

AMERICAN BUILDER

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Tries It... Buys It!

*Easy Opening Helps
Close the Sale*



Home buyers expect modern equipment these days. That includes windows. Fenestra* Residence Steel Casements are as modern and easy to operate as any other laborsaving home appliance.

One hand on the geared Roto-Adjuster almost effortlessly moves swing leaves to control and guide ventilation . . . in any weather. Fenestra Windows can't swell, can't warp, can't stick!

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Other attractions for buyers: windows safely cleaned on both sides from inside the room . . . easy application of inside storm sash and screens.

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1. Cost is low because Fenestra Windows are standardized, permitting mass production.
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3. Lower maintenance—steel frames are protected by Bonderizing and baked-on prime coat.



Architect: Ray Houhlihan, Evanston, Ill.
Builder: C. A. Hemphill, Evanston.

Note how well Fenestra Casements suit the Colonial style house.



Designer and Builder: C. J. Wright.

Note the gracious look Fenestra Casements add to this small home.



There's a Fenestra Standard Casement for every need, every house . . . small or large. Write for full information on standard types and sizes. Detroit Steel Products Company, Dept. AB-11, 2260 East Grand Blvd., Detroit 11, Mich.

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BRITTLE WALLS AND CEILINGS

Are not Crackproof!

For PERMANENCE—dry-build with full-wall size panels—the Upson way!

If a wall is not crackproof—it may not be permanent.

How well American home owners know that fact! Actually *two out of three* homes, we believe, have cracked walls and ceilings in one or more rooms. Even millions of comparatively new homes need wall and ceiling repairs.



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Crackproof walls of greater permanence are practical—and available. Many resourceful builders are turning to the dry-built full-wall construction made possible through use of Upson Strong-Bilt Panels.

With Strong-Bilt Panels—

You build faster! You can cover the entire wall of an average room with a single giant panel. No joints to tape. No nails to countersink. No nail holes to fill.



Amazing Upson Floating Fastener anchors panels securely from the back. Designed to help compensate for normal structural movement.

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Strong-Bilt Panels are made by bonding 6 plies of sturdy wood fibres under pressure to an approximate $\frac{3}{8}$ " thickness. They are light in weight, easy to handle—yet tough, strong and durable.



Already, thousands of homes have been dry-built with Upson full-wall Strong-Bilt Panels. By their use, thousands of homes have been given *added* dollar value. Phone, wire or write us for details of this improved construction method.



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AMERICAN BUILDER

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Planned for maximum convenience, this combination utility room and kitchen is ideal for basementless homes. Comfortable warmth is provided by the gas fired Wyandotte Winter Air Conditioner. The gleaming white, double compartment laundry tray is the smooth, easily cleaned Alden. And the Budget Gas Fired Water Heater stands ready to supply an abundance of hot water for every household need. In the kitchen, a dream of a sink—the Royal Hostess — puts additional luxury and convenience within reach of the homemaker.



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Publisher's Page



Domestic Problems Unsolved

THERE WAS very little real discussion during the political campaign just ending of the vitally important *domestic* problems with which the American people are confronted. Yet solution of these problems is essential to maintenance of an economy strong enough to provide for (1) the huge expenditures for national defense and foreign aid being made and (2) continued improvement of our standards of living.

The principal threats to the nation's economic future are still the same as before the election—viz., inflation and socialistic policies. Only time will tell whether the danger from these sources has been diminished by the result of the election. Inflation is an economic phenomenon, the preventives, causes, and remedies of which are known to all competent economists. Why, then, has it occurred and caused disaster in so many countries and progressed so far in this country? *Because of politics.* It requires so little intelligence and courage to start and promote inflation and such statesman-like intelligence and courage to advocate and adopt the means necessary for arresting it that few politicians ever have shown the required courage; and usually the people have rewarded those who have shown such courage by speedily throwing them out of office. For it is not possible to try to arrest inflation, much less arrest it, without advocating or adopting policies much disliked by important pressure groups.

Inflation is an increase in the volume and use of money—i.e., currency and bank deposits—exceeding the increase in the volume of goods available to be bought. High and increasing prices are its *effect*. The excessive increase in the volume and use of money may be due to various causes. In this country it has been caused principally by prolonged, huge, government deficit spending and advances in the wages of labor exceeding increases in its productivity. Socialistic policies usually foster and stimulate inflation because they involve government expenditures that increase the demand for goods without correspondingly increasing the production and supply of them.

Once inflation gets well started politicians fear to adopt measures to arrest it, and fear much more to adopt measures to cause deflation. Because of large crops here and abroad, the prices of many farm products would now be declining but for government buying of them at prices which subsidize the farmer. But decline of farm prices would destroy "parity" between farm prices and industrial prices, and reduce farm purchasing power unless industrial prices also were reduced; and decline of industrial prices would necessitate reduction of wages in industry. We can not have any deflation or perhaps even arrest inflation if there are to be no declines of farm prices or of wages. But what politician of any party has the courage to support policies intended and tending to reduce the

prices of his farmer constituents or the wages of his wage-earning constituents?

No politician of any party showed any such courage in the recent political campaign. Also, no leading politician of any party consistently opposed the socialistic policies involving large unnecessary government spending which help feed the fires of inflation. Governor Dewey has indorsed the so-called St. Lawrence "sea-way", a toll-free super-highway across New York state and the Tennessee Valley Authority; and toward the end of the campaign he came out for federal aid to slum clearance and housing construction. Some program for a professed believer in private enterprise!

Evidence is lacking that the political campaign and result of the election have contributed substantially toward reduction of the threats to the national welfare presented by inflation and socialistic policies. Those who really contributed under the New Deal toward saving free private enterprise were those—mostly in private life—who constantly strove throughout the fifteen years 1933-1948 to create a public opinion tending to make it better politics for politicians to oppose unsound policies than to favor them. It is only too evident that if private enterprise is to fare better in future than under the New Deal, persons outside of public life, not politicians, will have to be principally relied on to preserve it.

Samuel O. Dunn,

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Willis Mills, architect

ALL THE COMFORTS OF HOME—INCLUDING TELEPHONE RACEWAYS

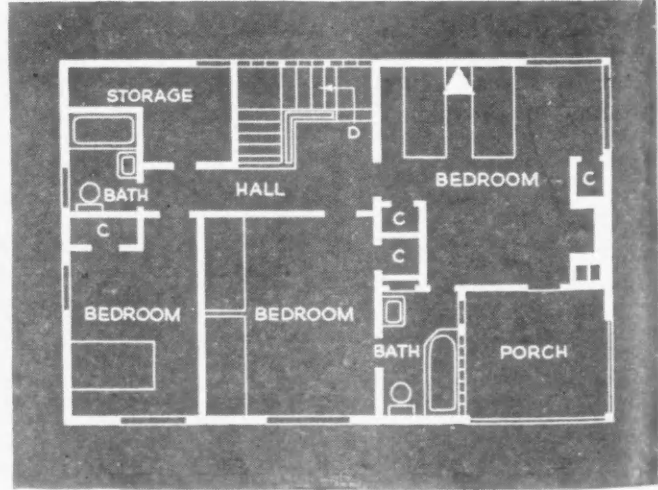
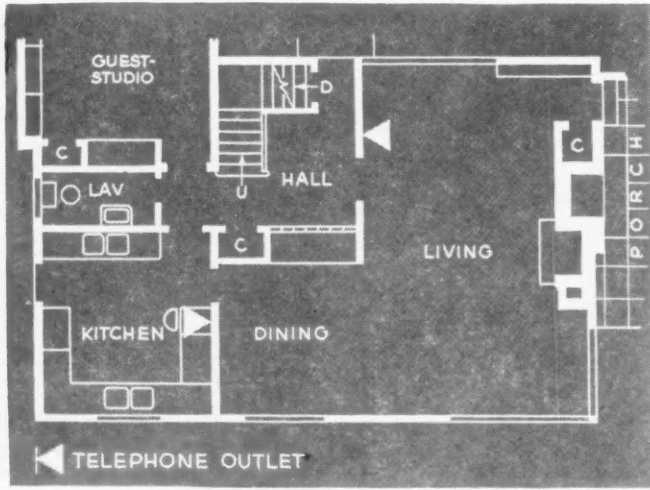
Neat, built-in telephone facilities make it unnecessary to have exposed telephone wiring on walls and woodwork. And they give a full measure of telephone convenience to the owner. That's why telephone raceways are being included in the smaller as well as larger homes.

In most homes, a few pieces of pipe or electrical tubing installed within the walls during

construction will carry telephone wires to conveniently located outlets. The cost is low.

For homes of any size, your Bell Telephone Company will be glad to help you plan modern telephone arrangements. Just call your Telephone Business Office and ask for "Architects and Builders Service."

BELL TELEPHONE SYSTEM



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...*We're going to be together a long, long time!*"

Chances are they'll celebrate a silver wedding... since it's a Flintkote Thikbut Shingle speaking. These sturdy shingles are built for extra years of service.

You get all the well-known advantages of a standard Flintkote Shingle... super-saturated quality felt... "4 to 1" stabilized asphalt coating... durable, fireproof, color-fast mineral surfacing.

And you get more. Much more.

Over the tabs we add an extra layer of stabilized asphalt coating, plus a second layer of fireproof mineral granules. The result gives your customers virtually two shingles for the price of one... with extra years of service built right into the tab exposed to wind and weather.

So, when you think of roofing... for repair, re-roofing or new construction... think of Flintkote. Extra years of service lower the cost in use of these famous

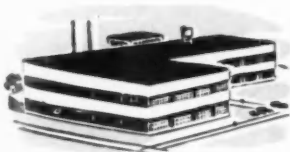
Flintkote fire-resistant shingles.

The Flintkote Company, Building Materials Division, 30 Rockefeller Plaza, New York 20, N. Y. Offices in principal cities.

*the extra years of service
cost no more!*

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• Durable Flintkote Cold-Process Built-up Roofs offer fast, safe, economical application by brush or spray.



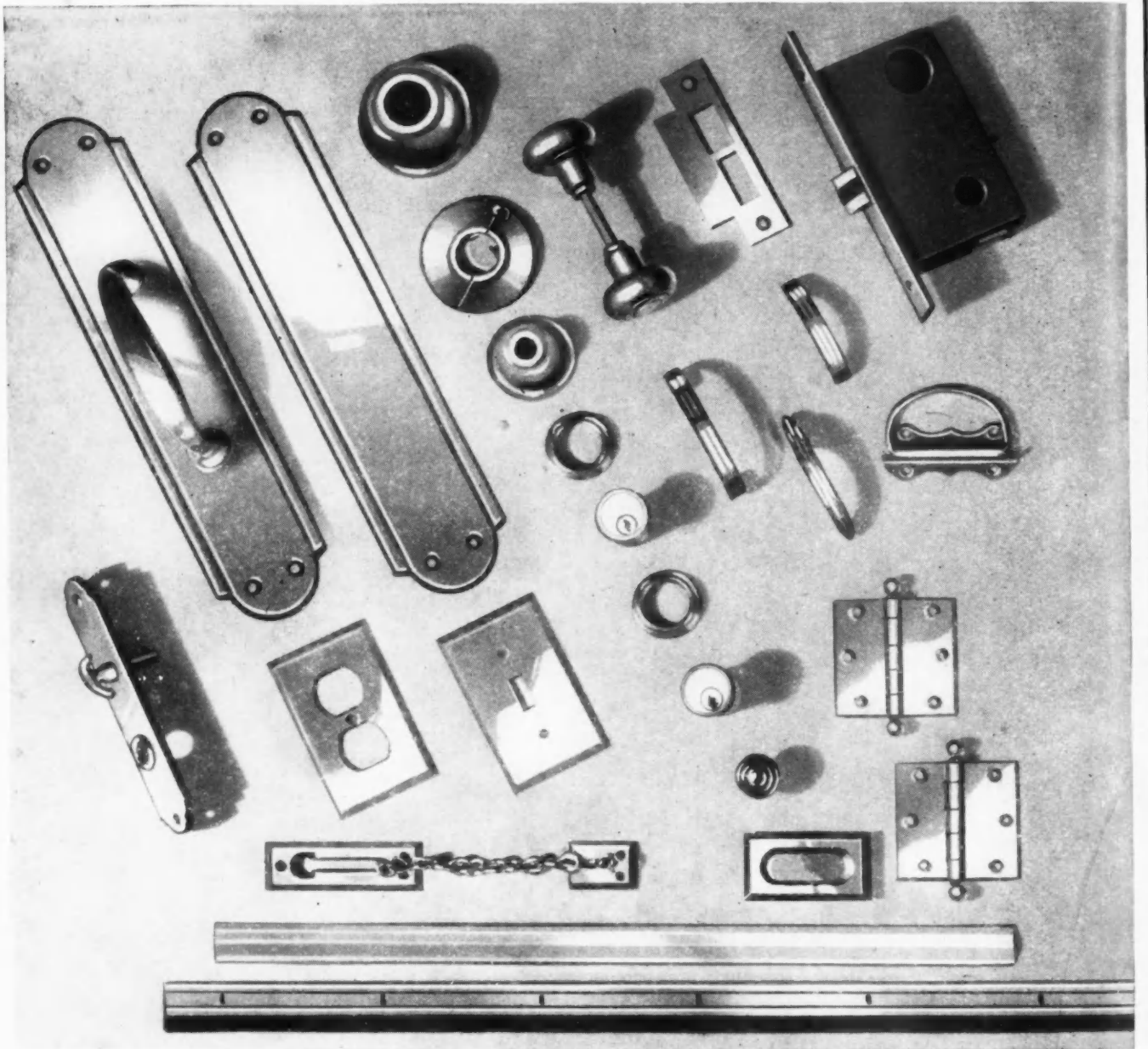
• Flintkote Asbestos Cement Shingles and Sidings... for new construction or economical modernization.



• Flintkote helps make homes comfortable with a complete line of durable thermal insulating materials.



• Flintkote's new research laboratory is part of a nation-wide plant expansion program now under way.



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Sharon, Pennsylvania

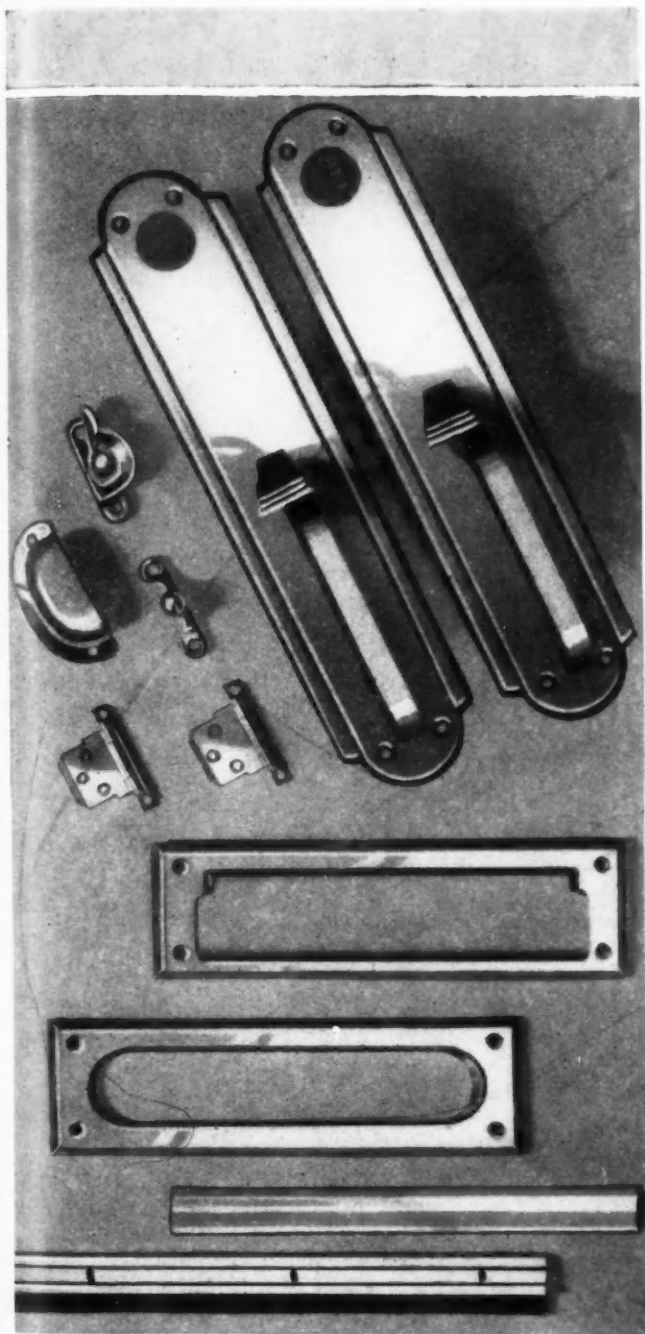
Particular People Prefer Products of Stainless Steel

To insure customer satisfaction leading designers are today recommending -- wherever possible -- products of stainless steel. Products that won't rust, discolor or tarnish regardless of weather -- products that will not stain adjoining surfaces -- products that will withstand the hardest usage and still retain their original finish year after year.

Progressive manufacturers, too, realize the inherent quality in stainless steel. That's why every day more and more functional pieces for the home are being made of this miracle metal.

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HURRY! HURRY! HURRY!

Contest Closes Midnight Saturday, November 20, 1948

Name the New **Roddiscraft Door**
1st Prize \$1,000 – 2nd and 3rd Prizes \$500 each



All you have to do is name the new Roddiscraft Door with the accordion type veneer core and follow the directions listed below.

About the Door Here are some facts about the door to guide you in selecting a winning name.

The new Roddiscraft door has a core made up of selected strips of veneer. These strips are spot-glued at intervals and stretched within the rails to form an accordion core design. This is a radical departure from the conventional core. The accordion core creates the strength and rigidity of a solid core with 50% less wood content.

Veneer strips are spaced 2" apart at points of greatest core-strip bending. This provides maximum support to the face panels and protects against puncture from abuse.

Face panels and rails are hardwood throughout. The whole assembly is pressure bonded with the finest glues obtainable and seasoned in specially constructed kilns for permanent straightness.

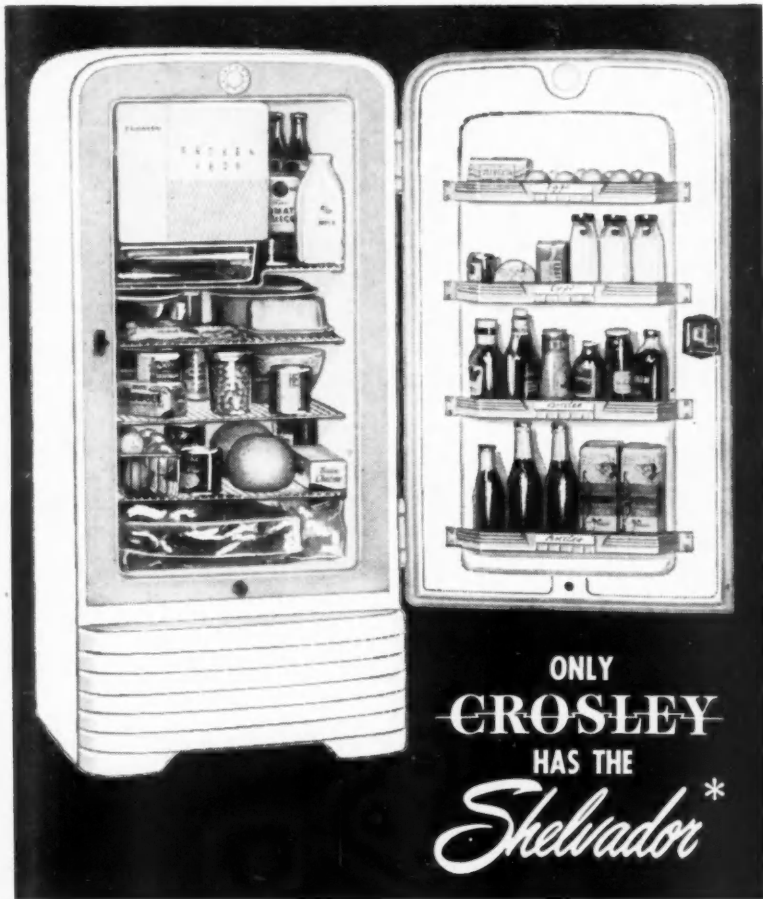
THERE YOU HAVE ALL THE FACTS YOU NEED TO THINK UP A PRIZE-WINNING NAME. PUT ON YOUR THINKING CAPS AND FOLLOW THESE SIMPLE DIRECTIONS:

1. Select the name you believe most appropriate and fitting. Then, in 25 additional words or less, complete the following statement: "I believe the new Roddiscraft Door with the accordion type veneer core is a superior door because" Each name submitted must be accompanied by a statement.
2. Send all entries to the Roddis Plywood Corporation, Marshfield, Wisconsin. All entries must be mailed before midnight, November 20, 1948. Send as many entries as you please.
3. Entries will be judged on the basis of originality and aptness of thought by a panel of expert judges. All entries become the property of the Roddis Plywood Corporation. The judges' decision will be final. In the event of a tie, duplicate prizes will be awarded.
4. The first prize winner will receive \$1000; the next two winners will receive \$500 each. All winners will be notified by registered mail.
5. This contest is open to lumber dealers, architectural firms, millwork houses and their employees.

Roddiscraft

Roddis Plywood Corporation
Formerly Roddis Lumber & Veneer Co.
MARSHFIELD, WISCONSIN

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Full 7 cu. ft. capacity in the floor space of a "4"—in the price range of a "6"—plus the exclusive Shelvador* at no extra charge!

IDEAL FOR SMALL HOMES, APARTMENTS! With building costs what they are today, it pays more than ever to get the most out of every dollar, every inch of floor space. You save cost, save space with this new Crosley Shelvador* Refrigerator, yet it provides adequate refrigeration even in the limited space of small kitchens. And it adds sales attraction—every housewife wants the Shelvador*. Ask your nearest Crosley distributor about it, or write to the address below for full particulars.

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REFRIGERATOR

5 OTHER MODELS
 A Shelvador* for every space every budget

Here's one answer to high construction costs!



And its size and styling sure fit in with modern building trends

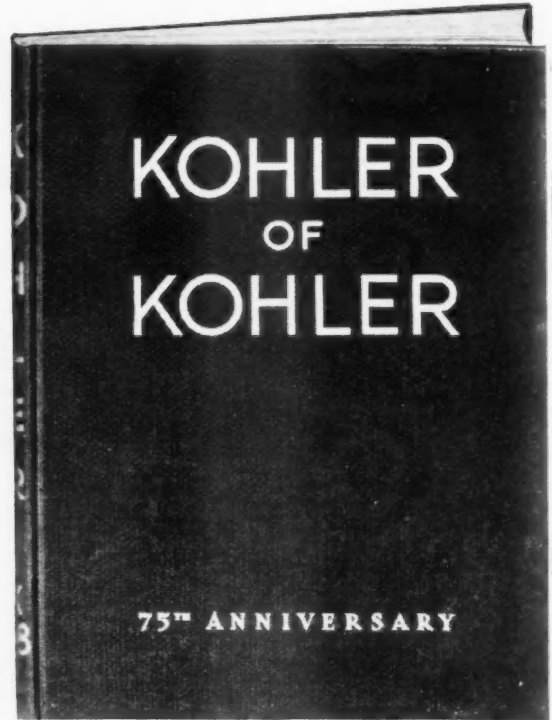
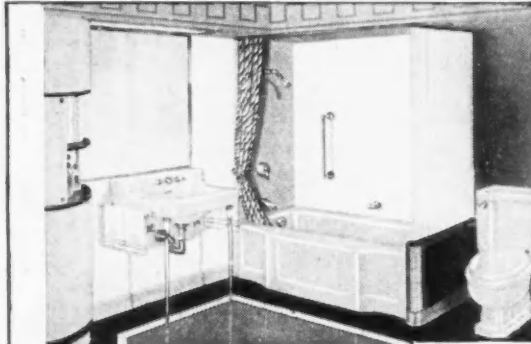
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NEW KOHLER CATALOG

Complete, up-to-the-minute information on all Kohler products... A valuable guide to the planning and installation of first quality plumbing and heating.



Peachblow IN A PLEASING PRACTICAL ARRANGEMENT

There is an air of freedom and light that catches the eye in the lower color scheme of peachblow and pale green. The fixtures are grouped in a pleasing ensemble, with easy, comfortable access to each, combined with economy of space. The curving line of the cabinet, with its smart kidney-shaped complement the graceful design and soft glowing beauty of the peachblow fixtures. The fixed glass partition above the tub wall at the rear end of the recess bath further emphasizes the effect of airy lightness. The incandescent floor is desirable, easy to clean. A light panel recessed in the ceiling above the lavatory affords plenty of evenly distributed illumination without the slightest glare.



KOHLER OF KOHLER

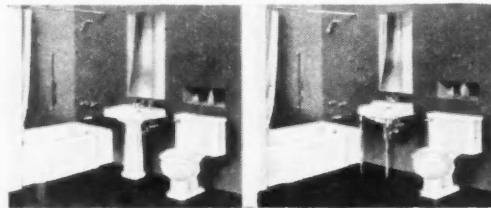
Illustrations in full color show complete installations, with floor plans, that are helpful in planning and decorating rooms of different dimensions, and for various budgets. They contain practical information on storage and other facilities.

MATCHED SETS

Suggestions for the Selection of Fixtures

Small rooms look better when their contents have the same basic design. The great safety of effective appearance principle is decoration. You can get the most unity with Kohler plumbing fixtures. Kohler fixtures harmonize in proportion, line and color. They have dignity and simplicity, the result of sound structural design. There are many ways to group them attractively in matched sets.

Now here Kohler fixtures are grouped in each matched set on three and the color photos on preceding pages. Fixtures in the various sets range in price and size from those suitable for large homes to those used principally in medium and low-cost homes.



SET 55

- E 528 E—Cosmopolitan bath—3 foot
- E 1700 F—Incandescent recessed ceiling lavatory—24x20-inch
- E 3652 PB—Bath chrome-plated chest

SET 62

- E 528 A—Cosmopolitan bath—3 foot
- E 1740 C—Chromoplate recessed ceiling lavatory—20x18-inch
- E 3652 PB—Bath chrome-plated chest

SET 70

- E 528 W—Cosmopolitan bath—3 foot
- E 2700 C—Washbasin recessed ceiling lavatory—24x20-inch
- E 3702 PB—Wallwash chrome-plated chest

KOHLER OF KOHLER

Pages like the one above provide useful suggestions for matched sets—showing how to achieve unity of effect with fixtures in groups suitable for large, medium, or low-cost homes.

KOHLER OF KOHLER

Hundreds of illustrations, with the latest specifications and data covering every Kohler product for bathroom, kitchen, washroom or laundry—and special installations for hospitals, industrial buildings and other institutions.

This is a reference book of permanent value—filled with information that will help you. The catalog tells of the materials, the research and engineering, the careful workmanship and many inspections that maintain Kohler quality. Distribution of the new K-48 is now being made. If you do not receive your copy in due time, please write. Kohler Co., Dept. 8-C, Kohler, Wisconsin.

COSMOPOLITAN—ENAMELED

COSMOPOLITAN

- E 525 F—Bath, recess, left outlet, with fittings illustrated
- E 525—Bath, recess, left outlet, free fittings

Fittings

- E 7022—Shower and bath fittings with 1/2 inch Nipples, shower, diverter, shower, shower head, pop-up drain
- E 7710—Curtain rod
- E 7708—Curtain hook and chain, curtain and pole not included
- E 525 F—Bath, recess, right outlet, with above fittings

COSMOPOLITAN E 525 F

COSMOPOLITAN

- E 525 A—Bath, recess, left outlet, with fittings illustrated
- E 525—Bath, recess, left outlet, free fittings

Fittings

- E 7000—Shower and bath fittings with 1/2 inch valves, shower, diverter, shower, shower head, pop-up drain
- E 7710—Curtain rod
- E 7708—Curtain hook and chain, curtain and pole not included
- E 525 A—Bath, recess, right outlet, with above fittings

COSMOPOLITAN E 525 A

KOHLER OF KOHLER

NEW Sander!

DOES YOUR SMALL JOBS

Quick!

American now offers a sensational new Tilt Type Floor Sander—designed to handle your small jobs *fast!* For remodeling or small homes—you can get in and out in a hurry with this handy Sander!

Easy to lift (89 lbs.), easy to handle . . . very little experience needed . . . speedy and powerful . . . you'll use it almost every day! New "package unit construction" enables you to put in a new motor and fan package unit, if needed, with no loss of operating time. More new features include exclusive safety-grip switch in handle with positive off-on control . . . heavy duty 1 H. P. motor . . . direct vacuum dust collection . . . vacuum cleaner type bag . . . eight inch drum . . . American-built dependability. For larger jobs, use American Standard Sanders, 8" and 12" drums. Send coupon for more details or FREE demonstration.



*...Light Weight
...Easy Handling*



*...Saves Time
...Saves Labor*



AMERICAN FLOOR SANDERS

New "PACKAGE UNIT"
...NO LOST TIME!



Just remove 6 screws and you can put in a new motor and fan or drum unit in a few minutes—never an idle hour while your sander is being serviced!

The American Floor Surfacing Machine Co.
519 S. St. Clair St., Toledo 3, Ohio

Send free description and prices.
 Please arrange a FREE Demonstration of the new American Tilt Type Floor Sander. No obligation.

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Best Selling! Best Serving! Best Values!

CHEVROLET *Advance-Design* **TRUCKS**

All over the country, the favorite trucks are Chevrolet Advance-Design trucks, and for good reason, too, for they're first in value. Compare them, feature for feature—value for value! You'll find they bring you more and cost you less, for Chevrolet trucks have 3-way thrift—*triple economy*—with low operating costs, low upkeep costs and the *lowest list prices in the entire truck field!* See your Chevrolet dealer.

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



Check These Features! Only Chevrolet Advance-Design Trucks Have Them All!

Quicker, quieter and easier operation is assured with Chevrolet's new 4-SPEED SYNCHRO-MESH TRANSMISSION in one-ton and heavier models. Faster shifting maintains speed and momentum on grades.

Mounted on the steering column, the new Chevrolet GEARSHIFT CONTROL offers new convenience and ease in all models with 3-speed transmissions.

World famous for its outstanding economy, Chevrolet's powerful VALVE-IN-HEAD ENGINE provides IMPROVED durability and operating efficiency.

The revolutionary Advance-Design FOOT-OPERATED PARKING BRAKE provides new convenience and

greater clear floor area in models with 3-speed transmissions.

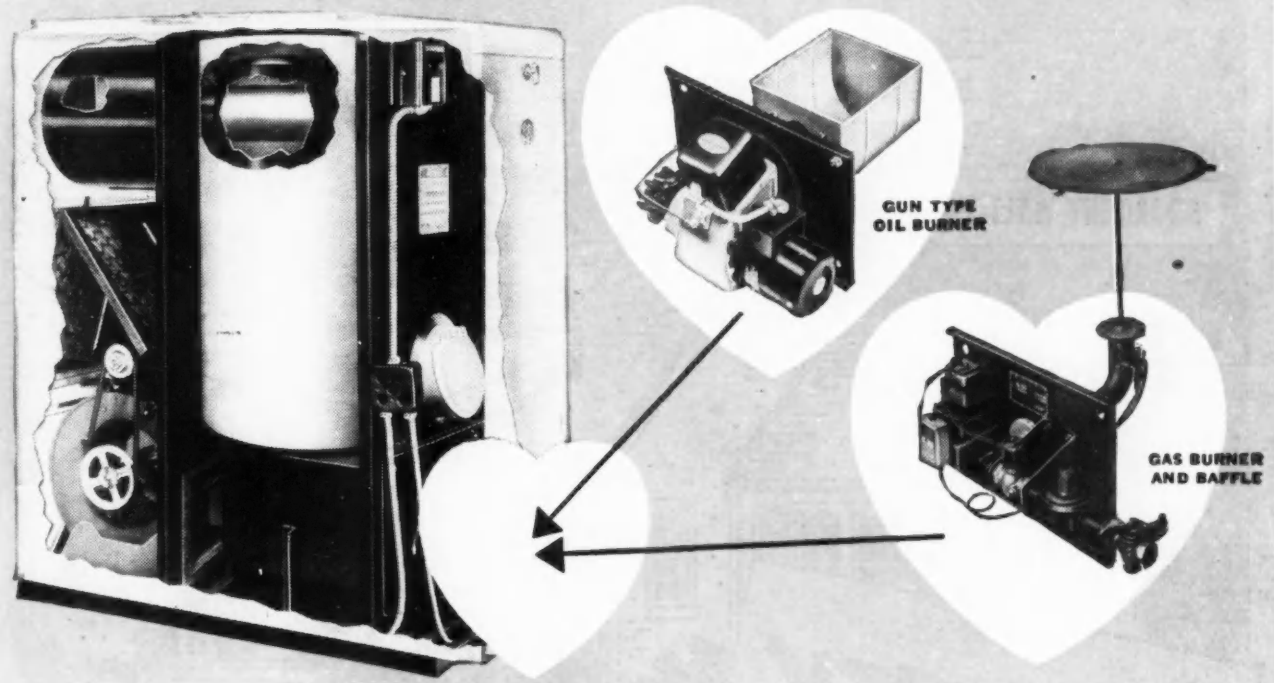
Heavy-duty models have greater strength and durability with Chevrolet's new SPLINED REAR AXLE HUB CONNECTION.

The Cab that "Breathes"* • Flexi-Mounted Cab • Uniweld, All-Steel Cab Construction • Large, Durable, Fully Adjustable Seat • All-Round Visibility with Rear-Corner Windows* • Heavier Springs • Super-Strength Frames • Full-Floating Hypoid Rear Axles on ¾-Ton and Heavier Duty Models • Specially-Designed Brakes • Standard Cab-to-Axle-Length Dimensions • Multiple Color Options.

*Fresh air heating and ventilating system and rear corner windows optional at extra cost

For G
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Denve
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stalla
versa
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condi
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New Two-Fuel Winter Air Conditioner —for either oil or gas!



—the **RICHMOND** furnace with "2 hearts"
easy to stock . . . easy to install . . . easy to change-over!

For Gas:—As a Gas Winter Air Conditioner, *complete* unit (in two sizes) approved by A G A for all types of gas, including LP, and for installation anywhere in the United States; from Atlantic City to Denver, at sealevel or a mile high.

For Oil:—As an Oil Winter Air Conditioner, oil burners for both size furnaces listed with Underwriter Laboratories under CS-75.

Richmond gives you both oil and gas burners, the heart of the heating system, each on a mounting plate for easy, fool-proof installation or quick change-over. Switch from oil to gas (or vice versa) can be made in less than an hour.

By stocking only two furnaces (AS 12 and AS 23) you have four conditioners—saving you up to 50% on your furnace storage and inventory costs—and you are ready for either oil or gas installa-

tions. Furnace unit, only 23" wide, is shipped assembled and internally wired in one carton (Weights less than 395 lbs.). Burner units packed separately.

Because of the easy storage, easy installation and easy change-over, this new Richmond Winter Air Conditioning unit is truly—
A Unit Designed With The *TRADE* In Mind.

FOUR CONDITIONERS—TWO FURNACES

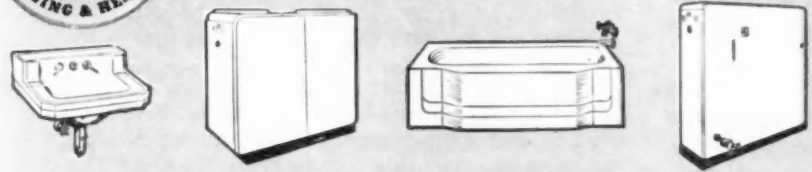
- AS 12: Output-Gas: 72,000 Btu. Oil: 75,000 Btu.
- AS 23: Output-Gas: 92,000 Btu. Oil: 105,000 Btu.
- Whiter-white Richmond Enameled steel jacket—23" wide x 47" deep.
- Steel base and channels—no "grouting" needed.
- *Furnace unit illustrated: #AS 23.



RICHMOND RADIATOR COMPANY

AFFILIATE OF REYNOLDS METALS CO.

When we started back in 1867 Two-Fuel was either coal or wood—but . . . "We've come a long way since then."



Plumbing Fixtures: Enameled Cast Iron Ware Vitreous China Pyral Glass
 Heating Equipment: Oil & Gas Winter Air Conditioners Gas Boilers Radiators

CLIP AND MAIL COUPON TODAY

Richmond Radiator Company
 19 East 47th Street, New York 17, N. Y. AB-11

Gentlemen:
 I am interested in the New Richmond Two-Fuel Winter Air Conditioners. Please send me full details. No obligations, of course.

Name.....
 Company.....
 Address.....

THE FINEST FLASHING FOR LOW-COST HOUSES



● Revere Home Flashing is a completely new type of copper flashing. It is so low in cost . . . so economical to install, that it enables you to give even low-cost houses the lasting protection of *solid copper* at valleys, chimneys, doors, windows, adjacent wall and roof joints.

Revere Home Flashing comes to you packaged, complete, ready to use. Each package contains: (1) 10 sheets of special-temper, special-gauge Revere Copper; (2) an instruction book that clearly shows — in words and pictures — just how this flashing should be installed; (3) enough hardware bronze nails to do the job right.

Revere Home Flashing provides more than economical weather-sealing. It adds an important sales point to the house; it shows that the builder uses quality material; and it assures complete satisfaction for the owner. And it does all this at such low cost that you'll want to start using it right way.

AT YOUR BUILDING SUPPLY DEALER

Your building supply dealer has Revere Home Flashing in stock . . . or can get it for you promptly. Ask him today, and start now to give your customers — and yourself — the protective advantages of the Revere Home Flashing System.

Of course, good construction calls for copper gutters, downspouts and plumbing lines, too!

REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, New York

Mills: Baltimore, Md.; Chicago, Ill.; Detroit, Mich.; New Bedford, Mass.; Rome, N. Y. — Sales Offices in Principal Cities, Distributors Everywhere.

BECAUSE THEY KNOW IT BY NAME

INSELBRIC

THE INSULATING BRICK SIDING

Yes, INSELBRIC is "the only insulating brick siding people ask for by name"! So naturally it's easier to sell! INSELBRIC is "accepted" as the nation's first choice in brick siding. INSELBRIC is quicker and easier to apply, looks better, and lasts a lifetime—makes old frame houses look like new brick homes. Profit-wise dealers always insist on genuine INSELBRIC—America's fastest selling insulating brick siding!

Is Easier to Sell!



LOOK FOR THIS NAME

INSELBRIC

ON BACK OF EVERY PANEL

*U.S. PAT. No. 2232432

THIS COUPON WILL BRING DETAILS OF HOW YOU TOO CAN "CLICK WITH INSELBRIC".

JONES & BROWN, INC.

National Distributors of Inselbric and Inselstone
PITTSBURGH, PA.

MASTIC ASPHALT CORP.

World's Largest Exclusive Producers of Insulating
Brick Siding. Makers of Inselbric and Inselstone.
SOUTH BEND, IND. • ELIZABETH, N. J.

Jones & Brown, Inc.
439 Sixth Avenue
Pittsburgh 19, Pa.

AB

Yes, I want to know how I can build a permanent, profitable business of my own with INSELBRIC. Please send me the full INSELBRIC story at once!

Name.....

Street.....

City.....

Brick

THE BUILDER'S MATERIAL...

NOW, MORE THAN EVER!

BRICK is the choice of leading builders everywhere. Just as it was last year and 100 years before that.

Why? Because you can *always* depend on brick.

Brick is quality-consistent. Here is a material that won't warp, shrink or swell. Brick won't burn. Brick needs no finishing; hosing cleans it. Brick won't weather,

corrode or rot — it keeps its natural beauty and fine texture.

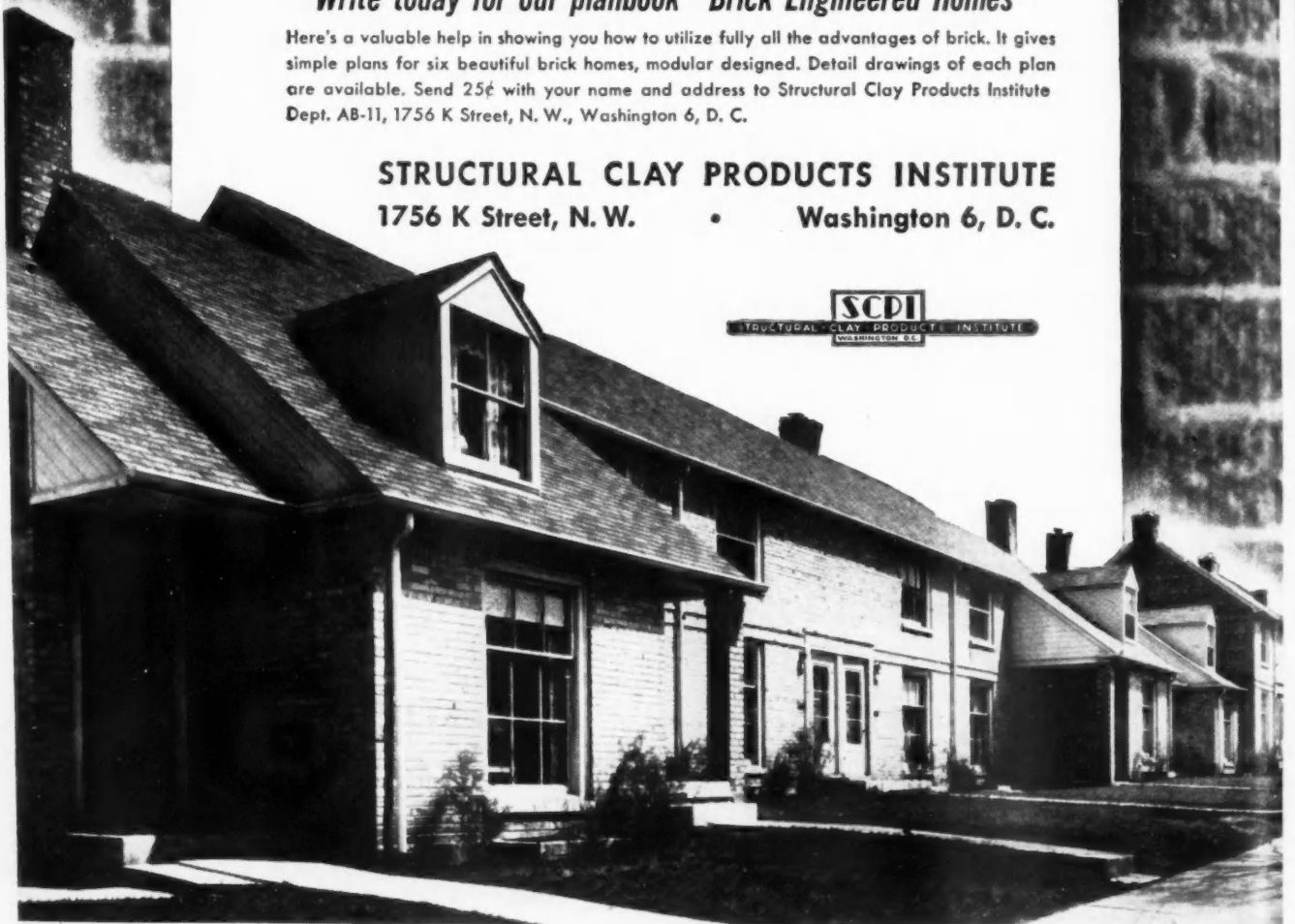
You'll get higher resale values with brick. In today's market this protection is particularly important.

And now brick is modular, bringing you the new economy and efficiency of construction demonstrated in brick engineered housing.

Write today for our planbook "Brick Engineered Homes"

Here's a valuable help in showing you how to utilize fully all the advantages of brick. It gives simple plans for six beautiful brick homes, modular designed. Detail drawings of each plan are available. Send 25¢ with your name and address to Structural Clay Products Institute Dept. AB-11, 1756 K Street, N. W., Washington 6, D. C.

STRUCTURAL CLAY PRODUCTS INSTITUTE
1756 K Street, N. W. • Washington 6, D. C.



NOW... a New CURTIS Achievement



What Curtis PRESPINE offers YOU today!



Through the past 82 years, Curtis has pioneered many an important development in the wood-work field. And today there's a *new* Curtis "first"—Curtis Prespine—a new wood product combining unique advantages, and specially designed to be used as an inherent part of Curtis Woodwork, such as door panels, and in kitchen cabinet units and other woodwork.

Like the well-known Silentite Window and other Curtis developments, Prespine is scientifically developed to meet Curtis high-quality standards for fine woodwork. When you know the features of Prespine, you'll know why it is so rapidly making a place for itself in the woodwork world!

Beauty of Surface—Prespine has a hard, satin-smooth, evenly patterned surface. When unfinished, the color of Prespine closely resembles that of the natural wood from which it is made.

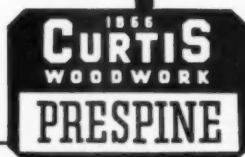
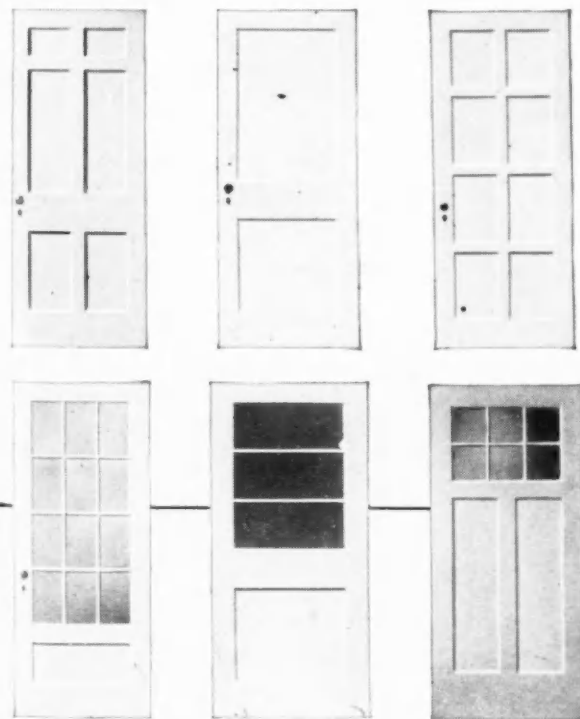
Takes Any Finish—The Prespine surface provides an excellent bond for paint. No grain raising—nothing to cause discoloration. Edges provide better surface to finish. Prespine, too, takes any color stain beautifully.

Lasting Durability—In this Curtis laboratory, Prespine has been boiled for hours—it has been soaked for weeks—it has been subjected to freezing and thawing—and every test has proved its amazing durability. Prespine has the strength to take heavy impact blows—is difficult to mar or scratch—does not chip or splinter at edges. It has superior bending strength—resists warping, shrinking and swelling.

Lifetime Economy—Economical in first cost, Prespine provides lifetime economy for the owners of Curtis products in which it is used. Here is a product worthy of the Curtis tradition of providing lasting value for architect, builder and home-owner.

PLUS the proved advantages of wood! Remember, Prespine is a wood product, with the advantages which wood has always offered. In making it, the chemical composition of wood itself has not been changed!

Prespine is available only as used in the production of Curtis Woodwork.



Prespine will be used in Curtis Woodwork wherever its use will prove an advantage. Here are shown three Curtis interior doors and three Curtis exterior doors with Prespine panels.

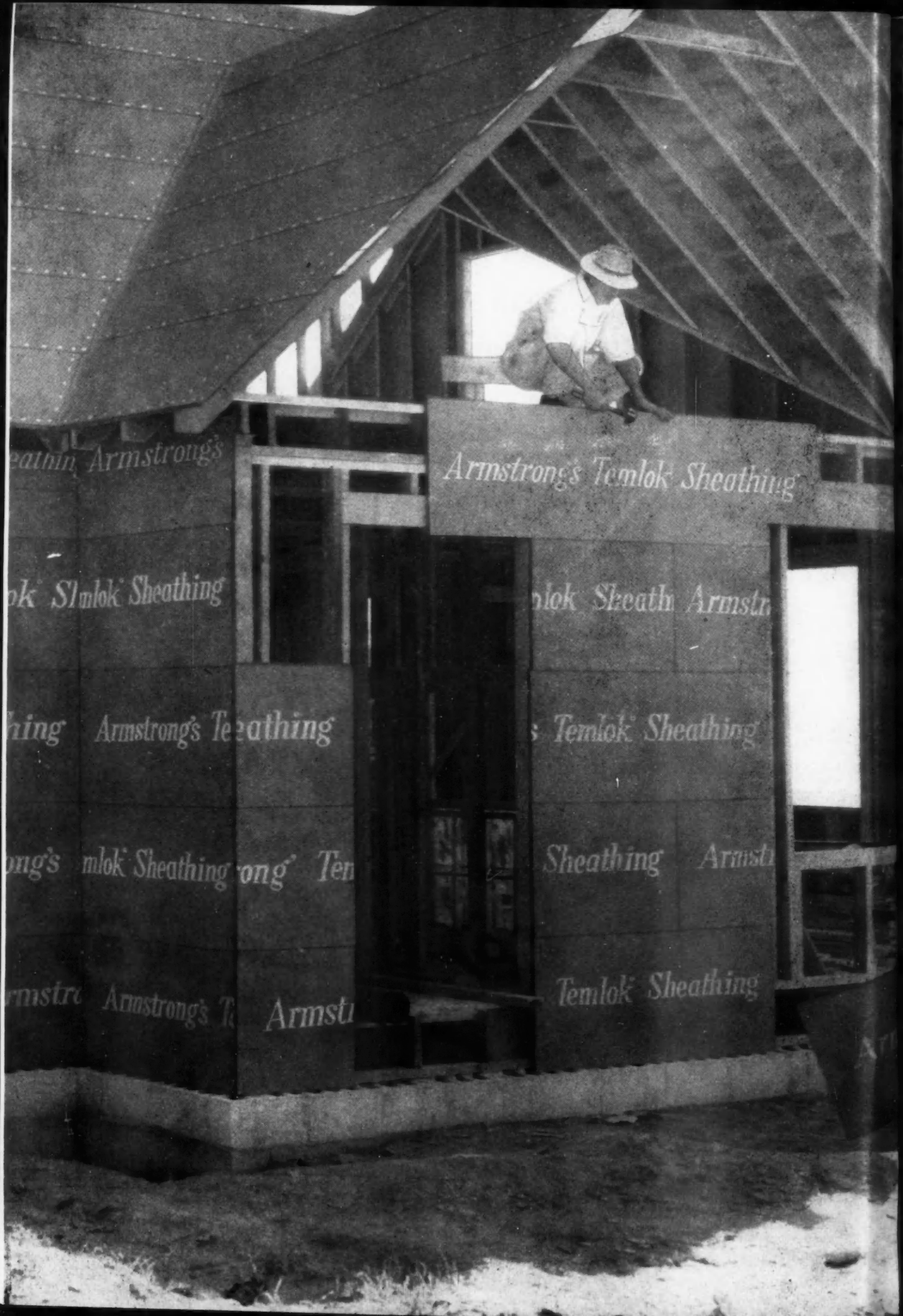
Curtis Companies Service Bureau
AB-11P Curtis Building, Clinton, Iowa

Gentlemen:
I want to know more about Prespine as used in Curtis Woodwork. Please send additional information.

Name _____

Address _____

City _____ State _____



Armstrong's

Armstrong's Temlok Sheathing

Temlok Sheathing

Temlok Sheathing Armstrong's

Armstrong's Temlok Sheathing

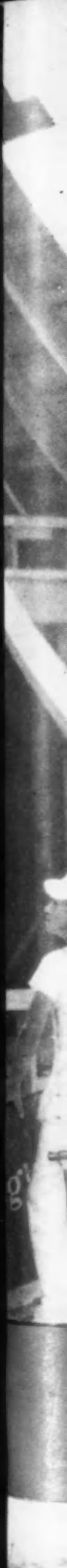
Temlok Sheathing

Armstrong's Temlok Sheathing

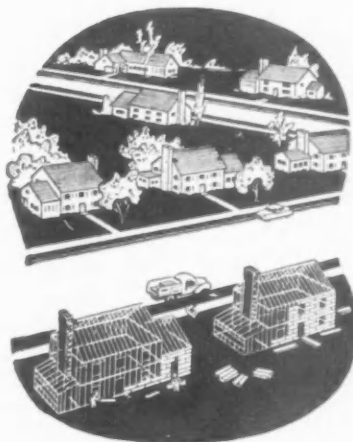
Temlok Sheathing Armstrong's

Armstrong's Temlok Sheathing

Temlok Sheathing



MAKING GOOD ON THE JOB



Armstrong's new Temlok® Sheathing has been in production only a few months, but it is already beginning to appear on new houses all over the country.

Carpenters tell us they like Temlok, particularly because of its strength. Of course, to a carpenter, that extra strength means he can handle a big piece of Temlok without, hav-

ing to pamper it. Temlok's light weight makes it possible for one man to handle a large piece of sheathing a little faster. The extra nail-holding strength makes it easier to work from a ladder, because the first nail holds the board in place. Temlok cuts easily, too. That's because the asphalt moistureproofing is dry all the way through the board. It can't stick to the hands or gum up a saw.

Lumber dealers, as well as contractors and builders, know how important it is for the carpenter to like a material. All the extra things that carpenters like about Armstrong's Temlok Sheathing are adding up to the kind of popularity that will continue to make Temlok easier to sell . . . in good times or bad.

When you sell Temlok Sheathing and the other Armstrong building materials, your selling job is easier because all of these materials are proving themselves, on the job, to carpenters, builders, and owners. Ask your Armstrong wholesaler about them or write to Armstrong Cork Company, Building Materials Division, 1611 Ross Street, Lancaster, Pennsylvania.



