. LaSalle Street, Chicago 2, Illinois	State 5335-6-7
SAN FRANCISCO OFFICE	3045 19th Street, San Francisco, California	Valencia 7241
LOS ANGELES OFFICE	P.O. Box 7685 Del Valle Sta., L. A. 15, Calif.	Vandike 6326
TACOMA OFFICE	1216 St. Paul Avenue, Tacoma 1, Washington	Main 3101



PROTECTS

Best Possible Windows



Nothing Equals Wood Windows

Snug fitting (no sticking or rattling), no open joints, no blue stain, rot or termites. WOODLIFE water repellency assures better weathering—protects paint against peeling or cracking, protects putty. WOODLIFE—The Original Toxic Water Repellent adds immeasurably to life, serviceability and wood beauty. Ask your dealer.

Protection Products Mfg. Co.

Mfrs of CHEMICAL PRESERVATIVES Since 1921
Research Laboratory and Plant KALAMAZOO, MICH.



(Continued from page 182)

tile cut diagonally for diagonal installations, 9 x 9 and 12 x 12 inches. Feature strip to come in widths of 1, 1½, 2½ and 3 inches.

Hinderliter Acquires "Nail-It" Rights

THE Hinderliter Tool Company Division of the H. K. Porter Company, has acquired the manufacturing rights to "Nail-It" pipe couplings, mud guns, swivel joints and pump suction couplings. Manufacture of these products will begin immediately at the Hinderliter Tulsa plant under the new trade name of "Nail-It-Kwik."

Small Scale Models Available for Displaying Design Ideas

ARCHITECTURAL Model Builders of Frankfort, Ill., specializes in building to actual scale, partial three-dimension homes, house fronts, room interiors, exteriors, floor layouts, store fronts and industrial dioramas. The model pictured is constructed entirely of wood, metal and plastic.

The scale model is suggested to prove the practicability of ideas on home designs, factory designs, factory layouts or color schemes. The models are built to exact specifications. Duplication of building materials is done rapidly and accurately on machines.

Plastic Tile Manufacturers Form New Trade Association

MANUFACTURERS and suppliers in the plastic wall tile industry, at a recent meeting in Chicago, announced formation of a trade association for the industry to be known as the Plastic Wall Tile Manufacturers Institute. Harry A. Hachmeister, president of Hachmeister, Inc., of Pittsburgh, was elected president. The firm of McClure, Hadden and Ortman, Inc., of Chicago, was selected as managing directors.

**Now Available!
COPPER ARMORED
SISALKRAFT**



Strong, flexible, easy to apply! For door and window flashing, as shown, 6-10-or 12 in. Copper Armored Sisalkraft in 1 oz. weight is recommended.

**PURE COPPER PROTECTION
at 1/5 the NORMAL COST!**

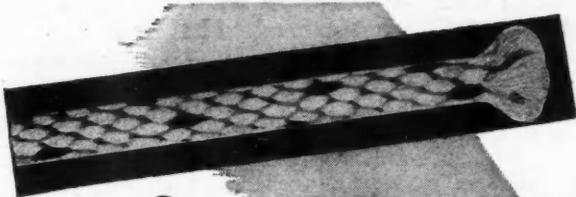
Copper Armored Sisalkraft is pure electro deposit copper reenforced with thousands of crossed sisal fibres and bonded with two layers of special asphalt to heavy kraft paper. Uniform, lightweight, will not kink, break or tear. 100% impervious to moisture. For all concealed flashing and foundation damp-coursing. Available in 6" to 60" widths, copper weights of 1, 2 or 3 oz. per square foot.

Write for complete information.



The SISALKRAFT Co.

205 W. WACKER DRIVE DEPT. AB CHICAGO 6, ILLINOIS



SPOT SASH CORD

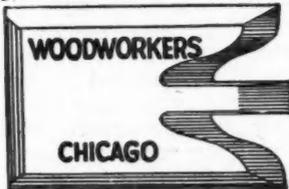
WITH WEIGHTS AND PULLEYS

— the one method of hanging windows that has been proved by generations of actual use to provide perfect and permanent balance.

The Colored Spots are our Trade Mark, Reg. U.S. Pat. Off.

SAMSON CORDAGE WORKS, BOSTON 10, MASS.

MAKE DOWELED DOORS

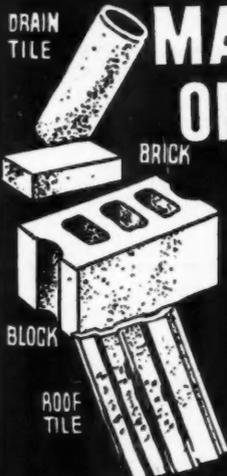


WOODWORKERS TOOL WORKS

on your shaper with our high speed steel—pattern ground — shaper knives 1 3/8", 1 3/8", and 1 3/4" for O. G. Cover and bead doors. 4 knives; 2 coping and 2

sticking, priced at \$19.44. 2 3/4" over all length. Prompt shipments—also other knives. Send 10c for Catalog.