Armstrong's Temlok

WINTER WEATHER CREATES INCREASED DEMAND FOR COBURN #500 SWING-OVER HARDWARE SET



OTHER WICKWIRE SPENCER PRODUCTS FOR THE BUILDING INDUSTRY

CLINTON WELDED WIRE FABRIC—For every type of concrete reinforcement.

REALOCK FENCE—Chain Link Fence for industrial plants, institutions, residences.

CLINTON BRAND HARDWARE CLOTH—In standard meshes and widths.

PERFECTION DOOR SPRINGS—Unequaled for toughness, durability and resistance to rust.

WICKWIRE WIRE ROPE—In all sizes and constructions for every need.

Car owners with old-fashioned swinging garage doors, who have had to shovel snow before getting their cars out, are good prospects for the Coburn #500 Swing-Over Hardware Set. For with this set the old doors can easily be remodeled into smooth operating overhead doors.

The Coburn #500 Set is adaptable to practically all types of garages. It doesn't interfere with usable floor space. Perfect counterbalance assures effortless operation. Coburn #500 is economical too, for even though it is high in quality, its cost is in the lowest price field.

Write today for catalog showing full line of hardware for garage and barn sliding doors. Other Coburn Products include fire door hardware, overhead trolleys and conveying systems for carrying loads up to 3,000 lbs.

WICKWIRE SPENCER STEEL
A DIVISION OF
AMERICAN WIRE FABRICS CORPORATION
A SUBSIDIARY OF



500 FIFTH AVENUE • NEW YORK 18, N. Y.

Boston • Buffalo • Chicago • Denver • Ft. Worth • Philadelphia • Pacific Coast Subsidiary—The California Wire Cloth Corp., Oakland 6, Cal.

The



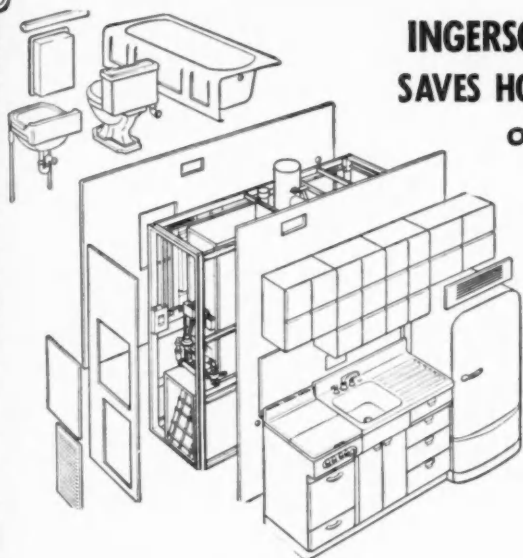
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NO. 1 OF A SERIES

The PROFESSIONAL BUILDERS' BULLETIN

An "Idea Department" from the Engineers of Ingersoll



INGERSOLL UTILITY UNIT SAVES HOURS OF DETAILING

One Specification Provides All Home Utilities

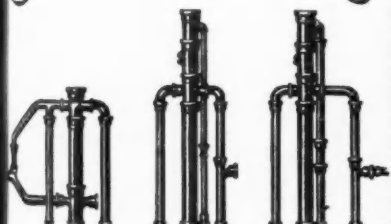
The Ingersoll Utility Unit simplifies the professional builder's problem in small-home design. Exacting details are eliminated. One specification provides for all plumbing and utilities—including all fixtures, appliances, controls and fittings. It is assembled by skilled A. F. of L. mechanics. The Ingersoll Utility Unit provides a well-designed, skillfully engineered installation that makes it easy to meet building schedules.

104 LEADING DISTRIBUTORS ADDED IN LAST 3 MONTHS



Units, Parts and Service Available Everywhere

New Ingersoll wholesalers include such industry leaders as Hajoca Corp., of Philadelphia; W. A. Case & Sons, of Buffalo and Tay-Holbrook, Inc., of San Francisco. The addition of 104 firms to Ingersoll's already widespread coverage, makes the Ingersoll Utility Unit readily available from coast-to-coast and assures adequate service.



New Ingersoll Flexibility Makes Unit Adaptable to Any Code Requirement

A choice of four stack and vent assemblies and five types of undergrounds give the Ingersoll Utility Unit the flexibility necessary to meet the most exacting code requirements. Adaptability to various designs and floor plans is provided by a choice of cabinets and types of heating plants.

The Ingersoll Utility Unit now meets 96 percent of all codes. A choice of oil or gas heating plants and other variations make the Unit adaptable to any small home, with or without basements.

Ingersoll's sales engineering force of specialists in small-home utilities is ready to consult with you at any time. Ask your Master Plumber whenever you desire the advice of these Ingersoll engineers.

COSTS YOU NOTHING!

NEW DESIGN DATA MANUAL for Professional Builders

New Credit Controls Point-up Advantages of Including Appliances In Small-Home Mortgage

Consumer credit controls, effective Sept. 20th, have spurred investigation by home-buyers into the advantages of buying a home in which stove and refrigerator can be included as part of the mortgage.

Under Federal Reserve Regulation W, down payments on appliances may not be less than 20 percent. Balances under \$1,000 must be paid in 15 months. Credits over \$1,000 with minimum monthly payments of \$70 may be extended to 18 months.

The result of increased down payments and larger monthly payments has enhanced the sales appeal of homes with appliances already installed as an integral part of the house.



It's new and up-to-the-minute, a complete manual with more than 30 illustrations and diagrams, including floor-plans, plumbing layouts, heat-loss formulas, types of fixtures for various jobs. Compiled with the help of leading architects and builders, *Architect's Design Data* contains material you can use every day.

Write for yours today!

INGERSOLL UTILITY UNIT DIVISION
Borg-Warner Corporation
Dept. B11, 321 Plymouth Court
Chicago 4, Illinois

Ride with the **WINNER!**

America's fastest selling insulation is

Fastest selling because

... BUILDERS LIKE IT

Smart builders demand a lot from the materials they buy. And when it comes to insulation, they find everything they want in the complete Fiberglas Insulation line—including the only mineral wool roll blanket on the market. For example . . .

**PREMIUM PRODUCT at a
COMPETITIVE PRICE**

Born of intense heat, the clean, springy glass fibers in FIBERGLAS BUILDING INSULATION will never settle, rot, burn or deteriorate. Once installed, their high performance and efficiency are lasting—and the price is competitive!

**EASIEST TO
APPLY CORRECTLY**

Speedy, foolproof installation is made easy by the firmly adhered vapor barrier. The tough, four-ply nailing flanges on the *completely* enclosed blanket make application a pleasure. The continuous roll blanket, particularly, provides superior vapor protection. Compression packages are handy, save storage space and are easily passed through stud and joist spaces.

**NATIONALLY KNOWN,
UNIVERSALLY ACCEPTED**

Builders know that home buyers recognize Fiberglas Insulation as the leader in the insulation field. In fact—this widely discussed insulation is continually setting new standards of quality, performance and economy in *all* types of insulated products used in the home.

OWENS-CORNING

FIBERGLAS

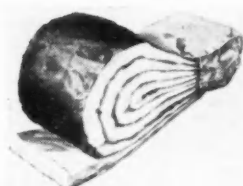
TM. REG. U.S. PAT. OFF.

**BUILDING
INSULATION**

*FIBERGLAS is the trade-mark (Reg. U. S. Pat. Off.) of Owens-Corning Fiberglas Corporation for a variety of products made of or with glass fibers.

is FIBERGLAS*

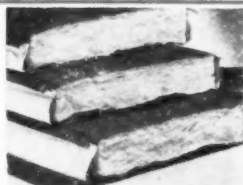
FULL RANGE OF TYPES AND SIZES



ROLL BLANKETS

Asphalted, vapor-resistant paper on one side. Perforated, vapor-permeable paper on other side.

Thickness	Width	Length	No. Pcs. Per Pkg.
Thick	15"	32'0"	1
Medium	15"	48'0"	1
Inch	15"	80'0"	1
Thick	23"	20'11"	1
Medium	23"	31'4"	1
Inch	23"	47'0"	1



BATT BLANKETS

Same type of construction as the Roll Blanket.

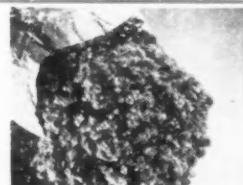
Thick	15"	48"	8
Medium	15"	48"	12
Thick	15"	24"	16
Medium	15"	24"	24



UTILITY BATTS

Made of Fiberglas PF Insulation.

Full Thick	15"	10 $\frac{3}{4}$ "	27
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POURING WOOL

For pouring or hand packing.

Packed in paper bags—approximately 40 lbs. per bag.

Fastest selling because **USERS LIKE IT...**

Dollar saving per season, per 1000 square feet of frame wall for insulation thicknesses shown. Ceiling savings usually are greater.

Insulation Thickness	Climatic Severity in Degree-Days			
	9000	7000	5000	3000
1"	\$42.20	\$32.80	\$23.60	\$14.00
2"	56.10	43.80	31.50	18.70
3"	62.70	48.40	34.80	21.20

(Figures Approximate: Based on price of \$.14 for No. 3 furnace oil.)

RIDE WITH THE WINNER!

Use Fiberglas, the building insulation that gives you and your customer more for your money. For full details, see your dealer or write Owens-Corning Fiberglas Corporation, Dept. 2018, Toledo 1, Ohio.

In Canada: Fiberglas Canada Ltd., Toronto, Ontario.

DISTRIBUTED BY

4

INDUSTRY LEADERS



ARMSTRONG CORK COMPANY
Lancaster, Pa.



CERTAIN-TEED BUILDING PRODUCTS CORP.
Ardmore, Pa.



THE FLINTKOTE COMPANY
New York, N. Y.



KELLEY ISLAND LIME & TRANSPORT CO.
Cleveland, Ohio

Save scarce fuel . . . Insure comfort . . . Insulate with FIBERGLAS

PROOF OF A JOB WELL DONE



in the Olympic Games

it's the laurel wreath
for the winner.

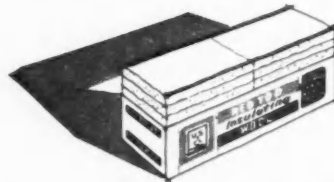
in Home Building

it's Insulating with

RED TOP

T. M. Reg. U. S. Pat. Off.

MINERAL WOOL BATTS



In the consideration of *any* insulation—even mineral wool—two factors are necessary for a complete and permanently effective job. RED TOP mineral wool batts offer you both: (1), *an efficient vapor barrier*, and, (2), *assured thickness and density that only a machine-made, factory-checked product can give.*

As a result, when you insulate with RED TOP batts, you add two strong selling features to your homes—effective condensation control, and an insulation that maintains high insulating value for the *life* of the house.

And, remember, RED TOP batts arrive on the job in strong, easily handled cartons.

Join the hundreds of alert builders who already know RED TOP mineral wool batts give superior, all-around performance—mean better insulated homes.



United States Gypsum

For Building • For Industry

Gypsum • Lime • Steel • Insulation • Roofing • Paint

"solved the problem of heating such a project"

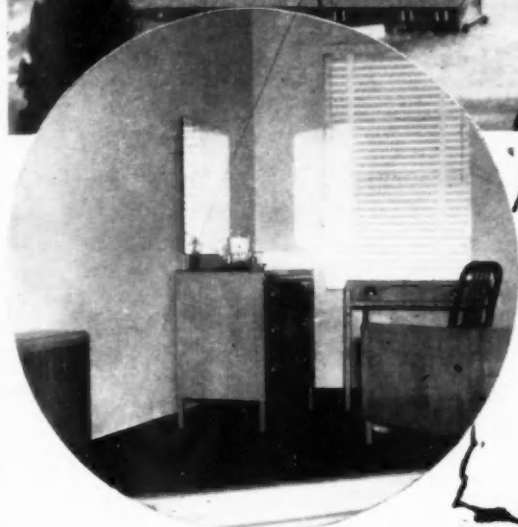
WITH

Janitrol

TRIPLE SERVICE HOT WATER HEATING SYSTEMS



OF MARSHALL TEXAS



Here in Marshall, Texas, is an installation of Janitrol Triple Service Boilers that you and your factory, Surface Combustion Corporation, can be proud of. We succeeded in building a modern and practical auto court catering to traveling business personnel offering equal service of any hotel in the country. And, with the help of your engineers, we have solved the troublesome problem, namely, the heating of such a project.

Our thirty cabins are heated with five Janitrol WAS-210-64 Type 1-WR Triple Service Boilers which supply not only water for convector heating, but also for sanitary purposes in the baths as well. This eliminated a separate hot water system and no doubt increases the overall efficiency of gas consumption. This installation is well within our policy of using the best nationally known equipment for best customer satisfaction.

R. A. Hope

For new installations, or for replacing outmoded equipment in homes, apartments, stores and numerous other types of buildings, this new Janitrol brings many new advantages.

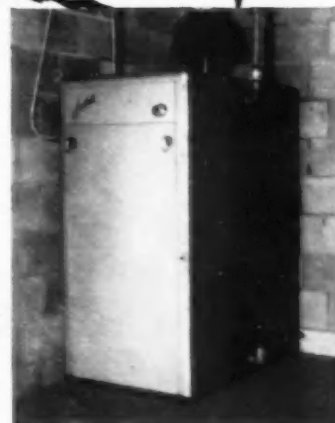
For new construction, the complete Janitrol hot water heating package and distributing system is simplifying the application of radiant panel heating in both ceilings or floors.

For replacement work and certain new construction Janitrol also supplies a complete package for convector heat-

ing. Gas, oil or LP-gases can be used to obtain three services: (1) Comfort Heating (2) High Temperature Water for Dishwashers and Laundry (3) Moderate Hot Water for Lavatories and Showers.

As a building contractor you should have complete information on this revolutionary but proven heating system, write today.

Janitrol Triple Service Units are available in 3 sizes. Multiple installations are made when requirements exceed 210,000 Btu. hr. →



SURFACE COMBUSTION CORPORATION • TOLEDO 1, OHIO

ADVERTISEMENTS LIKE THESE ...



Barrett Shingle Roofs
Look good and stay good in any weather

Whether it is cold or hot or a low frost, or even a heavy snow, the sure grip of the water-proofing and hold of a tight, rugged, weather-resistant and windlocking Barrett Shingle Roof keeps the roof dry and the result of 34 years of successful roofing experience - the name of the World's No. 1 Roof! This is the sure, scientific roofing which, through its organized manufacturing system, will stand up to the test of time.

Made by the products of the Allied Chemical Corporation, Inc., the world's largest chemical manufacturer.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

One of America's
Great Roof Businesses
Building Resilience, Durability, Longevity
Proven Performance, Wind Resistance
Long Service Life, Weather Protection

How can you tell a good roof?

It's easy. After the roof is on, just look to make sure it's better. Get the Barrett sold for your guide. It stands for 34 years of successful roofing experience. Barrett's name and the weather-resistant Barrett Shingles are the essential marks of a good quality roof. Barrett Shingles are the essential marks of a good quality roof. Barrett Shingles are the essential marks of a good quality roof. Barrett Shingles are the essential marks of a good quality roof.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
40 Rector Street, New York 6, N. Y.

One of America's
Great Roof Businesses
Building Resilience, Durability, Longevity
Proven Performance, Wind Resistance
Long Service Life, Weather Protection

FULL PAGES • FULL COLORS
IN

THE SATURDAY EVENING POST

SELL ROOFS... and HOUSES AS WELL

Your selling job is a lot easier when you sell Barrett* Shingles.

You find that your customers *know* the Barrett name ... and *believe in it* as a mark of highest quality.

You find, too, that if you have a house to sell, a Barrett roof is a real sales asset ... just as other items of equipment by known and esteemed manufacturers are a help.

Consistent advertising, backed by consistently high quality, has made Barrett one of the fine American brand names that people want in their names.

THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

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Chicago 23, Ill.

36th & Cray's Ferry Ave.
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MANVILLE

DISHMASTER

Here's a dishwasher that more people can afford to buy
and more builders can afford to install!

Its handy operation lightens household burdens . . . gives the fast,
sanitary and thrifty kind of dishwashing that every housewife wants . . .
eliminates the dishpan, dishrag and "dishpan hands" . . . uses less
hot water and washing powder.

The handsome design of this Manville Dishmaster* will modernize any sink
and "dress up" the kitchen. Yet it's not a gadget. This permanent fixture is
manufactured to highest standards of quality and fully guaranteed. As easy to install
as a new set of faucets. Choice of table or wall type to fit any sink.

*This is a real sales opportunity—especially
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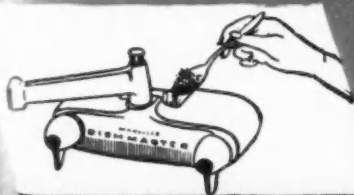
\$39.50

in

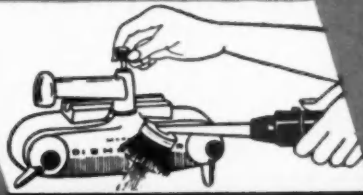
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by

Gerity



Charge the suds unit with 1 or 2 table-
spoonfuls of Vel, Dreft, Chat, Tide or
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Fingertip control. Lift the diverter valve
for clean spray. Push the button on
sprayer handle to add suds as needed.

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CORPORATION

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*Trade mark registered. Patents pending.

You get *plus* value with
Unique
SASH BALANCES

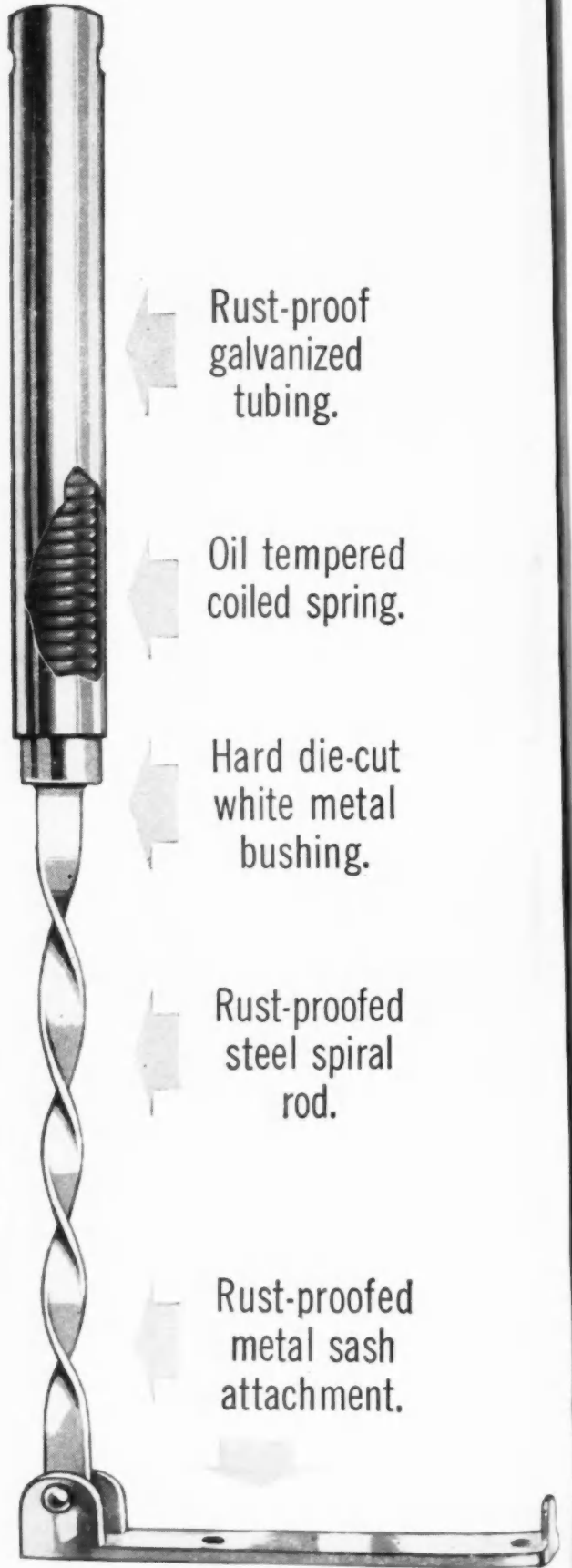


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It's as easy as one, two, three to install CECO Steel Casements, because all the guesswork has been removed. All the know-how you need is contained in CECO's Erecting Manual—prepared specially for the building industry. Detailed data gives complete and necessary steps for installing steel casements. Three of the important erection tips are shown here—"buttering" with mastic—fastening in wood construction—amount of clearance for caulking. For complete information, send for CECO's free Manual. Easy-to-follow instructions will help you cut costs, eliminate damage to windows, avoid loss of time. Write today. If you live in one of the western states, ask for special Pacific Coast Edition.

CECO STEEL PRODUCTS CORPORATION

General Offices: 5611 West 26th Street, Chicago 50, Illinois
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 Other typical products—Steel Basement Windows, Combination Storm and Screen Units, Metal Lath

HOW TO DO IT



The outside frame and mullions are "buttered" with mastic by the window erector before the casement is placed in the rough opening. Application of mastic is not to be confused with caulking of the casement opening.

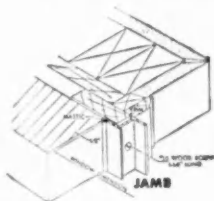


If the casements are being erected in wood construction, the screws should be applied so as not to distort the casement frames. For instance, screws are never drawn tighter in one hole than in another.

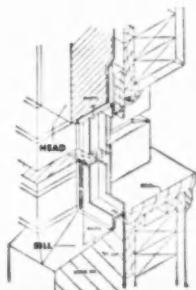


Masonry units should not be forced against the steel casement frame. Instead, $\frac{1}{8}$ " clearance should be left all around the casement for caulking.

ONE OF MANY TYPICAL INSTALLATIONS



Brick Veneer Construction



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 5611 W. 26th St., CHICAGO 50, ILL.
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and
the rivet...



The rivet that lies idle is as useless as a castle built in the air.

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60% have collected house plans.

27% have consulted architects.

44% have purchased land.

House & Garden

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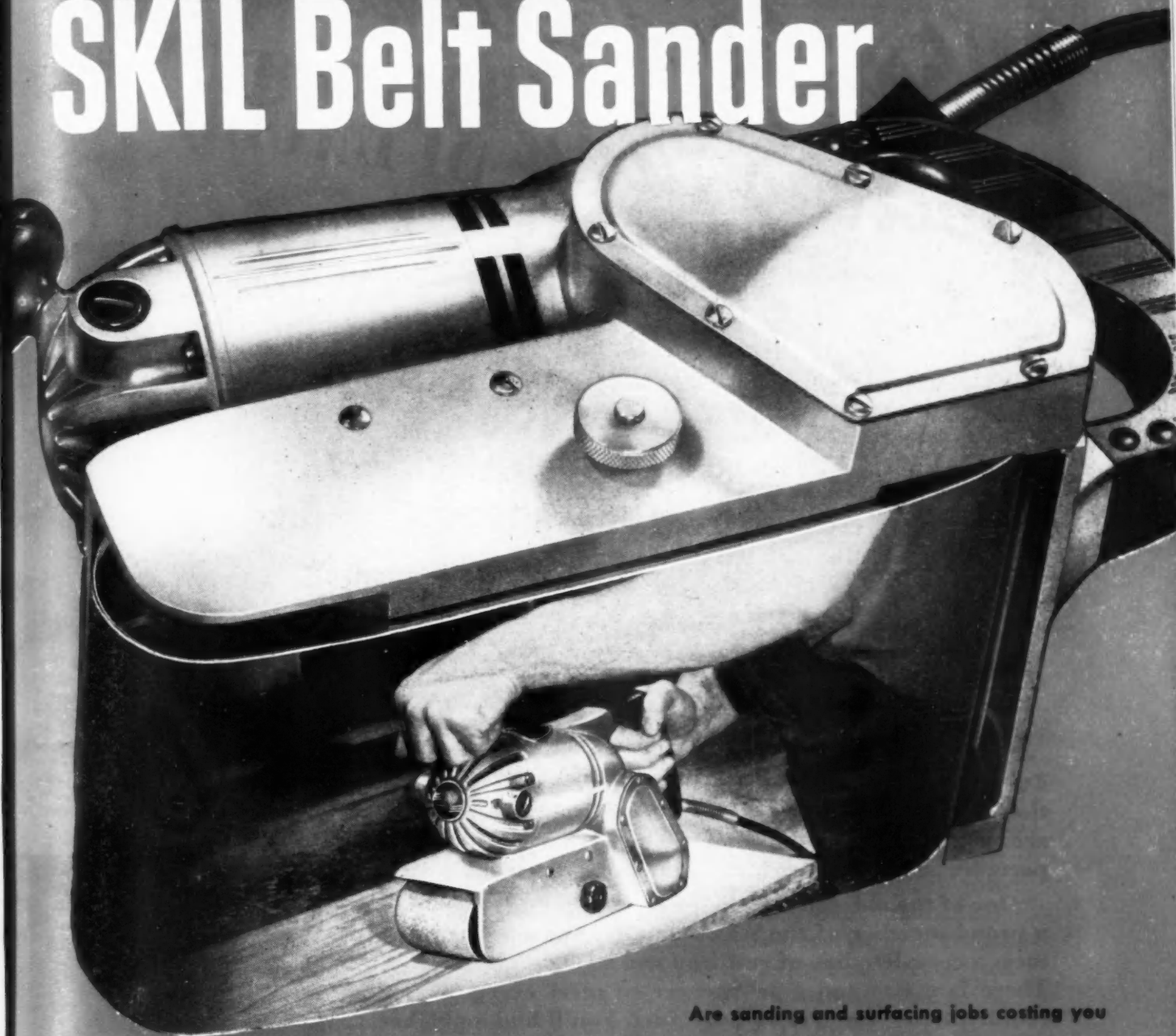
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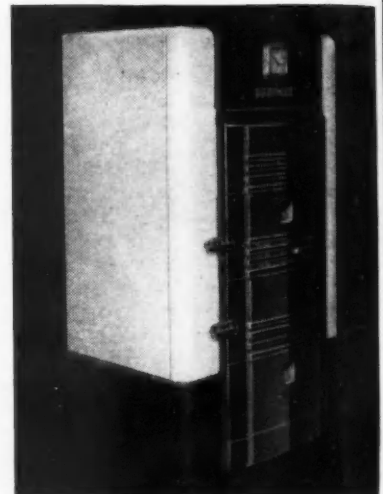
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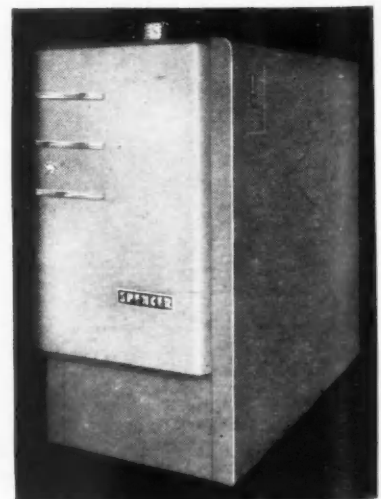
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Designed to burn any type of fuel—easily and quickly converted. Year-round domestic service hot water. A sectional boiler designed with iron to iron air tight fit. Attractive jacket combined with modern design door assembly featuring glass observation ports.



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**SELECTED BY
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JOBBER! DEALER! Make new customers, bigger profits with PITTSBURGH INTERLOCK—the colorful plastic wall tile that brings you tomorrow's colors today! Actually hundreds of striking combinations can be created to meet individual tastes from

the wide, luxurious range of plain, pastel and marbelized colors. Suitable for all bathrooms and kitchens—and for most business establishments. The sky's the limit on possibilities. Satisfied customers guarantee *new* customers and greater profit!

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Mail this coupon TODAY!

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Yes, I want to make new customers with PITTSBURGH INTERLOCK color-appeal. Please send full details.

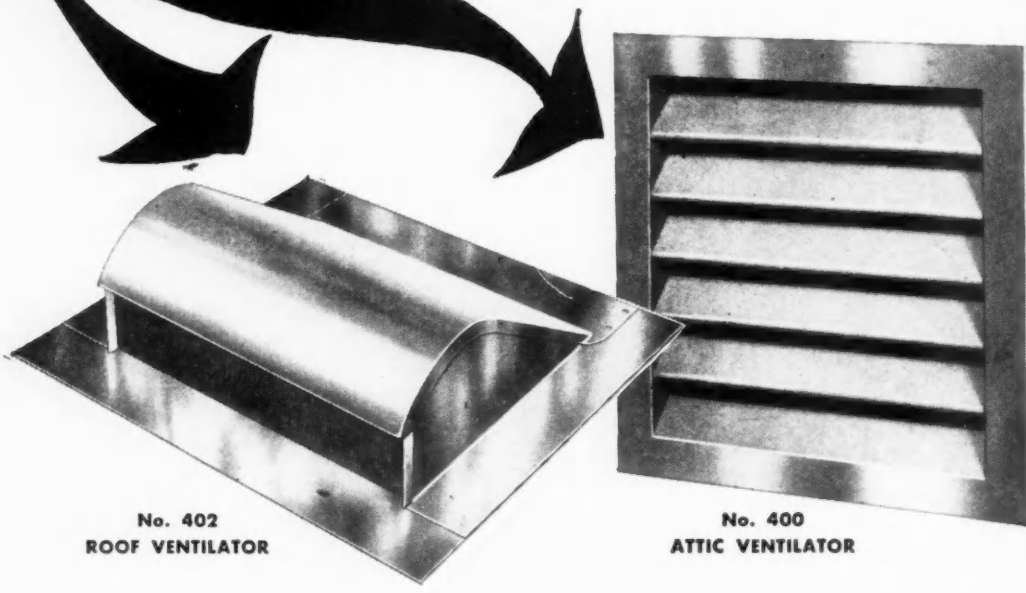
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ATTIC & ROOF VENTILATORS
Now made of rustproof
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No. 402
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Now available — ALUMINUM Ventilators at the same price as steel!

The improved LEIGH Attic and Roof Ventilators are now offered in rust-proof ALUMINUM — no painting required — they'll last a lifetime! Rugged, riveted construction results in a sturdy ventilator that will withstand rough handling. Ample free area, leakproof construction, removable insect screen, together with many other outstanding features combine to make LEIGH ALUMINUM Ventilators a most outstanding product.

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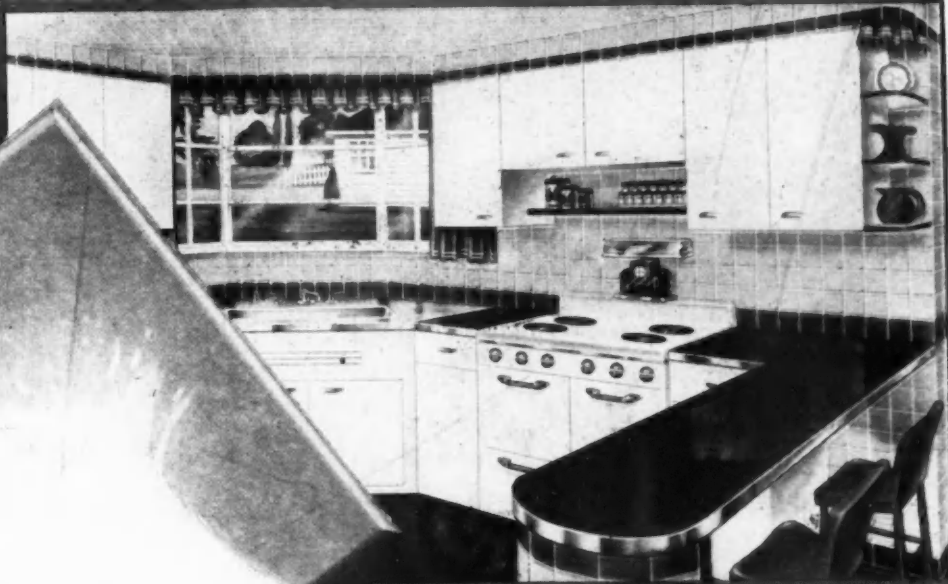
CLOTHES CHUTE DOORS

CEILING VENTILATORS

ALUMITILE Permanently FIREPROOF

Hastings ALUMITILE walls and ceilings in bathrooms, kitchens or any of the scores of other places where tile can and should be used will add that touch of luxury that makes the ordinary property "So much more desirable."

It is also beautiful, durable, economical and it will enhance the value of any property by many times the cost of installation.



Besides being fire-proof it is impervious to alkali and stains. It will not chip, crack or peel and can be easily cleaned like washing a china dish. This ideal installation for walls and ceilings is what everybody wants and which they now can have at a cost as attractive as the tile itself.

Available in 14 beautiful pastel colors ALUMITILE provides the means of satisfying the most exacting requirements of color and decoration. The wide range of tile sizes listed below make it possible to achieve anything desired in the way of pattern and design to meet the needs of all types of installation whether residential, commercial or industrial.

NOTE THE WIDE RANGE OF TILE SIZES

2½x5 caps	2½x10 caps	5x5 tiles
2½x5 corners	2½x10 corners	5x5 base
5x10 base	½x10 strips	10x10
5x10 tiles	½x5 strips	10x20

Water proof
Chip proof
Stain Proof

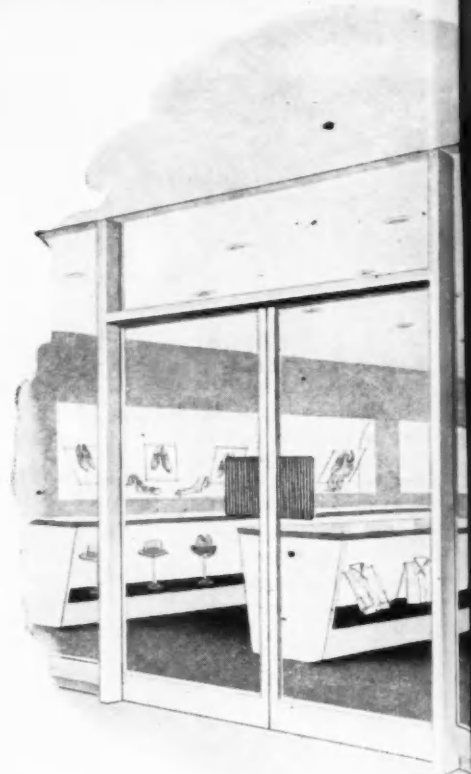
METAL TILE PRODUCTS CO. HASTINGS, INC. MICHIGAN.

Write TODAY for full information about ALUMITILE, the greatest development of its kind in years. There are choice territories still open for distributors.

Outstanding
New

Modern

Aluminum

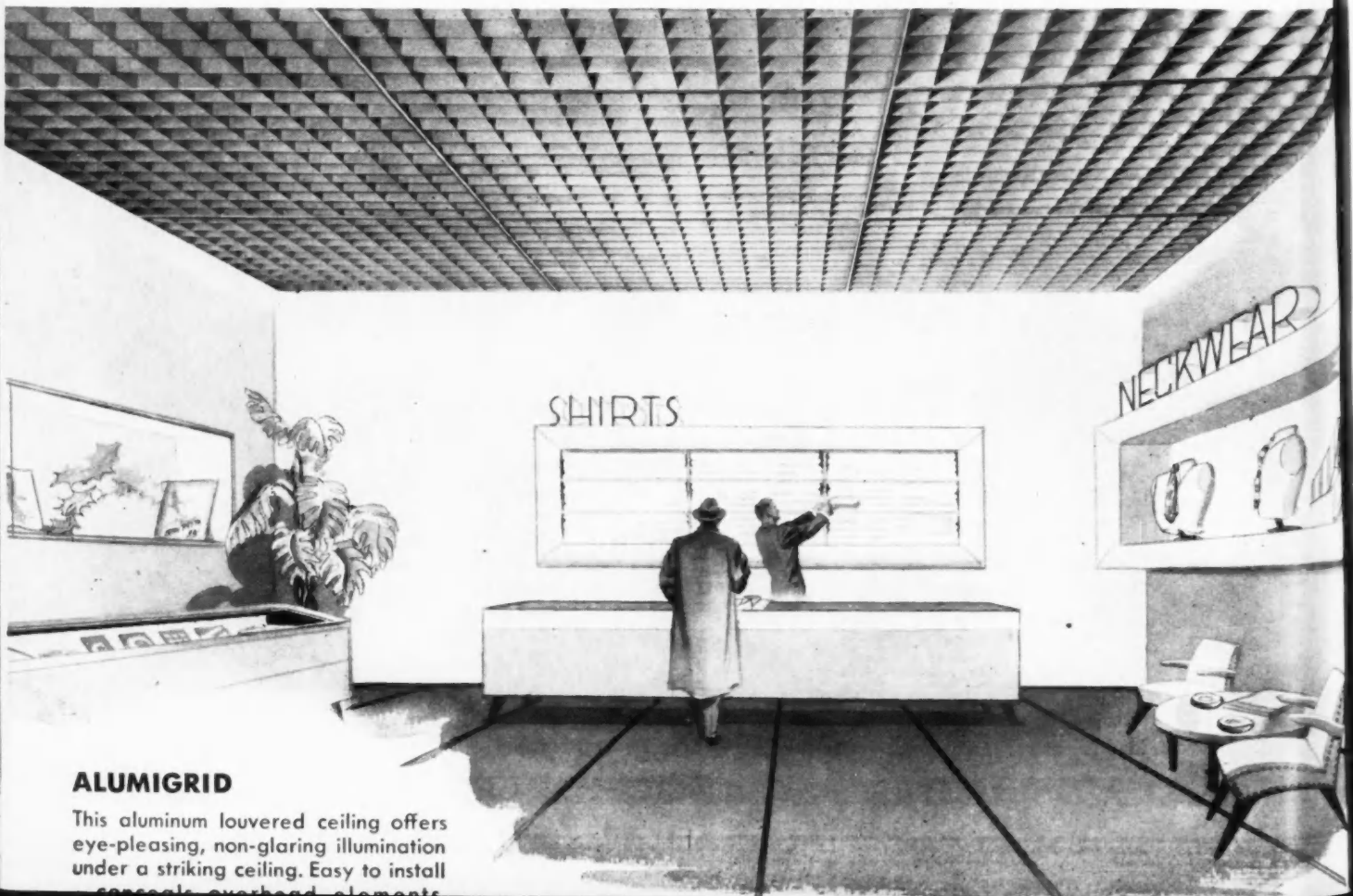


Kawneer precision-made assemblies are designed and engineered to fulfill the highest standards of modern building.

Shown here are four striking new product developments. United with the famous Kawneer Line of Store Front Materials, they offer you the widest variety of architectural metals available today.

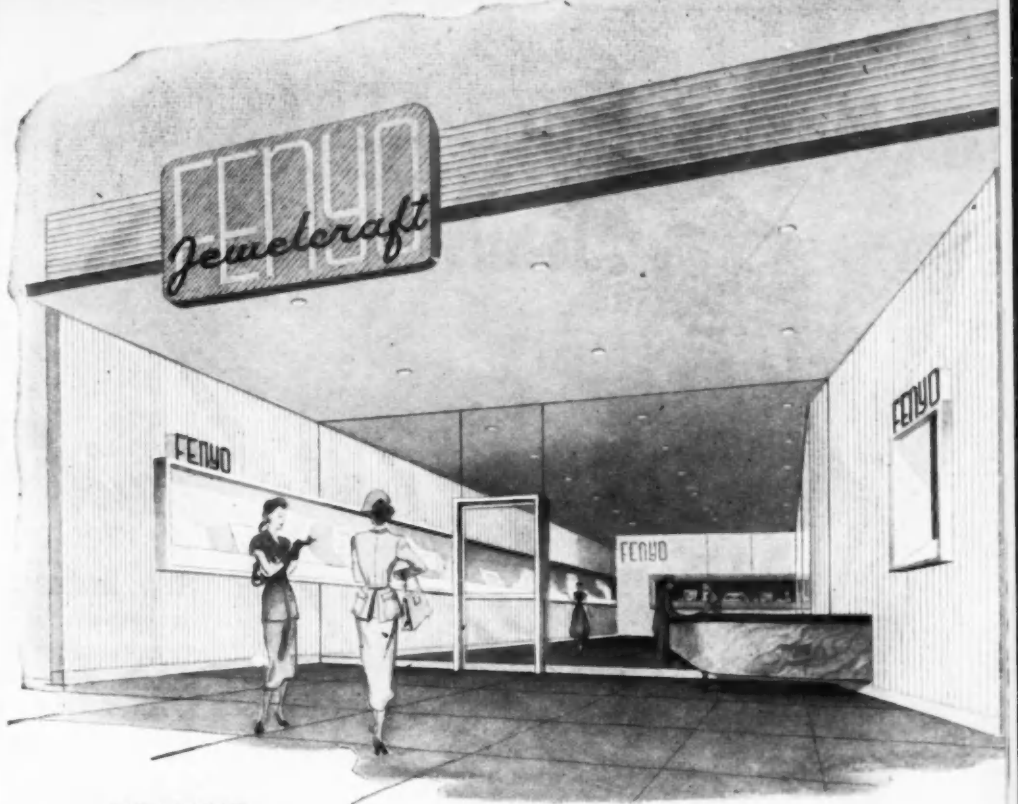
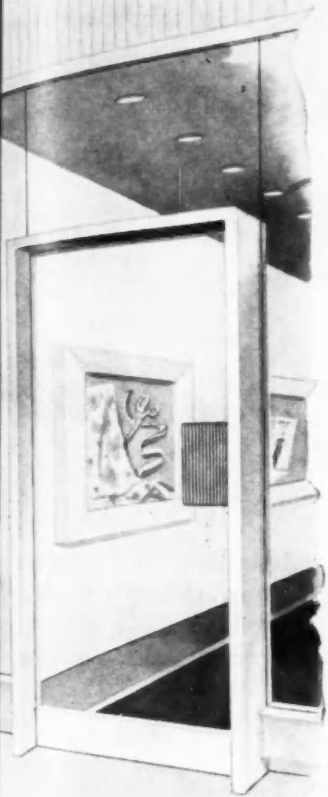
STOCK ENTRANCES

Now you can obtain immediate shipment on stock units. Kawneer offers the most complete line of aluminum entrances in the industry.



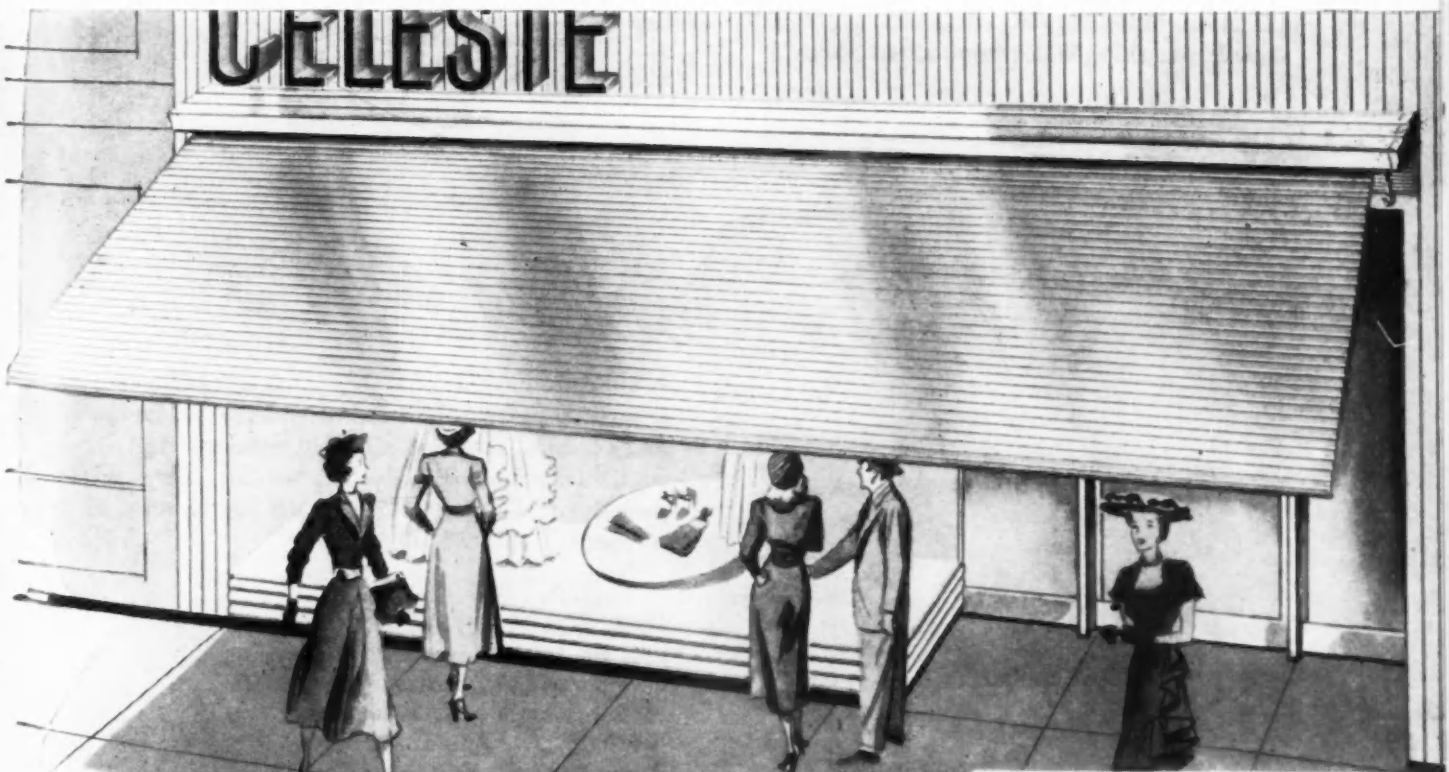
ALUMIGRID

This aluminum louvered ceiling offers eye-pleasing, non-glaring illumination under a striking ceiling. Easy to install



ZOURITE

The modern aluminum facing material in 4 colors! Green, brown, or black porcelain enamel baked on easy-to-handle aluminum. Also in Alumilite finish,



ALUMINUM AWNINGS

Here is the smooth-operating roll-type awning you've been waiting for. It's striking in appearance—easy to operate—sturdy and durable.

KOVACHY
AWNINGS

Write for information and construction details today. 123 N. Front St., Niles, Mich., or 2545 8th St., Berkeley, Calif.

Most popular ASBESTOS roof shingle

Johns-Manville has ever developed!



It's a rigid asbestos strip

NEW AMERICAN COLONIAL DESIGN: Distinctively beautiful, wins instant approval. Has a slightly staggered horizontal shadow line and deep-grained texture. Available in several pleasing colors. Blends perfectly with any style of architecture.

Any carpenter can apply



SELF-ALIGNING, SELF-SPACING: You don't need chalk lines. Each strip covers a large area . . . speeds application. Only 80 pieces required per square . . . only 4 nails per shingle in pre-punched holes.



Permanent as stone

FIREPROOF, ROTPROOF, WEATHERPROOF: Made from two practically indestructible materials—*asbestos* and cement. Thousands of J-M asbestos shingles have been in service over 35 years. Not one has ever burned or worn out! No signs they won't last another 35 years or more!

SEND FOR THIS FREE BROCHURE: It tells the full story of this outstanding development . . . shows many beautiful roofs in accurate full-color. Ask for brochure No. AS-85A. Address: Johns-Manville, Box 290, New York 16, New York.



American Colonials meet the construction standards of Industry-Engineered Homes



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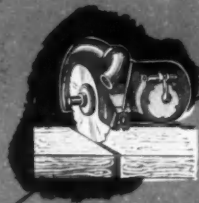
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Take this low-cost

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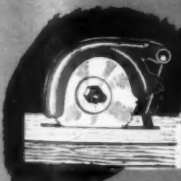
to your job!



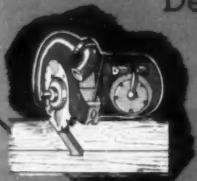
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To build more and better houses faster—builders use this portable, low-cost DeWalt. Because most of its working parts are now of light-weight, heat-treated aluminum, operators find it easier to handle—safer than ever before—and it does the fast, accurate work they want. It's a machine you can get quickly. Write for catalog. DeWalt, Inc., 111 Fountain Avenue, Lancaster, Penna.

ALL THESE AND MORE
IN ONE . . . and for
THE PRICE OF ONE!

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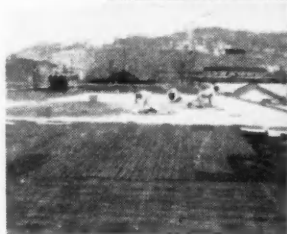
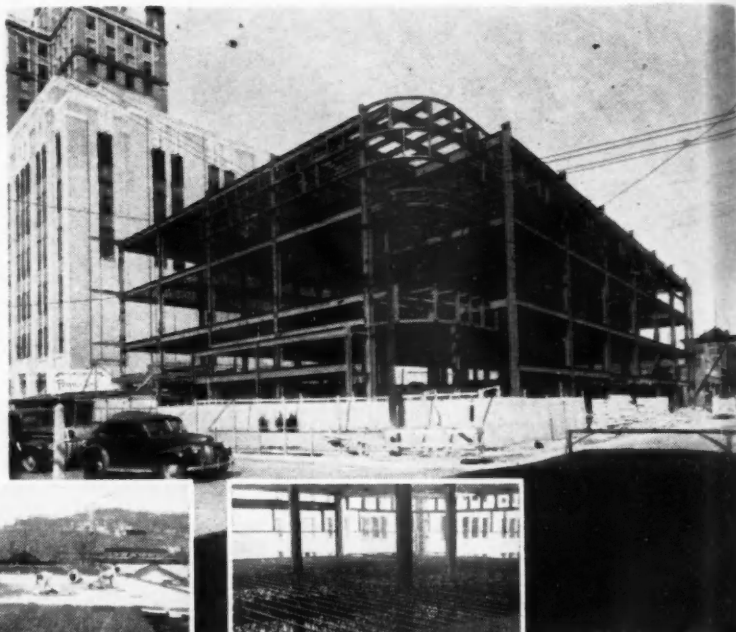
THE SAW THAT'S FIRST WITH BUILDERS

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Truscon "O-T" Steel Joists and Metal Lath Permit Quick Completion of Large Structural Areas

Meeting present day requirements for fast erection, because of abnormal economic conditions, calls for careful consideration of every material which will increase constructive efficiency or speed, without sacrifice of safety. That's why you will find it worthwhile to investigate the quick erection features of Truscon "O-T" Open Truss Joists* and Metal Lath.

Truscon "O-T" Joists are adaptable to various stages of building progress in one structure. They are self-sustaining . . . any number of floors can be erected simultaneously and then used as working platforms to carry on other building operations. Their open web pattern



Three different construction views of the new Peoples Store Building in Charleston, W. Va. Truscon "O-T" Steel

Joists and 3/8" Metal Lath are used throughout the building. Architect: Meanor, Grieffe & Daley. Contractor: Engstrom & Wynn.



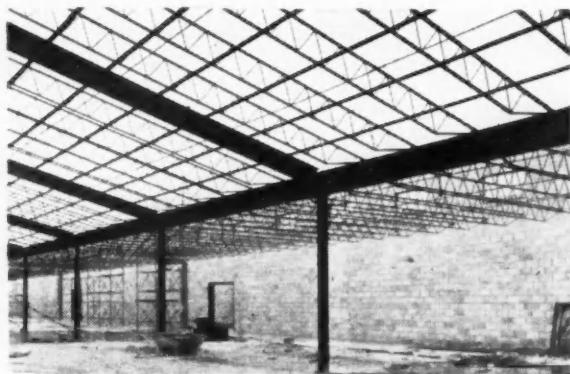
Interior construction view of new Westinghouse Corp., office building, Los Angeles, Calif., showing Truscon Steel Joists in place. Kaufman, Lippencott & Eggers, Architects. T-S Construction Engrs., Inc., Cont.

TRUSCON METAL LATH. As a plaster base for walls and ceilings, Truscon Metal Lath meets every requirement of modern cost-wise construction. It is easy to erect and work over . . . provides smooth, straight walls and ceilings, free from unsightly cracks . . . affords valuable fire protection.

Truscon manufactures a wide range of types of metal lath, corner beads, stucco mesh, corner reinforcements, hollow partition studs, base screeds, cold rolled channels and other products related to the plastering trades. All Truscon Metal Lath products are manufactured in accordance with U.S. Department of Commerce Simplified Practice Recommendation R-344. Write for illustrated literature

allows easy passage of pipes and wiring raceways within the depths of the floor in any direction. And construction can be carried on as readily in winter as in summer, for it is not wholly dependent upon the setting of concrete which is seriously retarded by cold weather. Write for free illustrated literature giving complete description of Truscon "O-T" Steel Joists.

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Use of Truscon "O-T" Steel Joists lessened erection time on David's Warehouse Bldg., Highland Park, Michigan. Architect: Charles N. Agree, Inc. General Contractor: J. A. Uiley Company.

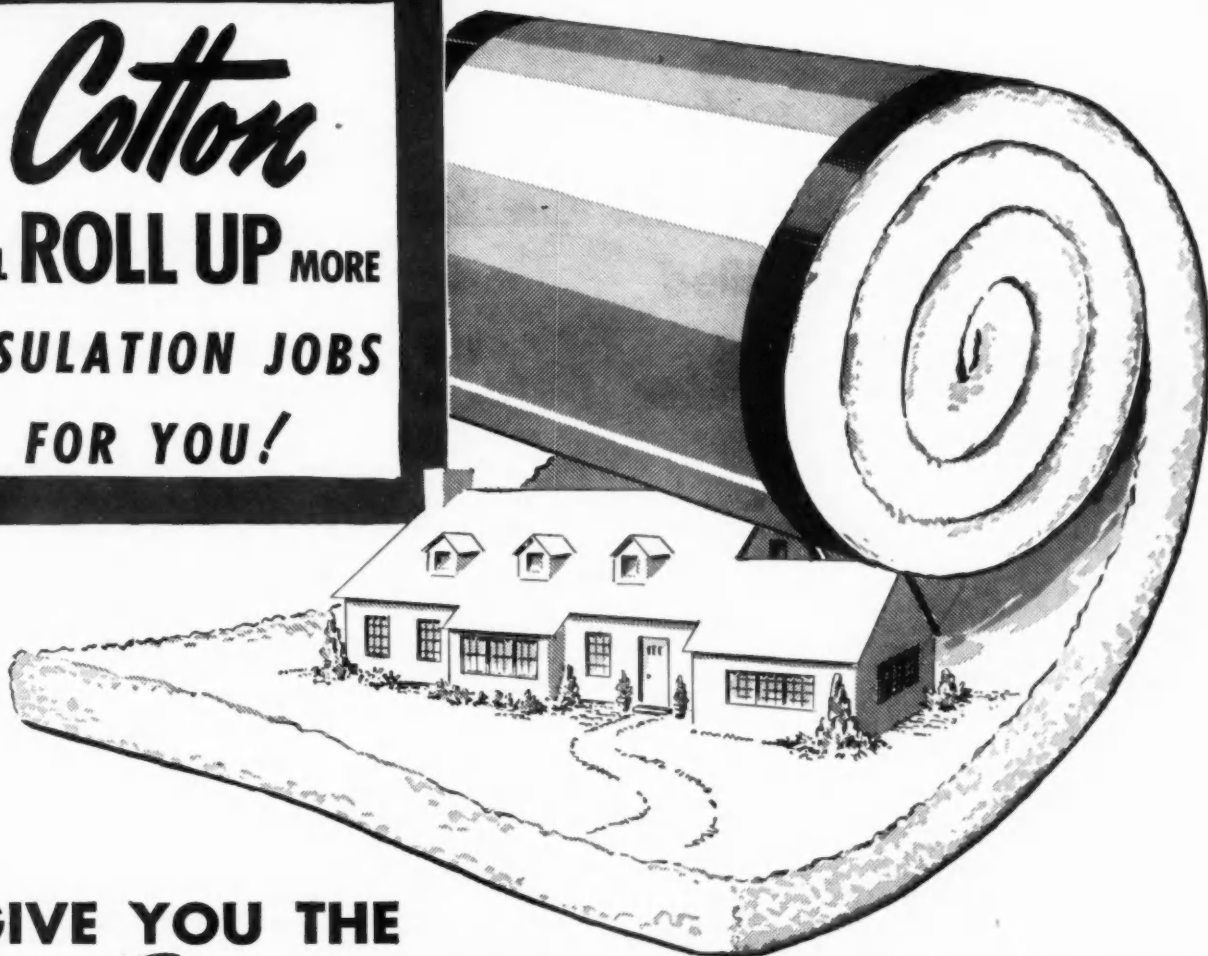
NEW POCKET RULER



Handy 6-inch plastic pocket ruler contains tables of modular sizes for Truscon Architectural Projected, 138 Double Hung, Commercial Projected and Pivoted Steel Windows, table of standard Residential Casement sizes, and useful 1/8" and 1/4" scales. Write for yours today . . . it's free.

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YOUNGSTOWN 1, OHIO
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Cotton
WILL ROLL UP MORE
INSULATION JOBS
FOR YOU!



—GIVE YOU THE
Inside **TRACK on PROFITS**

Selling Features

- Cuts fuel costs as much as one-third.
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 your copy now—
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Wrap up more insulation jobs per day with more profits per job. Lightweight, flameproof, easy-to-install cotton insulation gives you the inside track on profits. It comes in rolls of standard widths, goes down quickly without costly labor or expensive equipment, does not irritate your workmen's skin.

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Turn COLD prospects into WARM booster customers. Sell more insulation jobs at more profit per job. Get your FREE copy of "The INSIDE Story of Cotton Insulation" now!

NATIONAL COTTON COUNCIL OF AMERICA
COTTON INSULATION ASSOCIATION



National Cotton Council, Dept. B
 Box 76, Memphis 1, Tennessee

Please send "The INSIDE Story of Cotton Insulation."

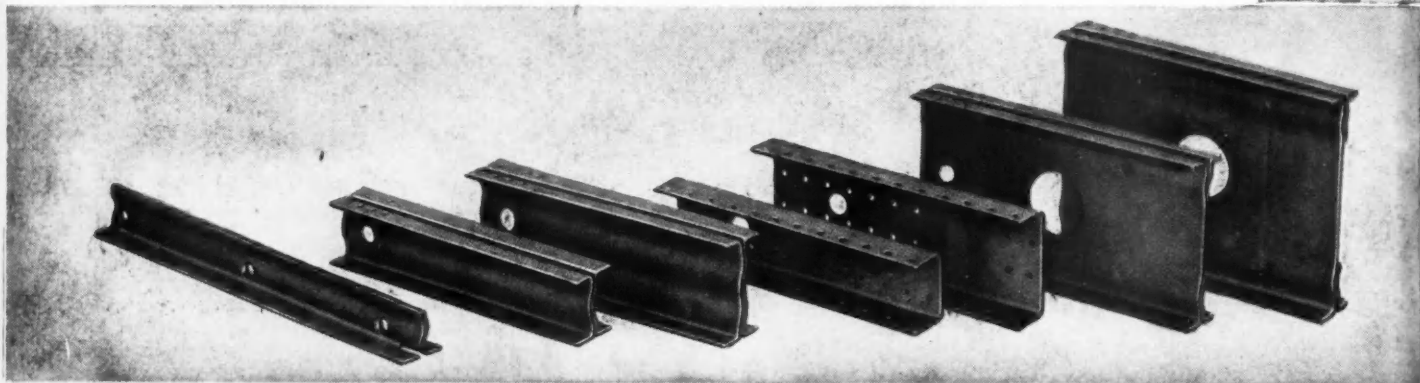
Name

Address

City State

**"We wanted Uniform High Quality,
Economy, Fast Erection, Fire Safety,
so we specified
STRAN-STEEL FRAMING"**

**Roberts Construction Corporation
Kent Village, Prince Georges
County, Maryland**



When the builder plans to retain ownership of a \$14,000,000 housing project, he takes particular care to select only the finest materials for its construction. That's why the Roberts Construction Corporation, owners and contractors, and Berla and Abel, architects, specified Stran-Steel nailable framing throughout the first two of nine blocks of buildings in the Kent Village garden-type apartment project now being erected in Prince Georges County, Maryland, near Washington, D. C.

Financially and structurally, the Stran-Steel framing system satisfied most advantageously the requirements of these builders. They wanted—and got from Stran-Steel framing:

Economy of Framing Construction—Stran-Steel framing members correctly engineered to pre-determined quantities and sizes, are shipped to the job to fit exact requirements. This simplifies assembly and eliminates costly, time-consuming cutting on the job. It reduces delays in close-in time to a minimum. The quick completion possible with Stran-Steel nailable framing means early occupancy and consequent early returns on the owner's investment.

Economical Dry-Wall Construction—The patented nail groove in Stran-Steel framing members permits plaster to be nailed directly to the framing members, without any danger of subsequent wall movement from warping and shrinking. When dry wall is applied to a precision-built steel frame, its permanence and stability through the years is assured.

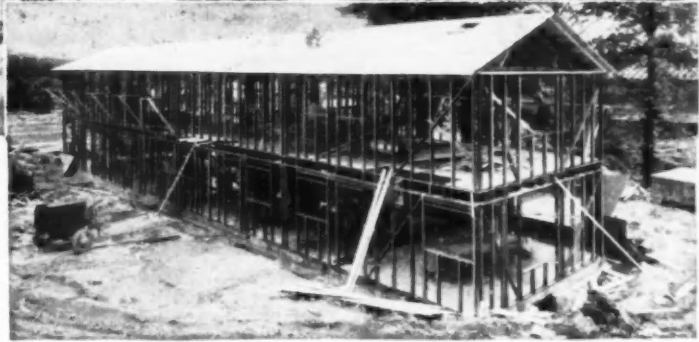
Fire-Safety—The use of incombustible Stran-Steel framing members for floors, walls and roof greatly increases the safety of the completed structure.

Stran-Steel Framing Supplies a Backbone of Steel for Apartments, Residences, Commercial and Industrial Buildings

Stran-Steel nailable framing has a definite place in the modern building picture. Its superiority has been soundly established in a wide variety of structural applications over a period of many years. And today an increasing number of builders and architects everywhere are adopting the Stran-Steel framing system for quality buildings.



portion of Kent Village project similar to first two blocks of buildings now under construction. Entire village, when completed, will have 1,600 family units.



Construction view of Stran-Steel framework for first unit, Kent Village Apartments. Roberts Construction Corporation, owner and contractor; Berla and Abel, architects.

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for Stran-Steel framing offers advantages unequalled by any other framing material. It's strong. It's fire-safe, rot-proof, termite-proof. The permanently rigid Stran-Steel framework affords protection against plaster cracks, sagging doors, and other damage caused by warping and shrinking. And the enduring quality of a building framed with Stran-Steel members insures lower maintenance costs and greater salability over the years.

Stran-Steel framing is available today. It can help you to build better. It can help you to build faster. Where quality is a consideration, it can help you to build at less cost. So, why not let our engineers show you how satisfactorily Stran-Steel framing can be applied to the job on your drafting board? Ask your local Stran-Steel dealer for full details, or write for his name and address.

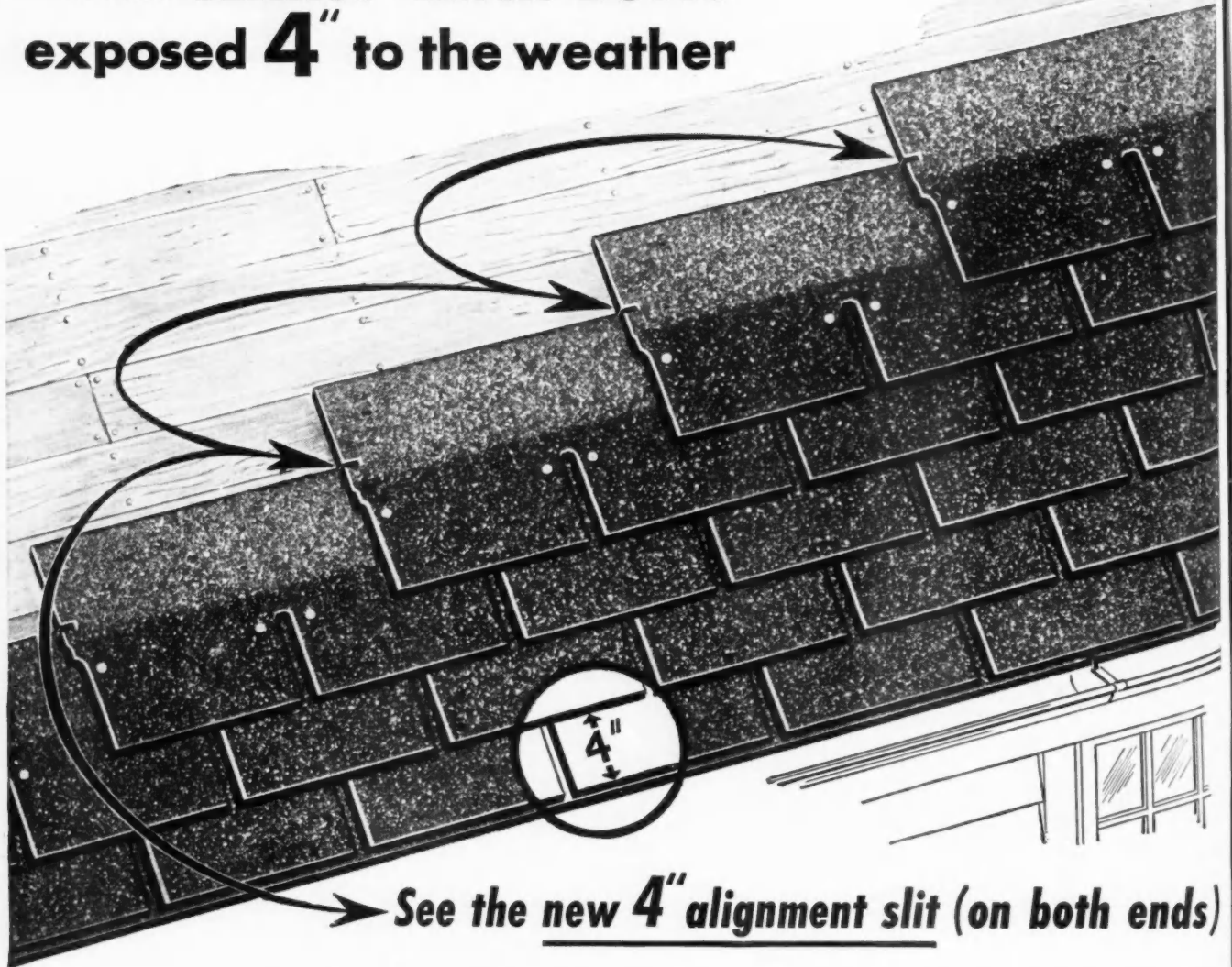
Any collateral material can be nailed directly to Stran-Steel framing members. The nail is automatically clinched as it is driven into the patented nailing groove. The holding power of this groove is much stronger than that of wood, yet nails can be easily removed with a claw hammer.



GREAT LAKES STEEL CORPORATION
 Stran-Steel Division • Dept. 30 • Penobscot Building • Detroit 26, Michigan
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Extra...extra...extra PROFITS! Get

—with **TEXACO THICK BUTTS**
exposed **4"** to the weather



See the new **4"** alignment slit (on both ends)

IN windy areas and for those who want a more substantial roof—Texaco **THICK BUTTS** with a 4" exposure, using 6 nails, can be recommended.

To the Dealer this means a 25% larger sale, a 25% larger profit and better satisfied customers.

To the Contractor or Applicator this means a larger job and a larger profit—because each job calls for 25% more shingles.

To the Owner this means a more watertight roof (4" headlap instead of 2"); greater wind resistance; more thickness and more weight (262.5 lbs. per square instead of 210) therefore greater durability.

The new $\frac{3}{4}$ " alignment slit at each end assures quick alignment and ease of application. No chalk marks are necessary because Texaco **THICK BUTTS** are now self-aligning for either 4" or 5" exposure.



TEXACO

ASPHALT SHINGLES and ROOFING

MEMBER OF THE ASPHALT ROOFING INDUSTRY BUREAU

Get Guaranteed Dimensional Stability with The New Weldwood Flush Veneer Door

New Mineral Core and Precision Manufacture give Weldwood Flush Veneer Doors Extraordinary Dimensional Stability

These beautiful new wood-faced doors always measure up. They won't swell in summer . . . won't shrink in winter.

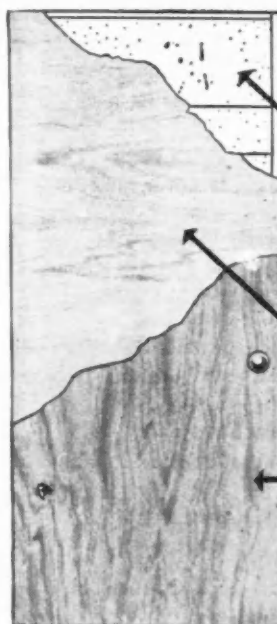
The new mineral core of the Weldwood Flush Veneer Door gives it such a degree of dimensional stability that we back it with the most sweeping guarantee ever given by any manufacturer.

Weldwood Doors are guaranteed against warpage or binding in opening due to any dimensional changes in the door.

Here indeed is a superior door. Just go over this checklist of advantages:

- 1 **PERMANENT BONDING** of veneers to core and banding with TEGO Film Waterproof Glue by hot plate process.
- 2 **VERMIN AND DECAY PROOF** mineral core resists fungus, decay and termites for the life of the structure.
- 3 **INSULATING PROPERTIES** are superior to double glazing, such as opening protected by storm door . . . when door is installed in an exterior opening with weather stripping.
- 4 **EXCELLENT VAPOR BARRIER.** TEGO Film Phenolic Glue bond provides a completely effective moisture barrier.
- 5 **INCOMBUSTIBLE MINERAL CORE.** Core has a fibrous binder with a nominal density of 20 lbs. per cubic foot. This material has a sturdiness which assures proper performance of door under the most severe conditions.

We'll be glad to rush you full specifications on this new door. Write or contact our nearest branch.



EDGE BANDS are thoroughly kiln dried hardwood, built up of two pieces of 3/4" stock, securely glued together to provide greater dimensional stability.

MINERAL CORE. Each core is made of three or more pieces, securely bonded together by high frequency process, thus offering a solid piece of homogeneous character. Moisture content not in excess of 4 1/2%. Sized with highly waterproof solution, offering a perfect base for laminating cross bands and faces.

CROSS BANDING of 1/16" veneer is bonded to core with TEGO Film Waterproof Glue.

FACE VENEER. At present, handsome Birch veneer forms the hardwood faces. Wide variety of other decorative woods available on special order.

UNITED STATES PLYWOOD CORPORATION

55 West 44th Street, New York 18, N. Y.

Distributing units in Baltimore, Boston, Brooklyn, Chicago, Cincinnati, Cleveland, Detroit, Fresno, High Point, Los Angeles, Milwaukee, Newark, New York, Oakland, Philadelphia, Pittsburgh, Portland, Ore.; Rochester, San Francisco, Seattle. Also U. S. Mengel Plywoods, Inc., distributing units in Atlanta, Dallas, Houston, Jacksonville, Louisville, New Orleans, St. Louis, Tampa.
In Canada: United States Plywood of Canada, Limited, Toronto.

Modern Methods of Home Heating

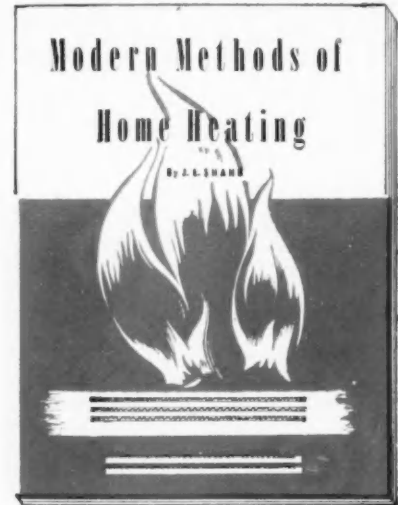
By **J. L. SHANK**
Consulting Engineer

INTRODUCTION BY
S. KONZO
Professor of Mechanical Engineering
at the University of Illinois



CONTENTS

- Gravity Warm Air Heating**
Methods for Figuring Size of Plant Required, Installation Procedure
- Forced Warm Air Heating**
An Answer to What Is "Air Conditioning"?
- One Pipe Steam Heating**
Latest Information on Modern Boilers, Radiators
- One Pipe Hot Water Heating**
"The Hot Water Heating System Has Had a Change of Face"
- Radiant Heating with Hot Water Floor and Ceiling Panels**
Description, Function, Installation Methods, Advantages
- Heating Commercial Buildings**
Good Information on Selection of Units
- Heating with Floor Furnaces**
Installation Advice, Comparison to Other Methods
- Radiant Heating with Warm Air**
Information About "The Most Discussed Subject" in Modern Heating
- Radiant Floor Panel Heating with Hot Water**
Basic Advice on Correct Installation and Operation Techniques
- Radiant Baseboard Heating**
How Uniform Temperature Is Achieved
- Heating System Controls**
Fourteen Different Types Discussed



The most comprehensive book on modern home heating published. It covers the latest methods of heating homes and small commercial buildings, written in language the layman can understand.—

Included is the most discussed subject in the heating field today—Radiant Heating. Everyone interested in home building should have a copy of this book.

A builder will find this a valuable source of information. It will enable him to discuss authoritatively the advantages of the various types of home heating.

Special trade contractors will find it of special value.

The prospective home builder will also find in it the information he needs.

Profusely illustrated with photographs, charts, tables and diagrams. Each article is a complete study of the heating requirements of an individual house.

66 Pages 111 Illustrations

ONLY \$1.00 PER COPY

Special prices will be quoted on quantities of 100 or more.

Size 8¼" x 11¼"

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Please send me postpaid copies of "Modern Methods of Home Heating." Enclosed is check money order for \$.....

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These DRILLS ARE "NATURALS"

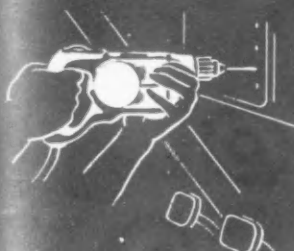


Black & Decker
1/4" Junior Drill
\$28.00

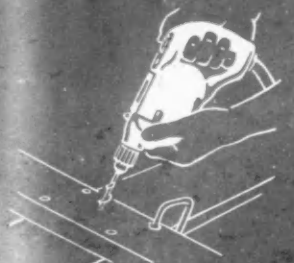
for INTERMITTENT Use!

If you want a handy odd-job Drill to save you time in your shop or on the job, a Black & Decker 1/4" Junior or 1/2" Junior Drill is the tool for you! These Drills are specifically built for users who need a good low-priced Drill for light-duty, intermittent service. Their B & D-built Universal Motors have plenty of power for scores of jobs like those illustrated. Each has a general-purpose spindle speed for driving carbon or high-speed bits and other attachments.

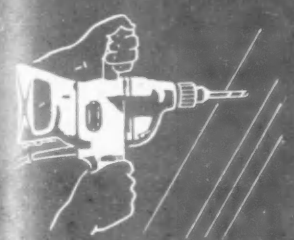
The 1/4" Junior Drill drives twist drills up to 1/4" diam. in steel; wood augers up to 1/2" diam. in hardwood; many abrasive attachments. The 1/2" Junior Drill gives you *double* the 1/4" Junior's capacity in metal and wood, and also drives Hole Saws up to 3 1/2" diam. Other Black & Decker Drills from 1/4" to 1 1/4" capacity in *Standard* and *Heavy-Duty* models. Ask your nearby Black & Decker Distributor for details. Write for free catalog to: The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Maryland.



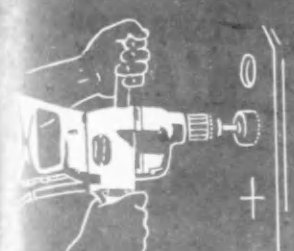
Drilling lead holes for screws



Driving auger bits up to 1/2"



Drilling bolt holes in rafters



Driving Hole Saws

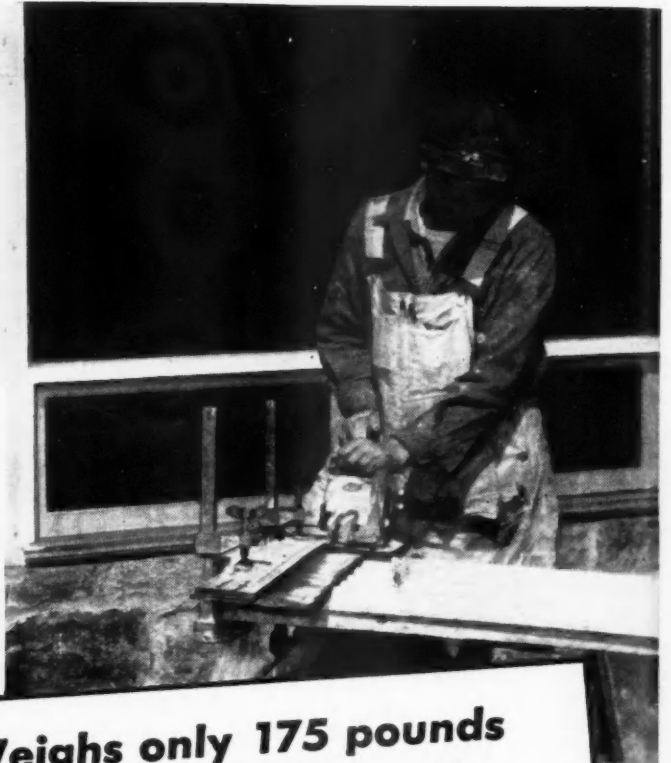
LEADING DISTRIBUTORS  EVERYWHERE SELL

Black & Decker
PORTABLE ELECTRIC TOOLS

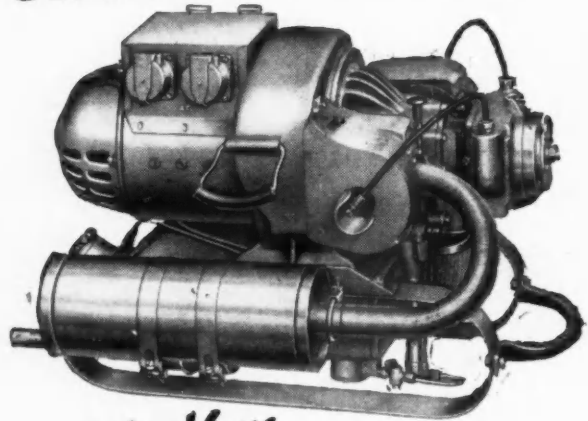


Black & Decker
1/2" Junior Drill
\$45.00

Carryable Power for Electric Tools



**Weighs only 175 pounds
Generates 5000 watts**



The New **HOMELITE**

Carryable **DUAL-PURPOSE GENERATOR**
(Gasoline-Engine-Driven)

For operating both high-cycle and standard universal 110 volt tools. Write for complete information.

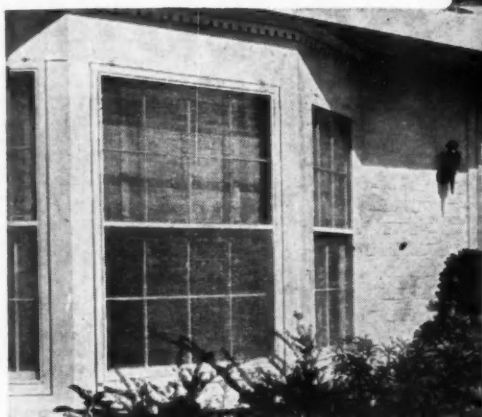
HOMELITE CORPORATION
511 RIVERDALE AVENUE, PORT CHESTER, NEW YORK

Manufacturers of Homelite Carryable Pumps
Generators • Blowers • Chain Saws

For outdoor metalwork



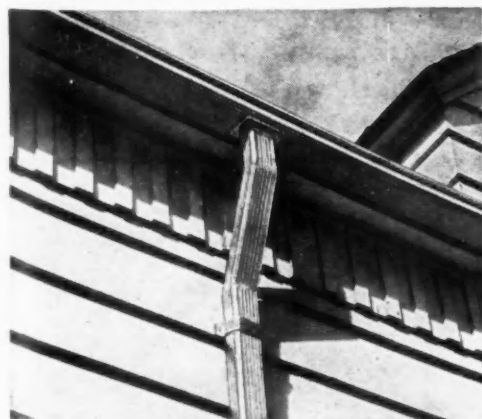
SCREENS: Home owners find stainless steel ideal for insect screens, because it won't rust or tarnish, and thus will not discolor adjoining painted surfaces.



THIS IS WHAT STAINLESS STEEL OFFERS YOU:

- 1—it's unaffected by long exposure to weather
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- 5—won't stain adjoining surfaces
- 6—keeps its good looks year after year

If you'd like to receive a monthly publication telling about the many uses of stainless steel, write to: Electro Metallurgical Company, Unit of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York, 17, N. Y.



DOWNSPOUTS: Roof drains that will last forever—that's the dream stainless steel makes come true. The downspouts pictured here have been up 10 years.

you can't beat STAINLESS STEEL!



Greater Diffusion

for either

HIGH OR LOW WALL MOUNTING



with the **HONEYWELL REGISTER**

Mount it anywhere—high wall, low wall—and the handsome Honeywell Air Diffusion Register will show you an amazing new standard of performance for all forced air installations.

You get *true* air diffusion with the Honeywell Register. It is factory-set for an air diffusion pattern of 120°! That's virtually three times greater than ordinary registers. Instead of disturbing air blasts with drafts and cold spots, the unique design of this new register diffuses a gentle, even blanket of air to every corner of the room—and without unsightly wall and ceiling streaks.

What's more, whenever you use the Honeywell Register, your installation costs are drastically cut. Branch quadrants are eliminated for all velocities under 800 fpm. Labor and materials thus saved *more* than cover initial extra cost. Only *one* man—not two—needed to quickly balance the entire system. Install Honeywell Registers in the next home you build — then *compare* results. Minneapolis-Honeywell, Minneapolis 8, Minn. In Canada: Toronto 17, Ont.



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TRENDS

BUILDING MATERIAL — EQUIPMENT — APPLIANCES

Commercial Building Paces Residential Building

THE DIP in residential starts in August this year has again opened the building industry to the attacks of its critics. They believe that increasing construction costs and the end of easy financing may have put an end to peak activity in residential construction while there is still a severe housing shortage. At the same time decreases in prices of other commodities are spotty, and there is no tendency for wages to decrease in any field. The Bureau of Labor Statistics reported a decrease of four per cent in residential starts in August 1948, as compared with last year; 83,000 residential units this August and 86,300 a year ago. The big volume last year was contra-seasonal, as the chart shows. The dip this year was caused to a large extent by the lapse of Title VI.

For the twelve months ended August 31, 1948, a total of 964,400 dwelling units have been started. This total is close to the million mark and breaks all records for residential building activity in a 12-month period.

Commercial building at a high level usually accompanies peak activity in residential building providing neighborhood retail drug, grocery and clothing stores as well as automobile repair shops, filling stations, laundries and other service establishments to accommodate the new communities which develop on the outskirts of towns and cities. Sustained high activity in residential building during the last three years has been accompanied by a high volume of commercial building but has shown a tendency to decrease in recent months.

Latest data of the Bureau of Labor Statistics for commercial building in June 1948, for example, shows a decrease of eight per cent in the number of stores and mercantile buildings started in urban areas over last year, three per cent in commercial garages, 13 per cent in service stations, 22 per cent in office and bank buildings, and 17 per cent in hotels and tourist courts. The number of amusement buildings on the other hand shows an increase of 17 per

cent. Bureau of Labor Statistics data on commercial building is confined to urban areas and does not show data on communities of less than 2,500 population. A complete report on these smaller communities might show a substantially greater volume.

In spite of the decline in the reported number of new commercial buildings dollar valuation shows a substantial increase. This is probably partially explained by more elaborate buildings this year and undoubtedly to higher costs. Premiums for material and labor are more readily paid for commercial building than for residential building. The avoidance of delays in construction on valuable commercial sites more than offsets additional costs.

Very few monumental office buildings, department stores and hotels are being built these days. Real estate and store owners in the heart of big cities are concerned by the drift of retail business to the outskirts. Many of them have embarked on large scale modernization programs downtown, but the new buildings are comparatively modest structures, usually neighborhood stores as

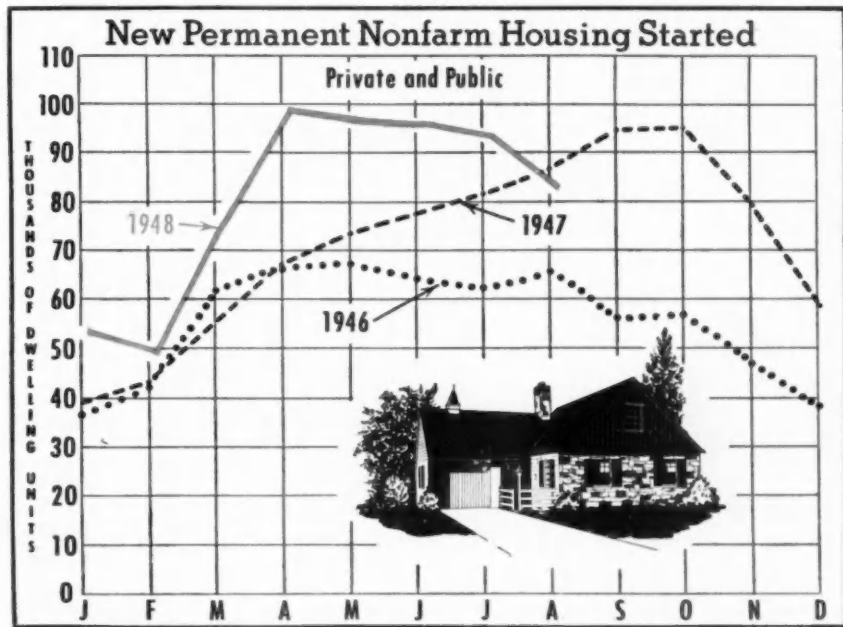
data on the average costs of new commercial buildings computed from statistics of the Bureau of Labor Statistics for June 1948 shows:

Average Costs of Commercial Buildings—
June, 1948

Stores and Other Mercantile Buildings	\$15,200
Commercial Garages	\$13,900
Service Stations	\$9,500
Office and Bank Buildings	\$48,100
Amusement Buildings	\$28,600
Hotels, Tourist Courts, Dormitories	\$13,900
Factories and Workshops	\$33,100
Public Works and Utility Buildings	\$57,900

Increased competition for the consumer's dollar is likely to result in a continuing large volume of commercial expansion and modernization. Outlying supermarkets and commercial centers solve parking problems. Most downtown commercial centers were established in the horse and buggy age and from then on just grew—so retail business and customers are likely to be further attracted to roadside stands.

Industrial building has been declining for the past several months both in physical and dollar volume. Some industrial firms have completed their postwar expansion plans. Others have shelved their plans on account of high costs, and the lack of venture capital.



United States Dept. of Labor
Bureau of Labor Statistics

AMERICAN BUILDER CHART

Why Hotpoint Kitchens Are The "Measure Of Value"



**THE KITCHEN MAKES
IT WORTH THE PRICE!**

Confidence Goes Up, Prices Seem Lower, When Home-Buyers Look At The Kitchen

BUILDING COSTS are steep today, but buyers find that prices look more reasonable through the windows of a Hotpoint All-Electric Kitchen. That's because thirty million people know Hotpoint is a reliable measure of value—the finest in electric kitchens.

Alert Builders and architects find that it pays to invest enough extra and make the kitchen a real showplace. For powerful advertising and merchandising have made Americans kitchen conscious. And they look to Hotpoint for the biggest values.



Today the Kitchen is the Measure of Value

Hotpoint All-Electric Kitchens create confidence in the quality of the whole house. The price seems better, too, for in many cases a "package mortgage" can be arranged to include cost of electric appliances.

See Your Sweet's Catalog for details or consult your nearest Hotpoint Distributor. Hotpoint Inc., (A General Electric Affiliate) 5641 W. Taylor St., Chicago.

Hotpoint has everything for the kitchen and laundry:

RANGES • REFRIGERATORS • FREEZERS • DISHWASHERS • DISPOSALLS*
CABINETS • SINKS • WATER HEATERS • FLATPLATE IRONERS
ROTARY IRONERS • WRINGER-TYPE WASHERS • DRYERS

Reg. U. S. Pat. Off.

Everybody's Pointing to

Hotpoint

PIONEER IN THE ALL-ELECTRIC KITCHEN

KENTILE floors make homes **COST LESS** and **SELL FASTER!**

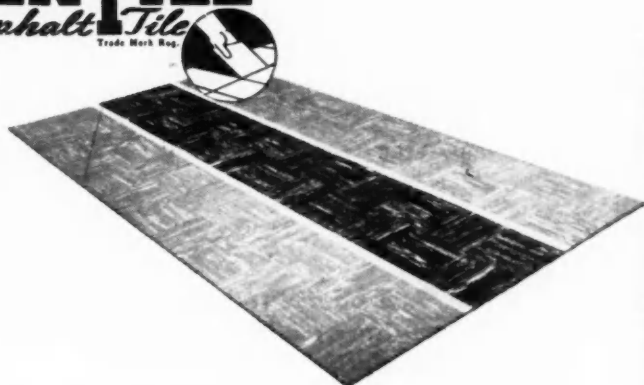
More and more, the floor they pick to save and sell is—Kentile! For instance: Levitt, miracle builder of Long Island, has built 2,000 homes and will build 4,000 more this year—all using Kentile in *every* room. Why?

1 Kentile is low, low priced, and can be laid—tile by tile—with astonishing speed . . . right on concrete, even below grade, without priming. Yet Kentile is so flexible it can also be laid directly on sound wood floors with boards not over 3" wide.

2 Kentile, laid square by square — with 23 colors plus feature strips — offers *unlimited* design possibilities. You can put a different floor in every room—give a house that custom designed look connected with high priced building. And it is definitely MODERN to match today's low price decor.

3 Your customers know the advantages of Kentile—because of full color, full page ads in such magazines as Saturday Evening Post, Better Homes & Gardens, House Beautiful.

KENTILE
Asphalt Tile
Trade Mark Reg.



FIND OUT!

Learn *all* the unmatched advantages offered today to home builders by Kentile. Look up your local Kentile dealer in the phone directory (under "Floors")—or mail the coupon below and we will have an authorized and experienced Kentile representative give you unbiased and verifiable Kentile facts—without obligation, but with *profit* to YOU.

DAVID E. KENNEDY, INC.
61 Second Avenue, Brooklyn 15, N. Y.

I want to know ALL the advantages of Kentile—without obligation.

Name.....

Address.....

City.....State.....

LOOK ^{for} ~~AT~~ ALL THREE BEFORE YOU BUY *Insulation*

fireproof, full-thick, Gold Bond Rock Wool Batts have all of them

1

Gold Bond Rock Wool is not just "fire-resistant," not just "fire-retarding," but as *fireproof* as the rock from which it's made!

2

"Full-Thick" batts—not just 1 or 2 inches thick, but full thick—*completely fill the walls*, providing an effective fire stop and top efficiency heat insulation!

3

Gold Bond Rock Wool Batts come with *effective vapor barrier*. Save extra labor and expense of putting in separate vapor barriers (in some cases required by F. H. A.). Gold Bond Batts meet all requirements!

Play it safe! Always use the best—use Gold Bond Rock Wool Batts!



Gold Bond Rock Wool—the finest fire-proof home insulation in the world—at no extra cost!

You'll build or remodel better with
Gold Bond

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK



Over 150 Gold Bond Products including gypsum lath, plaster, lime, wallboards, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wallpaint and acoustical materials.

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News, Views
and Comments

On and Off the Record

DISTRESS BUYING—Apparently it's over in many cities. Reports continue to arrive, showing that new houses have to be sold. No reports thus far received from cities where distressed buying has passed indicate any sign of a dried-up market, but do indicate that need for intelligent selling is here again.

NEW NOTE—One of the most satisfying meetings ever held by NAHB was the four-day assembly of directors in Los Angeles last month. There was hardly more than a reference to the threat of paralyzing legislation and the danger of socialized housing. For the first time in years, builders were able to turn their attention to discussions of merchandising and research.

MERCHANDISING—Alan Brockbank explained the new gold key plan, first of a series of association-sponsored public relations and selling ideas that the Brockbank committee will continue to develop.

RESEARCH—Nick Molnar reported notable progress in the work of the committee on low-cost housing. Everyone at the Los Angeles meeting reflected relief from the terrific strain of fighting socialized housing while trying at the same time to catch up with the need for housing.

TIME FOR PLAY—Also, for the first time in the history of the association the agenda was arranged to leave time for play. Night work was out, and there was even time for day-time excursions to building projects and places of general interest.

RAILWAY AGE—Like *American Builder*, it is a Simmons-Boardman publication. It is also the top authority on everything having to do with railroads. Its editors polled railroad employees, and found that 53 per cent of them believed that in 1944 the railroads made from 25 to 75 per cent profit on their investment. The employees were from 525 to 1,775 per cent incorrect. Fact is that the railroads made only a fraction over four per cent.

BUILDER PROFITS—What do builders' employees and the public

think builders' profits are? And, on an average, what are they? Might be interesting to learn how far apart are the facts and public opinion.

MODERNIZATION—Another sign of better equalization of supply and need, if not demand, in housing, is the increasing number of good modernization jobs that are turning up. For the first time in years a few builders are now finding time to make the first few dents in the tremendous modernization market.

OPTIMISM—A number of builders have remarked recently that it is a little difficult to restrain a feeling of unbridled optimism with regard to the future. Looking at the platforms of both major political parties, however, they see continuing strife over the public housing issue in the 1949 session of Congress.

CREDIT REGULATION "W"—Proposed change in the regulation would tighten Title 1, Class 1 FHA loans for alterations, repairs and modernization. If current 10 per cent down and 36 months to pay is tightened, might curtail the market for this kind of work in 1949. The market is just beginning to open, and it needs encouragement. Permanent improvements to real property can hardly be considered dangerous inflation.

LUMBER DEALERS—National Retail Lumber Dealers Association has been conducting a contest to find dealers who have done the best public relations jobs in the past year. Judgment will be made by a board of editors, and winners in several different classes will be announced at November meeting of directors.

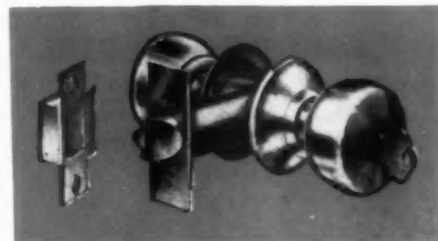
COLOSSAL—That is the only word that can be used to describe the scrap books made up by NAHB which contain newspaper publicity about National Home Week. Building industry undoubtedly received more favorable newspaper lineage during Home Week than during entire first eight months of 1948.

ONE RESULT—One major metropolitan daily changed entire editorial policy with respect to home building as result of Home Week.



Acclaimed by all...

The new **SARGENT DualLock**. Shown for the first time at the Hardware Show in October, dealers are already finding a wide market for this new bored-in lock. A quality lock at a moderate price, home owners and builders alike find it gives them beauty with economy—a rarity today. Easy to stock—a universal application of one lock case to doors of any swing or handing . . . Easy to install—just two holes to bore with a standard bit, no door supports needed with metal doors . . . Easy to sell—projection of knobs always symmetrical; small, compact, screwless roses; self aligning; a maximum of security with many new conveniences in use. *The DualLock is available in Brass, Bronze and Aluminum Through your Sargent Jobber*



SARGENT

and Company
New Haven, Conn.
New York
Chicago

"EXTRA SELL" in one word!

sun de... Fine location—
rear screened-in porch. close to everything! IMMEDIATE
POSESSION. for ful
now
to visit

New Houses—Westchester

**Early American Colonial
Just Completed
\$16,500**

Charming 2-story home on delightful tree-shaded plot. Lovely living room with fire-place, large dining room. Ultra modern kitchen with G-E **Disposall**. 3 bedrooms, 2 baths. 2-car garage. Convenient to schools, shops and station.

In the most desirable part of the Estates. Colonial type; center hall. 8 rooms; large bedrooms 3 bathrooms 2-car garage. Beautiful

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MIN
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The word "Disposall"* speaks volumes to a home-buyer.

It tells a housewife that she will never again have to handle messy garbage. It promises her a cleaner, more sanitary home.

And it labels the house you are selling as modern in every respect—with a kitchen as bright and new as tomorrow.

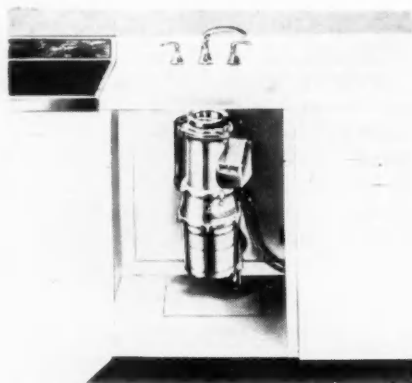
Surveys among Disposall users show that 97% of those questioned are highly enthusiastic about this appliance that grates all food waste and flushes it down the drain.

Readership checks of advertisements in national magazines show that Disposall advertisements are among the best read by women readers every time they appear.

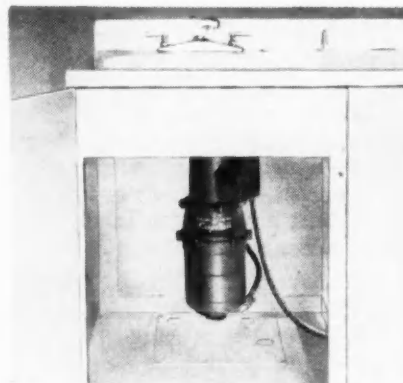
Women are vitally interested in this timesaving, stepsaving, garbage-eliminating appliance. They want Disposalls in their kitchens!

Install this "extra sell" in your very next kitchen! General Electric Company, Appliance and Merchandise Dept., Bridgeport 2, Conn.

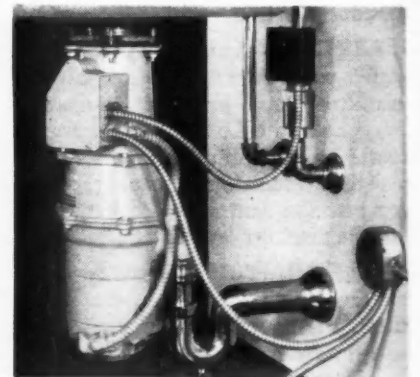
See how simply the DISPOSALL can be installed!



• Installable in any modern sink with 3½- to 4-inch drain opening, this is how the Disposall looks installed in the General Electric Sink.



• The Disposall fits snugly under kitchen sink—replacing the standard drain.



• Close-up, under-the-sink view shows all plumbing and electrical connections. The Disposall requires a 1½-inch waste line not more than 10 inches above the floor.

Mail this coupon for complete information.

General Electric Company, Appliance and Merchandise Dept.
1285 Boston Avenue, Bridgeport 2, Conn. Dept. AM4811
Please send me complete information about the G-E Disposall.

NAME _____

ADDRESS _____

CITY _____ STATE _____

*General Electric's registered trade-mark for its food-waste disposal appliance.



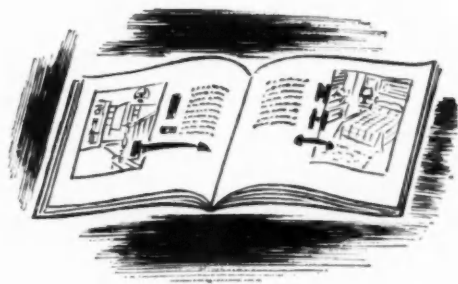
DISPOSALL

—means good-by to
garbage, automatically!

GENERAL  ELECTRIC

Announcing a complete line of BLACK ORNAMENTAL HARDWARE by Stanley

Here's appeal and good, hard, practical sense for every home owner or prospect. With this Early American inspired hardware you can give a smart, interior decorator touch to Cape Cod and Dutch Colonials, modern, Spanish, ranch type and many other style homes. The answer to many home modernizations . . . new cabinets, rumpus rooms, dens, the extra room in the attic, summer cottages. The unique hardware "accent" for both painted and natural wood surfaces. Easy to install, and surprisingly low-priced. Good news for your customers . . . good business for you.



THIS IDEA BOOK FOR YOUR CUSTOMERS

Get a supply of these generously illustrated books that picture some of the possibilities of Stanley Black Ornamental Hardware all over the house . . . all types of interiors.

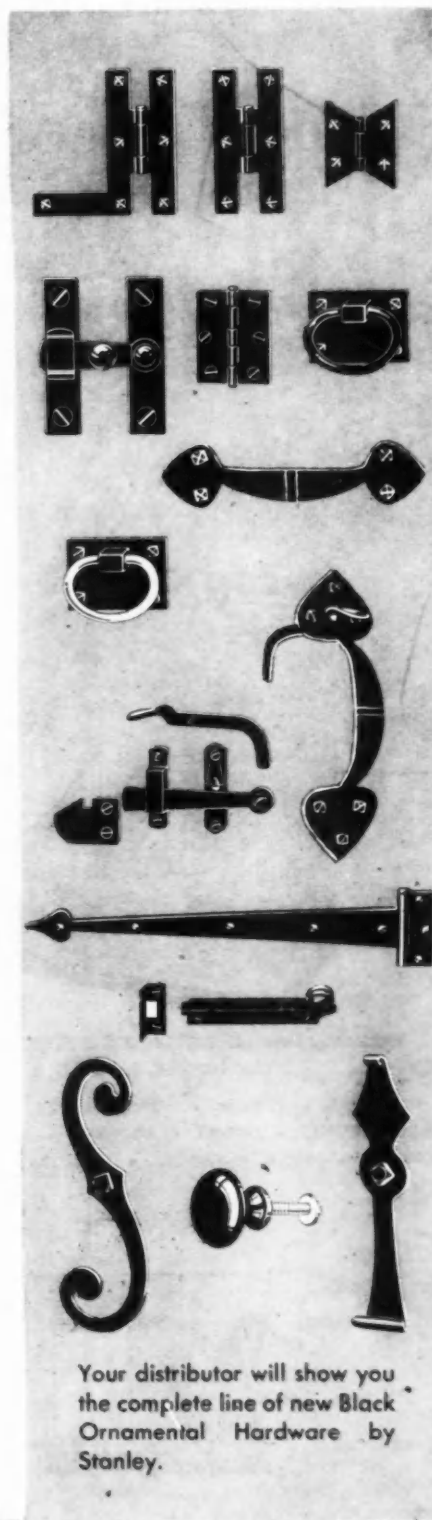
SEE BLACK ORNAMENTAL HARDWARE NOW

You'll want to tell your clients about Stanley Black Ornamental Hardware as soon as you've seen it. It's a distinctive, extra touch any home owner will appreciate. The Stanley Works, Hardware Division, New Britain, Conn.



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HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING



Your distributor will show you the complete line of new Black Ornamental Hardware by Stanley.

YOU CAN'T

**"throw a fish"
TO HOME BUYERS!**



F. Rojankovsky



Electric Range Section, NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
155 East 44th Street, New York 17, N. Y.

- ADMIRAL • CROSLEY • ESTATE HEATROLA • FRIGIDAIRE
- GENERAL ELECTRIC • GIBSON • HOTPOINT • KELVINATOR • LEDO
- MONARCH • NORGE • QUALITY • UNIVERSAL • WESTINGHOUSE

Home buyers aren't satisfied with just anything. They know what they want and insist upon it. Today the trend is to Electric Ranges. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that this year at least a million more Electric Ranges will be installed.

This is a definite trend that cannot be ignored. Progressive builders recognize this trend. Electricity is a "must" in any house, and it's simple and economical to include wiring for an Electric Range leading to a range outlet in the kitchen at the time of construction. This is assurance that the houses you build are not only modern today, but will stay modern for years to come!

Follow the trend...

wire YOUR HOUSES 
FOR ELECTRIC RANGES

Another 1,000,000 American families switched to Electric Cooking last year



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EDITORS' ROUND TABLE

The editorial in this issue kicked up quite a stir in the editors' monthly staff meeting. Ordinarily, the staff is not interested in reading the editorial until it appears in print. This time it was different.

One editor, who had been in Minneapolis in October, touched off the spark by remarking that we should do something about the high cost of labor. He said a builder in Minneapolis was getting less than 300 bricks a day per man, because an overweight, slow worker had been put at a corner by his fellow brickmasons. He was so slow that, in that pace-setting spot, he slowed everybody.

The point he was making is that not only does the builder suffer high costs because of low production, but of as great importance, no young, energetic apprentice could stand the monotony of such performance. Thus, said our criticizing editor, this low production process perpetuates itself by driving away potentially competent men from such work.

At that point the western editor cited the case of a young apprentice on a west coast job. Put to work nailing rough flooring, the apprentice made a low platform about six inches high, and equipped it with rollers. Sitting on the platform, he arranges his nails in his mouth and hand, and with the other hand slams a nail home with one whack of an axe, and slides himself into position for the next nail.

It's a symphony of motion and rhythm, said the western editor, and the man nails down three rough floors in 3-bedroom houses every day, with no help. He gets a premium wage scale for doing it.

That's incentive pay, said another member of the staff, and the unions do not like it. How does this fellow on the west coast get away with it?

He gets away with it, said the W. E., and the union knows all about it. The apprentice is cutting costs, even helping to get the cost of the finished house down to where he can afford to buy one. There's something wrong with an industry in which the skilled men who work at it are unable to afford the product they make. Here, both the employer and the man profit, and that is what a union should be interested in.

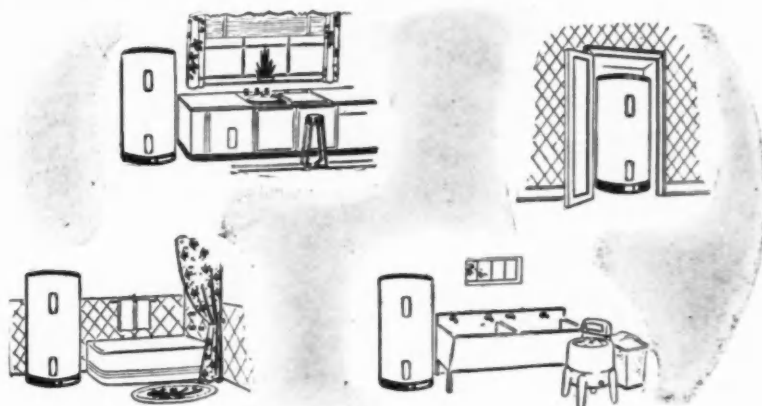
Hold everything, interposed our philosophic member, or maybe he is the severely practical one. You carry a thing like that to the limit, and what happens? First thing, the employer

(Continued to page 64)

IN THE SWIM



Electric Water Heaters are really in the swim because people prefer that type of automatic water heating. To have your customers completely satisfied with the homes you build—both now and in years to come—install the kind of water heating equipment they want:



How to reduce construction costs and add customer features

Construction costs can be reduced with Electric Water Heaters because there's no flue or vent, so installation can be made anywhere—in a closet, in the kitchen, in the bathroom, in the utility room. Hot water lines can be short, cutting piping cost.