WOODWORKERS TOOL WORKS
QUINCY & JEFFERSON CHICAGO, ILLINOIS



MANUFACTURING OPPORTUNITIES

The great building industry is your profitable market for these masonry products. Low investment . . . high returns.

The biggest building years in the nation's history are just beginning. New construction, involving billions of dollars, means huge demands for block, brick, roof tile and drain tile. Today is the opportune time to get into the local manufacture of these products.

Use our modern, low-cost machinery to insure finest quality products at lowest manufacturing costs. Sold direct from factory to user. . . . backed by 40 years of doing business with men like you.

Write for new catalog. Describes complete line of equipment with prices plainly given. Early delivery.

Concrete Equipment Company
514 OTTAWA AVE. HOLLAND, MICH.

New BEVIL-DEVIL ALL PURPOSE SET for

NOW AVAILABLE—the tools you need for insulation board jobs. Sharp, strong, specially ground blades cut through toughest insulation boards leaving clean, smooth edge. Three tools—five blades — attachments. All for . . .

\$585

Send postage paid anywhere in U.S.A.

Extra Bevil-Devil Blades, of selected steel, ground to cut insulation board. Package of 100 for \$4.00, postage paid.

KIMBALL MANUFACTURING COMPANY, INC.
1629 SYCAMORE ROYAL OAK, MICH.

- 1 SLICING
- 2 GROOVING
- 3 BEVELING & RABBETING

Universal
LEVEL-TRANSIT

with coated optics

Rugged — accurate — highly dependable, the Universal Level-Transit offers builders an all-purpose instrument of unexcelled practicality and versatility. Quickly converted from a precision level to a highly accurate transit in two easy motions.

Patented ball-bearing race assures perfect adjustment under severest conditions. Telescope 12" long, 25 power, horizontal circle 4 1/2" with Verniers to 5 minutes. Write today for full information — also free booklet, "How To Lay Out Building Lots."

DAVID WHITE COMPANY
381 West Court Street, Milwaukee 12, Wisconsin
Manufacturers of instruments for engineers, surveyors and builders.

Majestic

BUILDING NECESSITIES

FUELLESS INCINERATOR

Urgently needed in homes with automatic heat (where waste cannot be burned in the furnace), the Majestic No. 30 Incinerator is a boon to every home with a rubbish riddance problem—and a profit-maker for you. This popular-priced, 3-bushel unit burns wet or dry garbage and refuse without fuss, fume, or fuel. Taps to furnace flue. Sales backed by hard-hitting Majestic national advertising, consumer folders, and other selling aids. Write for details.

The Majestic Co.
834 Erie St., Huntington, Ind.
Majestic Building Products—nationally known and advertised for over 40 years



IT'S A PROFITABLE DEAL!

National Lock Kitchen Cabinet Hardware ... gleaming chromium ... styled to sell. New full-color counter display included in new "Short-line" deal. Write us or order from your jobber.



Training Course Offered in Fundamentals of Concrete Making

Establishment of a training course in the fundamentals of concrete making and concrete construction practices for technical personnel of both the Portland Cement Association and its member companies has just been announced by Frank T. Sheets, president of the Association.

John A. Ruhling, veteran concrete man who has been manager of the Association's Housing and Cement Products Bureau since 1944, has been appointed Manager of Technical Personnel Training, effective September 22. Carl A. Menzel, research engineer with the Association since 1928, has been appointed to succeed Ruhling as Manager of the Housing and Cement Products Bureau.

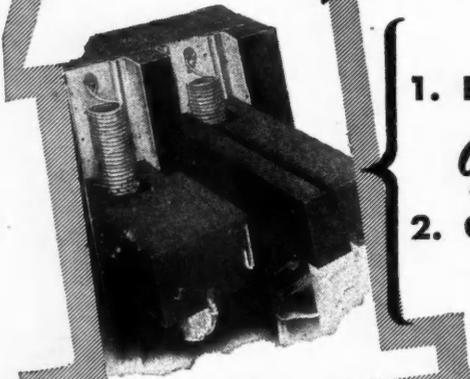
The training course, to be conducted in 13-week periods has a dual purpose, according to President Sheets.

"Not only will this intensive training in modern construction practices enable new men on our staff to serve the public more effectively," Mr. Sheets said, "but it will enable them to develop into positions of greater responsibility."

"The Association is one of the oldest and strongest in the construction field. For more than 30 years its field engineers have been rendering helpful service to users of concrete. The new training course is part of a greatly expanded research, development and educational program recently announced by the Association. The objective is to continually improve the quality of construction using portland cement."