Customers like Electric Water Heaters because they are: (1) AUTOMATIC (continuous hot water, no

attention); (2) CLEAN (smokeless, sootless); (3) DEPENDABLE AND TROUBLE-FREE (as electric light); (4) ECONOMICAL (fully insulated storage, short hot water lines); (5) SAFE (all-electric dependable temperature control); (6) FLEXIBLE (can be installed anywhere, even in living quarters; no flue or vent).

Electric Water Heater Section NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
155 East 44th Street, New York 17, N. Y.

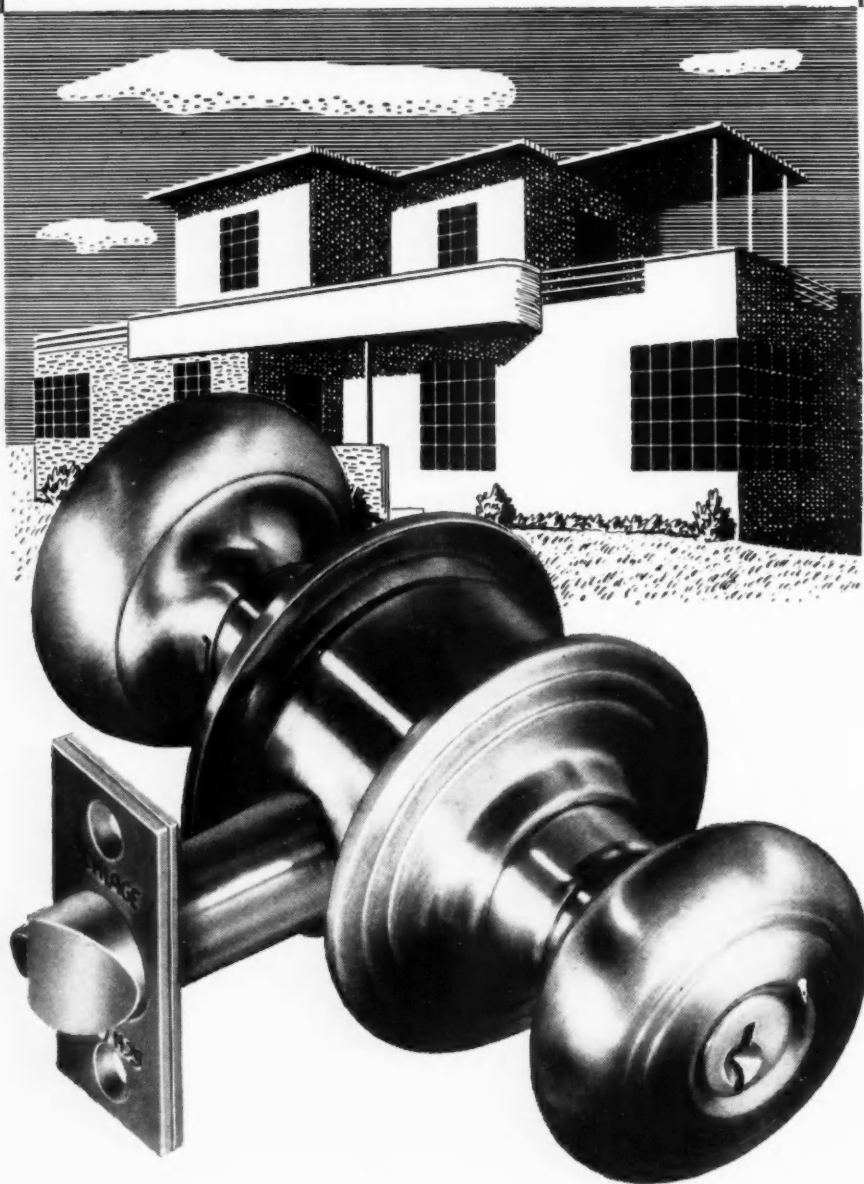
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IT'S EASY TO INSTALL an electric WATER HEATER!

... in a house wired for an Electric Range!

SCHLAGE LOCKS

for homes well-built...



Of course only the finest hardware goes into well-built homes. That's why so many of the world's homes are equipped with Schlage... *the finest in quality locks.*

Write for Illustrated Booklet:
"Locks by Schlage"



SCHLAGE
LOCK COMPANY
SAN FRANCISCO NEW YORK

ORIGINATORS OF THE CYLINDRICAL LOCK

EDITORS' ROUND TABLE

(Continued from page 63)

starts looking around for more young men who want to produce more and more. There's no limit to it. They begin to compete for production and higher incentive pay. In the end, only the ones who are willing to hit the ball with everything they have for as long as they are able to stand the pace can hold a job. They break their health or burn themselves out, and then you get a new crop. It's no good. The unions have a point in protecting the average producer, and seeing to it that there is a definite floor to his wages.

Then the union, said our youngest member, actually stymies free enterprise. In order to protect the average or slow producer, incentive is ruled out, and the cost of the finished product is kept higher than it should be. That's what happens, isn't it?

It isn't so simple as that, chimed in our religious-minded member. The fact that the country was built on a purely competitive system in which workingmen often were driven at their fastest pace from early morning until dark does not mean that that is the way, the human way, to handle help.

Our mediator stepped in with the observation that driving men to the limit of physical and nervous endurance and setting incentives that permit workers to kill themselves in pursuit of higher wage scales certainly is wrong. On the other hand, a union policy that condones or encourages a condition like the Minneapolis one cited is just as wrong.

The W. E. insisted, however, that permitting the young carpenter apprentice on the west coast to work as he saw him working is a good thing. The average worker is protected by a minimum scale, and there is little danger of finding enough men like the apprentice cited to develop a lot of killing competition. In the case of the apprentice, however, he should be allowed to develop a skill, and if he does develop it, he should be paid for it.

Staff meetings, interposed the chairman, are not supposed to try to settle questions that have been bubbling for a half century. Let's get back to the editorial. What about apprentice training?

High schools, volunteered the editor, who is an ex-teacher, have an idea that their only business is to run pre-college institutions. They think that

(Continued to page 66)

Here's more proof that masons prefer ATLAS MORTAR CEMENT

BARTEN & WOOD INC.
Masonry Construction
 UNITED BUILDING • 43 LEON STREET • BOSTON 15, MASS.
 Telephone GARton 4340

Universal Atlas Cement Co.
 1027 Statler Office Building
 Boston 16, Massachusetts

Dear Sirs:

On this group of trucking terminals, together with four other buildings not shown in the picture, we laid up over half a million brick with Atlas Mortar.

We were mighty pleased with the results, and it was literally money in the pocket the way the masonry work progressed.

Our masons liked Atlas Mortar for its outstanding plasticity and for its easy spreading and troweling. We liked it for the impetus it gave the job due to its workability and high yield.

It gave us what we consider an ideal set, and particularly appealed to us by its speed during cold weather months.

We're convinced that for top notch low cost masonry work, the best bet on the job is Atlas Mortar.

Sincerely,
Andrew Barten
 Andrew Barten



Numerous contractors, like Mr. Barten, praise the yield, strength and color of Atlas Mortar Cement. Masons like its rich, buttery plasticity . . . the way it responds quickly and easily to the trowel.

Backed by years of research, Atlas Mortar Cement

complies with ASTM and Federal specifications for masonry cement. For further information, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, N. Y.

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ATLAS MORTAR CEMENT

THE SATIN OF MASONRY CEMENTS

"THE THEATRE GUILD ON THE AIR" — Sponsored by U. S. Steel Subsidiaries — Sunday Evenings — ABC Network



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Immediate delivery!

Chromtrim "73" & "75" METAL MOULDINGS

Give You the Right Edge on
Tile Board and Wall Lino Jobs

The Chromtrim 73 and 75 line of metal mouldings combine beauty with durability. These economical and quality wall lino and tile board metal mouldings are the preferred trim by carpenters and builders for basement, bathroom or kitchen walls.

The popular Chromtrim 73 Series is for use with wall linoleum. The single flange design gives enough nailing surface to install easily without marring Chromtrim's high lustre finish. All sections are slotted and punched on 8" centers, to simplify leveling up after installation.

The Chromtrim 75 Series is similar in style and finish to the 73 Series, but accommodates the 5/32" tile board material.

Chromtrim 7313 and 7513 panel dividers also make a practical combination divider and cap section between bottom panels of tile design and top panels of a contrasting color or texture.

Chromtrim 73 and 75 when installed reveal no trace of the strong wide flanges which are concealed by the wall covering and tile board. Chromtrim 73 and 75 assure a snug fit on all wall linoleum and tile board jobs.

All Chromtrim mouldings are pre-cut and individually wrapped in convenient five and ten foot lengths, and shipped complete with nails in tough fibre tubes to prevent marring or bending.

R. D. WERNER COMPANY, INC. 295 Fifth Avenue, New York City 16, N. Y.
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Please send descriptive literature, catalog and prices on Chromtrim's 73 and 75 Series of metal mouldings.

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STATE _____

EDITORS' ROUND TABLE

(Continued from page 64)

everybody should be prepared to attend a university. They seem to have an idea that there is something wrong with the mentality of a boy who thinks he would like to earn a living working with his hands. The fact is that there is something very right about such a boy, but he simply doesn't have a chance in most modern school systems.

The ex-carpenter on the staff had a solution. Install the wartime system of training mechanics in the schools, he said. If a boy shows an aptitude for a trade, teach it to him, and don't try to ram a lot of other stuff down his throat. Maybe all he wants out of life is an opportunity to use tools by day and sit in a tavern in the evening. Maybe he has no intellectual or artistic desires.

Spoke up the youngest. A man can't live in this world without some liberal education in the arts and sciences, he said. You've got to surround his vocational training with a rounded curriculum.

Then, said the one with the solution, have a two-year course of surveys in the arts and sciences available to those who want it as a supplement to the vocational training, but don't make it mandatory. Then, have a four-year course, for those who want enough to equip them to go into business for themselves eventually. Fix that four-year course so that the whole thing is accredited in universities for the boy who discovers professional or artistic skills during the high school years. And if there are no university courses into which such a high school course fits, go to work on the universities, and have them create some new ideas in education.

It's an idea, said the chairman. Let's talk this problem of apprentice training wherever we get a chance. Somebody has to start something. It might as well be us. One good place to start is right here in Chicago with McNamee, who heads one of the best vocational training systems in existence. The Deerfield-Shields High School in Highland Park is another.

The purpose of the staff meeting was to outline some of the issues for 1949. There always is a purpose for these monthly meetings of the editors, and there always is something about which someone has become hot under the collar. That is why at least two hours is always required before the purpose of the meeting is touched, and that is why lunch is late.

It pay

YOUR SUGGESTION
WILL FIND QUICK ACCEPTANCE

...when you Specify

ELJER

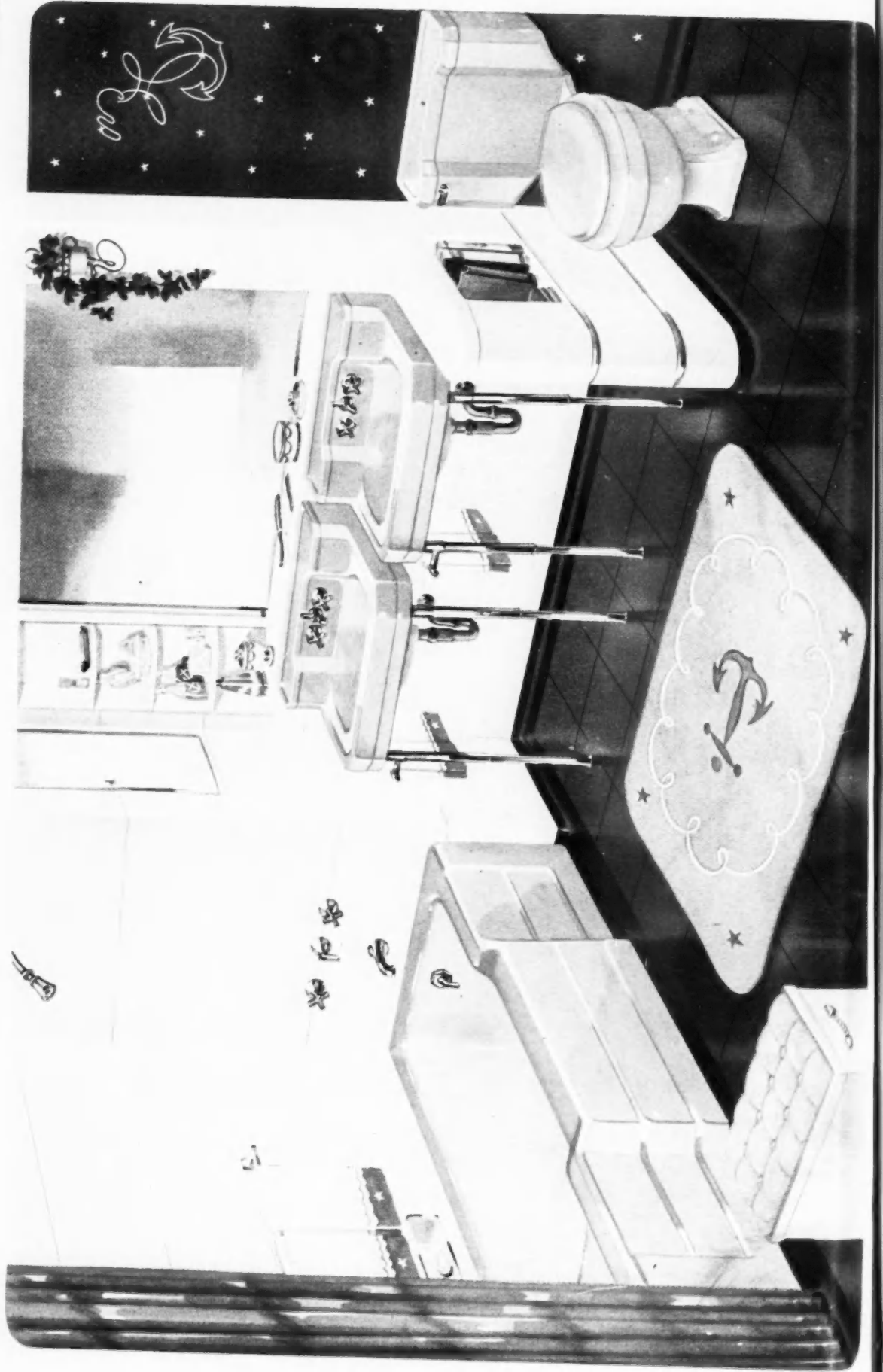
Eljer advertising in consumer magazines like The Saturday Evening Post will reach 75,000,000 readers this year. Everywhere, people know Eljer. You can be sure that your clients appreciate the long-life styling, superb quality and extra conveniences of Eljer's Fine Plumbing Fixtures, trimmed with Eljer's Quality Brass.

It pays you, it pays us-

because we specialize in Plumbing Fixtures and Brass

AS ADVERTISED IN THE SATURDAY EVENING POST →

ELJER EQUIPPED HOMES DO SELL FASTER BECAUSE



AN ELJER BATHROOM... that New look!

AN ELJER BATHROOM... that New look!



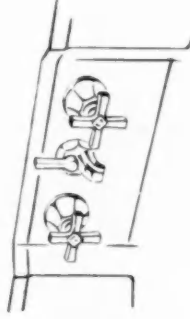
Eljer bathroom fixtures have just about everything: that perpetually new look, plus design and color, and besides they can be kept bright and shiny with the swish of a damp cloth.

The gleaming surfaces of Eljer plumbing fixtures, like their beauty and design, are the result of nearly half a century of continuous research and manufacturing ingenuity. All Eljer bathtubs have a heavy layer of lustrous enamel fused on a rugged, rigid, cast-iron base. Over 10 million Eljer fixtures are in use today.

The twin arrangement of vitreous china lavatories

shown above is a grand idea for a busy household. But whatever your idea is, Eljer's wide line of harmonious styles and colors will help you achieve it.

Select the exact Eljer bathroom, kitchen or laundry combination you would like; talk it over with your plumbing contractor. Write for our free booklet "Fixtures of Beauty and Distinction". Eljer Co., General Offices, Ford City, Pa.



Eljer faucets turn off and on with a touch of the finger... thanks to new, exclusive construction. Avoid the annoyance of dripping faucets. Eljer fittings are another reason for always specifying Eljer fixtures.

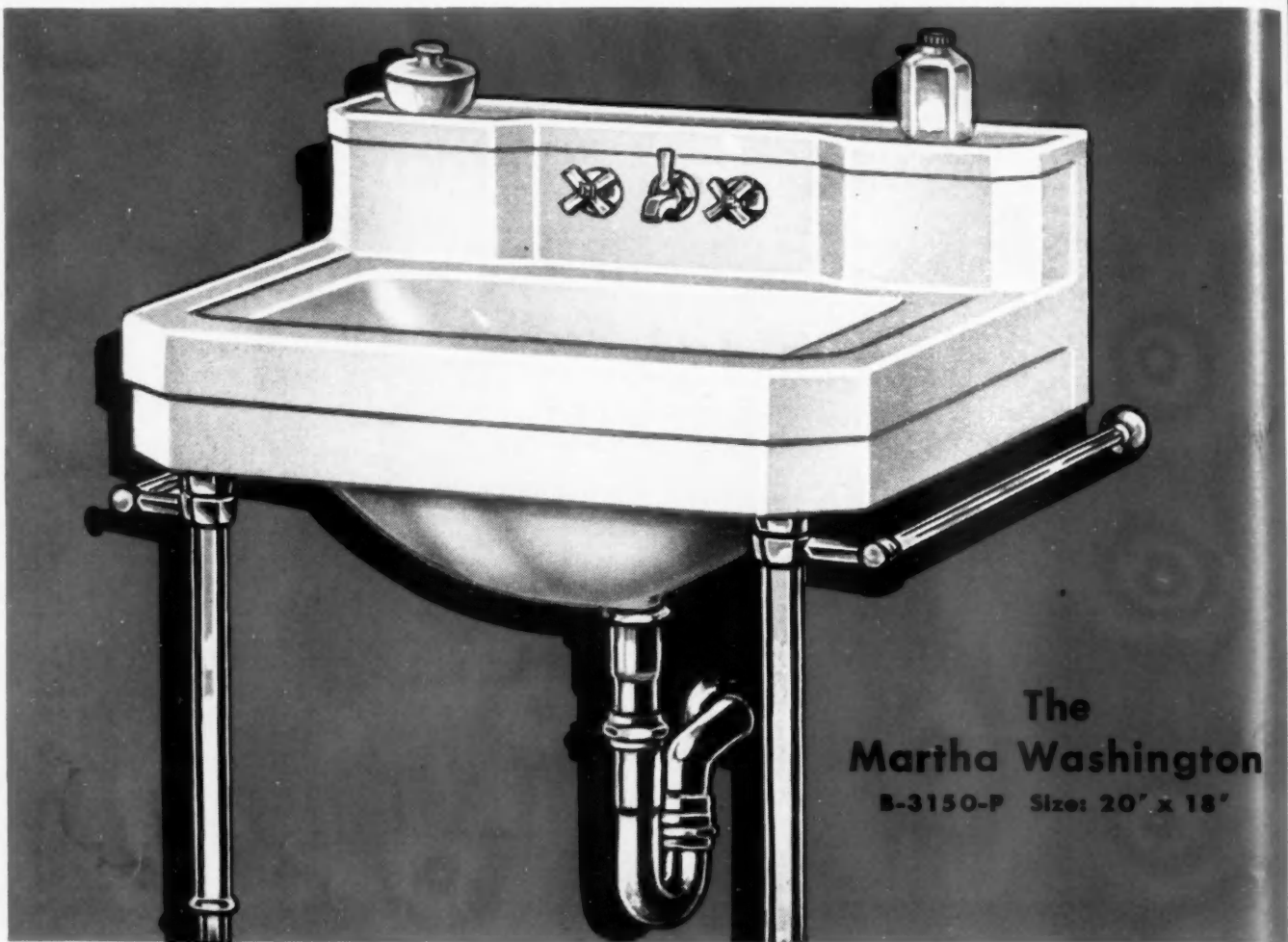
MANUFACTURERS OF FINE PLUMBING FIXTURES SINCE 1904

ELJER

Factories at Ford City, Pa., Salem and Marysville, Ohio and Los Angeles
There are over Ten Million Eljer Fixtures in Use



more and more people are asking for the *Extra Features* available
Only in Eljer's Fine Line of Plumbing Fixtures and Brass Trim



The
Martha Washington
 B-3150-P Size: 20" x 18"

Extra Quality . . . Makes Extra Sales

The high quality and modern styling of Eljer Lavatories give homeowners the *extra values* they recognize and appreciate. Eljer's Martha Washington Lavatory, for example, is made of *real vitreous china*. The hard, glass-like finish is fired at 2200° F. to become *part* of the rugged clay base . . . it resists stains and is impervious to all ordinary acids.

The overflow outlet in Eljer Vitreous China Lavatories is hidden under the front, anti-splash rim of the basin . . . permitting a

smooth, unbroken back surface. The generous shelf space is a great convenience. *Renewable* fittings, featuring the exclusive Eljer Swivel Disc, offer extra sales value.

Eljer manufactures a complete line of plumbing fixtures, in Vitreous China and Enameled Cast Iron. Available in white or harmoniously matching pastel colors. For additional information, see your Eljer Distributor or write Eljer Co., General Offices, Ford City, Pennsylvania.

It pays you, it pays us- because we specialize in Plumbing Fixtures and Brass

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MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS

Roundup of National Home Week Results Shows Countrywide Value of Publicity

Reports from 40 chapters of the National Association of Home Builders in reply to a questionnaire about the results of National Home Week show virtually unanimous approval of continuing the effort next fall.

The survey reveals the unexpected scope of the first endeavor, bearing out the statement of NAHB Executive Vice President Frank Cortright that thousands of visitors to exhibition projects over the country obtained a new concept of the home building industry.

Chicago is credited with the most impressive publicity achieved anywhere in the country. Admittedly, this was due to the Chicago Tribune support, and to the Chicago chapter's foresight in tying in with plans already developed to publicize home furnishings. A 60-page Sunday supplement to the Tribune, with complete maps showing all exhibit homes in the Greater Chicago area, drew hundreds of thousands of visitors to them.

A synopsis of reports from each of the replying chapters is given below.

LOS ANGELES

Proclamation by the mayor. Exhibited 150 homes and 200 projects with an estimated attendance of 100,000 visitors. Publicity confined to local newspapers.

SACRAMENTO, CALIF.

Five homes were viewed by 41,500 persons. One radio broadcast, good publicity in local papers and some department stores ran tie-in advertising. Reports "value inestimable."

SAN FRANCISCO

Sixteen homes and 54 projects were looked over by 100,000 visitors. No radio this year, but local newspapers cooperated and some stores ran tie-in advertising.

DISTRICT OF COLUMBIA

Builders exhibited 43 homes. The number of visitors is not known, but several builders reported attendance far exceeded expectations. One radio broadcast. Builders and realtors tied in with the Washington Post home week advertising, scheduled independently. Association reports the program of "tremen-



LINES of people like this filed through exhibit homes in cities all over the country during National Home Week. This one—built by J. E. Merrion & Co. of Chicago, was one of 71 viewed by 100,000 persons in the greater Chicago area

dous value" and suggests date be changed.

JACKSONVILLE, FLA.

Proclamation by mayor. Eight model homes were viewed by 15,000 persons. Newspapers cooperated with space on exhibit homes and received tie-in advertising. Favors change of date next year.

MIAMI, FLA.

Mayor issued proclamation. Twelve homes were exhibited. Builders used banners on job sites and trucks. Two radiocasts. Local papers carried publicity and stores tied-in with advertising.

FORT WAYNE, IND.

The governor and mayor issued proclamations. An estimated 75,000 persons viewed 25 homes. Daily radio broadcasts from job sites. Builders appeared on several programs. Local newspapers carried a special section with good advertising from allied industries.

INDIANAPOLIS

Proclamation by mayor supplemented that of the governor. There were 250 homes and 42 projects open for inspection. Demonstrations were made on job sites. Daily series of broadcast announcements. Two local papers carried special sections running 10 and 12 pages with a

large volume of tie-in advertising. Suggest changing date in 1949.

MUNCIE, IND.

Mayor's proclamation supplemented the governor's. Visitors viewed 10 exhibit homes. Some radio publicity and support of local papers with tie-in advertising.

NEW ORLEANS

Mayor's proclamation. Exhibit homes, 475 in 20 projects. Estimated 45,000 visitors. Demonstrations, prize contests, a "Home Week" Queen. Five radio broadcasts, special sections in papers, advertising by stores, builders and hotels. Says "value can never be estimated."

SHREVEPORT, LA.

Mayoral proclamation. About 600 visitors viewed 22 exhibit homes. Conducted tour for press and city officials.

GRAND RAPIDS, MICH.

Governor's proclamation. Three hundred homes were exhibited and viewed by 15,000. Stores set up window displays. Spot announcements on radio stations. Newspapers cooperated.

MINNEAPOLIS-ST. PAUL

Proclamation by governor, mayor. Minneapolis showed "Trend Home" to
(Continued to page 72)

Plan Now to Attend or Exhibit at the NAHB Convention, February 20-24, 1949



Cortright's Column

By Frank W. Cortright

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

When G. I. Joe came home from the war, nothing was too good for him. Home builders, bankers, the government, financing institutions, material suppliers and all of us in the building field promised to go all out to build him homes.

Let's see how well that promise has been kept. First, we had to fight our way through the clutter of the veterans' emergency housing program. We had to expedite and liquidate the expeditors. When we finally got the red tape unwound, we began to put on speed. Mortgage credit was abundant, and the production of houses shot upward at the fastest rate the world had ever seen. We licked most of our materials problems, we made some progress with labor, we got construction time back to somewhere near normal, and we have been doing pretty well. Veterans have been getting the houses we promised.

But as our volume went up, the pressure of the general price rise hit housing costs along with everything else. In spite of every economy we could make in materials and the use of streamlined construction methods, the cost of a new house kept going up and the limit is still not reached. Then came the cry for the "lower-cost" house.

Today we are well beyond the two-millionth house since V-J Day. The most drastic part of the emergency demand for shelter has been pretty well met. And simultaneously, the nature of the demand has increasingly changed. Today the demand is for houses in the \$5,000-\$6,000 class. This is the bracket of the "economy house" being planned and built by home builders in various parts of the country. But a cold, hard fact must be faced. This is simply that if the cost of the house has to be cut back, lenders, buyers and communities will have to accept smaller houses lacking the elaboration of the larger, more expensive house.

Right there we are running into serious barriers. One is the reluctance of lending institutions to put their money into mortgages for economy housing. Our builders and the Economy House Committee of NAHB have knocked themselves out developing good houses which can be produced in the price range that is so necessary. They have shown that it is possible, by streamlining construction methods, by using new and economical types of building material, to produce good, desirable homes in the \$5,000, \$6,000 and \$7,000 price range.

But when it comes to financing economy houses, most lending institutions look the other way. Many of them are simply not interested in investing in small houses of this character. Thus, the home building business is hooked on both horns of a dilemma. The country is demanding lower-cost houses. Builders can and will build them, but only a few lenders will provide the financing for the purchasers to buy them. And unless this condition changes once more, the home builder is going to be blamed for a situation for which he is not responsible—once more. The cry will be resumed for the government to take over.

The solution to this situation is in our reach if all concerned cooperate. Those who provide mortgage credit for the home building field must realize that the need for economy housing *must* be met.

Local building codes and regulations must be adjusted to admit construction of economy housing.

People in general must realize that they will have to accept smaller houses if costs are to be cut.

But the key to the whole thing is in the financing. Once that key is turned and the door is opened, we can go ahead with volume production.

Nor is this a matter of our own desire only. The Housing Act of 1948 was specifically designed to encourage lower-cost houses. If we do not produce under it, our industry will face a very cold Congress in the new session. This is our chance and if we do not grasp it—probably our last chance.

Home Week Results

(Continued from page 71)

10,000 people. St. Paul exhibited five homes to 8,500. There were spot announcements on eight radio stations, and builders appeared on six programs. Special section in newspapers.

KANSAS CITY

Mayor's proclamation. Exhibited 75 homes. Two radio broadcasts and good local press with stores and associate members advertising. Results "excellent".

NEW JERSEY

Governor's proclamation. Nineteen homes and two apartment projects shown. One radio broadcast, special section in local newspaper. Results deemed "not worth the effort expended."

ALBANY, N.Y.

Mayor's proclamation. Showed 80 homes to 3,000 persons. Ninety minutes of radio time daily during week. Special section in newspaper.

BUFFALO

Showed 18 homes to 20,000 people, including model home built by association. One broadcast and six spot announcements. Local papers carried stories and ads by builders and allied industry. Report "very favorable comments from public."

LONG ISLAND

Showed 100 homes to 50,000 people. Local papers carried stories. Metropolitan New York papers ignored event.

WESTCHESTER COUNTY, N.Y.

Exhibited 21 homes. Estimate 1,000 visitors. Suggest need for wire services to cooperate in 1949 because of failure of New York papers to recognize event. Ran ads and gave site demonstrations.

NIAGARA FALLS

Mayor's proclamation. Showed 15 homes to 3,200. Local press cooperated. Report it "opened up potential source of prospective customers."

ROCHESTER, N.Y.

Exhibited 70 homes to 20,000 visitors. Ran daily ads preceding event, cards in local busses. Three hours radio time. Good press cooperation. Trades gave site demonstrations. Report "one member sold six houses the first day." Date satisfactory. Conducted tour for city officials.

CINCINNATI

Ohio's governor issued proclamation for state, supplemented by mayor. Showed 8 homes, 60 projects, to 65,000. Ran two contests. Three radio broadcasts. Special sections in paper with tie-in ads. Suggest date change and "maybe greater need next year than this year."

CLEVELAND

Mayor's proclamation. Visitors, totaling 60,000, inspected 200 homes. Bus tours, demonstrations, posters and ban-

ners used. Radio and newspaper publicity. Special section in papers with tie-in ads. Report "very good public relations."

COLUMBUS, OHIO

Mayor's proclamation. Exhibited 300 homes. Radio announcements, special sections in papers with tie-in ads by allied industry.

OKLAHOMA CITY

Showed 125 homes to 75,000 persons. Spot announcements on radio, publicity in papers, tie-in ads by building materials dealers. Report "next year . . . direct at low-cost housing." "Locals not going to stand added assessments . . . honeymoon over for most builders."

TULSA

Mayor's proclamation. Exhibited 25 homes to 4,000. Public affairs forum attended by 600. Local press cooperated. Suggest date change and report "results very successful."

PORTLAND, ORE.

Ran week September 19-26; better date. Showed large group of houses to 30,000 persons; tied-in week with home show.

PITTSBURGH

Mayor supplements governor's proclamation. Showed 40 homes. Tie-in with county fair. Spot announcements and one radio broadcast. Special sections in papers. Change date.

DALLAS

Mayor and governor issue proclamations. Showed 150 homes. One broadcast, local press cooperated. Report "should be annual activity."

SALT LAKE CITY

Mayor's proclamation. Showed 26 homes to 3,000 persons. Tour for public officials; Kiwanis Club talks; radio and special sections in papers. Change date.

RICHMOND, VA.

Governor and mayor issue proclamations. Exhibited 15 projects, 39 homes and 6 apartments to estimated 1,800. Spot radio announcements; one television broadcast. Local press cooperated. Suggest date change. Report "closer to end of building boom than many realize."

SPOKANE, WASH.

Mayor's proclamation. Showed 30 homes to 20,000. Newspaper space 44 inches. Ads by stores, power company. Report "highly successful."

SEATTLE

Seattle builders exhibited 53 houses to 3,000 persons. Three were furnished as model homes and drew 10,000 attendees. Ten columns newspaper coverage. Suggest date change. Report "splendid for the industry . . . well worth the effort."

MILWAUKEE

Exhibited complete subdivision of 24 houses erected by builder members. Top price \$12,000. Excellent newspaper cooperation. Thousands viewed homes.

Florida Home Builders to Make Serious Effort to Lower Prices



THE HEAD TABLE at the first luncheon meeting of the Florida Home Builders Association in Ponta Vedra included, left to right, H. E. Cox, Veterans Administration; E. F. Luna, VA; John Shaeffer, retiring president, Florida chapter; Russell V. Tinney, FHA, Jacksonville; Curt C. Mack, FHA assistant commissioner in charge of underwriting; John Malone, NAHB regional vice president; Lawrence C. Pearce, new president, Florida chapter, and Frank Cortright, NAHB executive vice president. Mack and Cortright both were luncheon speakers

Intense interest in undertaking some low-cost housing construction in Florida was revealed in a panel on that subject, held at the fall meeting of the Florida Home Builders Association at Ponta Vedra Beach recently. Not only was the need for such construction underscored in remarks by Frank Cortright of NAHB, but representatives of the Federal Housing Administration and the Veterans Administration revealed a cooperative attitude.

Russell V. Tinney, FHA director of the Jacksonville-Tampa area, even went so far as to present to the builders some suggested designs by a Jacksonville architect, Joseph H. Bryson, for a single floor plan of 653 square feet with eight elevation variations. A feature of the designs was the attempt to incorporate pleasing architectural unity by including a porch and breezeway.

While the particular designs suggested

were not favored by many of the builders because of the small floor area, at least one already has arranged to start using them in a low-cost project.

The price range estimated by FHA for the several design variations under today's cost structure was from \$5,928 without garage or equipment to \$7,128, including garage, breezeway and \$600 worth of equipment. One feature of the designs, unpopular with most of the builders, was a "floating closet" to be installed like a piece of furniture instead of permanent closet construction.

A considerable number of the builders indicated their intentions of erecting some new homes in a price range below \$6,000 if it is at all possible to do so. They believe there is a huge untapped market for this price house in the Florida area. Chief obstacle is the inability to secure mortgage money on homes that they can build in this classification.

Tulsa and Oklahoma City Unite To Form New State Association



NAHB AFFILIATES in Tulsa and Oklahoma City have combined into the Oklahoma State Home Builders Association. Bob Adams of Tulsa was elected president of the new organization. Other officers are: vice president, Ben Wileman, Oklahoma City; Otis Nidiffer, Tulsa, eastern vice president; Howard M. Tippin, Oklahoma City, western vice president. Pictured above is the organizing committee. Left to right, standing: Sylvanus Felix, Mr. Tippin, Vernon L. Mudd, N. D. Woods, W. P. (Bill) Atkinson, Dick Martin, Roy Morgan, Roger Givens, Steve Pennington, Adams, president. Seated: Mrs. George Wilder, Cord E. Wilson, Wileman, Nidiffer, Oliver S. Black and Carl C. Bruce

San Antonio Chapter Is Active In Forming New NAHB Affiliates



Members of the San Antonio Home Builders Association are helping in forming two new chapters of NAHB at Corpus Christi and Austin, Texas. Frank Robertson, G. S. McCreless, L. G. Hodges, Ralph Eiser and Lee Miller of San Antonio accompanied W. P. Atkinson, regional vice president of NAHB,

to Corpus Christi where 20 builders were interested in forming a chapter. McCreless, Atkinson and Lee B. Miller, local chapter executive secretary, met with a small group at Austin. The photo above shows attendance at opening dinner meeting in San Antonio where Bill Atkinson and Frank Cortright spoke.

Chicago Association Service Program Reveals Reasons for Growth, Stability

The growth and strength of the Chicago Metropolitan Home Builders Association is the result of a constructive and effective program for its membership. A recent report of the association, detailing its activities for its fall membership drive, reveals a pattern that other associations can emulate with profit.

The activities and services of the Chicago unit fall roughly into three classes. First, there are the activities bringing general industry benefits—the public relations effort, the work to help direct and control legislation, and so on. Secondly, are the routine service tasks which help individual members. Last, there are the benefits from the association's physical facilities, which are considerable.

In the first classification, Chicago has thrown the weight of its membership opinion behind the fight against government housing, giving full support to the National Association of Home Builders to help make that association the effective organization it is today. Most outstanding of its efforts this year is the tremendous success of the Chicagoland Home and Home Furnishings Festival—the job done by the Chicago chapter for National Home Week by taking advantage of a chance to join other allied groups to achieve mass publicity. The spring home show, and continuing efforts in public relations also come under the first classification.

In services to members, one of the most outstanding is the insurance department conducted by Lawrence G. Holmes. Return premiums last year were 45 per

cent, a figure 25 per cent above the general area returns. This service alone often more than pays for a member's dues and assessments.

Individual services are many—helping to secure personnel, to place apprentices, to locate materials, handle veterans' complaints and assist in labor problems. There is a library file of all available information on building and build-

ing materials. The weekly association letter complements the national NAHB publications.

Prospects for homes in various price classes are directed to members through a reference index of members' operations. There is a free notary service to members when documents are signed at headquarters. Association committees cover—in addition to the operation of the chapter—research and construction economy, ethics and complaints, municipal relations, legislation, home financing, labor relations, veterans' housing, land planning, taxation and the legal aspects of building operation.

Periodic clinics on regulations and the application of new housing laws keep the membership informed of the practical aspects of these laws. Informal general membership meetings, held monthly, provide a forum where trade differences are analyzed and resolved, and where cost-savings methods of construction are shared.

Chicago does not neglect the social side. There are regular forum luncheons, a bowling league, Christmas party, annual field day and annual banquet.

The physical assets are noteworthy. The headquarters, adjoining the Sherman Hotel, are located in the heart of the Chicago Loop. The first floor and basement of a two-story structure is given over to the Chicagoland Home Building Center—a permanent exhibit of building materials, equipment and construction methods. There is a club dining room where luncheon and dinner are served and parties are handled. A members' conference room is available for business meetings. Offices occupy the second floor. All of these facts about the association give the membership committee and members at large a potent selling tool in increasing the membership and strength of the organization still further.

San Diego Presents Radio Program



EACH MONDAY evening, two builder members of the San Diego Building Contractors Association of California discuss some phase of housing with other industry authorities over radio station KGB. Pictured is a typical broadcast. Those participating, left to right, are: E. A. Walsh, manager, FHA; Russell Rink, assistant city manager; T. J. Lords, director, NAHB; B. F. Jenkins, president, San Diego chapter, BCA, and Harry Horton, moderator. The panels discuss construction technique, architecture, government controls and financing

**Here's why HEABEL'S
the Builders' Department Store
used**



The Heabel Company, Cedar Rapids, Iowa, remodeled their store recently . . . and they specified 1/4" Apac on the exterior walls. That's a particularly good testimonial, because Heabel's have been handling builders' supplies for many years.



K & M "Century" APAC features:

• **Easy to Use and Apply**

With Apac you save cutting time . . . just score it and snap off. You can lay up its 4' x 8' sheets 32 sq. ft. at a time . . . fasten them with nails or screws.

• **Durable**

Made of asbestos and Portland cement . . . Apac sheets are completely fire-resistant . . . rot-proof . . . rust-proof . . . weather-proof. They grow tougher with age!

• **Attractive**

Because of their smooth finish and pleasing light gray color . . . your finished job will be neat and attractive. And Apac never needs painting . . . though you can paint it when desirable for decorative reasons.

• **Economical**

Low first cost . . . long maintenance-free life makes Apac a leader in long range economy. Invaluable in building customer goodwill.

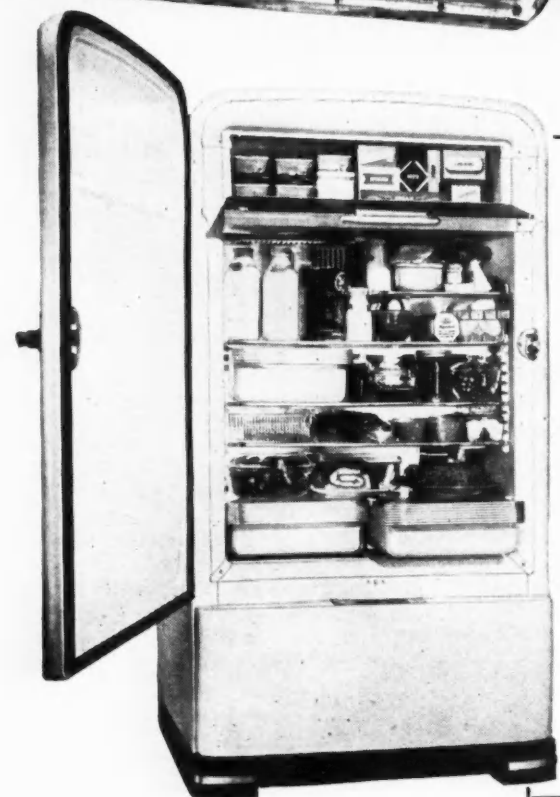
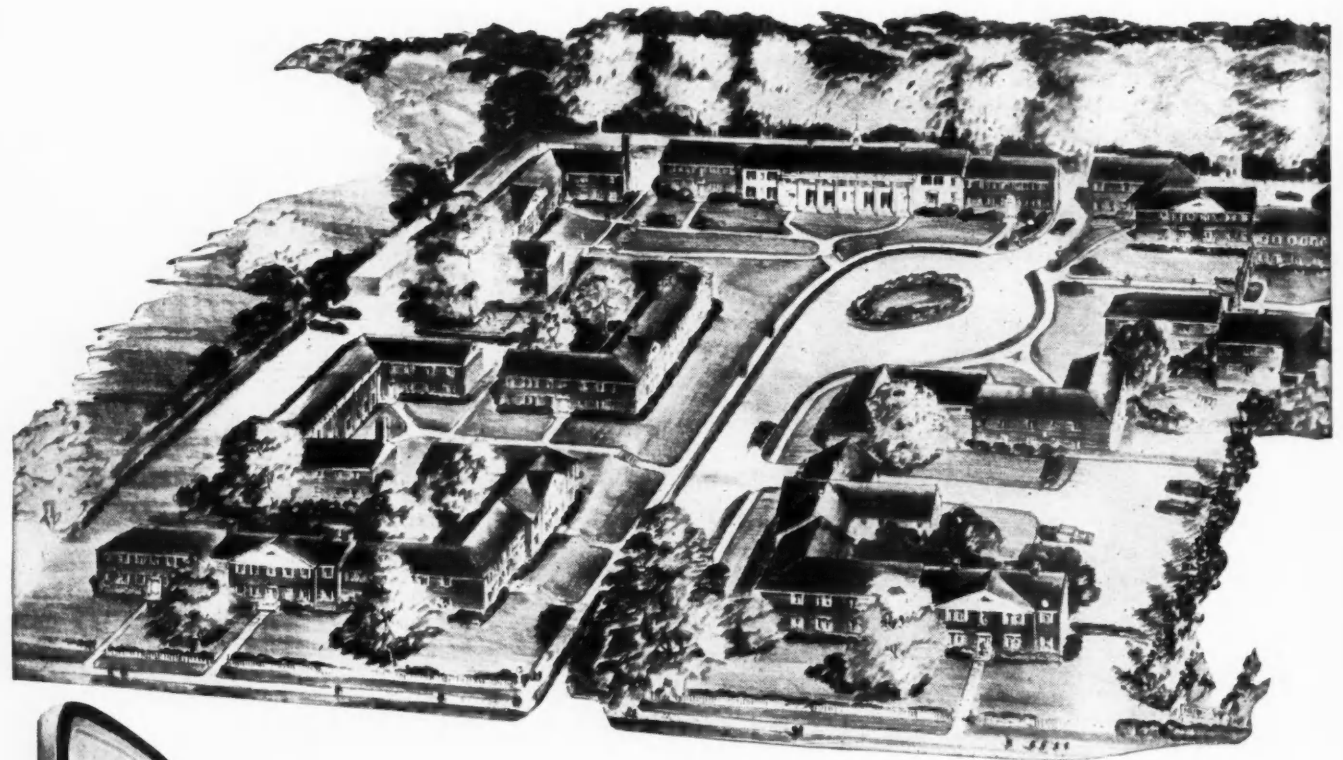
That's why the Heabel Company used K&M "Century" Apac . . . and why you'll want to use this building material. Get full information about "Century" Apac from your K&M dealer . . . or write directly to us. We'll attend to your inquiry promptly.

Original manufacturers of asbestos-cement roofing shingles in this country.



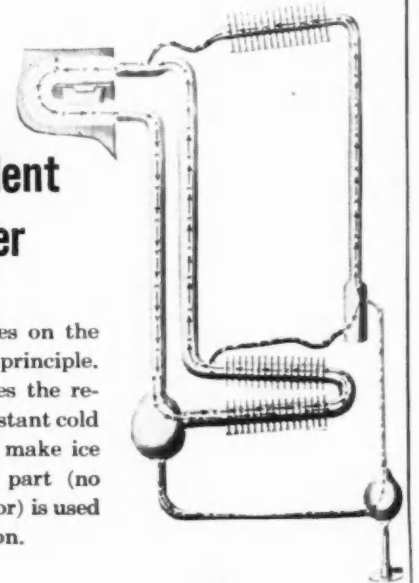
**KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA**

"I wanted dependable refrigeration ...I chose silent, long-



Here's why Servel stays silent ...lasts longer

The Gas Refrigerator operates on the simple continuous-absorption principle. The small gas flame circulates the refrigerant that supplies the constant cold needed to preserve food and make ice cubes. Not a single moving part (no motor, no pump, no compressor) is used in the entire freezing operation.



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for my garden apartments lasting Servel,"



Says Builder of Green Acres, Garden Apartments in Verona, New Jersey

"Last spring—when I was ready to order refrigerators—I wanted to make sure my tenants would get a refrigerator that would be dependable for years. That's why I settled on Servel for my Green Acres apartments. In addition to having all the latest conveniences, Servel is the only refrigerator that has no moving parts in its freezing system to ever need repair or replacement."

MILTON L. EHRLICH
1 Madison Avenue
New York, New York

The newest idea in American home living—where the country's fresh out-of-doors is blended with the city's modern conveniences—is the garden apartment. Naturally the builders and owners are making their garden apartments as up-to-date and comfortable as possible... with special emphasis on the kitchen and kitchen appliances. That's why many owners have chosen—and many more are seriously considering—Servel as the refrigerator for their kitchens.

Permanent silence pleases tenants

Tenants find something extra special in their new Servels. To be sure, they get every modern cabinet feature. And something *more*—the finest freezing system of any refrigerator. That's because only Servel operates

without using moving parts. It has no machinery to make noise or get out of order. Just a tiny gas flame provides dependable, uninterrupted refrigeration year in, year out.

Low operating and maintenance costs please owners

You'll find that it costs surprisingly little to operate an apartment house equipped with Servels year after

year. What's more, the upkeep bills amount to almost nothing. All the credit goes to the different operating method of the Servel Gas Refrigerator. There's not a single piston, pump, valve, or compressor in the freezing system to ever lose efficiency or need costly repairs. For full information on Servel, see your Sweet's Catalog . . . or write to Servel, Inc., Evansville 20, Indiana.

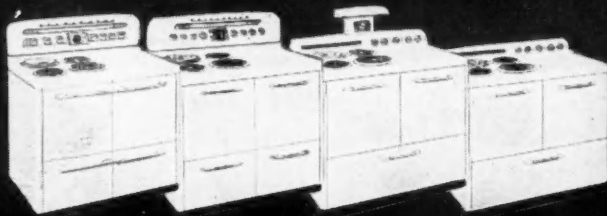
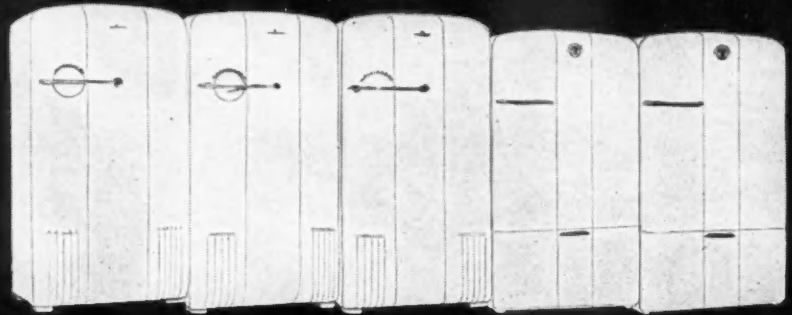
Servel

The GAS Refrigerator

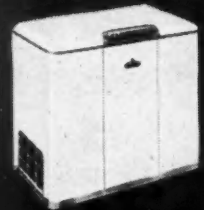
New angles
in space
utilization

Kitchen plans now easier with one-width Kelvinators

**5 Refrigerators
7 cu. ft. and larger
all one width!**



**4 Ranges and
Home Freezer
all one width!**



**Pick your client's models by budget...
NO CHANGES IN FLOOR PLANS NEEDED!**

Choose any combination of top-quality Kelvinators. Regardless of size, 5 new Kelvinator Refrigerators are all 31 $\frac{1}{4}$ in. wide. Regardless of model, 4 new Kelvinator Ranges and the new Kelvinator Home Freezer are all 39 in. wide. . . . Only Kelvinator offers the flexibility of uniform widths for easier kitchen planning!



"SPACE-SAVER" PACKAGE BRINGS BIG KITCHEN ADVANTAGES TO SMALL KITCHENS

Get Kelvinator's "Space-Saver" Package . . . "Space-Saver" Refrigerator only 24 in. wide is full 6 cu. ft. . . . companion range is only 21 in. wide, with new design permitting installation flush against wall. For further information, write Kelvinator Division, Nash-Kelvinator Corporation, Detroit, Michigan.

Kelvinator — of Course!

AMERICAN BUILDER

E D I T O R I A L

Apprentice Training

A YOUNG G.I. carpenter trainee recently expressed to *American Builder* what appears to be a justifiable complaint against the kind of on-the-job training he is receiving. In seven months of his training period he has done only two months of carpenter work, and that broken into short periods of a few days at a time. During the remainder of the seven months he has been kept busy doing the work of a laborer, and at one-half the wage scale of a laborer. This G.I. believes, and with reason, that he is being treated as a subsidized laborer instead of as a potential craftsman. He asks if *American Builder* believes he is entitled to a kick.

In this case and in many like it the young man's ambitions are being thwarted, his talents and time are being wasted, the industry is being denied the development of a good carpenter, and tax payers' money sent to him by the government to supplement his small wages is being wasted. The trainee's resentment is directed against his employer. While it is possible that the builder is taking an unfair advantage, it is probable that with shortages of all kinds, including common labor, he is using the trainee wherever he has to have him at a given time, and hoping eventually to detail him to carpenter work exclusively.

Regardless of the motives of the employer, however, the real fault lies in the failure of public school systems, excepting only a notable few, to provide sound and adequate vocational training. The pace at which builders and their superintendents and foremen are forced to work seldom leaves time for the instruction of apprentices. If there were time, it cannot be expected that more than a small percentage of good building tradesmen are also good teachers. And many of those who might have natural teaching ability are the products of the same slipshod system of apprentice training that now exists. As a result, they do not know enough about the trade to teach it.

Teaching is the business of teachers and schools. During the war the services perfected systems of intensive training that made skilled mechanics and tradesmen out of totally inexperienced men, and in a matter of weeks or months. These systems can and should be installed in the public schools to accomplish at least the apprentice training for building tradesmen.

They will not be installed, however, until builders point out to their local school boards the high wage scales in the building trades and the unlimited opportunities for building tradesmen to develop their own businesses or reach executive positions. Until builders educate their local school systems, there will be discouraged apprentices and insufficient and poorly trained craftsmen.

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MODERN COMMERCIAL



Erection of new commercial structures and modernization of existing buildings are keeping commercial centers abreast of new developments in merchandising

THE GREATEST volume of business in history is being transacted on America's main streets today. A substantial increase in population plus the prodigious and seemingly insatiable appetite of the public to consume all types of goods and services is resulting in the erection of many new commercial establishments, and in the expansion and modernization of a huge volume of existing structures. This is a natural consequence of the record production of new homes, but unlike housing there is little fanfare and publicity concerning the excellent accomplishments of America's light construction industry in the commercial field.

Despite the fact that business has operated in a seller's market for several years, retail store owners and managers are acutely conscious of modern merchandising and its methods. The individual builders who make up the light construction

industry are being called on daily to work with architects and merchants to produce sales establishments geared to present day selling. Each individual store presents an individual problem in design and appointments that only the merchant, the designer and the builder, can properly handle after consultation and cooperation in considering the various factors involved.

The prevailing trend now is for large plate glass windows providing unobstructed views of the interior. Because of this, it is the interior which becomes the display, together with all the furnishings. Several years ago a new store front alone was sufficient to provide increased impetus for sales. But today, with so much more to work with on both the front and the interior, a wider range of materials is used as well as much more versatility in design techniques.

One of the problems with large

display windows is that of reflections. These can be annoying at times and especially if care is not used in considering location. Tilting of display windows can do much to eliminate these reflections, in some instances, and in others, it may make them worse. Display windows are usually tilted in at the bottom so that the reflection is that of the street, rather than the brightly lighted store on the opposite side. For a more clear vision of the interior the best procedure is to use light pastel shades inside the store for wall surfaces and fixtures because, when well lighted, they will reduce reflections from out of doors to a minimum. Other helps are light-colored floor coverings and dark sidewalks. Even the beveling of windows at an angle in plan sometimes assists because this may bring reflection of a more distant spot not as bright as that closer to the store.

BUILDINGS for America's Main Street

The trend in commercial establishments today is away from the traditional toward the modern. But the modern store must be so designed and arranged that traditional merchandise can be displayed to good advantage. This can be done successfully if proportions are pleasing and plain, and if the merchandise is properly grouped. The design of the store should also allow for change and be flexible, if possible, so that a complete renovation job need not be done each time a change is desired.

In achieving this flexibility, especially in the smaller stores, the off-center entrance can do much. It makes the store appear wider because one display window then becomes horizontal permitting at least two different types of display arrangements, should that be desired. The off-center entrance also permits more freedom in plan with irregular and interesting arrangements to dramatize and emphasize merchandise.

In connection with plan arrangements and dramatization of merchandise the value of mirrors should never be overlooked. They can be used to widen a narrow span effectively, and to suggest spaciousness. Mirrors on columns do much to decrease the size and prominence of such obstructions.

Color is another problem in design that can spell the difference between failure and success. Colors should be carefully selected so as to feature the merchandise displayed rather than to divert attention. A fact to remember about color is that it is not a particular color which can be pleasing but it is rather the association of colors with each other that pleases or displeases.

Lighting colored surfaces and materials is extremely important because it can make them vivid or dull. A good rule of thumb to remember in this connection is that cold light, like some fluorescent or daylight, goes well with a cold color like blue, and warm light, such as filament or fluorescent pink and gold, goes well with warm colors like yellow and red.



GRAY AND BLUE structural glass have been combined in this front. In an effort to create the illusion that there is no glass separating the exterior from the interior, the gray of the left base was carried into the store interior as a wall covering



THIS DRUG STORE was planned with a feature display element at the street end of the counter to block off the unattractive view inherent in behind-the-counter soda fountain operation. Main plate glass display window here is set at an angle in plan



A SMALL FEATURE display window to the left of the entrance has been incorporated in the grocery store front shown here. A large visual area behind which a display unit can be placed is also one of the features. Name is in free-standing letters

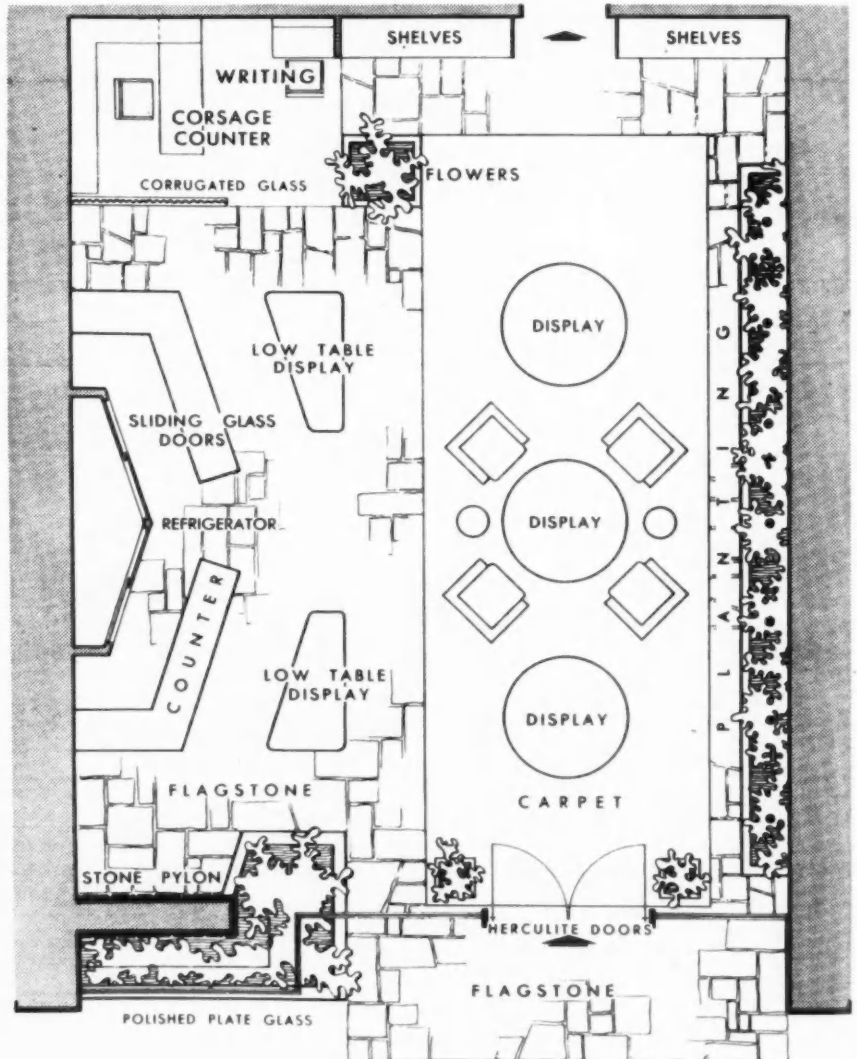


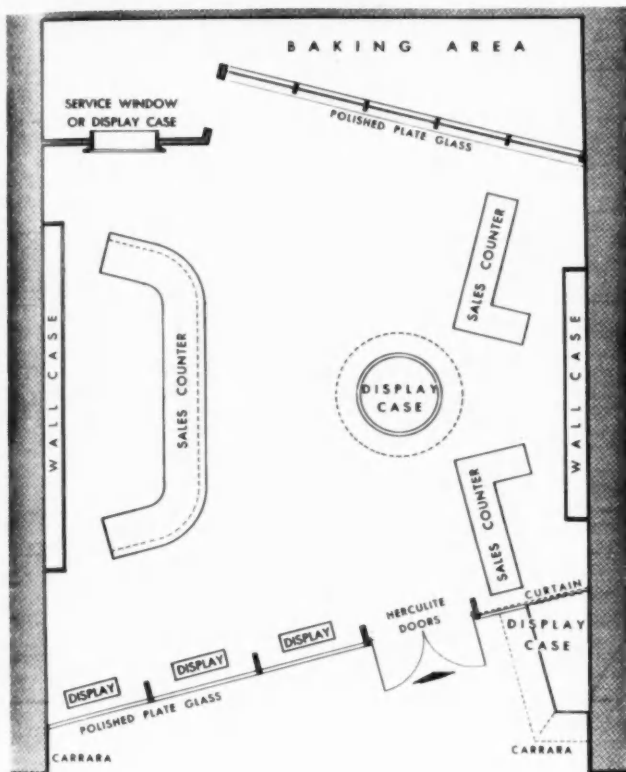
STONE PYLONS with glass shelves flank the main display area in this modern flower shop. Note egg-crate lighting in ceiling

The sign carrying the name or symbol of identification for the store always deserves very careful study. With the strong trend in commercial zoning to eliminate projecting signs, designers and builders are cautious about recommending erection of these features on new or remodeled structures. Clear, concise and well proportioned lettering is always safe and in good taste. If placed horizontally on the building, it will not have to be moved should a change in zoning force removal of projecting signs.

The common practice today, as it has been for years, is for each individual store owner to improve or erect his establishment with the idea of dominating a certain block or area. Extensive educational work is being done among merchants to demonstrate that group or block modernization pays biggest dividends in the long run. A street or an area with all stores modernized or erected according to a master plan will eventually attract more trade than a block of both old and new stores in an inconsistent hodgepodge. Principal argument against following a master plan for group store design is

IN DESIGNING this store two basic elements were kept in mind —to create attractive selling area as well as comfortable and dignified lounging area for customers





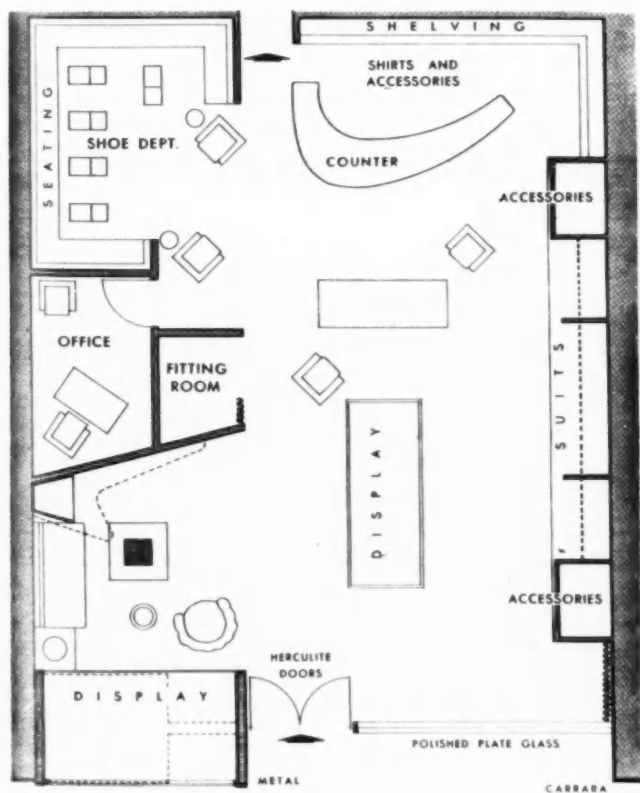
THE OPEN vision front on this bakery is divided into a series of vertical panels. Individual display cases are located back of three of the panels. At the extreme right is an exterior display case which gives the impression of being separated from the store

that merchants lose individuality in their establishments. When carefully done, however, some individuality can be assigned to each front and the overall effect of the block or area becomes a tremendous advertising and promotional medium because its very massiveness alone attracts attention.

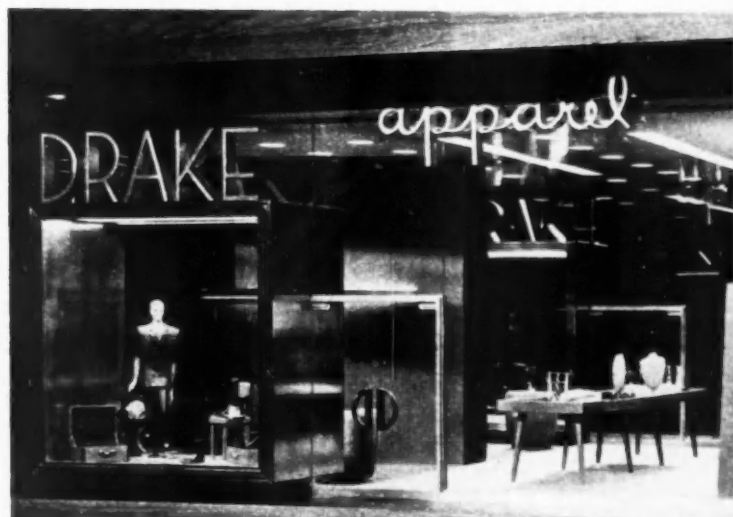
Group modernization of an entire main street is still the excep-

tion and not the rule. Such a program can be achieved only with impetus given the movement by some central organization or person who can bring all interested merchants together on common ground, where agreement can be reached on design and price. In many business communities and small towns, there are merchants who would like to initiate a pro-

gram of store front modernization but lack the extra stimulus and interested third party to get the project under way. Many manufacturers, trade associations and business groups have assembled data on proper procedure for group modernization programs and are ready to cooperate with builders, designers or merchants interested in such undertakings.



THERE IS both a feature window and a display area at floor level in this men's apparel shop. The design, in a bold and masculine manner, features straight and severe lines. The floor layout was planned for individual department selling. Lighting is recessed or concealed





Modernization Offers Builders Opportunities

The best in construction and creative architecture was achieved in building rebuilt from ground up

HIGHLIGHTS of the new Mallery Furniture and Decorators store, centrally located in White Plains, New York, N. Y., are the use of authentic Colonial woodwork, terraced selling floors; avoidance of a typical commercial atmosphere by the use of wallpapers, fabrics and accessories coordinated in color and style to emphasize the furniture.

The building was rebuilt completely. All woodwork was made by Nuroco Woodwork of New Rochelle, N. Y.

The exterior of the 50-foot wide building is Georgian, residential in character. Red brick walls are relieved by white trim and a crowning white pediment. The interior is broken up by alcoves, and by a series of tailored salons done in contrasting colors and styles.

The main floor is divided into four rooms. This division helps break up the awkward large area.

Architect Harry Leonard Miller of White Plains used Williamsburg mantels and New England trim in the building with taste and restraint. By changing floor levels, by use of small rooms alternating with large spaces, he achieved intimacy without sacrifice of the vista that the uninterrupted floor provides. Walter A. Stanley Construction Co., Ossining, N. Y., was the builder.



ILLUSTRATIONS show before and after effects. Small-paned show windows now carry out intimate and traditional theme of the building. Building is air-conditioned; brick and steel construction. Larry Weisberg and Mathew Kaplan, owners



TWENTY-THREE MODEL ROOMS, evenly divided between period and contemporary styles, provide at-home settings for variety of furniture and furnishings

STEPS IN PLANNING *Modern Store Interiors*



EXTERIOR design, with all-glass front, provides a visual transition to interior

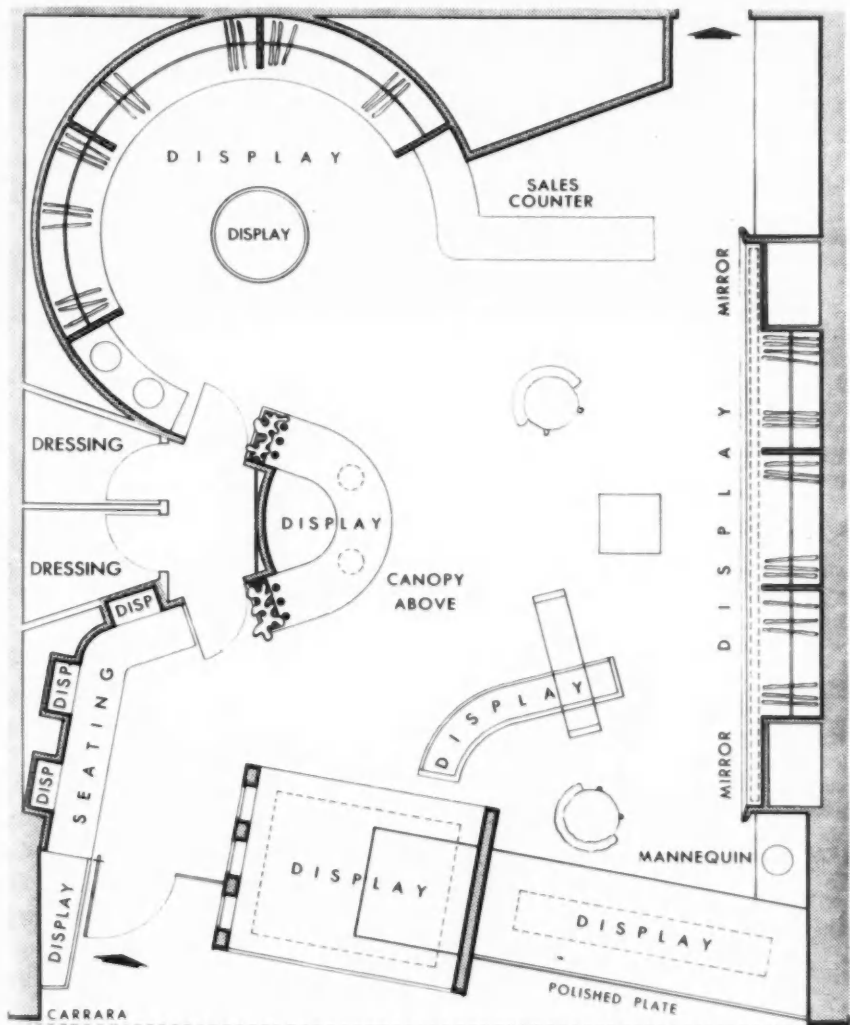
Following the modern trend, the exterior and interior treatment of this store are handled effectively as one integrated unit

THE MODERN store of today is the result of changing methods of merchandizing. There is a complete reversal of thinking with regard to the display of articles. The separation of show window from the sales area is a thing of the past. Today, an integration and opening up of the store's operation to the view of the public is considered good planning.

In the planning, the entire store is assumed to be a show window. The counters, cases, merchandise and entrance features, are all designed and arranged to fit into a coordinated grouping. The demand for larger areas of glass in the store front makes a smooth visual transition to the interior. This places emphasis upon the interior design and the general lighting arrangement.

With reference to lighting, it is found, that in order to reduce the reflections in the glass which occur during the day or night, bright areas inside the store, must be equal to, or greater than the brightness of the reflection. While lighting fixtures are usually bright enough to show that the store is open for business, bright walls and displays are important. They create interest and attract customers to the inside. However, lighting offers more than high brightness . . . it is a potent and versatile display tool. Composition can be strengthened and, perhaps most important of all, desirable features of merchandise can be emphasized by lighting appropriately applied.

A clear-cut example of open planning is shown in the Carlton Women's Apparel Shop. The large display unit that features the store front, as well as the adjoining unit, is laterally an extension of the interior, with the floor of the units placed at a higher level. The side piers, lintel and bulkhead is faced with Carrara structural glass in various shades of green. The feature window is framed with bronze Pittco metal. The small, wall-display window, indicated on the opposite side of the entrance doors, has its continuation on the interior in a series of framed recessed display boxes.



THE PREVAILING thought in planning this store, was to obtain an interesting arrangement of services, display counters and cases. At the center, flanking the dressing room, is a semi-circular step display, which at times can be used for

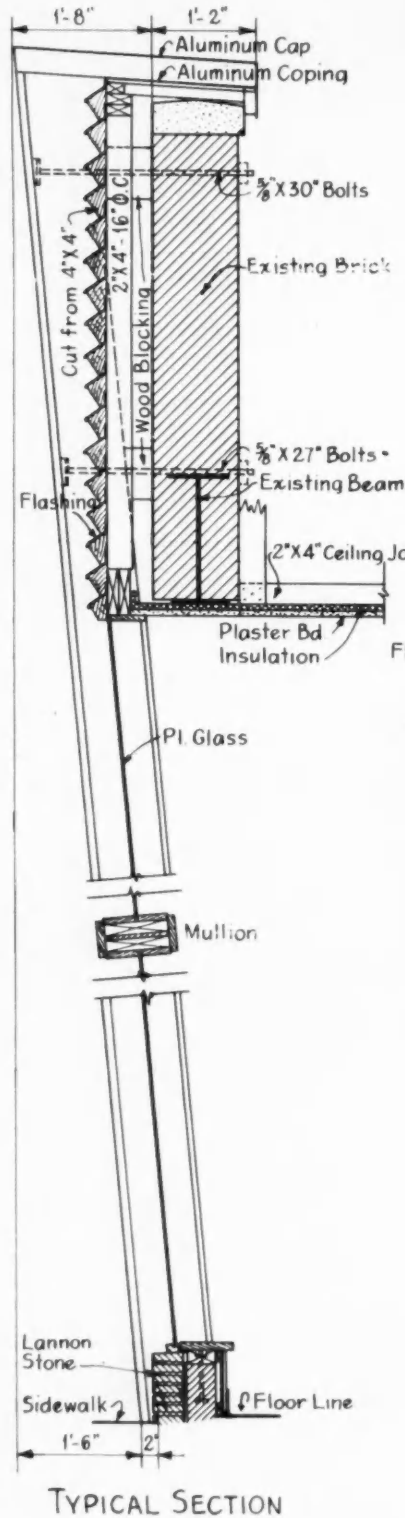
fashion shows. A mirror for the use of models, is placed directly in back of the display. Considering the fact that the shop is small, nevertheless, an attempt has been made to departmentalize it, yet have the store remain an integrated unit

Store Is a Show Window

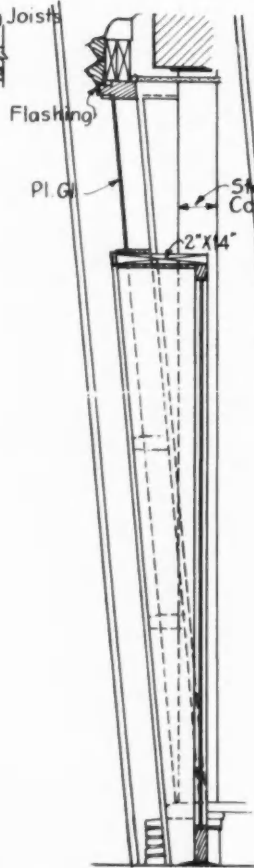
Attention getting feature with open visual planning, obtained through effective remodeling



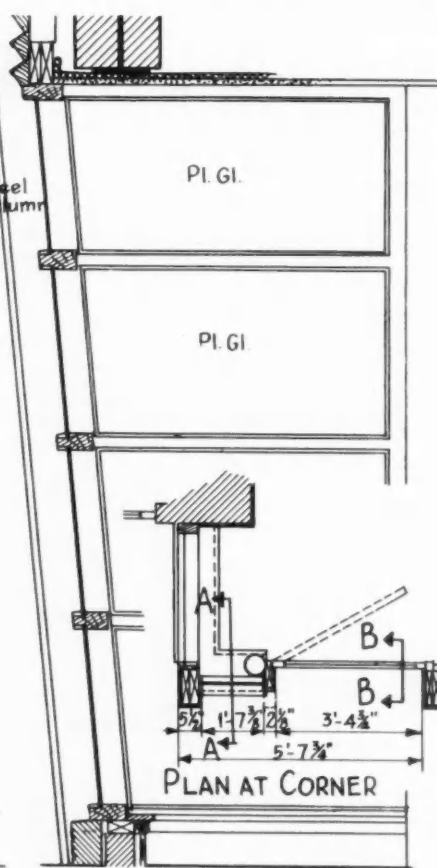
A SIMPLE remodeling job transforms a plain front into an effective selling medium



TYPICAL SECTION



SECTION B-B



SECTION C-C

AN IMPORTANT trend, worthy of special note, is the face-lifting process being done throughout the country in all communities.

The Commander Appliance Co.'s store is a good example of how remodeling techniques were applied to an existing shopping center, where all the stores conformed to a simple pattern of design. In this case, Norman R. Johnson, St. Paul architect, permitted all the old construction above the glass line to remain. All the old work below the lintel was removed to make

way for the new visual store front.

With economy in view, Johnson, in his design, has applied the new face directly over the old. The entire surface above the lintel is a series of wood members cut diagonally from 4x4's. These members are laid up in a sawtooth pattern, that in turn is secured to wood blocking applied to the face of the existing brick wall. Wood pylons, that are non-supporting, extend to the coping line at an angle. This allows the plate glass windows to be tilted to avoid glare.

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THIS dress shop avoids the appearance of a mechanical floor pattern through use of a succession of receding planes. This gives separate identity to each sales group

FLEXIBLE partitions provide a means of separation for the various departments

New Applications of Basic Materials

IN OUR CITIES the problem of the small retail shop is being restated in new terms. A major trend is the integration of sales space and sidewalk displays by a visual open store front. The current idea is to reduce to the absolute minimum those structural elements that form the fixed shell of the store building as columns and floor slabs. The remainder of the structure—the finish floor surfaces, ceilings, and partitions that enclose sales, service and displays—is being designed as dry-built, knock-down units, capable of multiple use and providing flexible access to space and equipment.

Then again, the smaller shops and stores, located in the heart of the city, prove that it is possible to answer the problem of high rentals and restricted space. This is done by taking every advantage of width, height, and depth to achieve the desired effect. To further carry out this effect the face materials used on the exterior are continued into the interior. Basic materials, such as plaster, plywoods, fabricated wall surfaces and metals, are being re-introduced in new and interesting combinations. Unusual lighting effects, obtained through drop ceiling panels, curved wall surfaces, and recessed display boxes, tend to strike a different note in the application of materials. Wall papers with large colorful patterns are used in connection with deep, solid-painted surfaces.

Striated plywoods, blond finished woodwork and fixtures are used extensively. Corrugated transite, placed both vertically and horizontally on wall surfaces, has also found favor in many areas.

An open front, high intensity lighting, and a straightforward plan, provide the background for a new use of basic materials in store design



CABINET WORK and lighting are smoothly handled. General illumination used in cove

LEFT: The Lucky Food Store in San Leandro, Calif. is an example of good planning and lighting. Regular groupings of overhead fluorescent tubes provide the high center area with shadow-proof illumination. Decorative spots and thin-line tubing carry out a contrasting effect in the lower ceiling panels adjoining side and end walls

Modern Lighting of Commercial Buildings

The effectiveness of architectural features are enhanced through the application of utility and decorative lighting

WITH today's trend toward open-vision stores, where the interiors are on display, lighting is of particular significance. It plays an important role in serving modern merchandising methods and in providing bright interiors that attract attention.

It becomes apparent that for best results in serving the merchant, lighting must be carefully planned and integrated with all the other elements that compose the store design. This involves not only

illumination as such, but also the creation of a pattern of steps of brightness and color, that are the basis of interesting atmosphere.

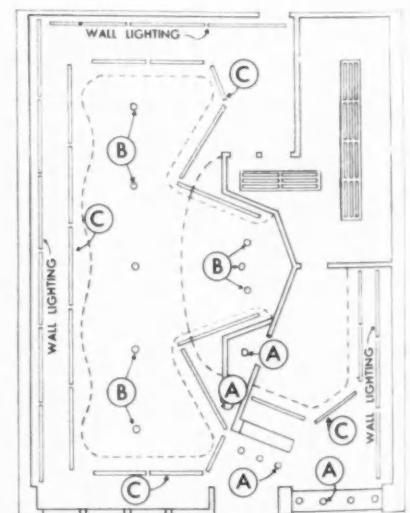
Lighting is the principal means of overcoming distracting reflections on plate glass. Dark areas behind the glass make it appear very much like a mirror. When interior displays are bright, images on the surface of the plate glass become less noticeable.

The most effective use of light in stores results when an adequate

level of general illumination in selling areas, is supplemented by lighting for attraction in display areas. The pattern of brightnesses formed by the lighting units of ceiling, walls, displays, and show cases will to a large extent, govern the atmosphere of the store. Creating attention by these methods of illumination attracts customers inside which is profitable to any business. Lighting used properly makes the store a more interesting place to visit for customers.



A GOOD example of a small restaurant, bar and lunch, all units served from same kitchen. The pleasing effects obtained in interior through decorative lighting are reflected in the simple lines of the exterior through use of structural glass



LIGHTING PLAN



A CEILING has a broken sprinkler ment c increas inserte ings sh ing eff cells o proper angle:



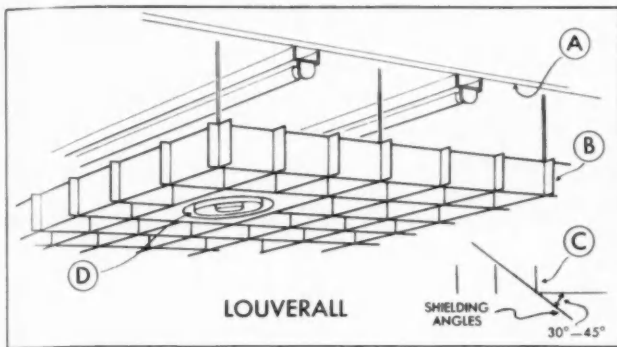
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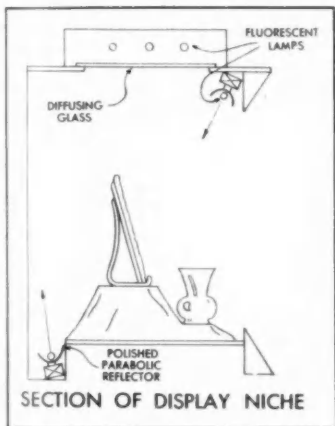
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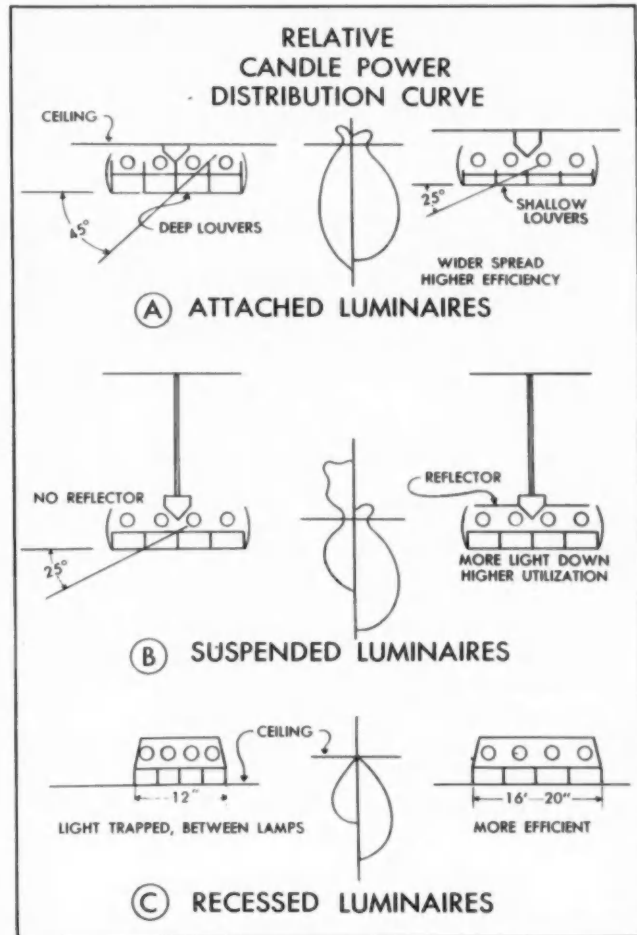
Lighting details that can be applied to all commercial installations



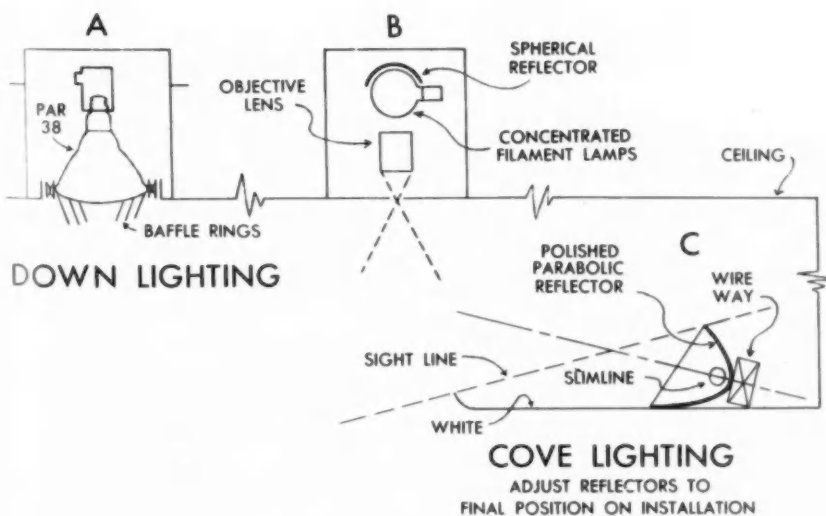
A CEILING composed entirely of louvers with lighting above, has a number of advantages. 1.) It creates a smooth, unbroken effect. 2.) In remodeling work, old ceilings, pipes, sprinklers and ducts can be concealed. 3.) Lighting equipment can be completely concealed. 4.) Lighting level may be increased without changing appearance. Spotlights can be inserted where required. In an installation of this type, ceilings should be painted white to increase the reflection. Lighting efficiency is thus greatly increased. The deeper the louver cells are in relation to their width, the better their concealing properties, but the lower the efficiency. Usual shielding angle: 30-45 degree. Aluminum is best adapted for this use



DISPLAYS, located in the niches placed around the walls, can be effectively lighted by method shown in the cross section above. The lamp and reflector concealed behind the frame, produce line highlights to accent the form of the objects. The luminous panel above provides overall illumination. The latter element offers opportunity to create a strong contrast in texture and color

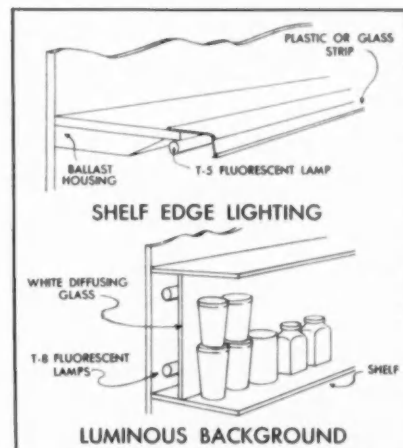


AMONG THE factors influencing the choice of louvered luminaires for fluorescent lamps are efficiency and candlepower distribution. Shielding angle and lamp spacing affect these factors. Although visual comfort provided by greater shielding angles, as at (A), is desirable for schools and offices, higher efficiency of shallower louvers may be used to advantage in stores. A high proportion of light emitted downward from a luminaire reaches the selling area, whereas that emitted upward in suspended luminaires has a low utilization (B). Some upward light is desirable, as it adds to store appearance. Close spacing of lamps decreases efficiency, because more light may be trapped in unit (C). Wider luminaires are more efficient



DOWNLIGHTS give sparkle and highlights to tableware as shown by spotlamps (A).

Cove lighting creates subdued atmosphere. Fluorescent lamps (C) are used for this



IMPULSE buying accounts for a large part of food store sales. Suggestions are shown for giving shoppers "buying ideas" with attraction lighting. Luminous background for translucent merchandise is one way of getting attention. Lighting for shelves is another. It may also provide illumination for price card strips

A SHOPPING CENTER *Is an Asset to Any Com*



INTERIORS of stores become parts of display windows in modern store front designs



Builders in many localities can profit by this example of progressive planning in New England

RIDGEWAY Shopping Center, nearing completion in a New England community, is the expression of a scientific approach to the problem of shopping center design. Its basic idea is to provide the greatest good for the greatest number—a premise which is the greatest insurance against failure.

The designer, Alfons Bach of New York City, heads the company which he formed to build the center. It is proving the soundness of his basic ideas on merchandising. He first asked himself what were the things most needed by patrons, merchants, landlords and the community. Then he found the answers and incorporated them into a theoretical design—an ideal plan. To work it out he made extensive traffic studies, population growth trends, merchandising trends and so on. Five years of study preceded the actual design.

But he was not satisfied to let the plan rest as a theoretical solution to a problem, which was all it started out to be. So he formed the company, of which he is president, to bring the plan to fruition. It is completely his design—structures, plan, furnishings and fixtures.

A study of Ridgeway Shopping Center, even in its present incomplete stage, reveals the good points that already are attracting a large volume of customers and ringing up unexpectedly large sales volumes in the cash registers of the merchants occupying the stores.

The center is good for the patrons because it permits them to drive in and park without traffic congestion. They can make shopping a one-stop proposition. If the weather is inclement, they can pass from store to store under cover. If it is hot, they are comfortable in the air conditioned interiors which all stores provide.

They find a nicely balanced combination of suppliers and services. The housewife who wants to make use of the launderette may get a

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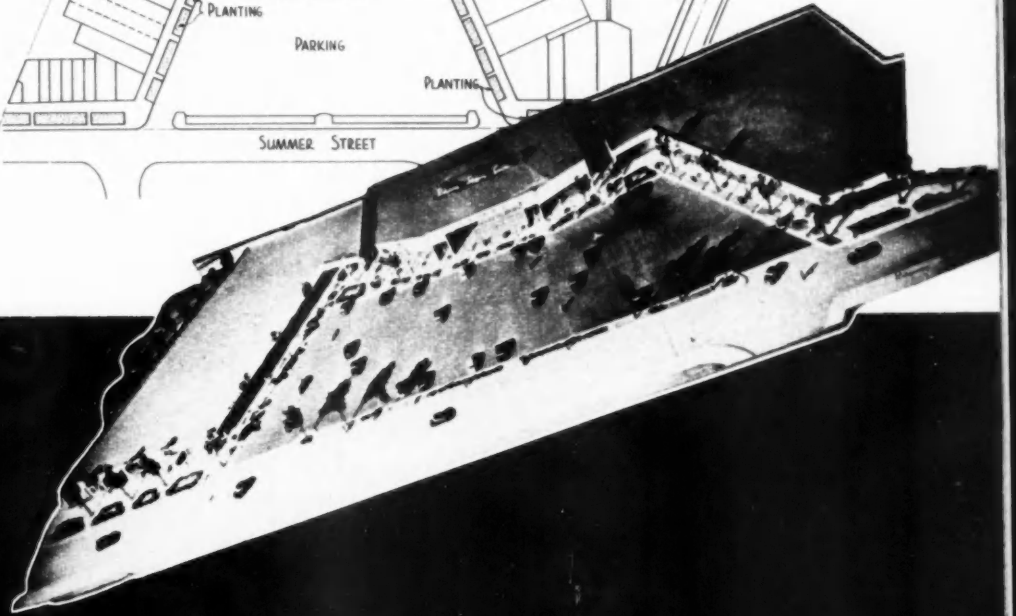
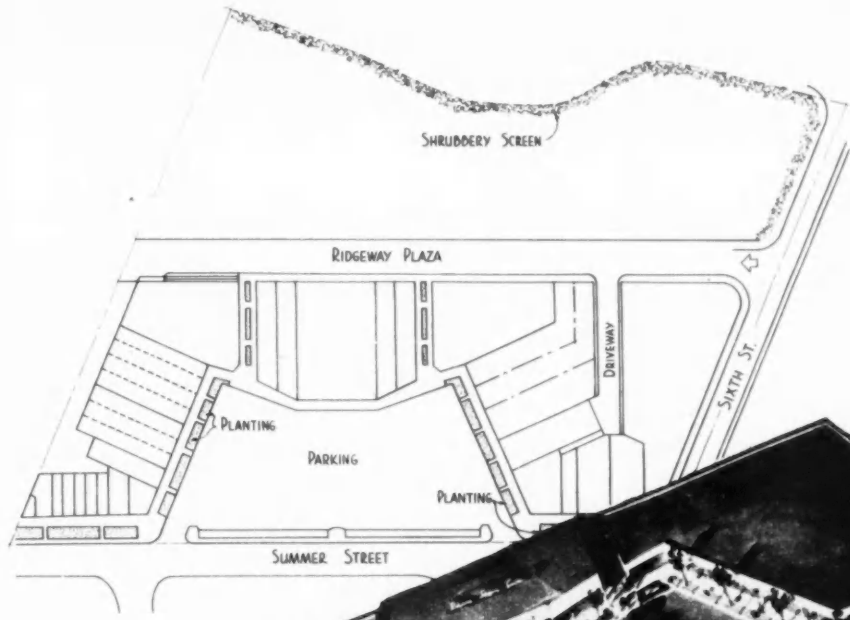
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MODEL, right, shows how Ridgeway Center will appear when complete. Left wing is now finished. Theater will occupy space in right wing; department store in center. All Ridgeway store fronts are full-view with large plate glass areas. Lights, installed in canopy, light sidewalks





UNUSUAL lighting is achieved at electrical appliance store. Note unit heater in ceiling



STRUCTURAL glass is used decoratively in the jewelry store. Electrical appliance store, above

beauty treatment next door while her clothes are being handled by the automatic laundries. The teen-age daughter may shop in the smart specialty shop catering to her age group while her mother does the family marketing a few doors away.

Ridgeway is good for the merchants because it permits them to work for and with each other instead of in competition. Each establishment gets the benefit of individual design, yet the owner knows that every other establishment will be in harmony with it. There is permanent protection against fly-by-night businesses.

Bach's corporation, the landlords, benefit from revenues which increase in proportion to the merchants' inevitable business growth. All leases are negotiated on a percentage of gross sales so that the corporation can recapture extra investment it has

put into parking area and future expansion provisions. About 20 per cent of the building costs went into heavy steelwork and a concrete slab to support a future second floor. Its addition will necessitate only the removal of the roof covering and the building of new walls and roof. All utility connections are installed and capped off.

The contractors, suppliers and building materials manufacturers who furnish services and materials going into Ridgeway are benefited because there is no compromising with quality. Ridgeway is the best possible advertisement for the builders and their suppliers.

The center is good for the entire community because it is helping decentralize business which slowly has been strangling itself in an extremely congested area. It is attractive architecturally, another asset to the city. And it will encourage the better qual-

ity of residential development in its environs, thereby increasing land values and tax revenues.

The mechanics of construction and a description of the physical facilities are interesting because they reveal the thoroughness of the study which preceded construction.

But—and Bach emphasizes this—they are not criteria of what will work in some other location. Each center must be custom designed to fit a situation, and it is only the basic planning principles that remain the same—the answers to each particular problem are different.

It is recognition of this fact that is leading many large operative builders, who are erecting shopping centers in connection with their developments, to secure specialists in the design of such facilities. This is particularly wise where the builder intends to retain the shopping center as

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MATERIALS AND EQUIPMENT USED

- Pittsburgh Plate Glass
- Pittsburgh Herculite Doors
- Pittsburgh Extruded Moldings
- Barrett Roofs
- Zonolite Vermiculite Plaster Aggregate
- U. S. Gypsum white plaster
- U. S. Gypsum Rockwool batts
- Kentile asphalt tile
- Hood rubber floor tile
- Milcor picture moldings
- Van Kannel revolving doors
- Sloan-Blabon asphalt tile
- Armstrong linoleum
- Frank Adam electric panel boards
- Standard Sanitary fixtures
- Pacific Boiler (steam)
- Dunham unit heaters
- Young unit heaters
- Minneapolis-Honeywell temperature controls
- York air conditioning equipment
- U. S. Plywood Weldwood



WORK in automatic laundry, left, is done in immaculately clean basement. Jewelry store front is shown above

an investment, as some are doing now.

It was because Bach is a designer that Ridgeway was undertaken. With a wealth of data at hand, the result of studies made in order to execute designs for large department and specialty chains, he reasoned that it could all be put together to produce an ideal plan—and that is what he did.

Ridgeway is located in Stamford, Conn., a city of 70,000 population. Bach found that the downtown business section of Stamford had only 2,000 parking spaces to serve 1,000 stores. By contrast, Ridgeway will accommodate 1,000 cars at a time to serve 30 stores.

The center is laid out in the form of a wide "U." The middle structure will be a department store of two stories or more, flanked by two other single story structures. The first of these flanking wings is complete and

occupied; the second is under construction.

Arranged on a 10-acre tract, equal to about three city blocks, Ridgeway will have 110,000 square feet of first floor selling area for its 30 stores, and just about double that amount for parking space.

Buildings are of fireproof construction, with reinforced concrete on steel framing. Exteriors are cut native fieldstone in ashlar, with occasional wood details.

Each shop has full view windows, following the modern trend of blending exterior and interior into a harmonizing unit. The design extends even to the point of selecting colors for decoration suited to each particular type of business.

The sidewalk in front of the center is 24 feet wide, insuring against future pedestrian congestion. Not all the space is used for foot traffic at

present, but is reserved for it. The concrete is dark gray to cut down glare, and it is scored in a diamond pattern instead of the conventional rectangle for more pleasing appearance. An overhead canopy over the sidewalk circles the perimeter of the stores to protect customers from the weather and eliminate the need for awnings. It also lights the sidewalks at night by means of semi-indirect built-in fixtures.

The entire development is heated in winter by unit heaters from a central system. In summer, it is cooled by air conditioning from a central cooling system.

Careful planning has been used in the design of the lighting installations for each store. A combination of fluorescent diffused lighting and semi-indirect or spot lighting, adapts the illumination to both decorative and functional performance.



ONE side of Shopping Center, with only one window, may later be easily expanded

Small Shopping Center Planned for Expansion

Deciding to build small, with an eye to the future, proved profitable for this owner



THE MERCER ISLAND Shopping Center is a good example of a small, integrated center, located and designed in such a manner that its facilities can be easily and economically expanded when such expansion is feasible.

The owner, Richard A. Anderson of Seattle, Wash., held his original building to a minimum size because its cost promised to be way out of proportion to the minimum rentals his prospective tenants felt they could afford to pay. Erecting this building was something of a gamble, and Anderson felt it was better to build small and plan for expansion than to go overboard and be sorry. As the matter turned out, he is anything but sorry, for his largest tenant, the market, is doing two to three times the volume anticipated. Since the rental is on a percentage of sales basis, the owner is faring very well.

The Center was designed by Victor N. Jones & Associates, Seattle architects, and built by O. B. Daniels, local

contractor. It was completed during the summer of 1947. It is located on the only property on Mercer Island zoned for business. In view of plans recently announced covering the building of a huge 608 rental project of over 700 units on the island, it is destined for tremendous expansion.

However, at the time Anderson decided to go ahead he could not be sure how fast the population of the island would increase. Since at that time it was not nearly enough to support the proposed center, he had to figure on attracting passing motorists on their way from Seattle to their homes on the other side of Lake Washington.

Lake Washington bounds Seattle on the east. Until a few years ago there were no bridges across it and few ferries. Just before the war the Lake Washington floating bridge, more than a mile in length, was built connecting Seattle with Mercer Island. This four lane "boulevard" is a spectacular piece of engineering. It

is in reality a floating bridge built on a series of concrete floating blocks and is the largest of its kind in the world. Mercer Island is close to the mainland on the other side and is connected with an ordinary bridge. This floating bridge made it possible to get from downtown Seattle to Mercer Island in a few minutes, and thus created a desirable site for homes almost overnight.

The Shopping Center is situated about 100 yards from the main road, a short distance from the Floating Bridge, and the big inducement to motorists is that they can find plenty of parking space, without getting into a lot of traffic. The attractive colonial building with its high cupola invites visitors; at night the name "Mercer Island Shopping Center," in big red neon letters, advertises its presence.

The building is faced with kiln-run Roman tile on four sides; the roof is covered with cedar shakes with 1x12 beveled boards being used on the gable ends. The roof overhang or

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MERCER ISLAND Center is located on only section in the vicinity that is zoned for business .



MARKET floor plan demonstrates wise attention to immediate and future necessities

canopy extends a little more than 6 feet beyond the side walls and is faced on the bottom with 1x6 boards painted white. There are 8 lights on this plancier. The sidewalk extends about 10 feet from the building. Steel sash were used and the double strength clear glass was separated into small panes.

About half of the total space is occupied by the market. The east side of the building has only one window, toward the rear, and the rear has no windows—the only opening being a service entrance for the market. This design accomplishes two ends. It gives a maximum of shelf space to the market and will permit additions to the building to be made at minimum expense.

A drug store is located on the northwest corner; south of that, a doctor's office and an electrical shop. At present there is plenty of space for parking on all four sides of the building, but a paved parking area will soon be installed.



FLOATING BRIDGE, largest of its kind in the world, brings shoppers to Mercer Island

Design and Materials Dramatize This Modern Office Building



COURTYARD is used for recreation



ENTRANCE door contains glass panels



OVERHEAD panels add to daylighting

THIS UNUSUAL office building achieves not only a feeling of beauty but of spaciousness. Sage green, with white trim and a Bermuda roof, it reflects the tranquillity of living and work indigenous to Beverly Hills, Calif.

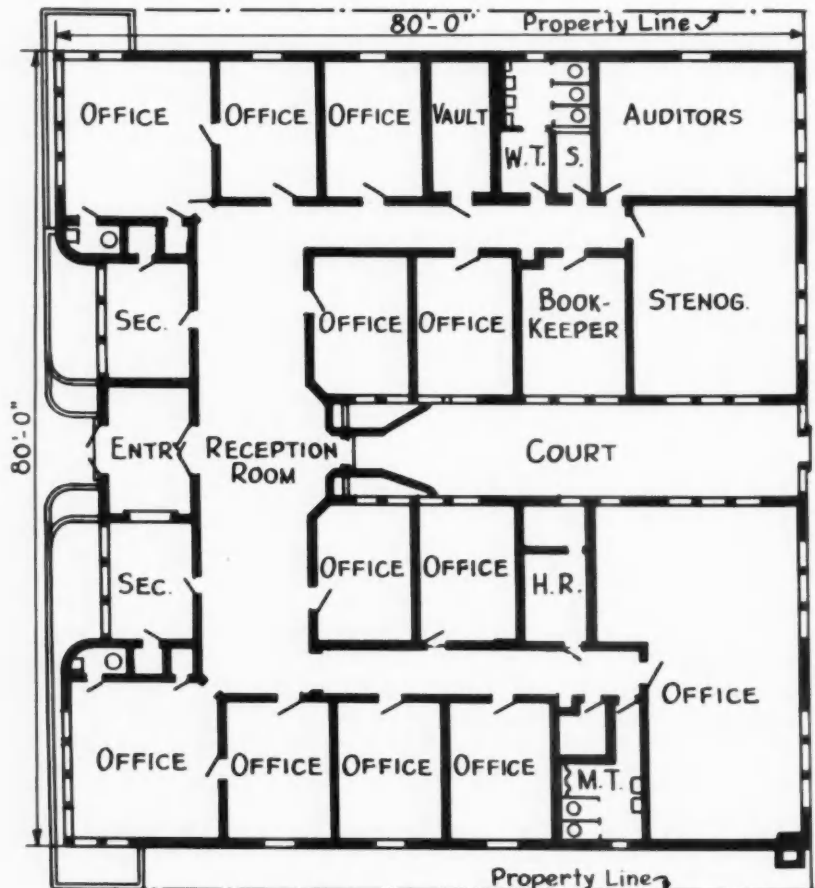
It covers an area of 7,160 square feet. Exterior walls are of masonry, and the interior walls and roof, primarily of wood frame.

The front center section is of vertical reeded plaster with a run plaster cornice and the white Bermuda composition roof. Across the entire front of the building are natural fieldstone planting areas filled with deep green foliage. An overhang of approximately 6 feet is closed over the doorway for protection but is open at three intervals on each side for light. Win-

dows are steel sash set in wood frames with coolite glass for eliminating the sun's glare.

The entrance door is of natural light-colored walnut with attractive, architectural glass panels. This massive door leading into the entry exemplifies the dignity and meticulous care shown throughout in achieving a background and atmosphere to augment the functions of those employed in The Atlas Corp. The corporation is comprised of investment and income tax counsellors and certified public accountants.

As one leaves the entry, he enters a large oblong reception room with alcoves for receptionists. Dark black walnut used throughout for interior trim. Flooring is oak parquet.



FLOOR PLAN

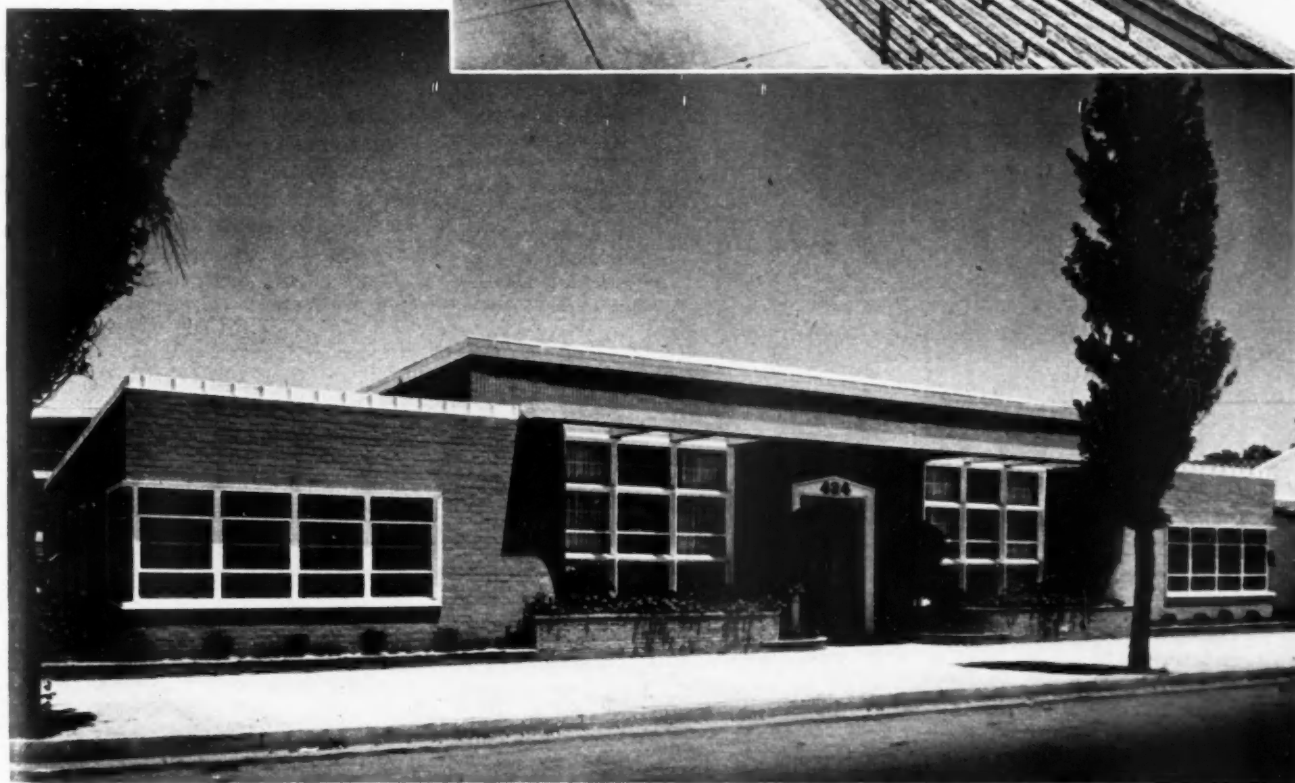
Unusual design by Rowland H. Crawford, architect, achieves both beauty and spaciousness, and reflects spirit of its background

Again lighting is of prime importance with not only cove lights but indirect lighting through overhead glass panels. With the exception of these glass panels, the ceiling is of acoustical celotex.

Executive offices are ample in size; luxuriously decorated and furnished. They occupy the front corners of the building. Secretarial and general work offices have been completed with the same feeling of architectural workmanship.

Comfort is achieved with a forced air system of heating and ventilating.

Parking is provided in the rear with access through a central courtyard into the main reception room. The flagstone courtyard, with colorful potted plants, is typical of the area.



OFFICE BUILDING for The Atlas Corp. reflects living and work indigenous to Beverly Hills, Calif.

Functional,Americ
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IN DISCUSSING the Wilshire Motor Sales building in Detroit, Mich., Louis G. Redstone, A.I.A., says: "By deviating from the ordinary type of automotive sales and service station, I strove to design one that would give a new and stimulating approach to the problem of rendering sales-service buildings both functional and appealing to the eye."