John A. Ruhling, who will conduct the training course, starting October 1, has had nearly 30 years experience in various fields of construction involving uses of portland cement concrete. He received his engineering training at Armour Institute of Technology and held important assignments with the Sanitary District of Chicago and the Bridge Division, Chicago Board of Public Works. For a number of years he was a sales representative of one of the large cement companies. Ruhling, a Naval veteran of World War I, was administrative assistant to the general manager of the Century of Progress Exposition just prior to joining the Association staff in 1933.

A Single ANSWER to 2 PROBLEMS!



- 1. Efficiency? *Greater!*
- 2. Cost? *Less!*

Milwaukee SASH BALANCE WEATHERSTRIP COMBINATION

Write for free FOLDER and PRICE LIST

For new or old building. Easily installed bronze channel strips and rust-proof steel springs. Smooth, quiet, efficient operation. A tried product that builders swear by . . . used with outstanding results in Milwaukee for 10 years . . . now available on national market.

DEALER INQUIRIES INVITED

Manufactured by **Milwaukee STRIP SERVICE, Inc.**
Dept. B. - 3808 W. Burleigh Street, Milwaukee, Wisconsin



YOU GET

Speed...Power...

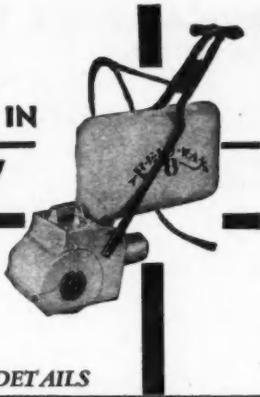
LOW UPKEEP . . IN

REID-WAY "8"

FLOOR SANDER

- Surface Speed—3534' Per Min.
- Motor Develops 2 H.P.
- ONLY ONE MOVING PART
- NO EDGER NEEDED

WRITE DEPT. AB FOR FULL DETAILS



REID-WAY, INC.

2917 First Ave. S.E.
Cedar Rapids, Iowa

IMMEDIATE DELIVERY



AMERICAN BOWSTRING WOOD TRUSSES
for Warehouses • Stores • Factories • Garages

FREE—SEND FOR NEW CATALOG TODAY!

25th Anniversary



1922-1947

AMERICAN ROOF TRUSS CO.

Phone PLaza 1772
6852 STONY ISLAND AVE.
CHICAGO, 49

Phone ADams 1-4379
232 W. SANTA BARBARA AVE.
LOS ANGELES, 37

Use

SOLVAY

**CALCIUM
CHLORIDE**

**with all Portland
Cement Concrete**



for ACCELERATION—CURING—
COLD WEATHER PROTECTION

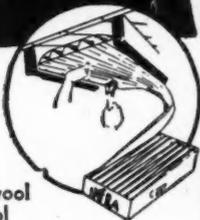
SOLVAY SALES CORPORATION 40 Rector St. New York 6, N. Y.

*In Insulation... HERE IS SOMETHING
BETTER UNDER THE SUN!*

IT'S INFRA ACCORDION
ALUMINUM INSULATION

... easiest to handle, store, transport and
install.

- C FACTORS: .072 down heat equals 6 7/8" rockwool
.095 up heat equals 5 1/4" rockwool
.10 lateral heat equals 5" rockwool



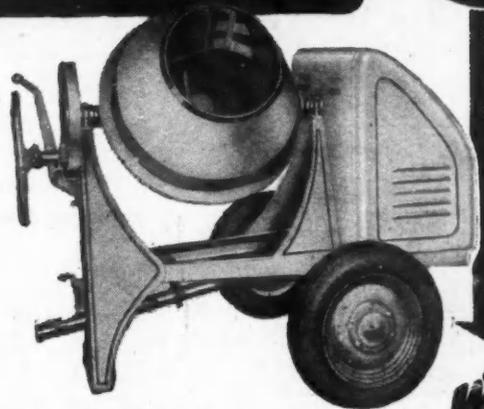
Infra offers unequalled insulation
efficiency and higher profits on
every job! Ask us for proof and
free samples.

*Thermal Factors Stamped on
Every Infra Carton*

INFRA
Insulation

10 MURRAY STREET, NEW YORK, N. Y.

**GET RIGHT UP TO
THE MINUTE!**



with

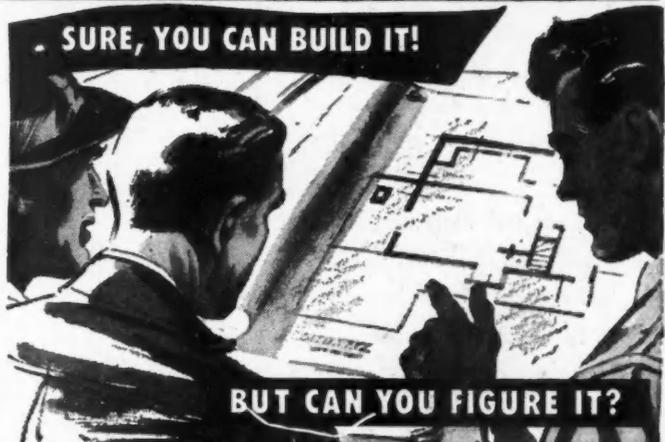
Here's the original single-open-
ing tilter, with famous "Figure
8" mixing action and other
time tested features. Stream-
lined for surprising daily out-
put and low yardage costs.
Furnished side or end dis-
charge on skids, steel wheels,
or pneumatics.

Write for Bulletin SJ 147.

**WONDER
TILTERS
MIX FASTER
TRAIL FASTER
LAST LONGER**

CONSTRUCTION MACHINERY CO.
WATERLOO • IOWA

SURE, YOU CAN BUILD IT!



BUT CAN YOU FIGURE IT?

LEARN ESTIMATING IN YOUR SPARE TIME

Learn estimating this simple, self-teaching method! Just multiply by
our simple factors to determine your labor and materials costs. Fast,
accurate, complete and dependable! You can learn in your spare time.
Why take chances on confusing, old-fashioned methods. It costs nothing
to see it!

The Tambllyn System

FREE TRIAL OFFER ★ SEND NO MONEY!

Tambllyn System, 210 C. A. Johnson Building., Denver, Colorado

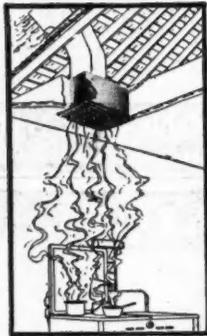
Send me the complete Tambllyn System on free 10 days trial!
If I like it I will pay \$8.75 when 10 days are up and \$5 per month
until \$38.75 is paid. AB11

Name _____
Address _____
City _____ State _____



INSTALL A CLIPPER TO
KEEP HER KITCHEN FRESH

Show the housewife how easy it is
to keep her whole house clean and
fresh with a Trade-Wind Clipper
Blower installed in her kitchen!



The Clipper is a complete, packaged ventilator which is easily, quickly installed. It is mounted in the ceiling between joists and vented outside—it traps and expels unwanted heat and odors the instant they rise. Unlike any other equipment, the motor in the Clipper is entirely removed from the air stream—away from all contaminated air. This means greater efficiency, longer life and easier servicing.

Effective in any small room—in old or new homes. Clipper Blowers are now carried in stock by electric supply dealers from coast to coast. Write us for the name of your nearest dealer and for the special bulletin which explains how simply the Trade-Wind Clipper Blower can be installed in old as well as new houses.

TRADE-WIND MOTORIANS, INC.
5705 SO. MAIN ST., LOS ANGELES 37, CALIF.