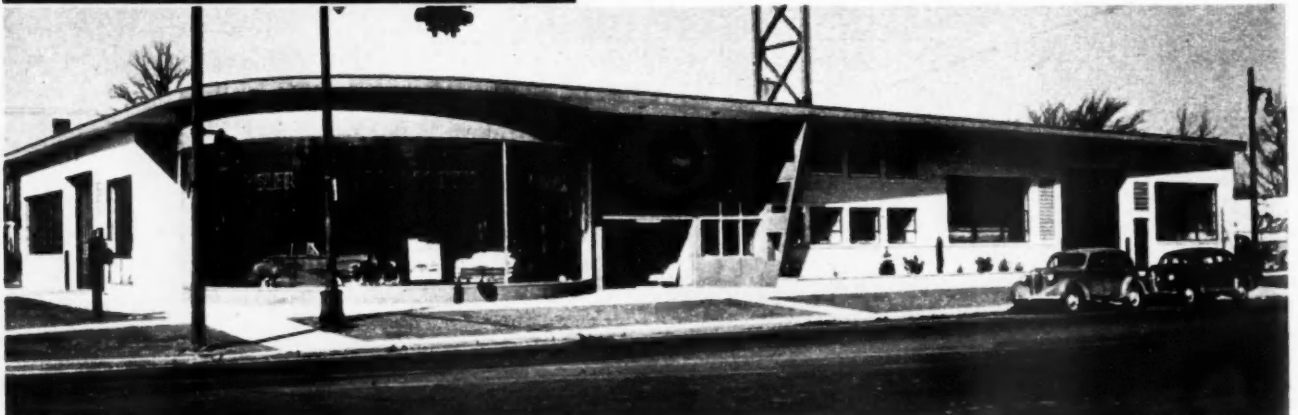
The focus of attention in this design is directed to the sweep of the circular corner show window. The wall facing the principal thoroughfare is slanted back toward the showroom to give an unobstructed view for display purposes. The division between the display and service departments is achieved by means of a vertical sign extending from the decorative flower box to twice the height of the building. This type of sign (which was not completed when photographs were taken) is framed structurally as an integral part of the building.

To achieve the desired results, it was necessary to study carefully and thoroughly the requirements of sales and service in close cooperation with the future occupants of the structure. By doing this, a floor plan was developed which affords the most efficient answer to a dealer's needs.

The interior of the building is as functional as its exterior. The cashier's office is centrally located with direct access to the offices and to the service and parts departments. The closing room is just off the hall to insure privacy. The main show room also serves as a waiting room for cus-



THIS unusual display room is especially effective at night when balance of building and its surroundings are dark. Note how solid glass entrance eliminates the usual stiff division between exterior and interior



THE VERTICAL sign extending from flower box to twice the height of the building divides display and service departments

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Attractive Motor Sales-Service Building

Situated on a heavily-traveled boulevard in Detroit, this structure's unusual lines and eye-appeal attracts the attention of thousands of individuals every day

tomers of the service department. Its decor was worked out to give an atmosphere of strength and grandeur.

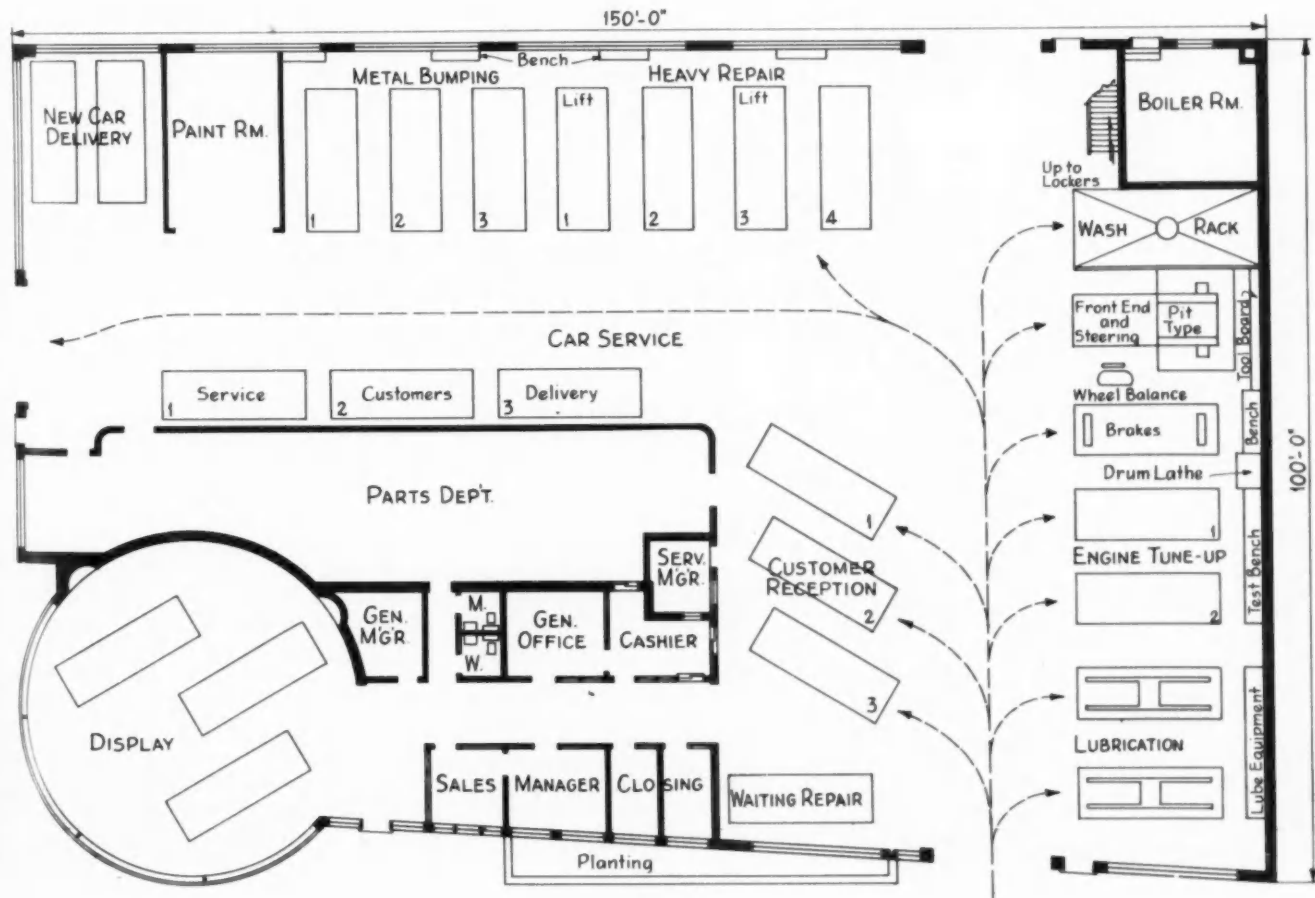
For economy of operation two types of heating are used. The main service and repair department has hot water heating with its own separate hot water boiler. The office section has forced warm air with a gas-fired unit. The two plants were installed because the offices require heating in late spring and early fall when the service department does not.

Lighting throughout is fluorescent except for the cove lighting in the show room, which is cold cathode tubing.

Situated on busy Dexter Boulevard in Detroit, the structure commands attention from thousands of individuals daily. The display room is especially outstanding and focuses interest on the automobiles which are shown.



INTERIOR of this building is as functional as its exterior is attractive. Plan below shows how the various departments are effectively separated from each other





THE UNITY of design belies the fact that two decades elapsed between erection of original building and its annex

Character of Restaurant Preserved

Lines and decorative features of cafe twenty years old skillfully duplicated in new annex



HAND CARVED oak panels, grotesque gargoyles, stained glass windows contribute to create an Old World atmosphere in this German-American restaurant

PRINCIPAL consideration in this expansion job was the owner's specification that the new addition be efficiently modern yet duplicate in appearance and atmosphere its older counterpart. Since the older building was erected in 1928 and included such features as a facade of hand carved oak panels, grotesque gargoyles also carved from oak, and stained glass windows, this unique assignment offered a challenge to Nick and Henny Mollgaard, well known builders of Milwaukee, Wis., who did the job.

The building houses a popular German cafe owned by Joe Deutsch. It is situated within easy reach of downtown Milwaukee, in an area which is largely residential. By adhering to the decor and plan of the original building Deutsch gained much needed floor space for seating patrons and an adequate kitchen from which to serve them, without sacrificing the old fashioned German atmosphere for which his cafe is famous.

To duplicate the exterior, granite paving blocks were used in combina-



INTERIOR of one of the attractive private dining rooms

tion with face brick. The oak panels flanking the windows, and the gargoyles atop them, were produced by an aged German craftsman who carved the panels for the original building in 1928. The stained glass windows with colorful etched glass roundels were custom-made, and add color and beauty to the interior. A red tile parapet completes the exterior finish.

The new addition has three floors and contains five private dining rooms, one public dining room, a service bar room on the second floor, a service kitchen in the basement, complete new heating room, walk-in freezer, locker rooms for the help, men's and women's washrooms, and a kitchen three times as large as the original kitchen. The overall footage of the new space per floor is 35 feet by 70 feet.

Throughout the new dining rooms decorative hand carved oak paneling and woodwork were used, in keeping with the decorative scheme of the original restaurant. In the public dining room, sand colored burlap, patterned in squares completes the wall treatment, and in the private dining rooms scenic wallpapers were used. The service bar room on the second floor has elf-like figures hand painted on its canvas walls and an old fashioned oak bar. The kitchen, planned for efficient operation and ease in maintenance, combines Sanitas wallpaper with tile for the walls. Equipment is of stainless steel. Floors throughout are rubber tile.

A private dining room located in the basement has knotty pine walls, while the service kitchen adjoining has walls of salt glazed tile. This particular tile comes in 2-inch and 4-inch widths, and is installed like ordinary brick. In this installation the 4-inch tile was used to form the interior wall. A dumb waiter connects the service and main floor kitchens.

The entire restaurant is ventilated with Mueller's air conditioning units, and heated with an oil-fired Mueller's furnace.



AN INGENUOUS baffle made of 2x6's with pressed wood back

Baffle Boosts Sales

DON'T BOARD up your retailer! Don't fence him in! The traditional ugly rough boarded-up store fronts, denoting a new front is being installed, is not only an eye-sore but a business-stealer as well. Every inch of window space is as valuable to a retailer as his newspaper advertising space. Don't shut his customers out!

P. Radcliffe Larson, young designer who heads the firm of P. Radcliffe Larson and Associates, Marshalltown, Iowa, has come up with a revolutionary new idea. The artistic baffle front.

Working with Marshall Lumber Co., L. T. Thompson Mill and Cabinet shop, Larson designed and had built a free flowing artistic baffle of 2x6's with pressed wood back. The differential in cost between this new type temporary



store front and the traditional rough boarding is so small as to be negligible. The eye-arresting effect is newsworthy and bespeaks the ingenuity of its inventor. In spite of beauty, the baffle with its 2x6 framework is ample support for scaffolding.

Painted grey the framework stands against a deep blue background which is offset by a free shape sign and a spotlighted white framed picture. The picture frame holds the artist's conception of the new store front, done in color. Added interest is gained by the use of a sidewalk box potted with growing plants.

Invitation to enter the store during alterations is emphasized by an arrow indicating the doorway.

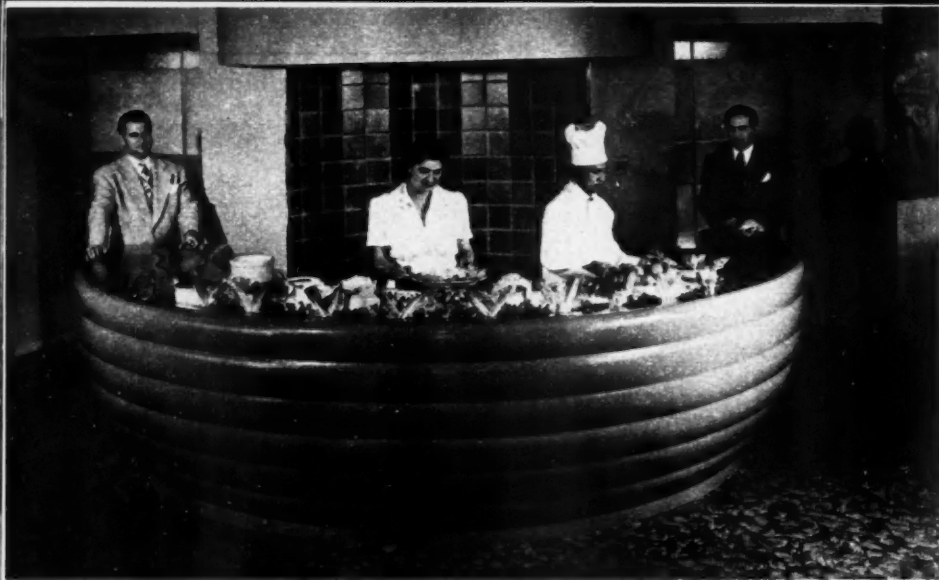
With many Marshalltown Main Street stores boarded-up for remodeling in the traditional manner, the contrast between them and the inviting baffle is self-evident.

From the retailer's point of view, this method of handling a difficult situation has untold sales promotion possibilities. Instead of shutting the customer out of the store, he is invited to enter.

Builders

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Careful designing and application of materials can enhance the appeal of merchandise and may determine to a great extent, success of the business



SALAD BAR in Welch's restaurant is designed as an oversized salad bowl. Situated at the entrance to both main dining rooms, it is also convenient to the kitchen



GARDEN ROOM is situated adjacent to one of main dining rooms and is three steps below main floor level. Here floor is of stained bronze and green concrete



ATTRACTIVE seafood cocktail bar is designed to represent kind of food that is served. Located in center of cocktail room, it has glass wainscot which is lighted

IN THE SAME way that good display in a store can enhance the appeal of merchandise to be sold, careful design and judicious use of materials in a restaurant can increase the desire for good food. In either case, the owner, by working closely with architect and builder, can achieve much of the desirability he wishes his product to have. Moreover, his restaurant or store can be so designed that it will appeal to the particular clientele he wishes to serve.

Welch's restaurant in Long Beach, Calif., is a good example of what can be achieved. In this case, the owner was the architect. Basically, he knew what he wanted in a restaurant, and by working closely with his builder, he achieved his objectives.

The restaurant consists of two large wings with dining rooms that lead into a circular cocktail room. The floor plan permits convenient service and attractive fixture arrangements.

In the center of the cocktail room is a unique circular seafood cocktail bar. It contains a glass wainscot which is lighted. Near this bar are counters where guests may stand and eat or drink before proceeding to the main restaurant rooms.

Near the entrance to the main restaurant rooms is a circular salad bar, designed so that in appearance it resembles an oversized salad bowl. Both the salad and seafood bars are designed to suggest the type of foods that are served there, and the immediate decorative elements around each bar maintain the desired atmosphere. In each instance, materials and colors achieve a proper atmosphere with a design that permits convenient serving and immaculate cleanliness.

On one wing of the restaurant, three steps down from the main floor level, is the garden room. It is completely surrounded by shrubs, with a

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Can Help Make Food Attractive



THIS restaurant, designed by the owner, is a good example of what can be done by careful planning and application of materials

serpentine fish pond on one side. Here, the floor is a stained bronze and green concrete, formed into 18-inch squares. The ceiling is acoustical plaster; the wainscot is stone. Floor to ceiling plate glass windows tilt inward to the floor level.

Walls of the other main wing of the restaurant are covered with murals. The floor is carpeted.

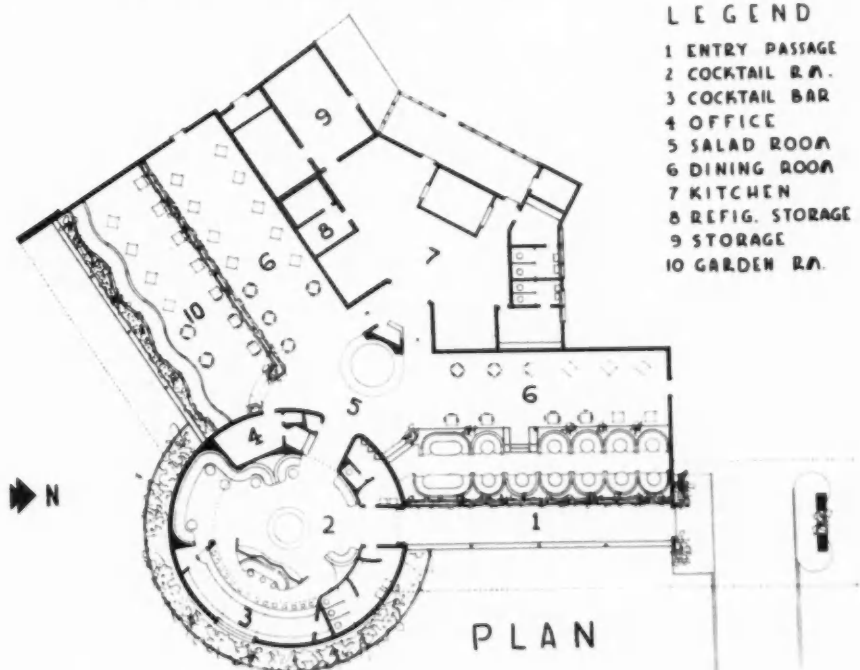
Lighting throughout the building is indirect. In the garden room, lights are concealed in the fixtures. Fixtures in this room are attached to supporting steel posts which protrude from the top of a stone wall in the center of the room.

When entering the main entrance to Welch's, the customer does not immediately come upon dining rooms or cocktail bars. Instead, he enters a long corridor with tilted plate glass windows reaching from the floor to the ceiling, looking out upon shrubs and flowers, and proceeds along this corridor to the cocktail bars. This is another detail that shows evidence of careful planning and determined effort to create and sustain a particularly good atmosphere. In this case, a customer does not enter the restaurant and immediately find himself in the center of a crowded dining room. He is first subjected to the atmosphere of the restaurant's interior by means of the corridor.

Extra large kitchen space is provided in the plan of the restaurant, and the kitchen is centrally located so that each dining area may be conveniently served. Orders are served from aluminum carts, and any area of the building—including the lower garden room level—may be served this way by the use of specially de-

signed ramps placed between levels.

In addition to the large kitchen area, adequate space is given to refrigeration storage and office room. Though the restaurant itself gives an impression of spaciousness, careful designing has achieved compactness and maximum utilization of all floor space.



UNIQUE floor plan achieves compactness and utilization of all floor space

Quonset Theater Has Good Acoustics

FROM a portable Quonset "40" to a comfortable, permanent theater is the history of a 40x100 foot warehouse that arrived in Mathias, Texas, in 1946. It is the first theater of its kind in the United States.

The conversion was achieved by the theater owner, Gidney Talley, and architect, DeHaven Pitts, both of San Antonio. Besides being fireproof, the building was declared acoustically perfect by R. C. A. sound engineers.

A concrete wall, 8 feet high and 12 inches thick, was built on continuous footings, extending two feet below the low point of the sloping floor. On this wall, the Quonset, which came in 20-foot sections, was mounted. The wall served as a support for the Quonset, and made possible a 28-foot ceiling at the high point.

The problem of lightweight insulating, fireproofing, and acoustical materials was solved by the use of two types of Vermiculite: Insulating fill and acoustical plastic. Vermiculite plaster was applied on metal lath which was welded to the inside ribs of the Quonset. Vermiculite fill was then poured between the metal exterior and metal lath. Fill was installed six inches thick.

ALTHOUGH exterior of theater shown is that of San Antonio, Texas, Quonset, it is almost identical with Mathias Quonset theater. Balcony, 40 feet deep, required additional ribs and purlins



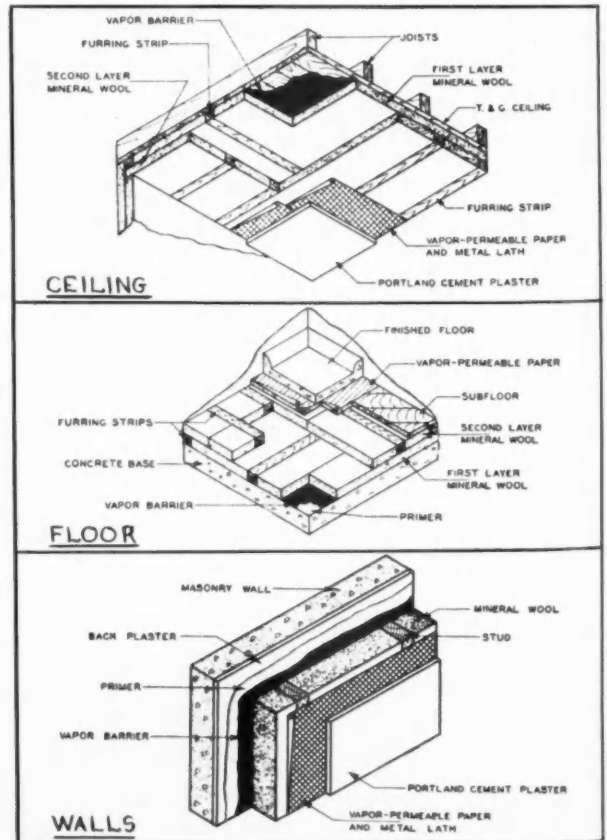
Proper Construction: A "Must"

NOWHERE is proper insulation more important than it is in cold storage locker construction. If insulation is properly applied, as it was in the new 3,000,000-pound capacity plant in Sunbury, Pa., money can be saved on initial cost and wear and tear of refrigeration equipment.

Refrigerating equipment in the Susquehanna Locker Plant, Sunbury, Pa., has a cooling capacity equivalent to that required to produce 50 tons of ice per day. Since the plant is well insulated, equipment is actually in operation for only a small fraction of the day.

Walls, floors, and ceilings are insulated with 14, 16, and 18-inch thicknesses of mineral wool, respectively, and are built of 4 and 6-inch thick mineral wool blocks. Vapor seal of asphalt emulsion and vapor-proof paper were installed on the warm side of the insulation before installing the mineral wool.

INSULATION methods, right, were used in Susquehanna plant





PASADENA FM-AM station represents forward step in design and use of materials

Building with a Special Purpose

RADIO station KAGH, FM-AM combination, Pasadena, Calif., represents a forward step in the design of this type structure.

A number of basic materials were used to achieve the desired exterior effect. Pumice lightweight aggregate concrete blocks painted in contrasting colors, together with brick and glass, are grouped in an

Service Station Construction Is Individual Problem

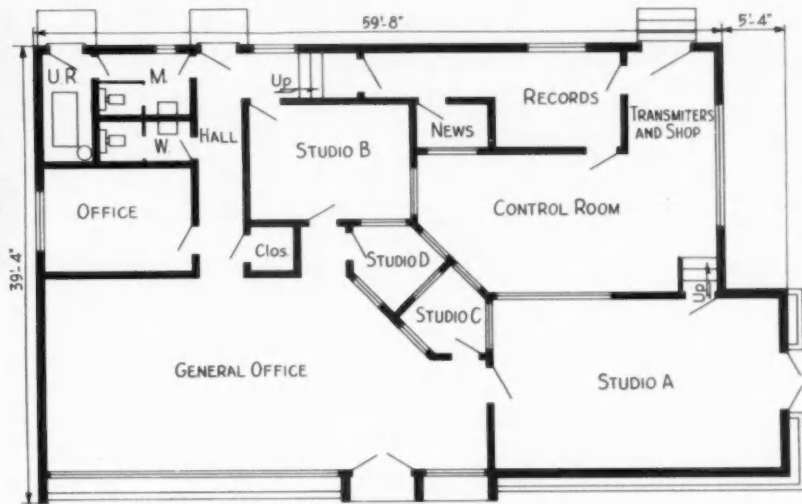
CAREFUL designing and planning are represented in the first service station construction since the war by the Cities Service Oil Co., 919 N. Michigan Ave., Chicago, Ill.

The first station, completed in Geneva, Ill., incorporates a basic floor plan that will be used, with variations, in other Cities Service constructions throughout the country. The plan provides for a large display and sales room, ample working space, and conveniently located rest rooms.

Distance between the sidewalk line and the pump line is 12 feet. Pump island is located 18 feet from the front of the building. Water line to pump island consists of a rubber hose led through four-inch drain tile. The hose is replaceable in case of freezing, and for replacement, wrecking of driveway or pavement is not necessary.

Approaches and surrounding areas in front of the building are concrete. Concrete floor in the office is 4 inches thick, and in service area 5 inches. Flat roof is five-ply tar and gravel, with center drain.

Lighting in salesroom is afforded by fluorescent fixtures with spotlights for highlighting merchandise displays. Air compressors, hot water tank and Alemite lubrication equipment is located in the heater room.



interesting design pattern. Solid wall areas of studio contrast pleasingly with fenestration that allows office to take advantage of daylight.

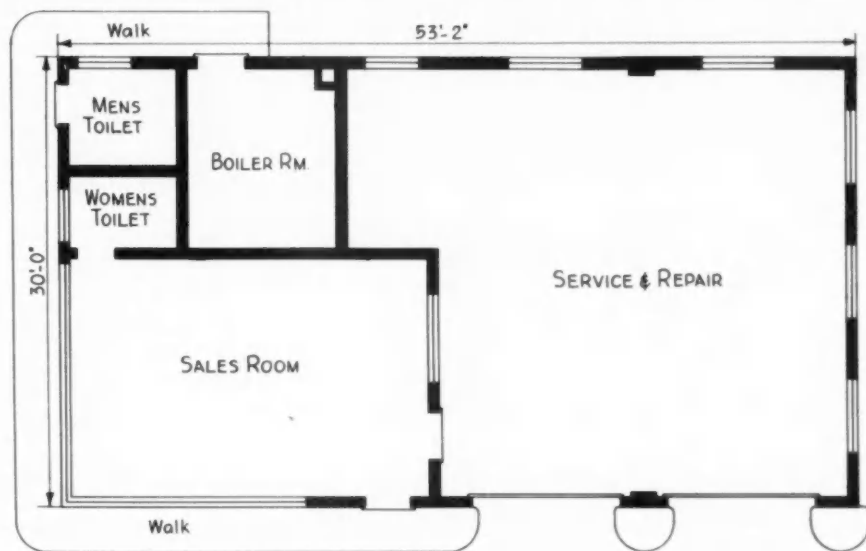
Floor plan of the broadcasting station is designed so that three studios, news and recording room surround the control room.

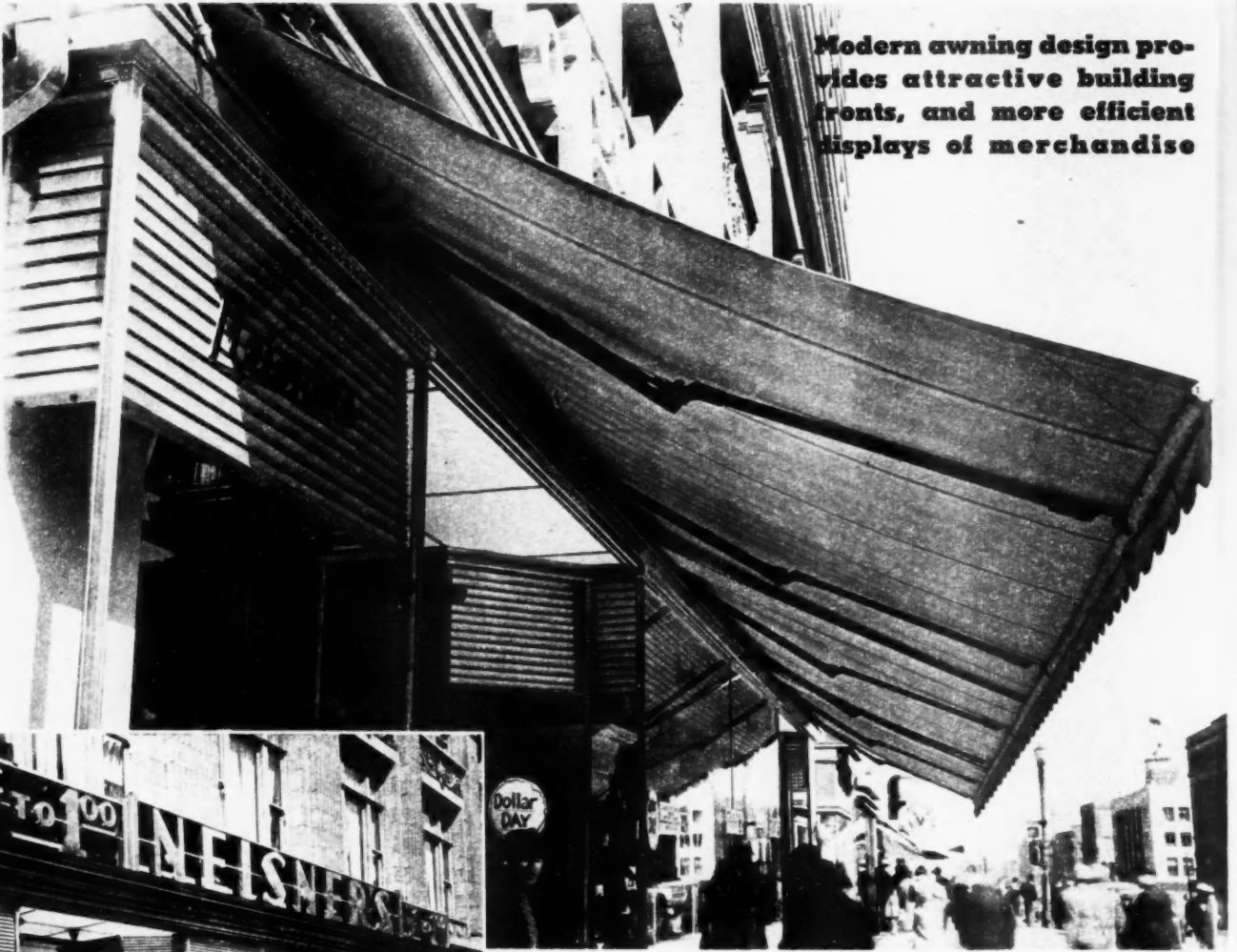
A dropped ceiling throughout the building provides space for the dis-

tribution of warm air heating ducts. The floor is asphalt tile over 4-inch concrete slab.

The station was designed by Joseph T. Callaway of Pasadena, and was built by the Sierra Construction Co. of Pasadena. It is one of the few stations in that area with FM broadcasting facilities.

FLOOR PLAN for this garage may easily be varied to conform to particular building site. Garage, below, combines simple attractiveness and utility, at minimum expense





Modern awning design provides attractive building fronts, and more efficient displays of merchandise



Awnings—A Part of



EXTENDED tension arms, maintain tautness of fabric and neat appearance in awning of store above. Arms fold back into recess box as they retract canvas awning

PIVOT type recess box awning installation on small store front shows no indication of awning in closed position, since stainless steel cover hides awning and mechanism

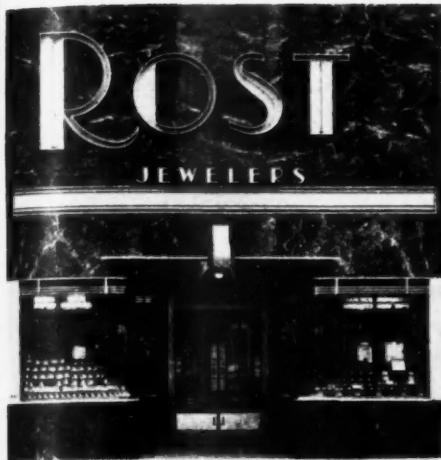
BUILDERS OF commercial structures know that merchants and others demand awnings on their building fronts to furnish proper sunshade protection for displays and the interior of the store, or for employees in an industrial establishment. Recently the air conditioning engineer also has stressed the desirability of awnings by pointing out that their installation adds greatly to the life and efficiency of any air conditioning unit.

When modern fronts first became the vogue on stores and other commercial structures, a problem faced builders, architects and awning men. Although the owner of the new structure insisted that he have awnings, the architect and builder accepted them only as a necessity, feeling that the type of awning available then did not blend with the building designs.

That situation now has changed, according to the National Cotton Council. Alert canvas awning manu-

SOLID coating, with stripes, h construction panel me ployed v closed in for easy

facturer to work to the boxes. a canvas provide when lo conceal awning enclos awning A re canvas box co carry the des materi steel, porcelan nectio enclos witho the ca not co New and v



SOLID color canvas awning, with contrasting stripes, blends with construction design. Pivot type panel mechanism is employed with control enclosed in the left column for easy crank operation



Modern Store Fronts

facturers put engineers and designers to work and came up with the answer to the problem—recessed awning boxes. With this type of construction, a canvas awning may be installed to provide full shade and rain protection when lowered, and yet it is completely concealed when rolled up. When the awning is not in use, the concealed enclosure shows no indication of awning or awning mechanism.

A result of research on the part of canvas awning manufacturers, recess box construction allows the builder to carry out his design without loss of the desired effect. Any of the modern materials, either aluminum, stainless steel, bronze, construction glass or porcelain enamel may be used in connection with the concealed awning enclosure. The entire front is a unit without any detracting elements and the canvas awning mechanism does not conflict with the design.

New tension arms, spring controls and winding mechanisms now are

available, all resulting from the development of modern canvas awnings for new designs in building fronts. All arms and controls which support the awning when in use, and which provide for extending and retracting the awning, are completely concealed when the protection of the canvas is not required. Because recessed boxes provide complete protection for the fabric and mechanism, it is no longer necessary to remove awnings in the winter when they are seldom needed. On bright sunny days, which occur even during the winter months, the awning is always ready for instant use, but canvas types can be rolled up to admit as much light as possible when sunlight is at a premium.

Modern canvas awning arms have been so designed that they offer a much higher degree of tautness in the extended awning, adding to the attractive appearance of the building, and facilitating rolling and unrolling. New spring controls eliminate de-

structive ripping and flapping of the fabric in the wind.

Recessed awning boxes may be added to existing buildings, but of course the cost of such an installation is higher than if proper provision is made at the time the building is being constructed, or during remodeling. If plans do not call for awnings, the builder will provide a service to the building owner by questioning him about his awning requirements before work begins.

Accompanying the mechanical advances made for canvas awning installations, new up-to-the-minute patterns and colors now are available, together with fabric improvements which insure long life under varying conditions. Generally speaking, on wide fronts a solid pattern or wide stripes should be recommended by the builder. More narrow stripes should be used on smaller fronts, or a solid pattern appliqued with some other color. Awning companies today offer an extremely wide range of painted or woven fabrics. The practical experience of local awning manufacturers will prove valuable to builders who call them in for consultation when plans are made for a new commercial or light industrial building.

Bonforte Builds 3 a

Colorado Springs builder uses conventional methods along with high quality materials and workmanship to produce low-cost houses which sell for \$200 down and payments of \$60 to \$70 per month for veterans who qualify



TWO AND three-bedroom houses to sell between \$8,000 and \$9,500 are being produced at the rate of three a week by Bonforte Construction Co. in Colorado Springs, Colo. Bonnyville Addition, as the project is known, will consist of 325 houses when completed in December, 1949. About 70 houses are completed at the present time. In addition to setting aside 11 acres as park area, John Bonforte, the developer and builder, has also planned a shopping center, work on which will start this winter.

By efficient management and careful selection of workmen, Bonforte has been able to achieve a good degree of high quality workmanship and good production per man hour. This has enabled him to include only quality materials in the houses designed to sell at these low prices. The two-

bedroom houses contain about 760 square feet and sell for about \$8,050. The price includes a lot 55x118 feet with curb, gutter, sidewalks, masonry incinerator and clothes line posts. The price also includes, as equipment in the house, an 8-foot General Electric refrigerator, a 36-inch General Electric range, a General Electric automatic electric washer and Coleman dual wall floor furnaces.

The average three-bedroom house contains 1,060 square feet of floor area and is located on a lot 65x118 feet. The price of \$9,500 on these houses also includes the same equipment listed above in the two-bedroom houses. The price, including the equipment, figures about \$8.30 per square foot.

In purchasing the two bedroom house, the average veteran makes a

down payment of \$200 and monthly payments of approximately \$60. The monthly payment includes principal, interest, insurance and taxes. In purchasing the three-bedroom houses the average veteran makes a minimum down payment of \$200 and payments every month of approximately \$70, which also includes principal, interest, insurance and taxes. Non-veterans may purchase these houses with down payments of approximately 10 per cent and monthly payments which are about \$6 per month less than those required from the veterans.

The houses are set on foundations of reinforced concrete and are of standard frame construction. Exterior walls are finished with stucco, asbestos shingles or cedar siding. Asphalt shingles are used on the roofs. Floors are finished oak throughout, except



THE \$8,050 price on his house includes a lot 55x118 feet, curb, gutter, sidewalk, masonry incinerator, clothes line poles, an 8-foot G.E. refrigerator, a 36-inch G.E. range and a G.E. automatic washer



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G. 6'21.0"

AN



the bathroom and kitchen where in-laid linoleum is used. Interior walls are gypsum board. Several types of insulation are being used including infra-red foil, vaporseal, mineral wool and wool batts.

Bathrooms are all equipped with large lavatories with chromium legs and towel racks, tubs and showers. Walls are tiled around the tub to a height of 4 feet above it. In addition to ample cabinet space in the kitchen, each unit is also equipped with an electric clock and chimes in the kitchen. Aluminum tension screens are standard equipment, as also are the combination screen and storm doors on both front and rear. All plumbing lines in the houses are copper. All windows are weatherstripped with metal tongue-and-grooved weatherstripping.

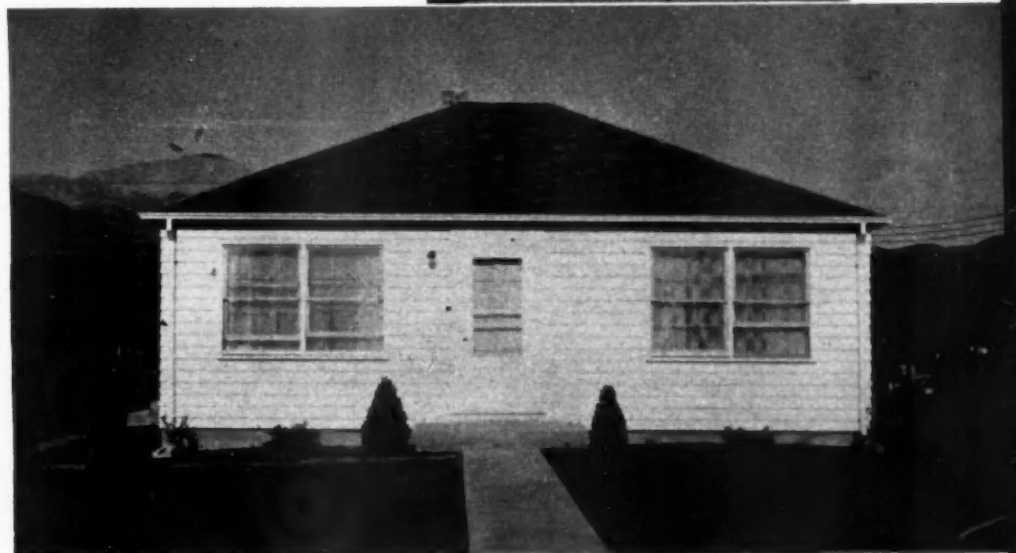
The houses, designed by Earle A. Deits, of Colorado Springs, are necessarily simple in appearance and economical to build. Good variation in appearance is achieved, however, by using a large number of different elevations over a minimum number of floor plans. Large window areas are features of these low-cost houses not usually found in this price range. In addition to doubling and tripling installation of double-hung windows, an occasional house is equipped with a picture window. Bonforte expects to increase the production rate of three houses a week progressively until he reaches a rate which will permit him to not only complete the 325 houses before December, 1949, but also to complete and prepare the shopping center adjacent to the project for occupancy by that time. At the present time about 70 houses in the project are completed and occupied.



LOCATED on lot 65x 118 feet, this three-bedroom house, including all equipment listed with two-bedroom house on opposite page is priced at \$9,500



ABOVE are two views showing completely equipped kitchens provided in these low-cost houses. Below is another variation in two-bedroom plan offered in project. A total of 325 houses, 11-acre park and shopping center will complete project



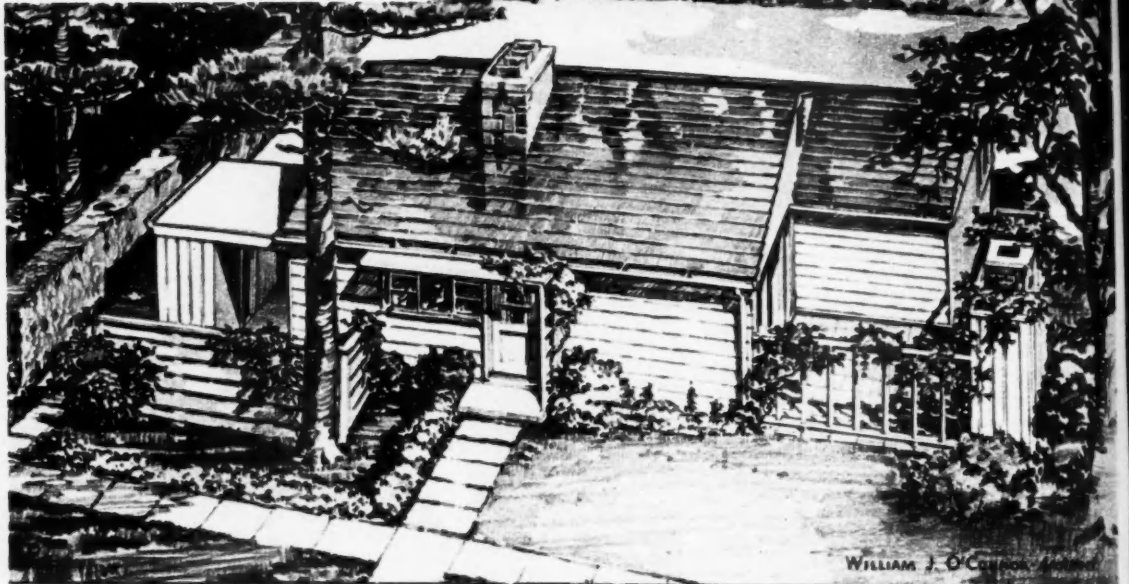
AMERICAN BUILDER

Blueprint House

Number 22

Prepared by Monthly Small House Club, Inc.

WITH a minimum of window exposure on the street side of house, a maximum of privacy is obtained for the occupants



Privacy Obtained by Good Planning

THIS SMALL house design is selected from the "House-of-the-Month" group prepared by the Monthly Small House Club, Inc.

The Monthly Small House Club, Inc., is a guild devoted to the development of the small custom-built house. Its personnel are experts in the small house field, well qualified to judge and prepare the latest in home design and planning. The book published by the company, from which the current design is selected, contains a large group of houses prepared by well known architects. Each house conforms to the Minimum Property Requirement of the F.H.A.

Chief characteristics of this one-story, 970 square foot dwelling, designed by William J. O'Connor, architect, are its livable qualities and its possibilities for expansion. The various units are all closely related to each other, presenting a compact arrangement. The entry porch could easily be extended to include a carport. If a partial basement is desired, the present heating space may be converted into an additional closet, and the stairway

to the basement placed adjacent to the outside storage room.

While the living room is not large, ample wall space is provided for furniture distribution. The concentration of windows and doors on the wall leading to the terrace opens the living room to include the terrace in its overall aspect. The barbecue grille at the end and lattice screen at the sides make the terrace an integral part of the house.

Sleeping quarters, that include three bedrooms, are placed at the rear of the house. Thus, privacy and a view of the garden is obtained. Each bedroom contains a large bank of windows that provide ample ventilation. Closets are plentiful and convenient.

A feature of the plan is the grouping together of plumbing and heating elements. By placing kitchen and bathroom fixtures back to back with the heater in the rear of the fireplace, all the service roughing-in is confined to one small partition. This condition allows economy of installation.

For a small house a maximum

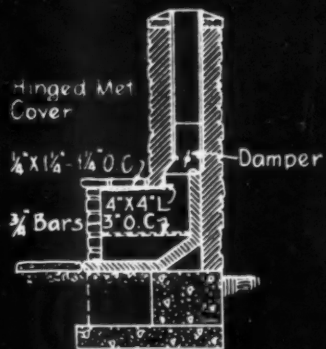
degree of privacy is maintained. From the street, the house is a series of unadorned receding planes, with the grouping of entrance door and adjoining windows providing the only break in the front wall surface.

The house is of frame construction placed upon a concrete foundation that extends below the frost line. A 4 inch thick concrete slab extends over the entire floor area. Asphalt tile is cemented to the slab. Exterior walls are covered with 8-inch vertical and horizontal redwood siding. Cypress wood shingles, spaced 5 inches to the weather, cover the roof. Wood casements are used for all window openings.

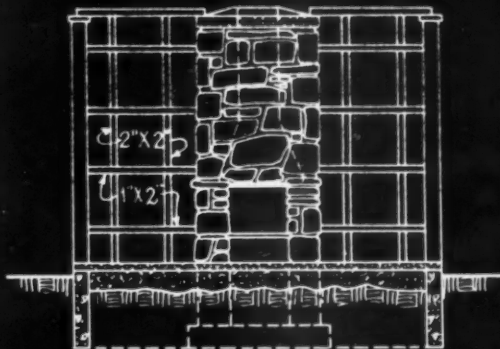
Two-inch thick Rockwool insulation is placed between studs on all exterior walls, with 4 inch thick Rockwool on ceilings. Interior walls and ceilings are covered with two coats of gypsum plaster. Wood trim throughout is white pine.

House is heated with an oil-burning forced warm air furnace. Ceiling in the hall is furred down to provide a plenum chamber for heat ducts for the various rooms.

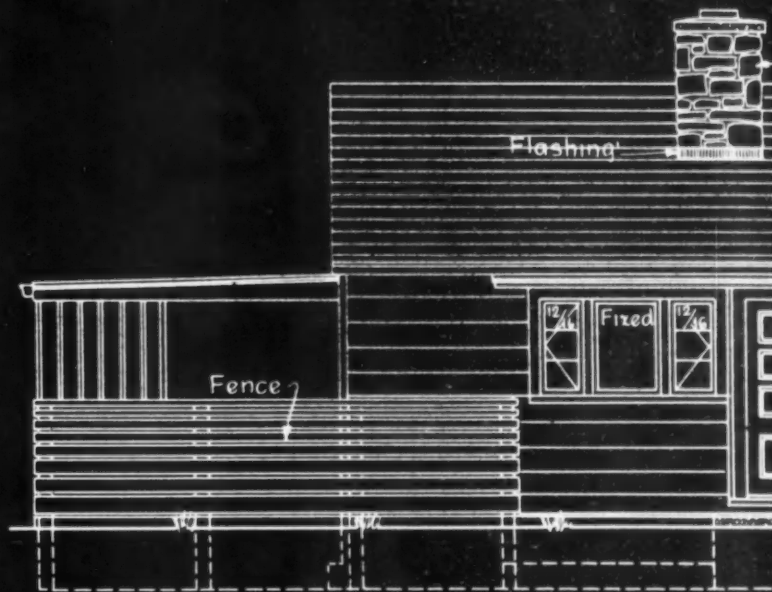




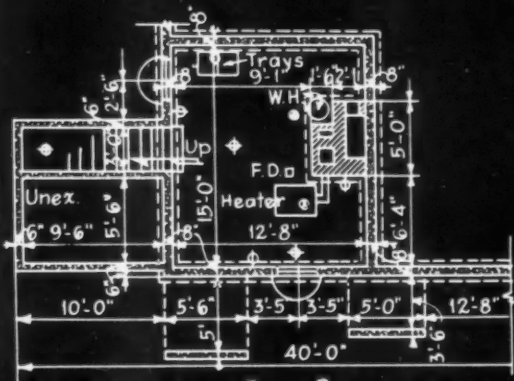
SECTION THRU GRILLE



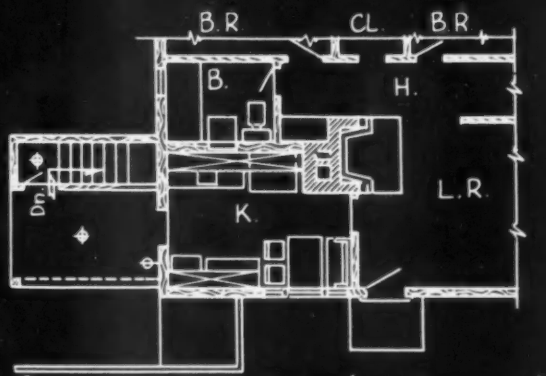
SECTION THRU TERRACE



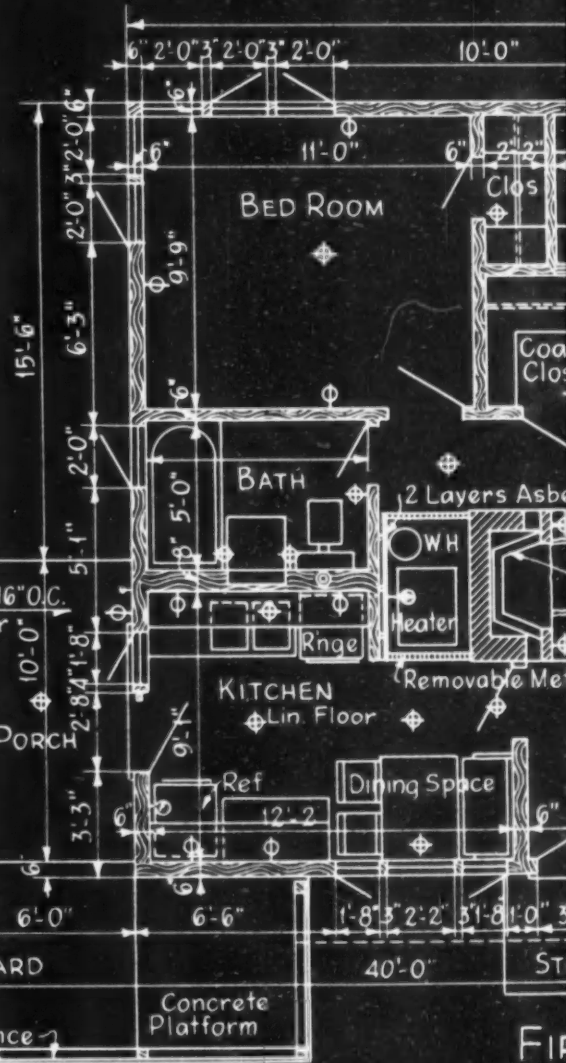
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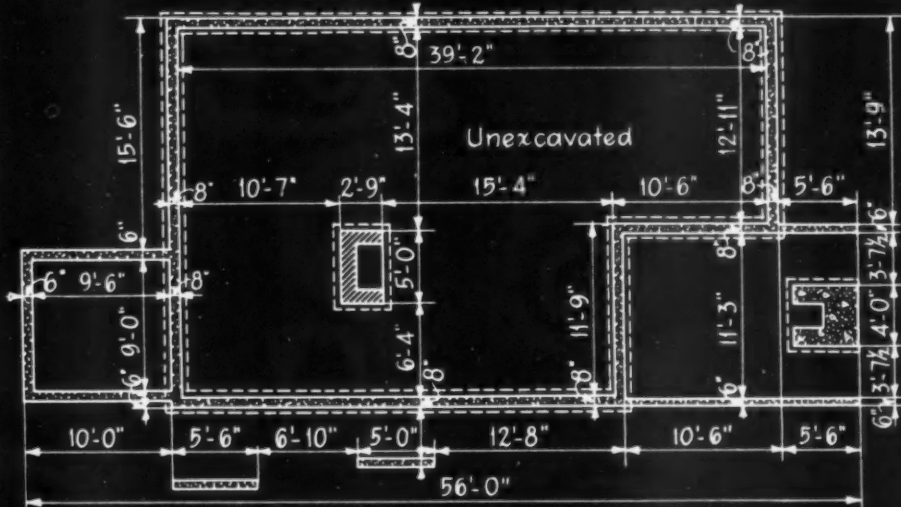
ALTERNATE FOR PART BASEMENT



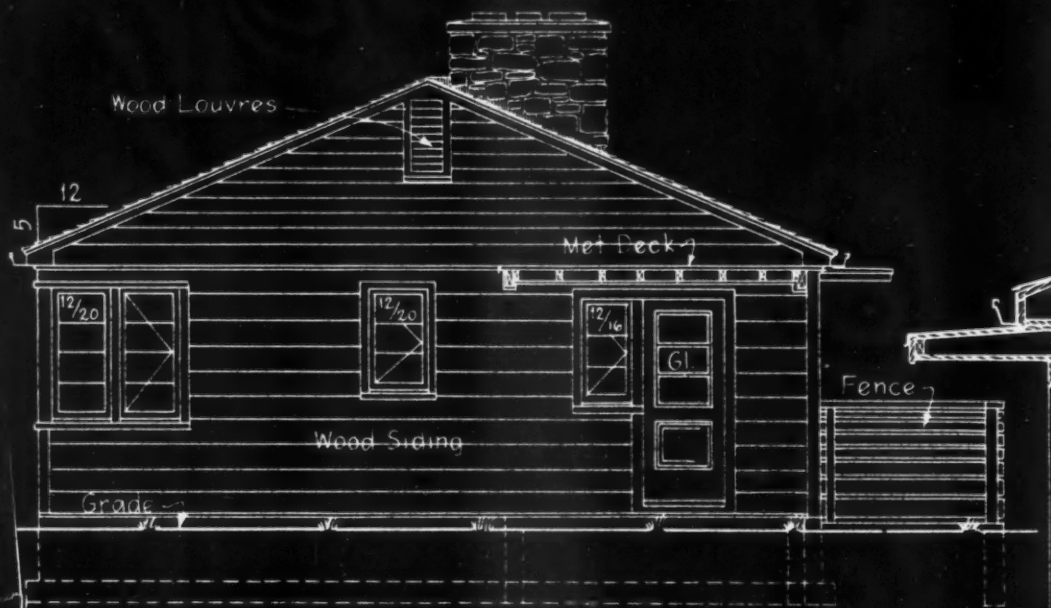
CHANGES ON FIRST FLOOR (WITH BASEMENT)