ALPHABETICAL INDEX TO ADVERTISERS

A		M	
Abco Manufacturing Co., Inc.	162	Macklanburg-Duncan Co.	42
Abesto Mfg. Corp.	166	Majestic Co., The	185
Acme Sash Balance Company	168	Mall Tool Company	138
Adam Electric Company, Frank	180	Masonite Corp.	46
Adams-Rite Manufacturing Co.	152	Mengel Company, The	173
Air Control Products, Inc.	44	Milwaukee Stamping Co.	183
Airtemp Division of Chrysler Corporation	175	Milwaukee Strip Service, Inc.	186
Allied Chemical & Dye Corporation	147	Minneapolis-Honeywell	33
Allith-Prouty, Inc.	189	Minnesota & Ontario Paper Co.	25
Aluminum Company of America	5	Monsanto Chemical Company	170
American Builder	134-136-144	Morrison Steel Products, Inc.	163
American Floor Surfacing Machine Co.	56	Mullins Manufacturing Corporation	159
American Radiator & Standard Sanitary Corporation	10	N	
American Roof Truss Co.	187	Nash-Kelvinator Corporation	66
American Saw Mill Machinery Co.	13	National Brass Company	171
American Telephone & Telegraph Co.	50	National Door Manufacturers Association	146
Andersen Corporation	65	National Gypsum Company	167
Archer-Daniels-Midland Company	176-178-181-182-184-186-190	National Home Shows, Inc.	166
Asphalt Roofing Industry Bureau	127	National Lock Company	186
B		National Manufacturing Company	4th Cover
Barber-Colman Company	150	National Radiator Company, The	48
Bar-Brook Mfg. Co., Inc.	158	New Castle Products	180
Barnes Manufacturing Co.	40	Nichols Wire & Steel Co.	49
Barrett Division, The	147	Nordberg Mfg. Co.	176
Barrows Lock Works	148	Norfolk and Western Railway	21
Bendix Home Appliances, Inc.	169	O	
Better Homes and Gardens	132	Ohio Hydrate & Supply Co., The	140
Bird & Son, Inc.	170	Overhead Door Corporation	3rd Cover
Briggs Manufacturing Co.	124	Owens-Corning Fiberglas Corporation	131
Bryant Heater Co.	41	Owens-Illinois Glass Company	30
C		P	
Cabot, Inc., Samuel	181	Paxson Co., The	174
Carey Manufacturing Co., The Philip	19	Pittsburgh Plate Glass Company	161
Ceco Steel Products Corporation	60-61	Ponderosa Pine Woodwork	165
Celotex Corporation, The	2	Porter-Cable Machine Co.	157
Central Metal Strip Co.	189	Pratt & Lambert, Inc.	28
Chevrolet Motor Division	20	Prestile Manufacturing Company	54
Chicopee Manufacturing Corporation	142	Protection Products Mfg. Co.	184
Christopher & Son Iron Works, Geo. C.	178	Prudential Insurance Company of America, The	130
Chrysler Corporation	175	Pryne & Co., Inc.	183
Clipper Mfg. Company	172	R	
Colorcrete Industries, Inc.	179	Red Devil Tools	183
Concrete Equipment Company	185	Red Star Products, Inc.	45
Consolidated Machinery & Supply Co., Ltd.	62	Reid-Way, Inc.	187
Construction Machinery Co.	187	Remington Rand, Inc.	8
Crane Co.	133	Republic Steel Corporation	15
Croft Steel Products, Inc.	182	Reynolds Metals Co.	55
D		Richmond Radiator Company	29
Detroit Steel Products Company	3-141	Rilco Laminated Products, Inc.	148
Detroit Surfacing Machine Company	170	Roddis Lumber & Veneer Co.	137
DeWalt, Inc.	27	Rowe Manufacturing Company	121
Drake Hotel, The	174	Ryerson & Son, Inc., Joseph T.	176
Du-All Scaffold Bracket Company	181	S	
Dunn Mfg. Co., W. E.	4	Samson Cordage Works	185
Duplex, Inc.	142	Sargent & Company	26
E		Servel, Inc.	52-53
Eagle-Picher Company, The	156	Sharon Steel Corporation	51
Electro Metallurgical Company	63	Sisalkraft Co., The	153-184
Eljer Co.	34	Skillsaw, Inc.	22-23
Elkay Mfg. Co.	139	Solvay Sales Corporation	187
Emerson Electric Manufacturing Co., The	154	Sonneborn Sons, Inc., L.	144
F		Spray-O-Bond Company	162
Fastener Corporation	168	Standard Dry Wall Products, Inc.	62
Flexsaw Co.	168	Standard Stamping & Perforating Co.	64
Flintkote Company, The	57	Stanley Tools	164
Foley Mfg. Co.	183	Stanley Works, The	47
G		Steelcraft Manufacturing Corp.	31
General Engines Co.	189	Steel Wall Tile Company	179
General Motors Corporation	20	Sterling Wheelbarrow Co.	189
Grand Rapids Hardware Company	58	Structural Clay Products Institute	9
H		Superior Fireplace Co.	125
Heatilator, Inc.	181	Sweet's Catalog Service Distribution Dept.	138
Hemphill Co., A. D.	172	T	
Heston & Anderson	189	Tamblyn System	187
Hold-A-Dor Co.	184	Taylor Bedding Mfg. Co.	54
Hotpoint Institute, The	155	Taylor Manufacturing Company	140
House Beautiful	160	Texas Company, The	32
I		Tile-Tex Company, Inc., The	126
Infra Insulation, Incorporated	187	Tiletone Company	56
Ingersoll-Rand	43	Timber Engineering Company	164
Insl-Cotton Division	54	Trade-Wind Motorfans, Inc.	188
Insulite Division Minnesota & Ontario Paper Co.	25	Trane Company, The	24
Irrington Form & Tank Corp.	123	Truscon Steel Company	15
J		Turner & Seymour Mfg. Co.	182
Jaeger Machine Co., The	58	U	
Johns-Manville	128-129	Union Carbide and Carbon Corp.	63
K		United States Gypsum Company	149
Kawneer Company, The	16-17	United States Plywood Corporation	173
Keasbey & Mattison Company	143	Universal Sanitary Mfg. Co.	166
Kelvinator Division	66	Upson Company, The	6
Kimball Manufacturing Company, Inc.	185	V	
Kimberly-Clark Corporation	177	Vikre Co., J. N.	174
Kohler Co.	145	W	
Kresky Mfg. Co., Inc.	146	Walker-Turner Company, Inc.	59
L		Ware Laboratories, Inc.	174
Last Frontier Hotel	172	Western Pine Association	64
Libbey-Owens-Ford Glass Company	12-151	Westinghouse Electric Corporation	39
Lowe Co., The	178	Wheeler, Osgood Company, The	183
Lumite Division	142	White Company, David	185
		Wood Conversion Company	135
		Woodworkers Tool Works	185
		Wright Rubber Products Division	140



**"I LIFT ONLY 80 LBS.
OF THIS 400 LB. LOAD!"**

Sterling's scientifically balanced construction actually takes 80% of the load off the arms and backs of the barrow men. With Sterling Wheelbarrows, crews work faster, make more trips, haul more yardage per day. And quality, all-welded construction keeps Sterlings on the job longer, reduces job costs. Deliveries are being stepped up as fast as the material situation permits.

STERLING WHEELBARROW CO., Milwaukee 14, Wis.

Look for this Mark of
STERLING Quality

Sterling
WHEELBARROWS

METAL WEATHERSTRIPPING

All Types Immediately Available

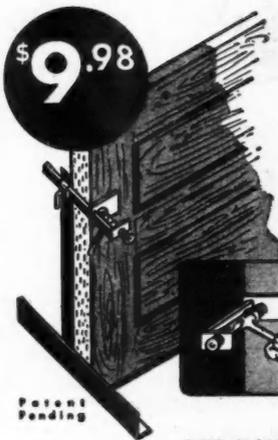


- Metal Weatherstrips
- Thresholds
- Calking Compound
- Screen Guides

New Catalog No. 47 Available Now

WRITE FOR YOUR COPY TODAY

CENTRAL METAL STRIP CO.
4343 N. WESTERN AVE. CHICAGO 18, ILLINOIS

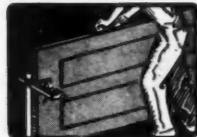
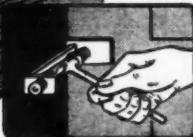


\$9.98

HOLD-A-DOR

SAVE TIME ... BOOST PROFITS

It's new! It's different! It's handy! The ideal portable unit for holding doors, windows, screens, etc., that can be nailed to rough flooring... used in and out-of-doors. Designed and used successfully by a contractor. See your dealer or order direct.



HOLD-A-DOR CO.

576 MILLVILLE RD., DRAUGHTUCK, CONN.



The General
2 H.P. 4 Cycle, 1 Cylinder
Air Cooled Gasoline
Engine

Compact, powerful, light weight. Ample reserve power for hundreds of applications where dependable power is essential.

Weight only
30 lbs.

Write for complete Specifications and prices, and for details about distributorships and dealerships.

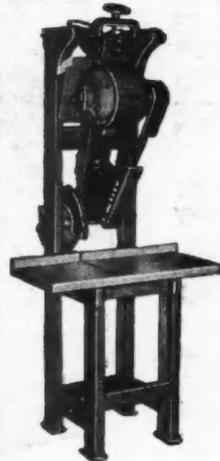
General Engines Co. Div. Luthesser Bros.
FRANKLIN PARK ILLINOIS

**Faster Cutting
AT LOWER COST**

**with H & A
WOODWORKING
TOOLS**

Long recognized for their high quality and efficient performance, H & A Woodworking Tools are again available to woodworking plants, contractors and builders, lumber yards, and saw mills. H & A Tools are used wherever exacting performance is required.

**IMMEDIATE DELIVERY
ON ALL MODELS**



H&A SWING CUT-OFF SAW

A low cost production tool for quickly and accurately cross-cutting dimension stock with 1/3 the power required by radial arm saws. Safe and easy to operate, the blade pulls through the wood and automatically returns to resting position. Available in three capacities: 3" x 12"; 4" x 14"; 5" x 16".



H & A 6' JOINTER

The finest available — sturdy cast iron construction for vibrationless operation. Equipped with three high speed knives set in head of solid steel forging. Spins on oversize bearing at 6,000 r.p.m. for maximum cutting efficiency. Extra long 42" or 60" tables are stress released so as to remain level for life. Precision planing, edging, rabbeting, relieving, and chamfering are easy operations even on long boards when 60" table style is used.

H & A 14" Band Saw and H & A Woodmaster are also available. Write for further information on the complete H & A line of quality woodworking tools.

Heston & Anderson

Founded in 1921

608 W. Kirkwood St., Fairfield, Iowa



DIVISION OF ST. PAUL FOUNDRY AND MFG. CO.

NOW AVAILABLE!



POL-MER-IK IS BACK!

Here's the news oil-starved painters have waited five years to hear—the announcement that'll banish memories of war-time, stop-gap substitutes.

And, as before, Pol-mer-ik is 100% pure linseed oil . . . coming to you factory-fresh in sealed cans . . . bringing you better drying, finer leveling, higher gloss and greater durability—all the qualities you simply couldn't get in "replacement" oils.

Pol-mer-ik's the oil that saves painting time and gives an all-round more satisfactory paint job.

Why? Because it's *Supertreated*—given a special processing and blending which strengthens its molecular structure . . . speeds up painting . . . provides a tougher, more durable, better-looking paint job.

Supertreating makes Pol-mer-ik the finest linseed oil science has produced. It gives the painter EXTRA VALUES AT NO EXTRA COST.



Supertreated Pol-mer-ik



100% PURE LINSEED OIL

...Find out more about it...mail this coupon today...