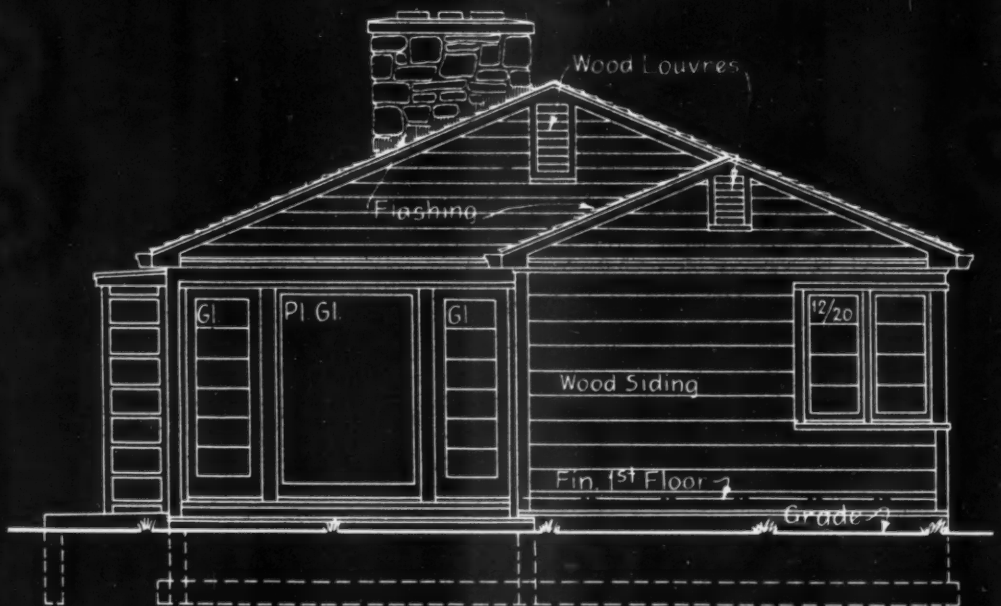
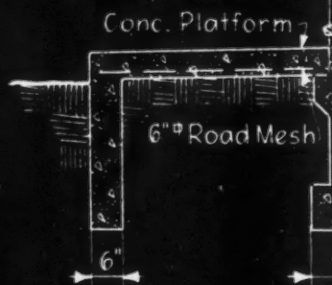
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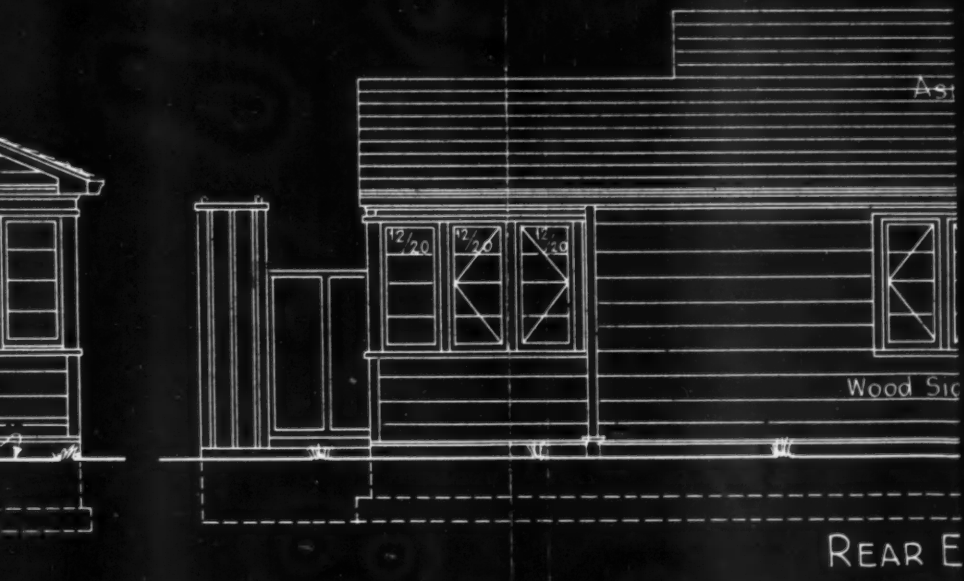
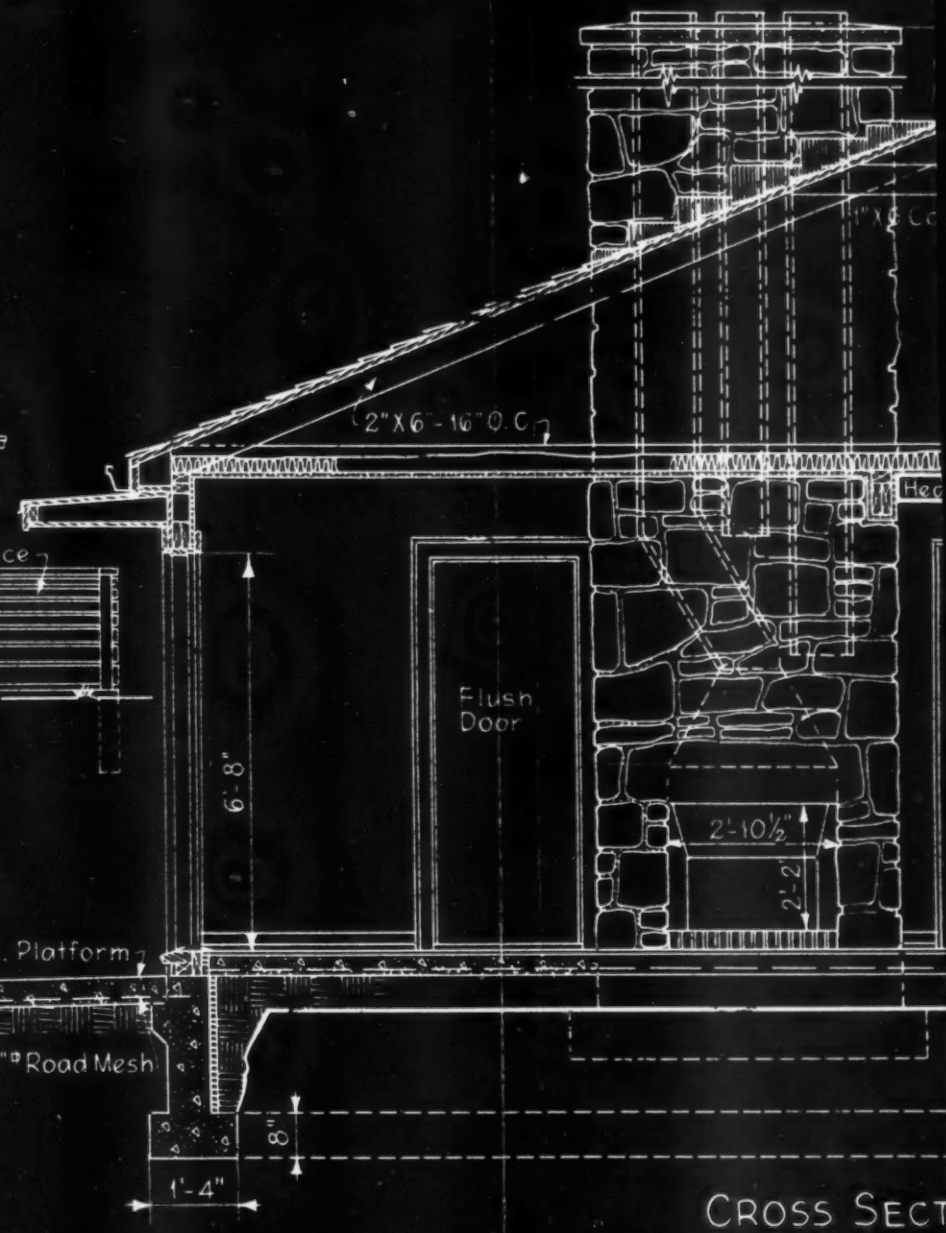
FOUNDATION PLAN

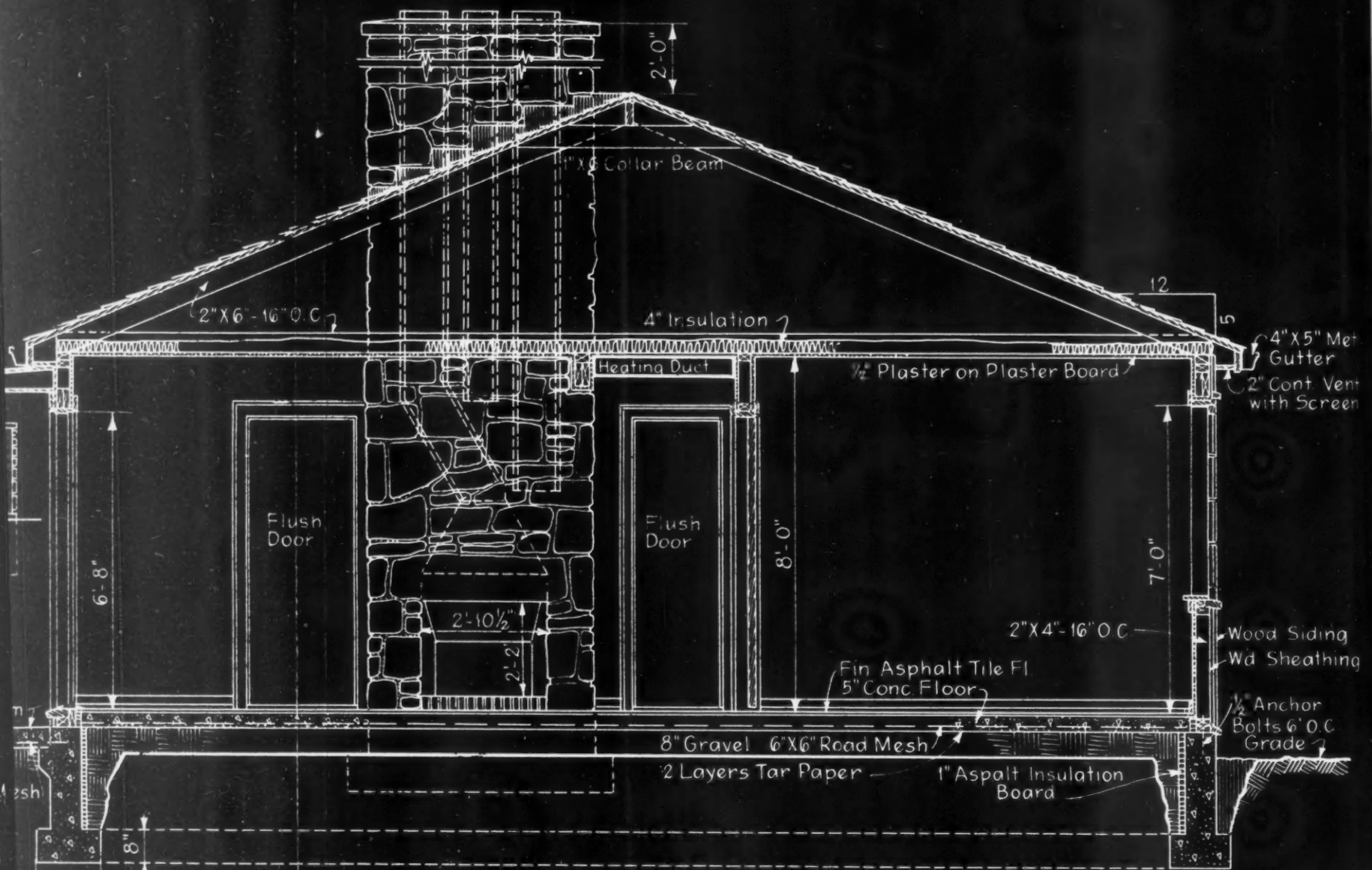


LEFT ELEVATION

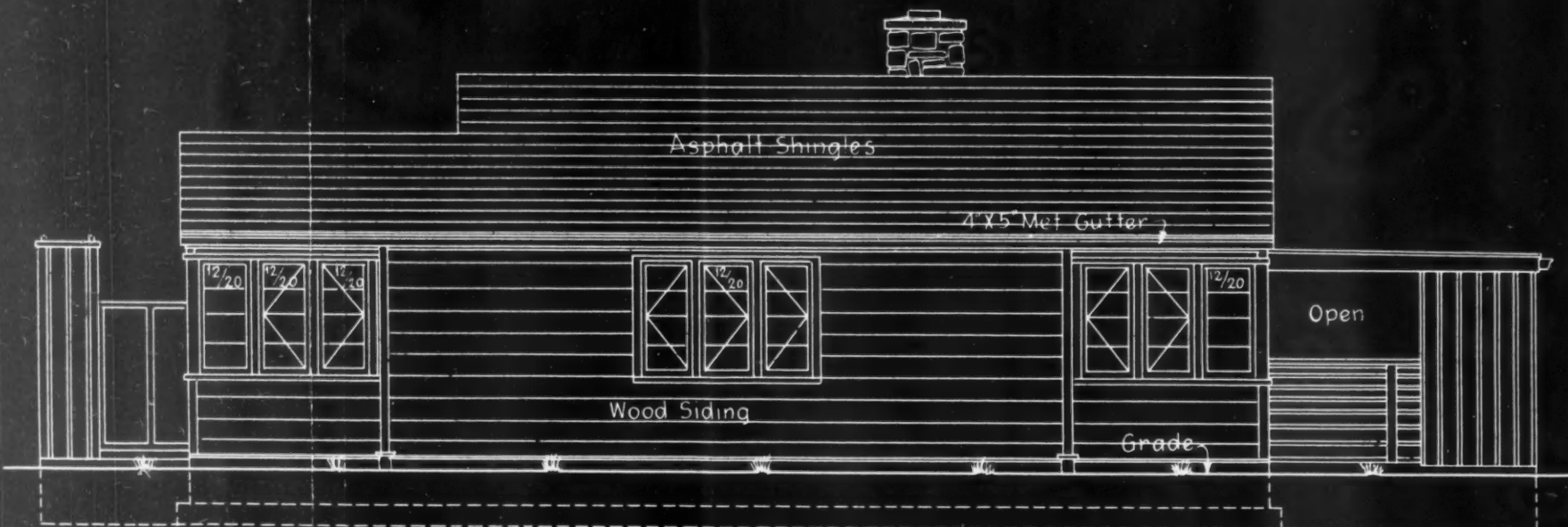


RIGHT ELEVATION





CROSS SECTION



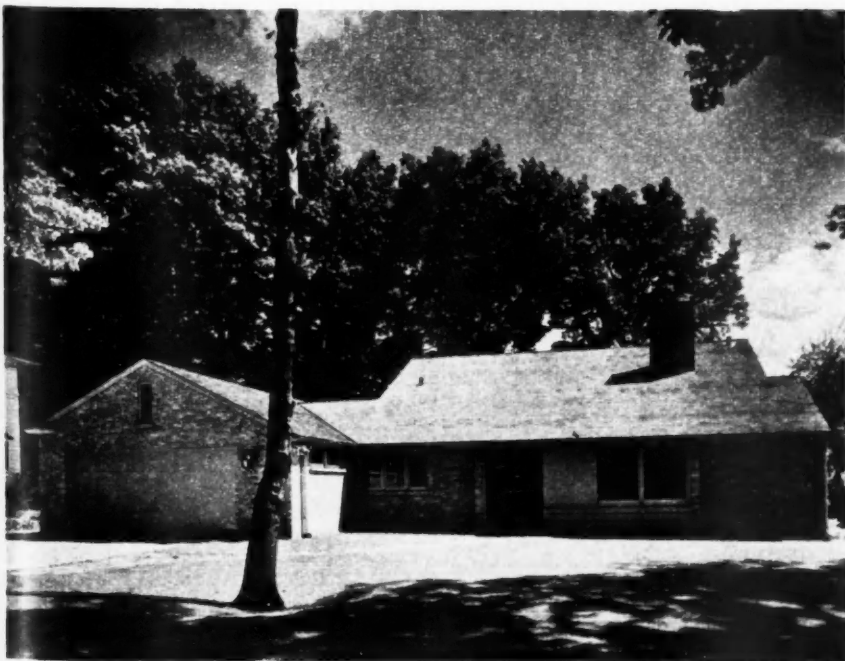
REAR ELEVATION



SOUTH WALL of house extends full two-stories in height. The entire facade with window wall is opened to garden view

House with a Dual Personality

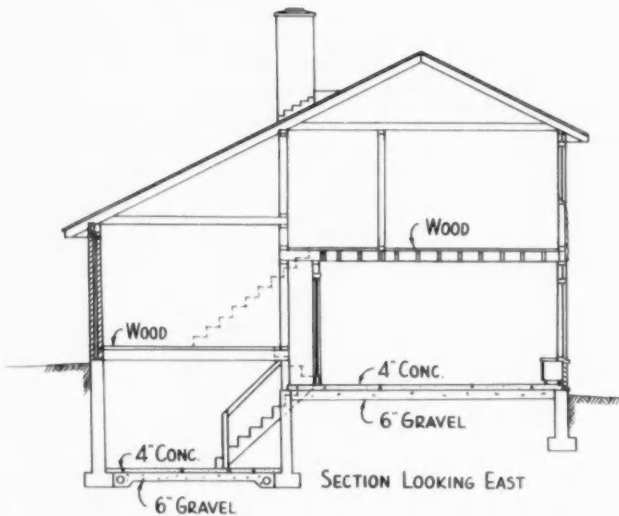
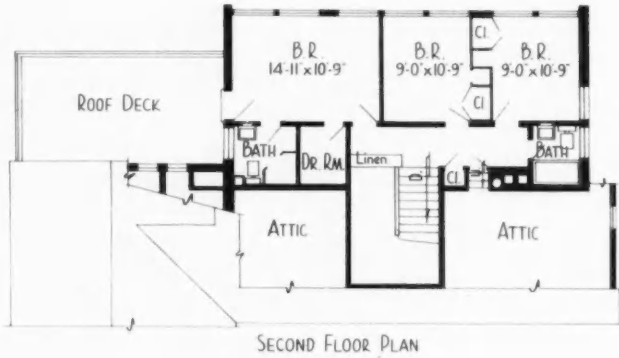
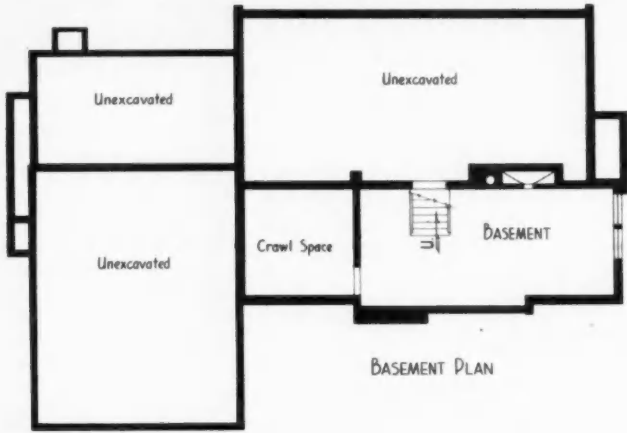
One-story house at street front develops into full two-story house in rear



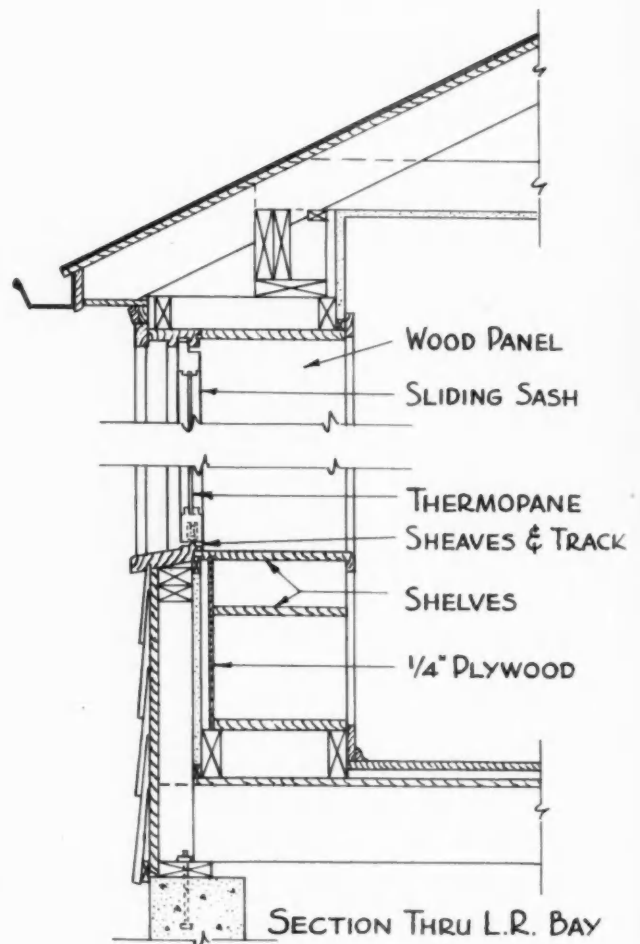
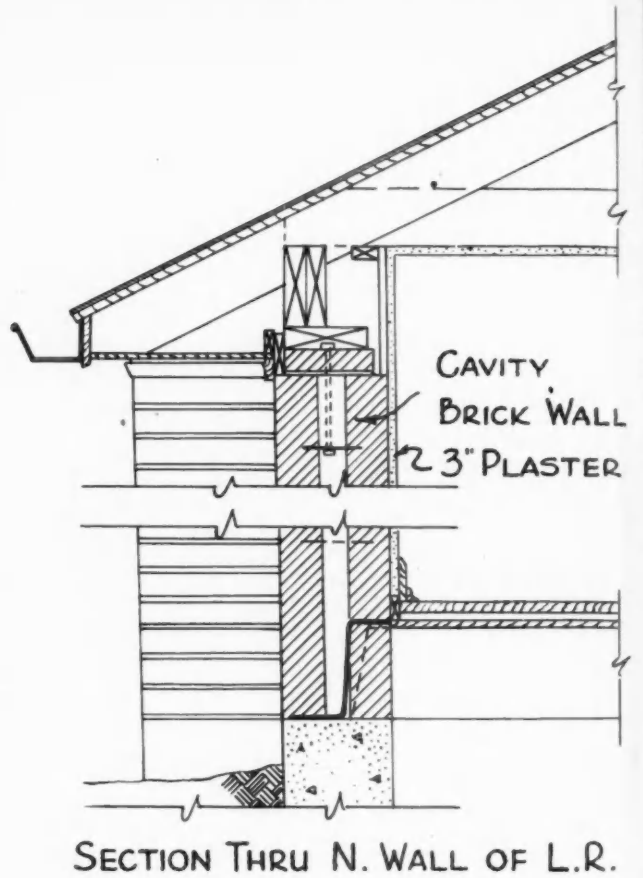
HAVING A site sloping gently to the rear, architects Perkins and Wills, of Chicago, Ill., took advantage of the situation. They designed a home for Mr. and Mrs. Harry W. Knight, Winnetka, Ill., that is inconspicuous on the street side, while opening to generous two-story proportions in the rear.

The house has cavity brick walls on three sides with frame at the rear. Common brick facing is left natural. Fixed Thermopane glass and casement sash are used throughout. Unexcavated portion of the first floor is covered with a concrete slab. House was built by Peter McDonald for about \$32,000.

ILLUSION of a sprawling ranch house is created through the simple, sloping roof lines that extend down to top of windows



SPLIT-LEVEL arrangement is clearly indicated in section through house. Basement is unexcavated except for utility area. First floor rooms are centered around large family room. Three bedrooms on second floor have exposures toward garden front



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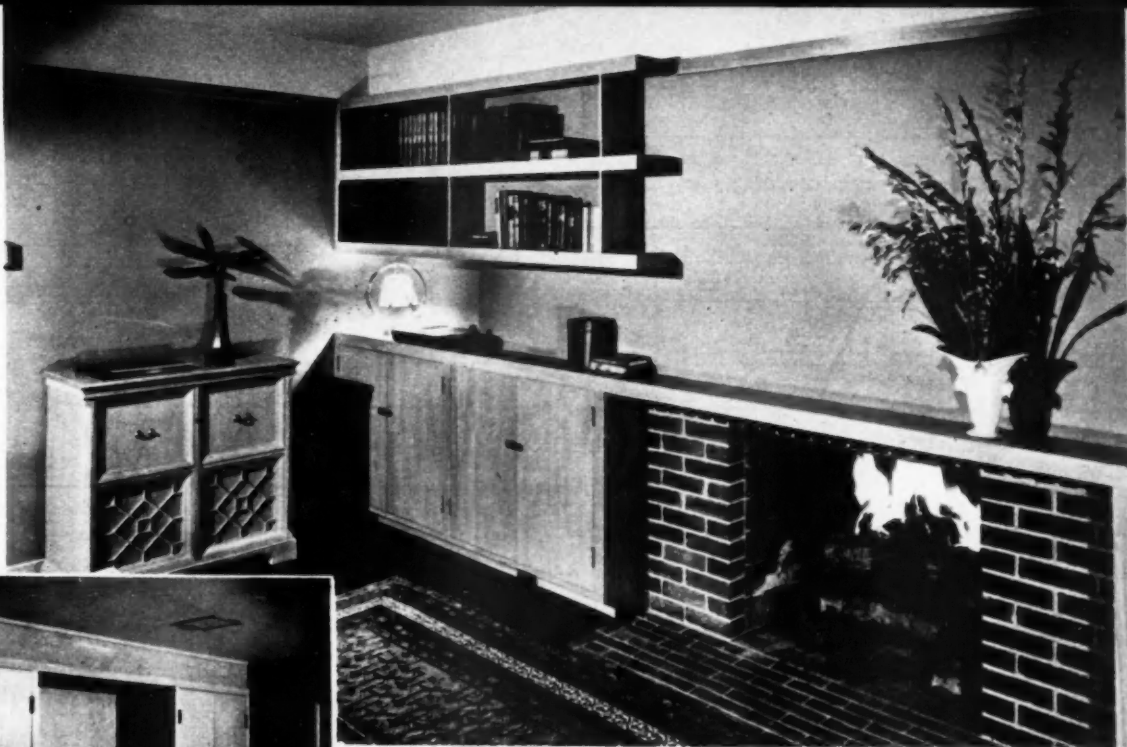


BUILT
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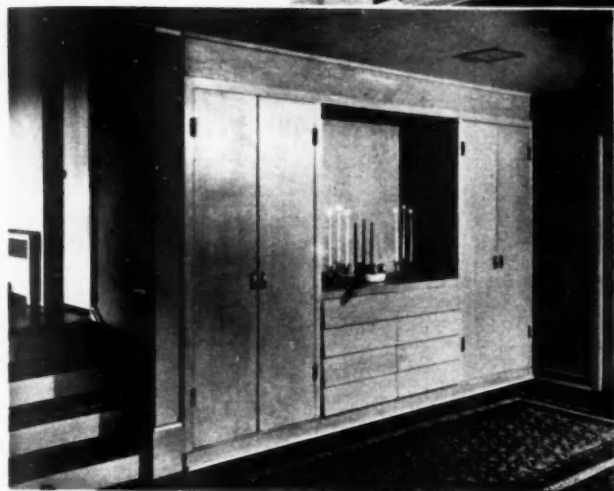


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THE living room, adjacent to the entrance hall, is in addition to family room, providing secluded retreat for members of family. Mantel is extended on both sides of fireplace as counter with cupboard space below. The hanging book shelves above, are unusual, effective treatment. Blond finish over walnut woodwork



SHOWN BELOW is the dining portion of family room as seen from entrance hall. Convactor-type radiators are placed under extended window sill. Pass window to kitchen on opposite wall



BUILT-IN cupboards and drawers provide storage space for linens and dishes in dining room unit. Drawers have no pulls



ABOVE: The serving bar in foreground that houses the convactor radiator, provides separation between the laundry, kitchen equipment and eating space in this large multiple-use kitchen. All cupboards and trim are walnut-finished natural. Floor, counters and back-splash are linoleum, walls and ceiling smooth-finished plaster. Right: Closets with shelves, on each side of large fireplace in second floor children's room, provides necessary space for toy storage. Additional closets accommodate clothes. Woodwork and doors are natural-finished walnut. Plaster walls, ceiling. Fixtures recessed in ceiling





AIR VIEW of four-apartment units arranged to provide maximum outside wall space and privacy. Note large fenced recreation space and play yard for children. Also, car ports with individual stalls

Careful thought in arrangement of units provides facilities for home comforts in

MULTIPLE HOUSING

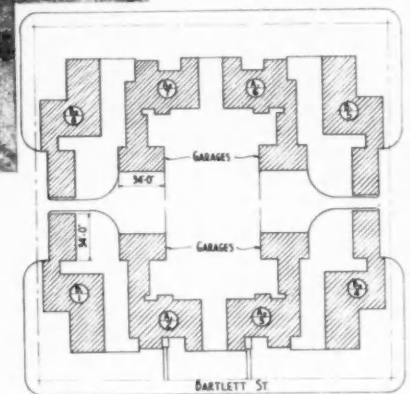
RENTAL APARTMENTS with most of the conveniences of single-family dwelling units were the objective of Dow Zabolio, Houston, Texas, builder when he laid out and built the project illustrated above.

Each unit was designed to provide a maximum of outside wall space and privacy for each apartment. The floor plan shows that the only wall common to adjacent apartments is less than 10 feet long, and that three sides of each apartment are outside walls. Paved driveways lead to car ports with four stalls, one for each family. In addition to a fenced, private yard for the use of the four families in each unit, a particularly desirable feature is the large play yard and recreation space for the use of all tenants. As a safety precaution for children the play space is closed by gated brick walls. The purpose is to keep small children off the street, and out of the paved areas in which tenants' automobiles are stored. Equipment furnished in the play space includes a four-way outdoor fireplace and several items of playground equipment.

Designed by A. Graham Scott,

architect, each building is provided with a generous roof overhang of more than two feet. This keeps the direct rays of the sun out of the upper apartments during most of the day. Roofs are three-ply, 15-pound felt covered with gravel, and laid over solid 1x8 sheathing on 2x6 rafters. Insulation is 2-inch Rockwool between 2x6 roof joists. Second floor joists are 2x10, 20-inch, o.c. All second floors are oak over solid wood sub floors.

Foundations and first floors are reinforced concrete. Two-ply, 15-pound felt in mastic was laid over the concrete, with 1x4 short length screens above, and finished floors of oak. All ceilings and inside walls are 1-inch Sheetrock. Outside walls have 15-pound felt applied over solid 1x8 wood sheathing applied diagonally. Finish surfaces of the walls are of two types—brick and asbestos shingles. The combination is worked out to afford pleasant relief from any semblance of monotony. Second floor porches are provided with wrought iron railings in figured design. Low sections of brick walls are continued beyond the buildings to form fences spanning the spaces between adjacent



units. An opening in the fences provides access to rear entrances. Open wrought iron columns in figured patterns support the canopies over front entrances. Clear ceiling heights are eight feet.

Two types of building were used. By reversing the plans of each, the net effect is to provide four different designs as far as exterior appearance is concerned. The major difference in the two types, as can be noted from the floor plans, is that one provides slightly more outside wall space for one pair of bedrooms.

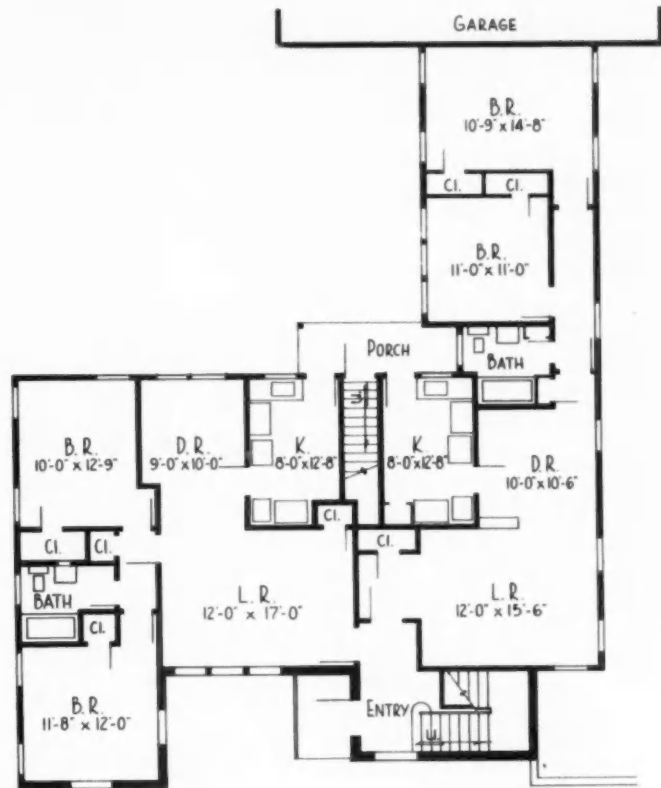
These apartment units are fairly typical of others built and under construction in and near Houston, with the probable difference that these are designed especially to appeal to families with children. The project is conveniently located to transportation and a shopping center, as well as to churches and a school. It is likewise located within easy traveling distance, a matter of a few minutes, to both industrial and commercial employment. Zabolio, in addition to building apartments, is also building single-family residences in project development.



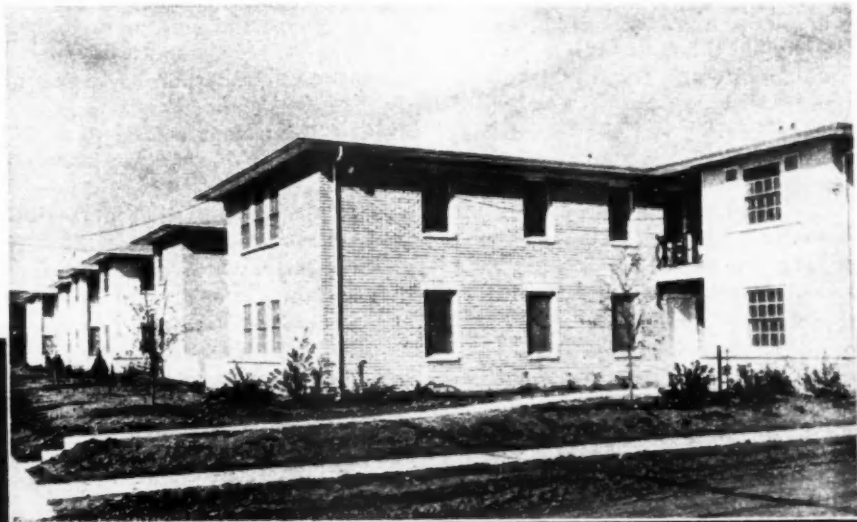
RIGHT: attractive and manly shield

BELOW: achieve for outside tied tog

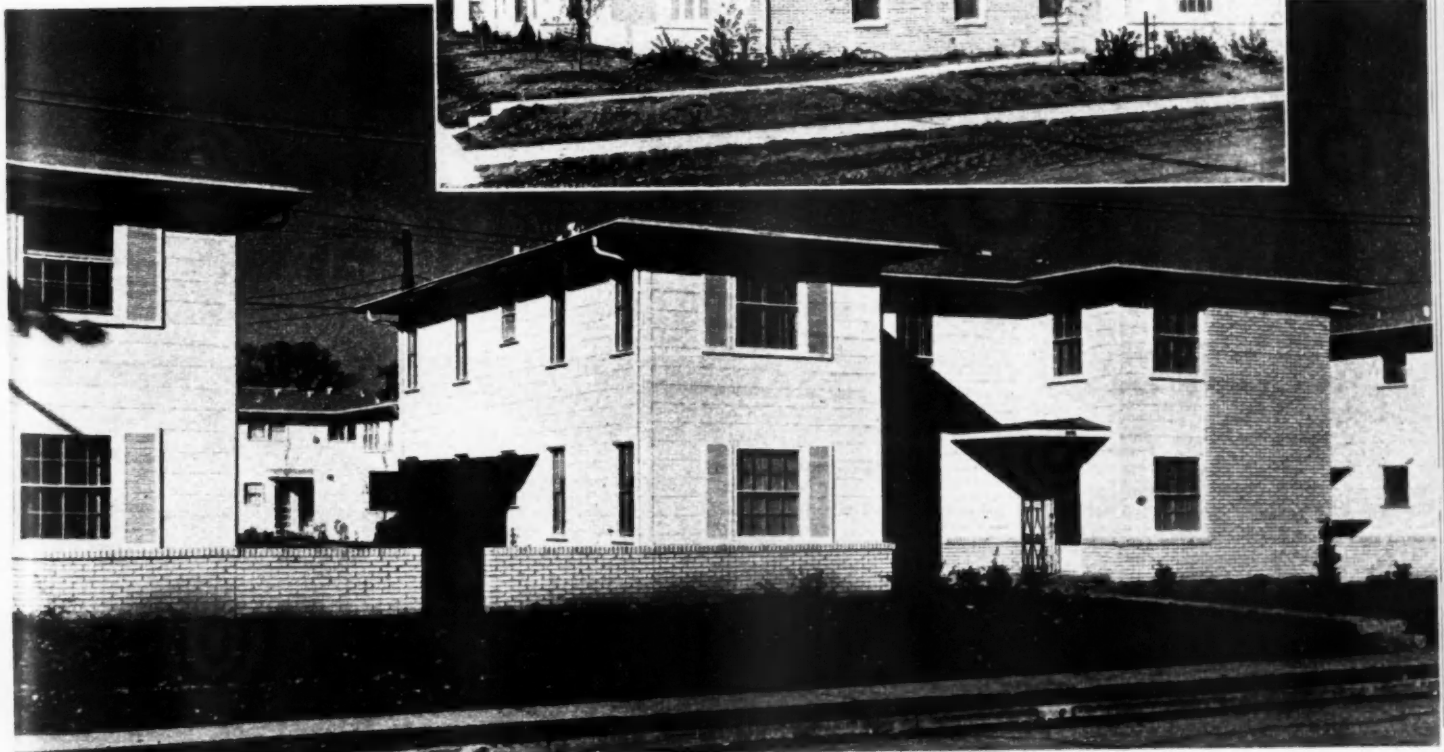




RIGHT: View at corner of project. Note attractive railing at second floor porch and manner in which roof overhang partly shields second floor windows from sun



BELOW: Note pleasing appearance achieved by combining asbestos and brick for outside walls. Also note how units are tied together by extending low brick walls





DENTAL lavatory at the right is an idea endorsed by medical authorities

Style and Operation of Fixtures

THE MORE a builder knows about his product, the better he can explain the value of it.

The builder, as a salesman of his houses, profits by a thorough knowledge of price, characteristics and background of each item that goes into his houses.

These facts about bathroom fixtures are presented as both a buying and selling aid for the builder.

Take lavatories first. Lavatories are consistently the most beautiful of bathroom and powder room fixtures. Of the improvements made on lavatories, the greater emphasis on flat space is perhaps the most outstanding.

Generally speaking, lavatories are available in two designs—the flat-top model, and the integral, raised shelf-back model.

The flat-top model has the faucets on the same level as the front of the bowl while the other pre-

sents the supply valves on an inclined or vertical side of the integral shelf. There is more flat space for toilet articles on the raised back shelf-model. This type also lends itself to a mirror installed so as to come down flush with the back of the lavatory.

Bowl designs on new lavatories are of three types—rectangular, octagonal, and D-shaped. In the D-shaped bowl, the straight side of the D is toward the user. Integral soap-holders, depressed into the bowl itself, are useful features of some of the lavatories.

Support for lavatories is given by handsome chromium-plated brass legs at the front of the fixture. Towel bars, attached to each side of the bowl, are provided for greater convenience.

Popular size lavatories for average bathrooms (6x8 feet, for example) are: 22x18 inches (basin,

17x10½ inches); 24x20 inches (basin, 18x11½ inches); 19x17 inches (basin, 14x11 inches); and 20x14 inches (basin, 15x9 inches).

In listing dimensions of lavatories, the length is always given first. Thus in the case of a lavatory 22x18 inches, the length or side parallel to the wall is 22 inches.

For bathrooms that must be of minimum size, there is a small lavatory measuring 18x15 inches (basin, 14½x9 inches). Even on this small model the deep, oval basin provides ample wet area, and there is a handy soap depression. The chromium-plated trim with mixing spout and direct lift waste is mounted on an angle panel.

Larger bathrooms in homes of more spacious design look especially attractive with lavatories of approximately these dimensions: 27x21 inches (basin, 21x12 inches), and 33 x 22 inches (basin, 23 x 13



ILLUSTRATIONS show bowl designs of modern lavatories. Straight side of D-shaped bowl is always toward user

Construction — Part III — Plumbing

inches). For long, narrow bathrooms there is a model measuring 26x15½ inches with a 4½-inch shelf for toilet accessories and two depressed soap dishes.

Counter-top lavatories are a new approach to bathroom styling. These units are designed to fit into a counter-top which may be of tile, linoleum, glass, formica, wood, or other materials. Besides permitting interesting bathroom styling, the counter-top lavatory is extremely practical. Two lavatories may be built into the counter-top to provide greater utility and a dressing table may easily be added. Extra storage space below the counter-top will prove a boon to space-starved home-planners. Sizes for this type are approximately: 24x20 inches (basin, 17x10½ inches); 27x20 inches (basin, 21x11 inches); and 20x19 inches (basin, 16x11 inches).

Corner lavatories are available in such sizes as: 17x17 inches, 16x16 inches, and one model measuring 17 inches on the sides and 20¼ inches from corner to front. This last model has a flat back shelf measuring 7½ inches at the center.

Dental lavatories, spiritedly endorsed by medical authorities, are getting new attention because of their hygienic qualities. A handy size for this type is the 14x14 inch model.

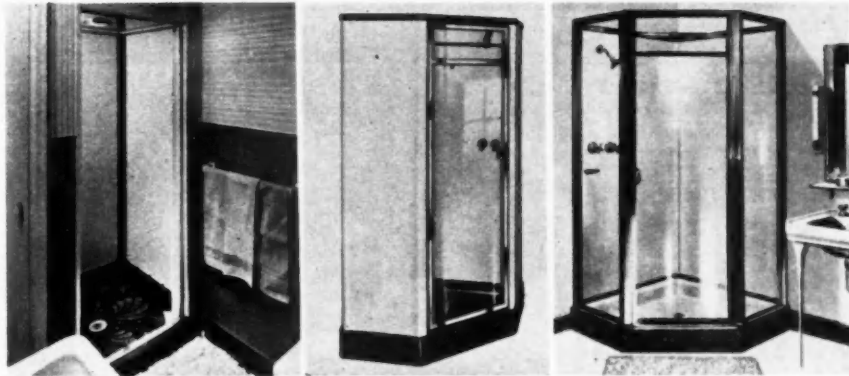
Bathtubs

Designs of modern bathtubs reflect the constant striving of the industry for the ultimate in good appearance, in safety, and durability.

There are three general types of baths—the conventional, oblong design; the square bath; and the receptor type of small bathtub.

Usual lengths for the conventional style of bath are 4½ feet, 5 feet, and 5½ feet. Variations on these sizes include 60x32½x16 inches; 66x32½x16 inches; 54x27x14 inches; 60x27x14 inches; 54x30½x14 inches; and 60x30½x14 inches. All these tubs, as well as the square ones, have a right- or left-hand outlet.

As in the case of the lavatory, the new tub has been given more flat surface space. Rims are lower, broader, and flat so that toilet articles may be placed on the rim nearer the wall. Bathers may sit on



THESE shower stalls, representative of modern design trend, take up little space

the outer edge of the tub while dressing and be perfectly comfortable, so ample are the new rims in width. Most important of all is the fact that the new tubs are designed with a flat bottom to prevent slippage in bathing.

Revived after the wartime lapse is the production of the square bathtub, useful for conventional as well as for irregularly-shaped bathrooms. These square models are getting the full decorative treatment in modern bathrooms with such glamorous backgrounds as glass brick and colorful waterproof wallpaper. Two integral corner seats and other features bring new convenience and comfort to this type of bathtub. In addition, its structural advantages bring new freedom to the planning of bathrooms. It fits into wall lengths too short for the average bath; in connecting baths, it saves valuable space between bedrooms; it leaves room for closet or storage without reducing bathroom floor space. Square bathtubs are available in either recess or corner styles.

Sizes for this type of tub include these: 48 inches long, 46 inches wide, 16 inches high; 48 inches long, 49½ inches wide, 15½ inches high; 48 inches long, 48 inches wide, 15½ inches high.

For exceptionally small homes where bathroom space is at an absolute minimum, a receptor type of tub has been designed which measures only 42 inches long, 31 inches wide, and 12 inches high. With a built-in seat and flat bottom, this space-saving tub has a non-splash rim that also serves as a safety handhold. This type of tub may be installed in a second-floor or downstairs bathroom which measures only

5 feet, 8 inches by 6 feet, 8 inches.

Shower

Developments in shower equipment include glass panels for the tub enclosures, glass doors for cabinet showers, new types of shower heads, adjustable shower arms, and new mixing valves for greater safety.

Most home owners are insisting on overhead showers for their tubs, as the extra expense is slight. The water has to be piped to the tub anyway, they say, so why not have a shower too?

One of the popular members of the shower family is the pre-fabricated metal shower cabinet. Cabinet showers are available in a variety of sizes, the smallest being 32 inches square and 76 inches high. Cabinet showers are shipped knocked down for economy of transportation and ease of installation. They are leak-proof and durable. The latest types of receptors for shower cabinets are stain-proof and non-slip.

The main differences in the construction and quality of water closet bowls are in the time consumed for flushing, the durability of inner working parts and the sanitation of the fixture itself. Tremendous improvements have been made in water closets in recent years.

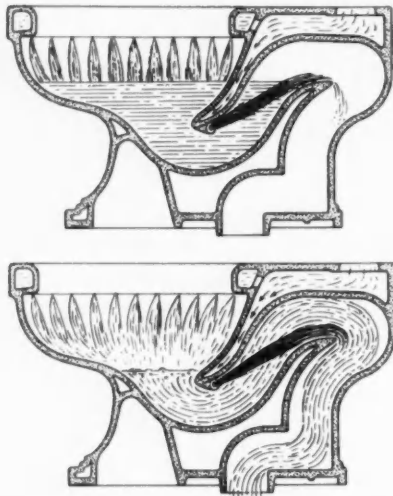
It is a far cry from the noisy, chain-pull closet and the leaking wooden tank at the ceiling to the handsomely streamlined fixture in the modern bathroom. Water closets are made of vitreous china which is impervious to acids, easy to clean, and dirt-resisting. Vitreous china will not stain or discolor and will withstand the action of

the strongest scouring preparations.

New water closets are not only attractive in appearance but efficient in operation. Designers have given the most careful attention to the prevention of back-siphonage or contamination of water supply.

Types of Water-Closet Bowls

There are three major types of water-closet bowls: the siphon jet,



WHEN water closet of siphon jet is flushed, water normally present in the bowl as a refill is thrown over dam into down-leg by action of the flushing supply from tank, and water piles up in down-leg. Added weight of water in down-leg creates syphonic action, and this action empties bowl

the reverse trap, and the washdown. The washdown is the least expensive while the siphon jet costs the most. The siphon jet is preferred because it has a deeper water seal, a larger trapway, a very large water area, and offers more positive flushing action. Dirt does not stick to a wet china surface. This is why the large amount of water area is an advantage. The modern styling of siphon jet bowls enhances the beauty of the bathroom in which they are installed.

The reverse trap bowl is an intermediate bowl. It has a medium size water area, an integral flushing rim and jet, and a minimum water seal of 2½ inches. The plumbing trade regards it as an excellent buy.

The oldest and most competitive type is the washdown bowl. The minimum area of its water surface is 8x7 inches. It has a trapway and depth of seal about the same as the reverse trap and the exterior styling is largely utilitarian. Any of these types of water closets may be used in connection with a tank or a flush valve.

Innovations have been made in

recent years in the styling of the bowl and tank. One of these is the close-coupled combination; another is the one-piece water closet.

In the case of the close-coupled combination the bowl and tank are bolted together. It is generally set away from the wall and is becoming a very popular combination. Washdowns, reverse traps, and siphon jets are each available in close-coupled combinations.

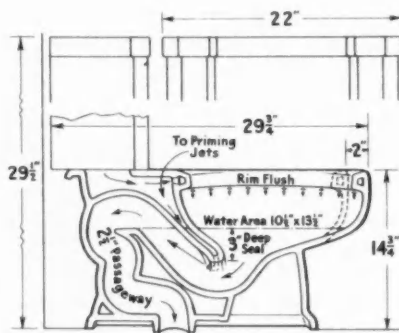
Another attractive type of water closet is made all in one piece. The bowl joins the tank and this simplifies the cleaning of the fixture. It, too, sets away from the wall. Both siphon jet and reverse trap bowls may be obtained in one-piece or integral designs.

The majority of water closets with tanks sold today—estimates vary from 70 to 80 per cent—are close-coupled water closets.

Flush valves differ from water closet tanks in that the water for flushing is supplied direct from the main. Consequently the flushing action is positive and direct. Flush valves can be adjusted as to volume and length of flush.

Since no tank is required, a flush valve provides a more compact installation. Another advantage of a flush valve is its ability to withstand rough treatment. A flush valve is virtually vandal proof. It cannot easily be tampered with or put out of service. Simple repair parts kept in stock facilitate quick and easy repair in a matter of minutes.

The dependability of operation of flush valves, their water economy, low maintenance cost and long life



CROSS section shows dimensions of one popular siphon jet water closet

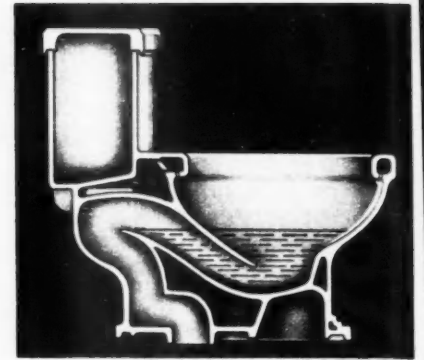
has been proved over many years of experience in hotels, hospitals, schools, and industrial plants.

Water closet seats made of various materials in different price ranges are available. These include seats made of hard wood, painted or sprayed; pyralin- or sheet-covered seats; plastic seats; and rubber seats. The later are used pri-

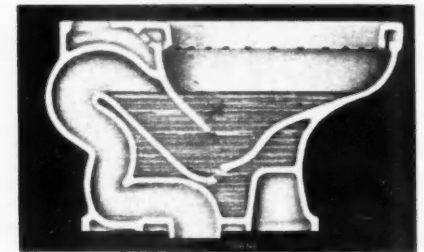
marily in schools, factories, and institutional buildings.

A recent trend in bathroom equipment is the use of a colored seat on a white bowl with the color of the seat matching the colors in the rugs and bathroom or powder room curtains.

There are regular seats, elongated seats and a new type of hygienic saddle-shaped elongated seat for



CROSS section of siphon vortex closet



ANTI-SYPHON type water closet has extra reservoir for deep water seal

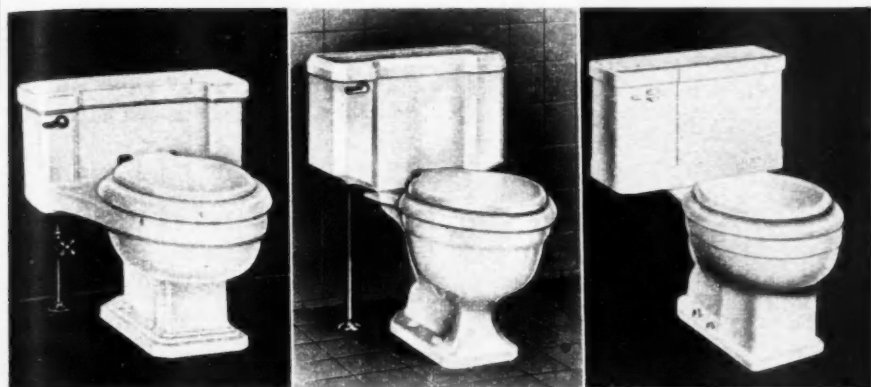
correct posture. This seat is equipped with a telescopic cover which has a flat top and covers the lip of the bowl.

Faucets, drains, supply valves, and showerheads have come in for their share of improvements also. New finger-tip valves close tightly with only the slightest pressure. Different designs have been formulated for different fixtures. New lavatory hot and cold water supply valves, for example, are available in elongated shapes or in round, dome-like styles.

Quality faucets are fashioned with skill and precision from metals that are tempered to stand up under daily and yearly use and abuse. Despite recent advances in metallurgy, no metal has been found that is better for the manufacture of faucets than brass. Nor is there any finish superior to chromium plating.

Faucets made of red brass—brass with a high copper content—will not corrode and will operate readily in their fittings. Years ago nickel was the standard plating for faucets, but nickel must be polished frequently to maintain its appearance. Then, too, after years of pol-

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NEW water closets are as attractive in appearance as they are efficient in operation

ishing it loses its lustre, the plating wears away, and the brass shines through. Chromium is distinctively the metal of this labor-saving age for just an occasional wiping with a cloth is all that is needed to retain its lustre.

Designers have done their utmost to obtain simplicity and efficiency in the mechanical parts of the faucets. Modern faucets have parts that are easy to replace. This freedom from expensive repairs is the ideal towards which the plumbing brass industry has been striving for years.

Many faucet washers now are made of new composition materials having great durability and will give long service even on the hot water side.

Wastes or drains are better because, for one thing, they are almost all readily removed from the fixture for cleaning and so that the piping may be more easily cleaned also. New lavatories feature wastes that can be quickly removed by merely one pull upward and one slight turn to the side.

Showerheads in new bathrooms take less water, concentrate the stream on the body of the bather, and are easy to keep clean. With reasonable care, a showerhead is virtually non-clogging. One of the innovations in showerheads is the type which, with a mere turn of a lever, provides not only the self-cleaning feature but a choice of any spray desired, ranging from a fine, stimulating needle spray to a coarse, drenching shower.