THE SCIENTIFIC SHORTCUT TO BETTER PAINTING

ARCHER-DANIELS-MIDLAND COMPANY
MINNEAPOLIS 2, MINNESOTA

ARCHER-DANIELS-MIDLAND COMPANY
600 Roanoke Building • Minneapolis 2, Minnesota

Please send me more information about the EXTRA VALUES for me in Supertreated POL-MER-IK 100% pure linseed oil.

NAME _____

ADDRESS _____

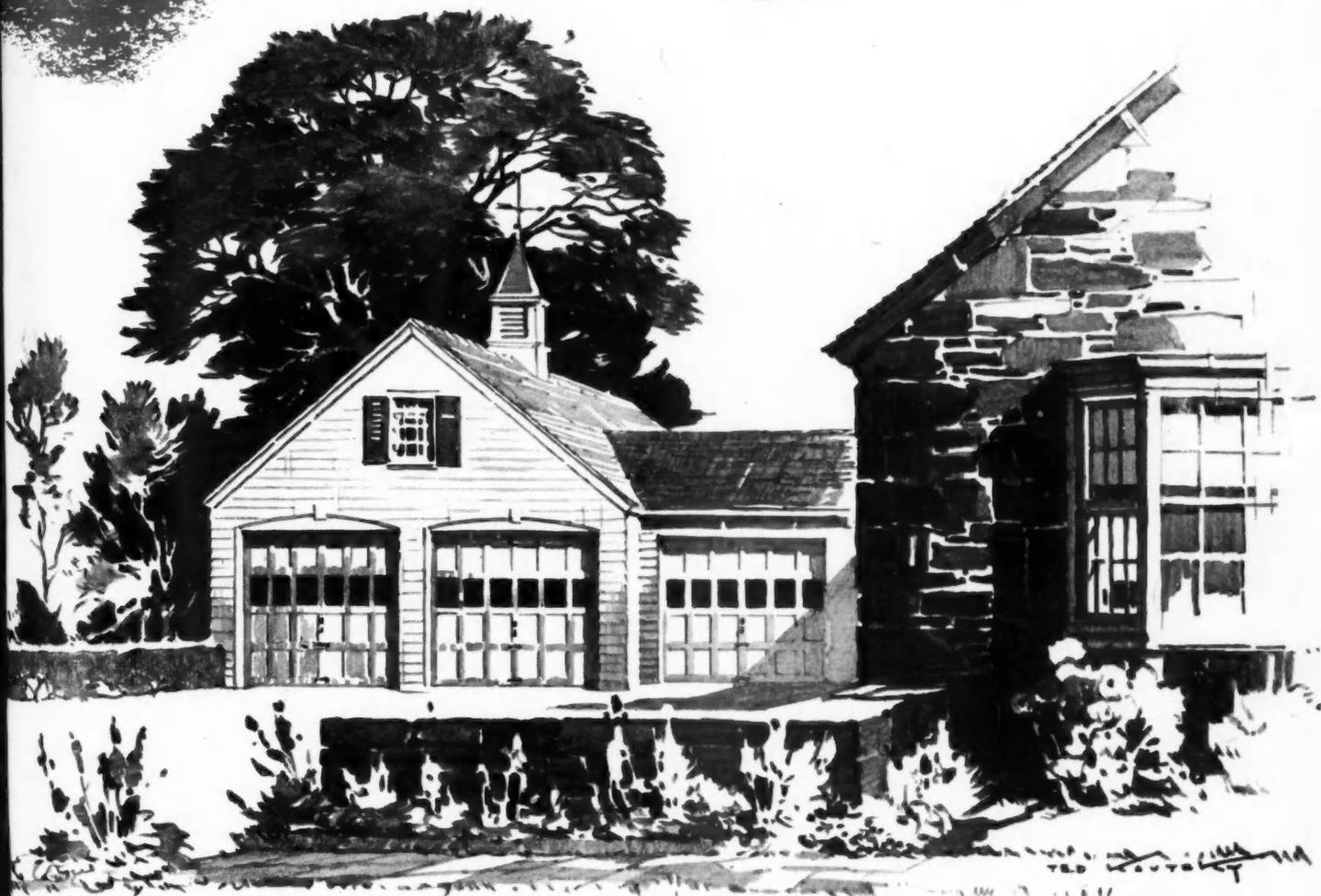
POST OFFICE _____ STATE _____

Preferred . . .

for APPEARANCE and PERFORMANCE

● Where doors are prominent in the design of a structure. The "OVERHEAD DOOR" is specified with complete confidence, because this quality door blends with any style of architecture. For smooth operation and uninterrupted service. The "OVERHEAD DOOR" with the Miracle Wedge is again a predominant choice because it is efficient in all weather and gives years of trouble-free service. Built as a complete unit for residential, commercial, and industrial structures, this door is strong, lightweight, and adaptable, and is preferred by millions of users.

TRACKS AND HARDWARE OF SALT SPRAY STEEL



COPYRIGHT, 1947, OVERHEAD DOOR CORPORATION

The
OVERHEAD DOOR
TRADE MARK
WITH THE
MIRACLE WEDGE

● Any "OVERHEAD DOOR" may be manually or electrically operated. Sold and installed by Nation-Wide Sales—Installation—Service.

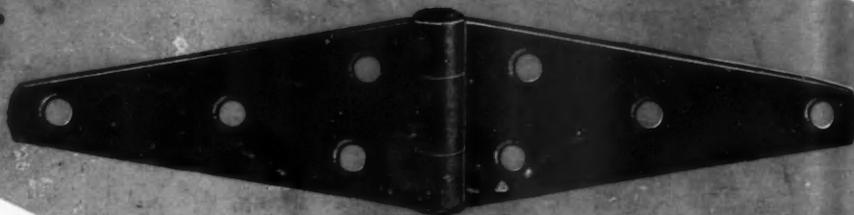
OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U.S.A.

National

STRAP AND "T" HINGES



Light Strap Hinge



Heavy Strap Hinge

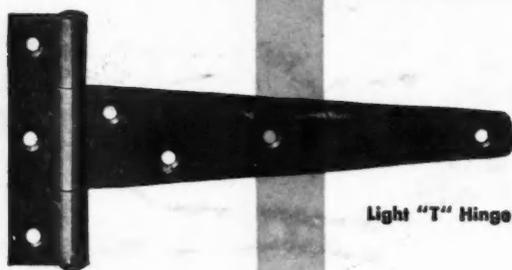
IN these exceptional postwar times, the demand for National Strap and "T" Hinges is extreme. Consistent with supplies of raw materials, increased quantities are being shipped to National Dealers everywhere. Your National Dealer will co-operate in supplying your needs.

National Strap Hinges are furnished in light and heavy weights. The light-weight strap hinges range in sizes from 2 inches to 8 inches, closed; heavy-weight strap hinges from 4 inches to 14 inches, closed.

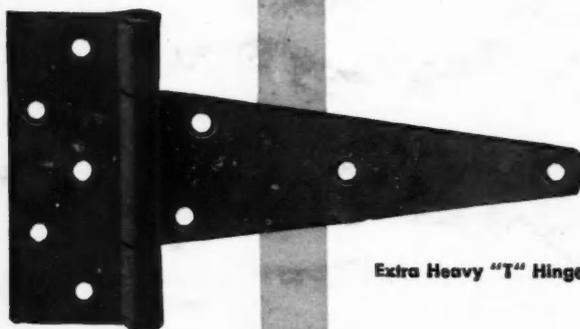
National "T" Hinges are furnished in light and extra-heavy weights. Sizes in light-weight "T" hinges, closed, range from 2 inches to 10 inches; extra-heavy weight, from 4 inches to 14 inches, closed.

No. 840 Reversible "T" Hinge is made especially for use on garage doors. It has a loose pin and can be reversed and used as a full surface hinge or mortised into the jamb when brick construction is used. Sizes from 6 to 14 inches, closed. All reversible hinges below 12-inch sizes are embossed for additional strength.

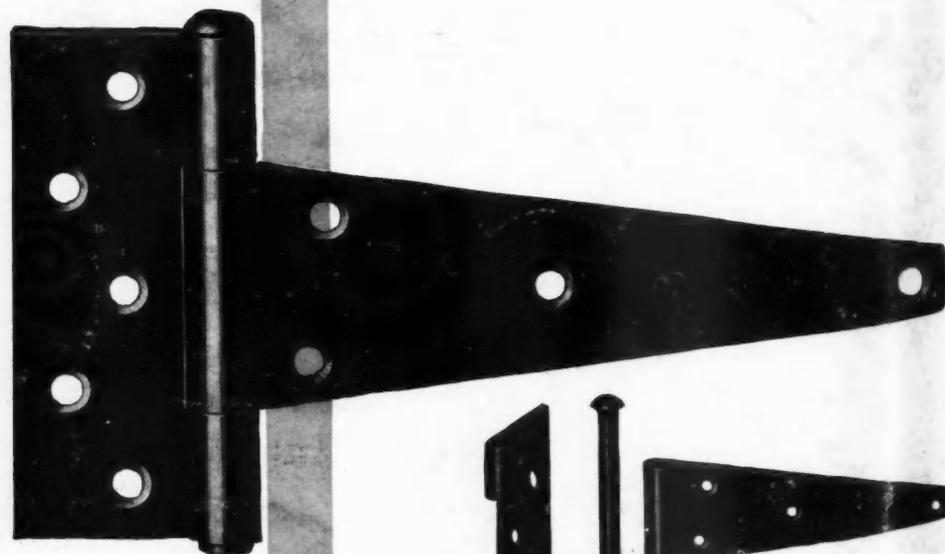
For quantities and sizes available, see your National Dealer



Light "T" Hinge



Extra Heavy "T" Hinge



No. 840 Reversible "T" Hinge

NATIONAL MANUFACTURING CO., Sterling, Ill.