Especially important are the safety features of modern showers. No longer need the bather be subjected to the hazard of violently changing water temperature. New types of improved mixing valves are available which maintain any desired temperature regardless of fluctuating supply line pressure.

When the same valves supply both tub and shower, a transfer valve is used. Some transfer valves

are so constructed that they return automatically to the tub position when the water is turned off. This eliminates the possibility of an accidental or unexpected shower for the next person who uses the tub.

The relation between adequate sizing of the piping leading to the shower and even water temperature is better understood today. When the hot and cold water supply lines are adequate in size, so that neither will be "starved" by heavy use of water by other fixtures, satisfactory operation of the shower can be obtained with ordinary hot and cold valves.

Laundry tubs are still important even though completely automatic washers have entered the scene. The single compartment unit was especially designed for use with the automatic washing machine. This has a 12-inch deep compartment with an integral washboard, black supporting frame with leveling screws, chromium-plated trim with hot and cold supply valves, swinging spout with a hose end mounted on a shelf back, and a waste with rubber stopper. It may be installed as a single unit or in banks of two or more. Its size: 22x25 inches.

The two-compartment tub has two 12-inch deep compartments with an integral washboard in the left-hand compartment, soap depression and black finished steel supporting frame with leveling screws. This model also has the chromium-plated trim, swinging spout with hose end mounted on the shelf back, and twin wastes with rubber stoppers. Size: 36x25 inches, and 42x25 inches.

Sinks, Important Item

A combination flat rim sink and laundry tub is available made of porcelain enamel on cast iron. It has a 14-inch deep laundry tub and an 8-inch deep sink basin. It may easily be equipped with chromium-plated trim and water supply valves. Size: Sink, 18½x17½ inches; tub

is approximately 18½x17½ inches.

Modern sinks add convenience, speed, and beauty to any kitchen. Sinks range in size, generally speaking from 42 inches to 96 inches in length and have more than enough room for work and storage if their size is correctly chosen according to the individual family's needs.

Especially recommended is the twin-drainboard sink. If kitchen space is extremely limited, the single-drainboard model will suffice, but the average housewife will prefer the double model.

Sizes for sinks include: 42 inches long, 22½ inches to 25¼ inches wide, 36 inches high; 48 inches long, with same width and height, 54 inches long, same width and height, 66, 72, 84, and 96 inches long, with same width and height. Most models have bowls 8 inches deep with five drawers and almost as much storage space as a closet. Drain baskets and sliding shelves for heavy articles are included on the larger models.

Stainless steel sink tops come in the following lengths: Single bowl—54, 60, and 72 inches; Double bowl—66, 72, 84, and 96 inches.

The seal of the Steel Kitchen Cabinet Institute on the steel kitchen cabinets is a guarantee of the ability of this type of cabinet to withstand years of shock, strain, and ordinary use under any conditions. Exhaustive tests are given these cabinets by an impartial laboratory as a protection to the consumer.

Similarly the work in commercial standards carried on by such trade groups as the Enameled Cast Iron Plumbing Fixtures Association, The Vitreous China Plumbing Fixtures Association, the Formed Metal Institute, the Sanitary Brass Institute, and the Tubular Plumbing Goods Institute are of great value to the building industry and to the public. These trade groups have set up minimum standards which are largely responsible for giving American homes the finest plumbing in the world with the economies of mass production.

Fixtures Are a Good Buy

Plumbing fixtures are a good buy today. Despite improvements in design and quality, price advances have been moderate. Because of improvements in production methods, the streamlining of manufacturing processes, and the use of modern labor-saving machinery, manufacturers have been able to keep their production costs down.

Quality Houses Custom Built

All members of family of three comprise this well-coordinated construction team, and line support comes from a competent work crew of craftsmen

GOOD PLANNING, workmanship and materials make up the three-point credo by which Charles Arensberg has become one of Seattle's most successful speculative builders.

Arensberg homes are priced from \$15,000 to \$40,000. But no matter the selling price, there is no compromise with quality workmanship.

Houses show careful attention to detail, and offer as many refinements and appliances as possible within given cost brackets. Bathrooms, kitchens, and front entrances receive extra attention because of their importance in selling. And glass block is used generously in many of the houses for the same purpose—but never with its functional purposes overlooked.

A builder in Seattle since 1918, Arensberg now heads a well-coordinated family construction team. His wife directs the interior decorating; their son, Buckley, does the architectural planning.

The team's line support is a competent work crew. Many of the men have been with this builder more than 28 years. During that time, he has erected more than 500 houses.

Experienced craftsmen are necessary to the Arensberg methods of operation. No two floor plans are alike; each house is custom-built and requires an average of six months to complete.

The floor plan is representative of 11 homes just completed in Seattle's scenic Montlake District. It is a plan for comfortable, uncramped living. The rooms are spacious with extensive window area; there are abundant closets of ample dimensions. Quarter-sawn oak flooring, when available, is used throughout. The only basic difference in the various priced homes is square footage.

All Arensberg homes have at least two bathrooms, one connected with the master bedroom. The second, often coupled with a dressing or pow-



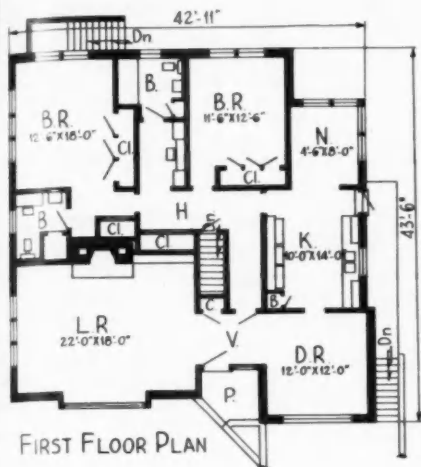
ROOF OVERHANG permits freedom in fenestration, such as application of large glass block area at front door



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FIRST FLOOR PLAN



THOUGH floor plan, left, represents one house in group, no two plans are alike

der room, is convenient to the other bedrooms and the living area.

Realizing the sales value of good bathrooms and kitchens, Arensberg has equipped each with reliable and attractive fixtures. Glass block panels, which transmit an abundance of daylight with no sacrifice of privacy, frequently enhance them.

Bathroom walls and floors are of clay tile in various hues. Built-in towel cabinets and medicine chests, chrome rack fittings and large mirrors are standard in most of the bathrooms. Dressing rooms offer floor-to-ceiling linen and clothes closets with sliding doors and brass or chrome hardware. A mirror wall extends above the dressing table.

Cove-based linoleum is used throughout the kitchen and breakfast nook; the arrangement of appliances is tailored to the floor plan but in most instances is L or U-shaped. Steel cabinets are installed above electrical units and the sink; an exhaust fan over the electric range, a dishwasher unit with garbage disposal attachment and, in some instances, a freezing storage locker.

Where privacy is a problem, glass block is substituted for ordinary fenestration over the sink.

In all Arensberg houses there is free access from the kitchen to the dining room and the large breakfast nook. The last, ample for six to eight persons, is often fitted with extensive window area—especially when the beauty of the Cascade range and Mt. Rainier constitutes the view.

Large picture windows are featured in both the dining and living rooms which usually are connected by a vestibule. Italian marble fireplaces of ample size are a "must" in the spacious living rooms, and generally are flanked by built-in book shelves with a lower cabinet for wood storage.

Arensberg utilizes large glass block panels beside the entrance door,

sometimes adding a second panel at right angles to brighten the dining room. In some houses he installs a panel in an exterior wall to provide interest and to daylight a closet. Living rooms frequently get an extra allotment of daylight through a panel flanking a fireplace.

Some of the garages are on the basement level, depending on the contour of the ground. All Arensberg houses have full concrete basements and include a recreation room finished in knotty pine, and a maid's room and bath, all with asphalt tile floors.

Heat for this lower level is from radiant coils imbedded in concrete over gravel. The living area is warmed by grids of 3/4-inch copper tubing set in the ceiling. The heat source is an oil-fired furnace coupled with an air conditioner.

Arensberg says the installation cost is triple that of an ordinary hot air system but estimates that the radiant type is 30 per cent cheaper to operate.

Four inches of mineral wool insulation above the ceiling is provided, and all rooms are sheathed with half-inch rock lath before plastering. Exteriors generally are Roman brick veneer or Wilkeson cut stone over frame construction. Roofs are of native cedar shingle or hand-split cedar shakes.

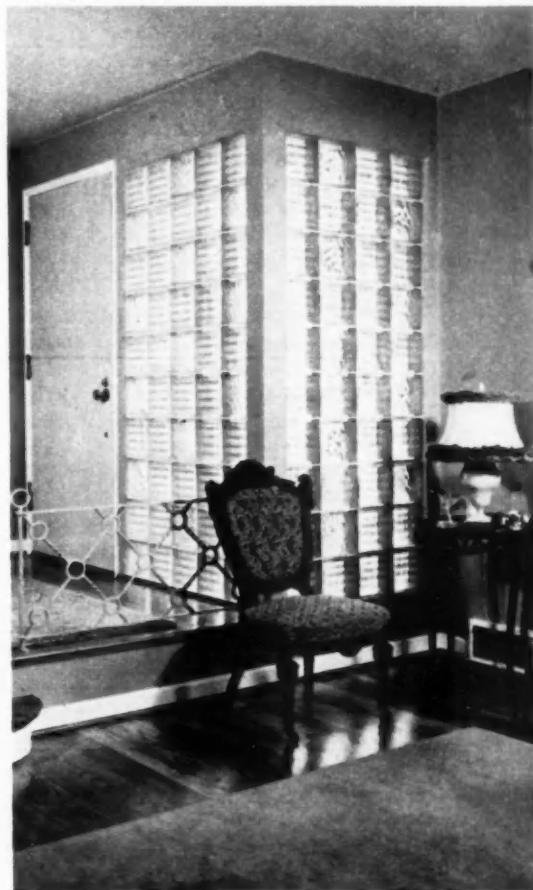
"I have never built cracker-box houses—and never will," Arensberg said.

Realizing that quick sales of homes in the higher price range often depend largely on location, Arensberg chooses building sites carefully. Scenic background and the surrounding neighborhood are prime considerations. He recently deserted a site in the New Northgate District of Seattle when he learned a shopping area was to be built in the immediate area.

Arensberg homes are custom units, sold "as is". Details to suit the individual taste of owners are provided if the sale is closed before a home is completed.

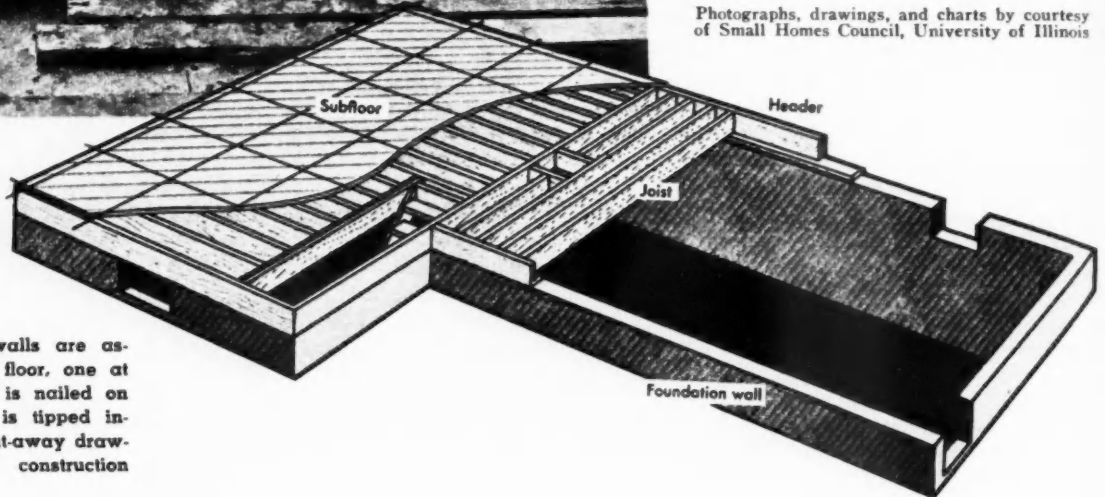
Sales are generally completed on the site without the help of salesmen or extensive promotion. Occasionally buyers purchase through local real estate brokers. Houses are delivered to owners completely landscaped and with a lawn sprinkler system.

USE of glass block at entrance takes advantage of daylighting, yet, since the glass is translucent, the blocks assure privacy from the street and front porch



Simplified construction methods using pre-cut materials, preassembled parts, and modular coordination, help reduce building costs

Photographs, drawings, and charts by courtesy of Small Homes Council, University of Illinois



ABOVE: Exterior walls are assembled on rough floor, one at a time. Sheathing is nailed on studs before wall is tipped into place. Right: Cut-away drawing shows floor construction

TO PROVIDE the small-scale builder with a knowledge of practices and construction methods used by the large operational builders, a research project in construction methods was undertaken by the Small Homes Council of the University of Illinois.

Six houses were built, three of frame construction and three of masonry. The houses were identical in size and plan.

The houses were erected in pairs . . . one frame and one masonry. On

the first pair of houses, the contractor used customary construction methods.

After the first two houses were well underway, the contractor started the second pair. On these houses, the Small Homes Council specified the methods to be used in their assembly. Techniques used by large scale builders were adapted to meet the needs of small operators.

When work on the second pair of houses was well along, construction on the third pair was started. On this

final pair, improvements were made on the techniques worked out on the previous houses.

To compare the efficiency of the two methods of construction . . . conventional and engineered . . . a system of time analysis was set up. A time study operator was assigned to each pair of workmen, and all operations made by every man were timed and recorded. The time statistics were also broken down into productive and non-productive time.

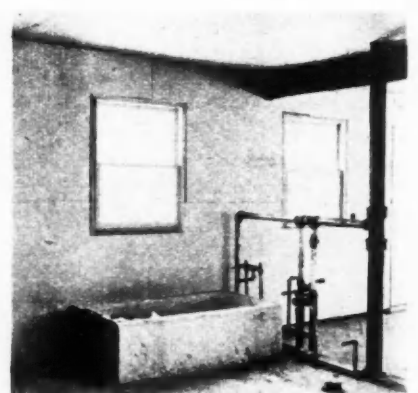
In order to build these houses



APPLICATION of wallboard on exterior



TIPPING a partition into place



PLUMBING pipes placed before partitions

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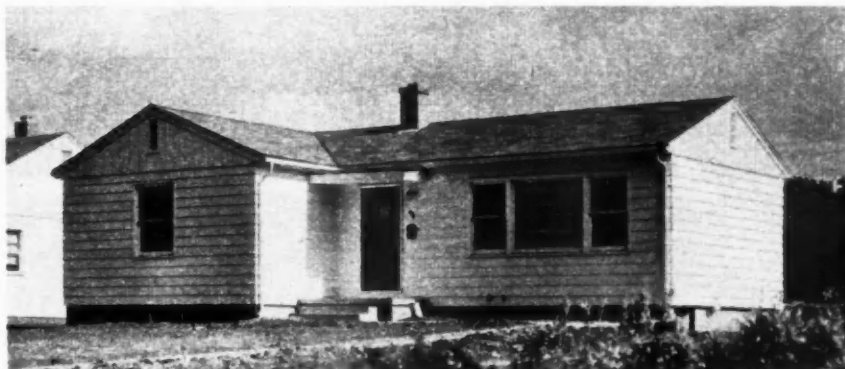
STUDY Reveals Savings

under conditions similar to those found on most jobs, a contractor was chosen to construct all six houses. He was considered a typical small-scale builder. The saving in time which might have resulted from the workmen's increased familiarity with the house were off-set by the fact that they were constantly being confronted with new and different assembly techniques.

The "Industry Engineered" house was chosen for this study. This house is designed to take advantage of savings possible under engineered construction methods. The dimensions of the house are coordinated with dimensions of materials so that lumber, wallboard, brick, concrete blocks, windows and other items fit into the house with the minimum of cutting and fitting. The basic unit of measurement is the module.

The use of precut building materials was one of the principal techniques studied. Much of the delay, expense, and inefficiency of conventional construction methods is due to the custom of cutting and fitting each piece of building material from measurement taken as the work progresses. Savings can be made by cutting from dimensions taken from drawings or framing layouts.

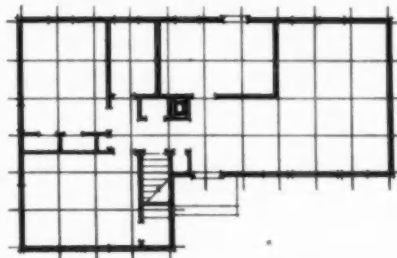
Site assembly of roof trusses, wall panels, gable ends, stairs, and other



ONE OF the frame "Industry Engineered" houses on which time study was conducted

units, prior to their incorporation into the house, follows precutting as a natural step and makes major savings possible. It is easier and more efficient to work on the ground or the floor than from scaffolds or ladders. By assembling sections of the exterior walls of a frame house as far as possible on the floor, and then tipping them into position, costs of wall construction can be reduced. For example: (1) By aligning materials easily in position for nailing. (2) Simplified nailing practices are possible. (3) Direct nailing through the top and bottom plates are possible.

In conventional roof construction, both the top-story ceiling and roof are designed and constructed as separate parts of the house. By designing



TYPICAL floor plan with modular grid

the structural members of the ceiling and the roof as a roof truss, a more efficient and economical construction is possible.

Interior partitions are built in the same manner as the exterior walls, tipping them into position after they have been assembled on the floor.

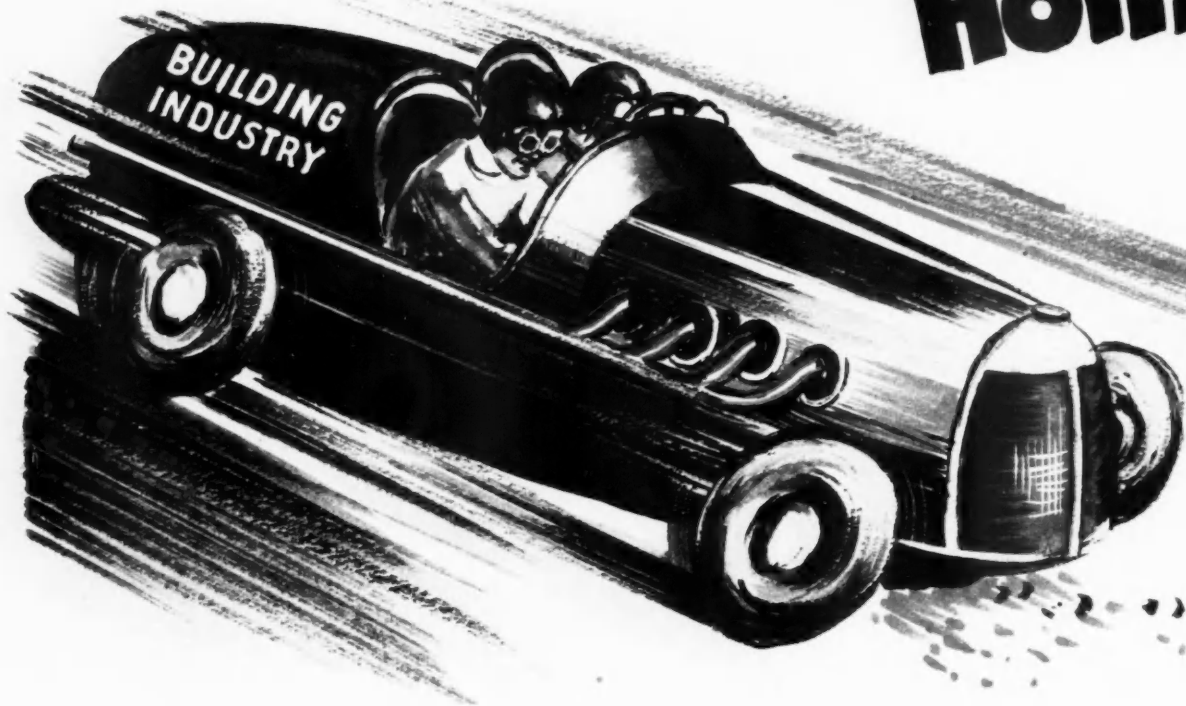
SAVINGS THROUGH ENGINEERED CONSTRUCTION

Operations	Items Included	Man-Hours, Conventional Methods	Man-Hours, Engineered Method†	Man-Hours Saved	Man-Hour Savings in Per Cent	Savings in Total Labor on Job in Per Cent	Savings in Total Cost* in Per Cent
FOUNDATION AND FLOOR	Excavation, footings, foundation, basement floor, floor joist, and subfloor (Page 4)	256.75	231.19	25.56	10	1.2	0.6
EXTERIOR WALL	Structural framing and sheathing (Page 5)	262.32	217.80	44.52	18	2.1	1.0
ROOF	Roof trusses, gable ends, roof boards, and roofing and cornice (Pages 6 and 7)	374.88	276.62	98.26	26	4.7	2.2
INTERIOR	Flooring, wall and ceiling material, interior partitions (Pages 8 and 9)	412.01	251.00	161.01	38	7.8	3.6
MILLWORK	Trim, cabinets, windows, painting (Page 10)	534.39	440.48	93.91	18	4.5	2.1
MECHANICAL	Plumbing (Page 12)	80.30	54.60	25.70	32	1.2	0.7
	Heating (Page 12)	42.97	48.34	- 5.37	- 12	- 0.2	- 0.1
	Wiring (Page 12)	40.25	53.05	- 12.80	- 31	- 0.6	- 0.3
MISCELLANEOUS	Not included in any of the above groups.	75.05	67.19	7.86	10	0.3	0.2
TOTALS FOR ENTIRE HOUSE		2078.92	1640.27	438.65	21	21.0	10.0

(†) An average of the houses built by engineered methods. (*) Material and labor; no allowance for contractor's overhead or profit.

CHART, prepared by Small Homes Council, indicates the savings in man hours between conventional and engineered method

Home st



THE FAR FLUNG housing industry is roaring down the home stretch of another big year. There are frequent optimistic predictions that we shall soon pass the million mark, but regardless of whether we do or don't, the sum total of houses built in 1948, plus the number erected in 1947, will be so great it will make a sizable dent in the housing shortage . . . which is far more than can be said of many other industries still struggling to make things fast enough to meet the prodigious pent-up demand that has been accumulating during the past several years.

Back in the 20's there was a single year when we turned out more than 900,000 homes but they were simple structures compared with what the public demands today. Building materials then were usually in good supply and in most localities there were plenty of willing workers. Bottlenecks, such as harass today's builders, were comparatively unknown. It was a simple job compared with what the industry is up against today.

Ever since that memorable year we have pointed with justifiable pride to the home building achievement that has never been equalled by any other nation . . . a record that stood more or less unchallenged in the United States until the building industry was finally able to shake itself free of war time bureaucratic restrictions and hampering controls and tackle the colossal job of catching up on our home building.

The earlier assumption that the building industry should be able to

suddenly provide the several million homes that were needed and do so at a prewar price was merely to indulge in wishful thinking. No other industry was able to do so overnight, regardless of the simplicity of its product or the efficiency of the production facilities. It is only now that some of them are on their way to getting supply more nearly in balance with demand. A few have already met the spectre of overproduction face to face. Things are beginning to even up.

While all this has been going on the home building industry hasn't been doing as badly as many of its uninformed critics would have us believe. A total of nearly two million homes in approximately two years, isn't enough to knock the props out from under the housing shortage in the entire country, but it has come perilously close to doing exactly that in far more areas than most of our bureaucratic friends would have us believe. Little is being said of such cities and towns where it is now a comparatively simple matter to buy a home, and in some cases to rent one. Only the critical areas are pointed to as horrible examples and the blanket indictment applied to the entire country.

Every time we make such a statement some irate individual invariably tells us, in a few well chosen words, that we simply don't know what we are talking about. He then relates the sordid details of a distress case that proves to his satisfaction that the whole housing situation is getting

worse instead of better, and ends up with the emphatic statement that "it is high time something be done about it."

We are not foolish enough to claim that there are no such distress cases. We are fully aware of the fact that there are countless young couples still having acute housing troubles and we are entirely sympathetic with their plight. On the other hand, we disagree one hundred percent with the all-too-common assumption that "nothing is being done about it." It is our contention that building nearly one million homes a year, for two years in succession, is really and truly doing something about it and that another million homes on top of those we have built, since the present boom got under way, will mark the end of the housing shortage in a surprisingly large number of cities and towns.

In this connection it must not be overlooked that there has always been a housing shortage in certain metropolitan areas and that this *fortunate* situation will, no doubt, continue to be the case. We use the term *fortunate* advisedly and for the simple reason that an over-supply of homes in such cities, as well as any where else, depresses real estate values to the point where the end result to lending institutions and home owners is truly catastrophic. When cities grow fast enough to make it a bit difficult for newcomers to find a suitable place to live, there is little to worry about except the temporary inconvenience of the home seeker. It

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Stretch, Second Lap

by R. E. Saberson



1,000,000 GOAL



is only when the new arrivals are able to get exactly what they want and at their own price that the suspicion arises in their minds that perhaps they may have moved to the wrong locality. "All the homes you want when you want them, and at a price to fit every income" sounds pleasingly Utopian but actually it is not all it is cracked up to be. If any one thinks so it merely is necessary to recall those dismal days of the 30's when homes were a dime a dozen and "For Sale" signs were so thick along the streets they hid the shrubbery. There was no housing shortage in those days!

All of which brings up the question as to what the industry now would be up against if it had been able to build homes at a rate that would have promptly satisfied the abnormal demand.

Had it been possible to complete such a Herculean task over night, there promptly would have ensued a financial upheaval that would have made the 1929 debacle seem like a wave of prosperity.

It will be difficult for home seekers to understand why they are better off in the long run if the housing shortage is solved less rapidly, and more normally, than many of its ill-advised critics are demanding. True, there will be many temporary inconveniences and annoyances but they will be nothing as compared with

what would happen to the financial well-being of these same people if every demand could be satisfied at once and leave little, if anything, to be done in the immediate future.

We are now paying exceedingly high prices for homes, automobiles and most everything else because everybody wants them at one and the same time. Nothing could be worse than to suddenly produce houses in such quantities as to fully and promptly satisfy the needs of every family. What would then ensue requires no great stretch of the imagination.

Our only hope for a continuation of steady employment at good wages is not an immediate over-supply of homes or anything else. If we can level out the exceedingly difficult process of catching up with demand we shall gradually reduce the velocity of the inflationary spiral, obtain better products and come much closer to perpetuating prosperity.

It is our contention that an industry that can turn out nearly a million homes a year, under the exceedingly difficult conditions which have prevailed, writes the final answer quicker, better and more economically, than is possible in any other way.

The construction industry is our great economic stabilizer. When it is busy we hear little about "hard times"—now almost a forgotten term. To try to do too much in too short a time can only result in excessively high prices.

Now that the edge has been taken off the housing shortage, with nearly two million residential units already completed, we shall begin to see more attention given to what home prospects really need and can afford. Maybe it will take another million homes to bring such a situation to full bloom, but in such an event it is encouraging to note we are now on the home stretch of the second lap.

In the meantime there will continue to be trailer camps, quonset type homes and emergency housing in our busiest industrial and military centers, but again this doesn't mean that "nothing is being done about the housing situation." The two million residential units already completed may not measure up to the standard that would have prevailed if the demand had been less acute. Nevertheless, a good start has been made . . . a great industry is gathering momentum . . . competition is beginning to take over.



APPLICATION of various types of glass, glazed tiles, and white stucco causes the exterior to sparkle with cleanliness

Materials Typify Character of Business

THIS FINE dairy processing plant at Everett, Wash., was developed with the thought that it would be good public relations and remain a perpetual advertisement of the business. To further emphasize this thought, materials were used in construction work, both inside and out, to obtain an effect of sanitation and cleanliness.

William Arild Johnson, A.I.A., and Associates, architects, Everett, Wash., have obtained the desired effect in the design of this building through the generous use of glass blocks and other materials with a hard, glazed surface. The dark ceramic tiles of piers and bulkheads, together with the stainless steel of the entrance and frames, are in sharp contrast to the white cement stucco of the walls and canopy. All of these materials add up to a structure that sparkles and exudes a spirit of cleanliness.

The design and layout of this plant are the result of many months of

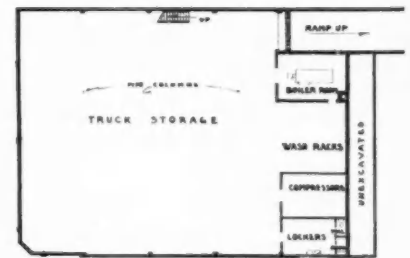
study and research on the part of the architects to obtain an efficient and workable plan and attractive exterior. The processing, storage, bottle washing, and other phases of the dairy plant, are all in a compact group, arranged for the best type of operation. The street corner portion of the building is devoted to a fountain lunch for retail trade. This room is furnished with a center, U-shaped counter and booths. The ramp on the far side of the loading platform provides access to truck storage in the basement. The balance of the basement is devoted to utilities and wash racks.

This building is one-story with basement, both of reinforced concrete frame and floor construction. All walls are of masonry of the curtain type. Large, monitor-type skylights provide the maximum in ventilation and light in all rooms. All interior materials are hard and impervious for sanitation purposes. The finished floors throughout are special, acid-

resisting tile. The basement is entirely fireproof.

A feature that is often overlooked in a commercial building is space for planting. In this case, the owners provided a set back from the property line to establish a continuous planting area adjoining the exterior walls on both street fronts.

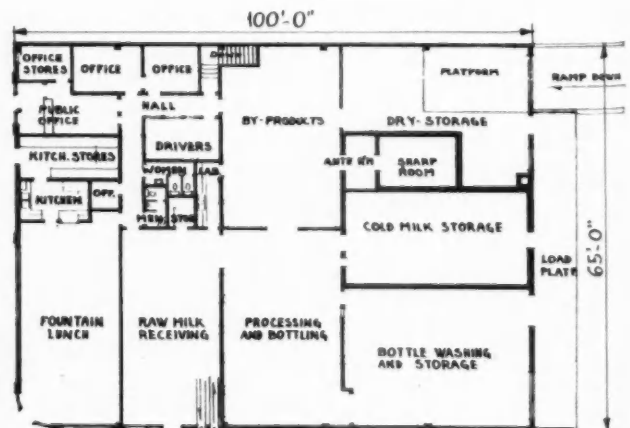
This building, recently opened to the public, was constructed by Elias Moe, builder of Everett, Wash., at a total cost of \$105,000.



BASEMENT PLAN

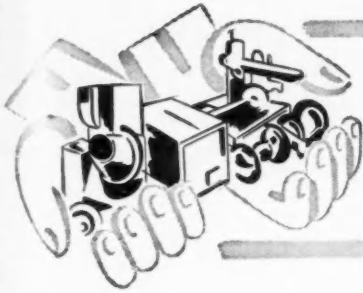


INTERIOR of fountain lunch room with large counter for service



MAIN FLOOR PLAN

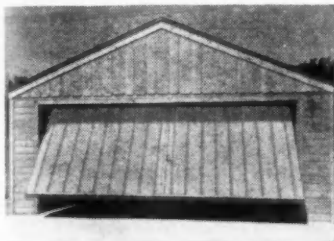




NEW PRODUCTS

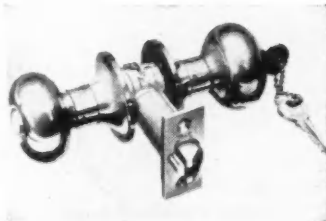
Offered by Manufacturers

GARAGE DOOR AB11812
For 16x7 foot openings, an overhead receding (track) type door is made of galvanized sheet steel that has been hot gal-



vanized and annealed. Door has uniformly coated surface and clinging base for paint. No special priming coat is needed. Manufacturer: Strand Building Products Co., division of Detroit Steel Products Co., Dept. P-101, 1710 Buhl Building, Detroit 26, Mich.

TUBULAR LOCKS AB11841
"Key-in-the-knob," six pin tumbler tubular lock, is applicable to office buildings, schools, apartment houses, hospitals, hotels, stores, factories, and other public buildings and residences. Lock incorporates "pre-installation assembly" designed to reduce

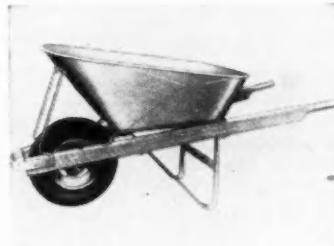


installation time. In several designs, locks are so designed that they can be reversed on the job for last minute changes in floor plans. Application to doors of different thicknesses accomplished by a clamping nut in inner rows. Finished in either polished or dull brass, bronze and chrome. Manufacturer: Yale & Towne Manufacturing Co., Chrysler Building, New York 17, N. Y.

SLIDING DOOR FRAMES AB11827
"In-the-Wall" frames available in standard widths from 2x6 feet, 8 inches, to 3x6 feet 8 inches. Frames for double door installations in these sizes are available. Any size made to order. Metal track in built-up header included. Wear-ever phenolic pressed on ball bearings roll on metal track. Finished wood jambs, available in two widths (for plaster walls and for sheet rock or plywood panel), are locked in metal. Hardware includes single track of aluminum extrusion heat-treated for

strength, 1-1/16 inches high and 17/32-inch wide, pre-punched on 8-inch centers, in lengths to 22 feet; T-Section guide of aluminum extrusion; cadmium plated steel hangers. Manufacturer: Nordahl, 180 W. Alameda Ave., Burbank, Calif.

LIGHTWEIGHT WHEELBARROW AB11815
Wheelbarrow has 3 1/2 cubic feet capacity. Body is made of heavy gauge steel. Cor-



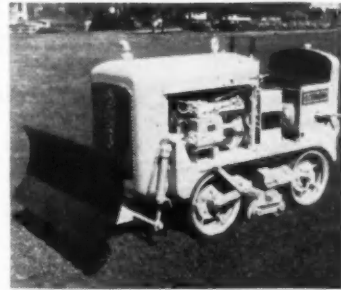
ners overlap, and are welded to provide double thickness. Equipped with 4:00x8:00 pneumatic tire. Wooden handles bolted to tray. Manufacturer: Vanco Products, Inc., 130 S. Weber St., Colorado Springs, Colo.

ELECTRIC RANGE AB11838
Automatic range has lighted pushbutton unit controls that identify heats for different cooking operations on range surface and in oven. Rounded oven-interior corners with heating units sealed in walls, automatic reset oven timer, four surface units with one adjustable for deep-well cooker, and warmer unit with pushbutton switch are incorporated. All controls located



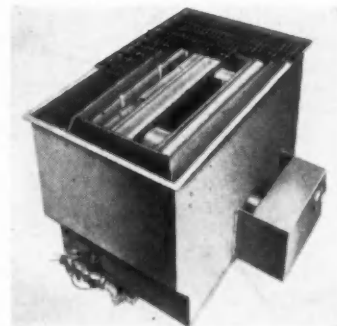
above utensils. Manufacturer: Hotpoint Inc., 5600 W. Taylor St., Chicago 44, Ill.

HYDRAULIC CRAWLER BLADE AB11807
Blade is operated by hydraulic pressure supplied by hydraulic pump. Pump is self-contained unit with pressure valve, hydraulic reservoir and pump in one housing.



Two cylinders, mounted on track guards, move blade up and down, traveling 14 inches above ground level. Blade may be used for back-filling ditches when used in conjunction with a pneumatic back-fill tamper, and can be used for light grading around new developments. Manufacturer: Schramm, Inc., West Chester, Pa.

FLOOR FURNACE AB11836
Temco model 506-1, shallow gas floor furnace, measures 25 1/2 inches over all depth. Unit equipped with porcelain enamel heat

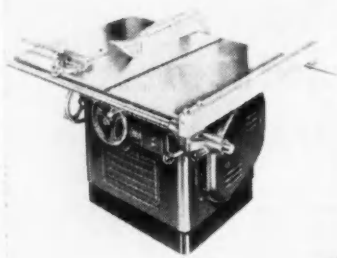


chamber, ceramic surface treatment of type developed by National Bureau of Standards for use on aircraft power plants. Ceramic port burner. Automatic electric temperature controls are optional; when specified by purchaser, they are installed at factory. Compact control assembly is recessed. Capacity, 50,000 B.T.U. Manufacturer: Tennessee Enamel Manufacturing Co., Nashville 9, Tenn.

TILTING ARBOR SAW AB11846
Delta 12-inch tilting arbor saw may be set for speeds of 1800, 2400, 2600 r.p.m., or more. Blade will tilt to right at 45-degree angle and, in that position, cut stock 2 7/8 inches thick. Arbor is carried on permanently lubricated ball bearings. Work is supported in front of saw table by table space of 16 inches. Table, finish-ground, is 38 inches long; 4 feet wide. Blade will cut through 4 1/8-inch stock on square cut. Will do straight ripping, cut-off work, miter cutting, rabbeting, grooving, tongue and

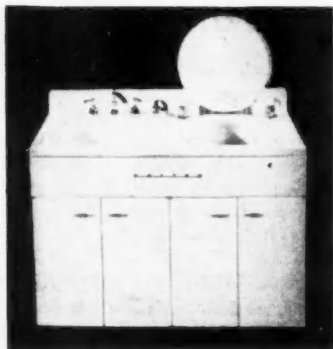
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groove work, dadoing, sticking, and shaping. Used with either 3 or 5 h.p. motor. Manufacturer: Delta Manufacturing Div.,



Rockwell Manufacturing Co., 600 E. Vienne Ave., Milwaukee, Wis.

DISHWASHER-DISPOSAL UNIT AB11842
Kaiser Timesaver Sink, combining dishwasher and disposal unit, is in 48-inch



steel cabinet. Equipped with porcelain work surface, four access doors, full base shelf, mixer faucet and spray attachment. Unit is 36 inches high, 25 inches deep, with 4-inch splashboard. Top assembly, of porcelainized steel, contains sink 19 1/4 inches long, 16 1/4 inches wide and 8 inches deep. Dishwasher is fitted with porcelainized steel lid with concealed gasket set flush with working surface. Manufacturer: Kaiser Fleetwings Sales Corp., 1924 Broadway, Oakland 12, Calif.

ADJUSTABLE WORK PLATFORM AB11808

Made of tubular steel, with all joints electrically welded. Platform adjustable to any

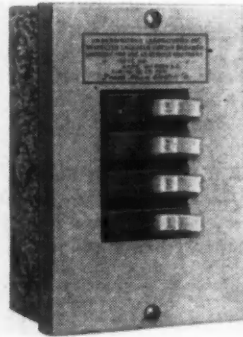


height. Basic individual parts can be assembled into complete unit of any desired height with rigidity and safety. The same standard sections can be used on many installations. Equipment offers versatility

in its application to most off-the-ground jobs, inside or outside. Manufacturer: Bil-Jax, Inc., Archbold, Ohio.

CIRCUIT BREAKERS AB11847

Circuit breakers, built to Underwriters Laboratories' standards, are available for flush and surface mounting. Breakers mounted with independent screws to facilitate removal or capacity changes. Assembly and mounting bracket may be removed to simplify wiring. Suitable for controlling



lighting in garages, residences, business houses, or for controlling small motors on machinery of which motor is a part. Fabricated with Frank Adam A.C. Junior circuit breakers. Manufacturer: Frank Adam Electric Co., 3650 Windsor Place, St. Louis, Mo.

SURVEYING INSTRUMENT AB11829

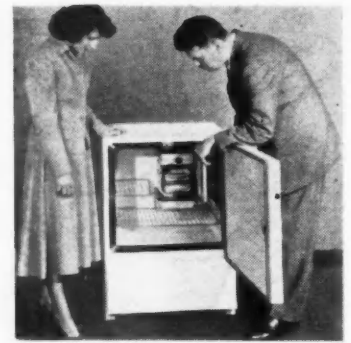
Burt Quadrant Transit may be used for running lines for roads, building lots, foundations, walls, fields, fences, ditches or tiling. Simplified assembly consists of aluminum transit head mounted on swivel stand, leveling base, and 54-inch adjustable tri-



pod. Horizontally, 360 degrees may be surveyed in areas adjustable up to 60 degrees. Vertical range of 60 degrees up or down grade. Contains two spirit levels and plumb bob. Instrument may be used as combination two-way level and try square. Manufacturer: Fenton Crafts, Fenton, Mich.

SMALL REFRIGERATOR AB11845

"Lo-boy" refrigerator, 3.5 cubic feet capacity, is 34 1/2 inches high, 24 inches wide and 22 1/2 inches deep. Optional refrigerator top of formica, may be used as kitchen table top working surface, and increases height of unit to 36 inches. Interior dimensions are 19 inches high, 19 3/4 inches wide, and 17 inches deep. Cabinet liner is of all-welded construction, finished in vitreous enamel. Exterior is finished in polished, baked white enamel.



Condensing unit is 1/8 h.p. "Freon 12" thermic, available for 50 cycle, or 220 volt operation and 110 volt-60 cycle A.C. single phase current. Weight, 231 pounds. Manufacturer: Moss Atlas Corp., 244 Herkimer St., Brooklyn 6, N. Y.

FLEXIBLE COVERED STRIP AB11809

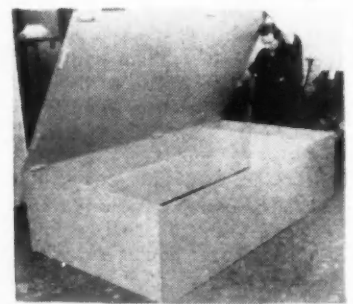
"Tub-Kove," a white pliable strip, is designed to seal cracks at junction of walls and bathtub. May be applied so as to follow contours of cracks. Covers and seals



openings against entry of steam or water. No special tools needed for application. Waterproof, plastic-base cement, applied with brush, seals strip to plaster, wood, tile or porcelain. Strip packaged in 15-foot lengths. Manufacturer: Keller Products Inc., 1880 Roxbury Road, Cleveland, Ohio.

PRE-FABRICATED CLOSET AB11837

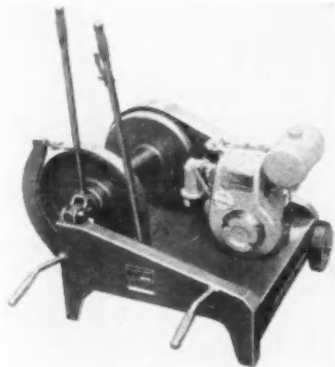
"Milo Cabinet-Wall," pre-fabricated closet, may be used to form partitions between rooms. Backs and sides may be papered or painted to match other walls of rooms. Frames are of suitable lumber, sanded; panels of laminated construction. Lower doors are 3/4-inch thick. Shelves and sides



are 1/2-inch plywood. Bottoms, tops, intermediate horizontal panels, and exposed backs are 3/8-inch plywood. When not exposed, backs may be made of Masonite. Hardware includes extruded aluminum track, steel door guides, stainless steel ball

bearing door hangers, door pulls, stops, hinges, hooks, clothes hanger rods, shelf rests, bolts, screws and nails. Manufacturer: The Mengel Co., Wood Products Div., Winston-Salem, N. C.

ROOFER'S HOIST AB11801
"Model 500," gasoline powered by 4.2 h.p. single-cylinder, air-cooled engine, develops 500 pound single-line pull at 200 feet per minute as standard rating. Optional ratings from 650 pounds at 150 feet



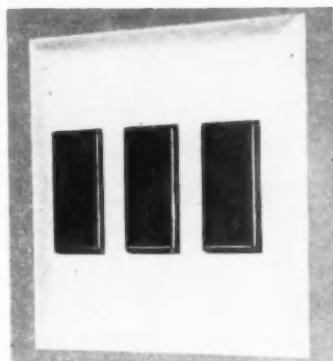
to 200 pounds at 500 feet are available. Weight, 410 pounds. Equipped with pressed steel wheels and wheelbarrow type handles, unit is portable. Designed for hoisting roofer's and mason's materials and other smaller hoisting jobs. Manufacturer: American Hoist & Derrick Co., St. Paul 1, Minn.

FILTER FOR CLOTHES DRYER AB11802
Designed as optional equipment for Bendix automatic clothes dryers, filter traps lint exhaust from dryer as well as fine dust which escapes ordinary screen filter. Consists of container, made of bakelite; screen which fits over container, and hook by



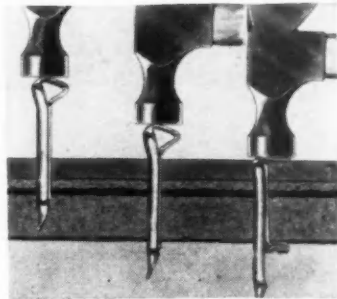
which container is fastened to dryer. Uses water as filtering agent. Container and screen are removable for cleaning. Manufacturer: Bendix Home Appliances, Inc., South Bend 24, Ind.

REMOTE CONTROL LIGHTING AB11806
Touch-Plate low voltage switch system consists of plate push-buttons and relays. Single transformer supplies 24-volt current for operation of all relays in the house. Low voltage wire may be used with system. Push-buttons fit flush to wall; operate under light pressure. A single lighting fixture may be controlled by as many switches as desired. Switches available in single, two and three gang units. The system, with a wide range of special controls, can be



installed by electrical contractor. Manufacturer: Touch-Plate Distributors, Inc., 2038-42 Bay St., Los Angeles 21, Calif.

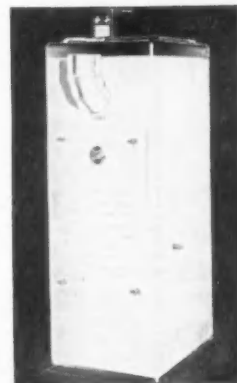
LOCKING NAILS* AB11819
Wood shingles may be locked directly to gypsum sheathing with ES nails. Nails may be driven at convenient points without locating studs. Fastening device consists of two legs, one half enclosing the other, hinged near end and forming triangular



loop at top of nail. When driven into material, last blow of hammer flattens top, causing locking action. Nails of 1 3/4-inch length are of low carbon steel, zinc coated. Weight, 200 pieces to one pound. Elastic Stop Nut Corp. of America, 2321 Vauxall Road, Union, N. J.

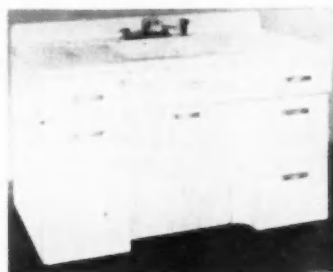
WINTER AIR CONDITIONER AB11840
Vaporizing pot-type, oil-burning, winter air conditioner has capacities of 55,000 and 80,000 B.T.U.'s per hour at the bonnet in floor cabinet or highboy models. Patented

air control device designed to permit smoke-free, clean fire with oil pilot consuming less than 1/2-gallon of oil in 24 hours. "Air gate" mechanism operates so that there cannot be high fire oil supply without adequate air for combustion. Units are approved by Underwriters Laboratories



for zero clearance at sides and back. Blower, filters and automatic humidifier included. Model designation, VH1-55 and 80 and VF1-55 and 80. Manufacturer: The Lennox Furnace Co., Marshalltown, Iowa.

SINK AND CABINET UNIT AB11804
"Deluxe Porcelain" sink and cabinet unit includes 54-inch double drainboard sink top in white, acid-resisting porcelain enamel, with crumb cup strainer and streamlined faucet with spray attachment.



Unit is complete with Tracy steel under-sink cabinet. Features baked-on Du Pont
(Continued to page 156)

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 105 West Adams Street, Chicago 3, Illinois

NAME.....ADDRESS.....
CITY.....STATE.....

AB11801	AB11810	AB11819	AB11828	AB11838
AB11802	AB11811	AB11820	AB11829	AB11839
AB11803	AB11812	AB11821	AB11830	AB11840
AB11804	AB11813	AB11822	AB11831	AB11841
AB11805	AB11814	AB11823	AB11832	AB11842
AB11806	AB11815	AB11824	AB11833	AB11843
AB11807	AB11816	AB11825	AB11834	AB11844
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AB11809	AB11818	AB11827	AB11836	AB11846
			AB11837	AB11847

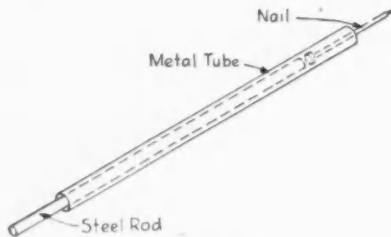
When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.



How-To-Do-It Pointers

How to Make a Tool to Aid Nailing in Hard Places

A 16-INCH by 3/8 inch diameter metal tube with a rod inside, makes a handy tool for aid in nailing in hard-to-get-at places. The



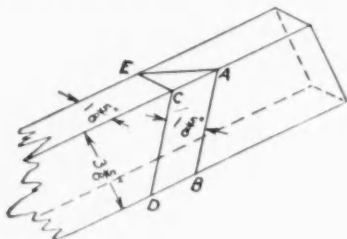
rod should be at least one-half inch longer to work smoothly within the tube.

Insert nail in lower portion of tube. Allow tube to guide nail in position in areas that are unable to be reached in any other manner. Submitted by WILLIAM F. DAVIS, Rome, N. Y.

How to Find the Correct Angle Cut on Rafters

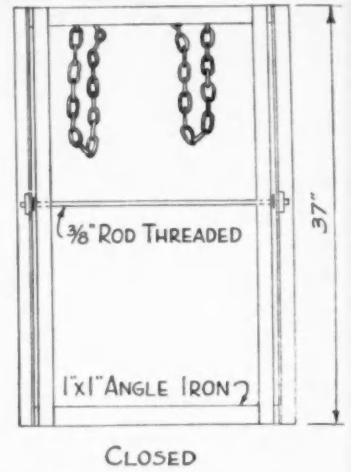
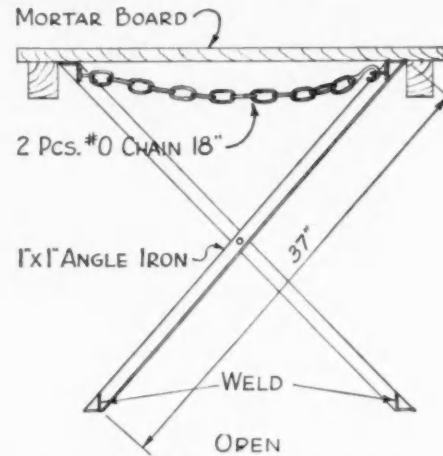
A SIMPLE and foolproof method by which the correct angle cut on hip, valley and jack rafters may be determined is submitted by RUSSELL A. ERICKSON, DeKalb, Ill.

Mark plumb cut "A" to "B." Then use a block the same thickness as the rafter, holding one edge on line



"A-B" and mark line "C-D." Square across the top edge of rafter from "C to E." The line from "A to E" will be the correct bevel cut on rafter. This method will work on all differently-pitched rafters.

How to Make a Folding Mortar Board Stand



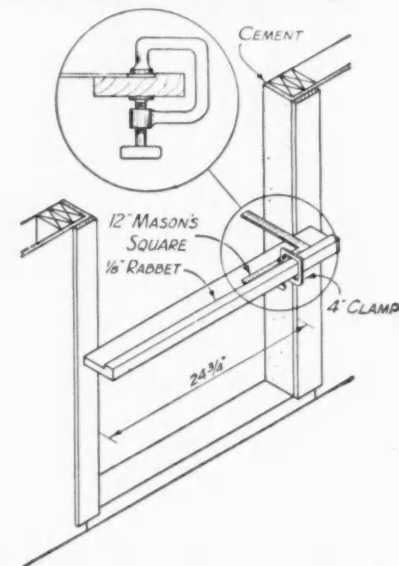
A HANDY folding stand for the use of tile setters and other mechanics can be easily made from steel angle irons.

The stand is light and strong, and can be raised to different heights by

adjusting the iron chains.

The stand is designed to be used in conjunction with the mechanic's mortar board and can be moved easily from place to place. J. G. CALDWELL, San Mateo, Calif.

How to Square Up Jamb To Receive Tile Facing



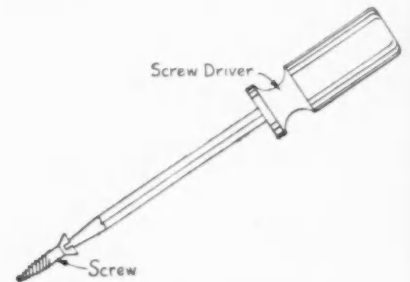
WHEN the jambs are carefully prepared for setting tile in a shower stall door opening, it is easier for the mechanic to hang the door.

The drawing shows the manner in which the jamb can be levelled for the reception of the tile surface. A small steel square is tightly clamped to a specially prepared straight-edge. The straight-edge, together with the steel square, is moved up and down on the face of wood members placed on the outside face of the jambs. Thus, the steel square scrapes off the uneven surfaces of cement and prepares the jamb for receiving the tile and door frame. Reverse position of steel square to level opposite jamb. J. G. CALDWELL, San Mateo, Calif.

How to Make Screw Driver For Special Purposes

TAKE a small three-cornered file and flatten out the point end of the instrument by filing the surface just enough to fit into the slit on the head of the screw. Provide a wooden handle on the other end and you have a screw driver adapted for special purposes.

JOHN J. KILCOYNE, San Diego, Calif., who submits this idea



says: "I have used it many times in the glazing of green houses where a slip will cause the glass to break, and I have found it extremely handy."

\$5 for an Idea

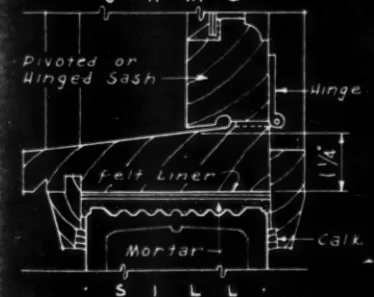
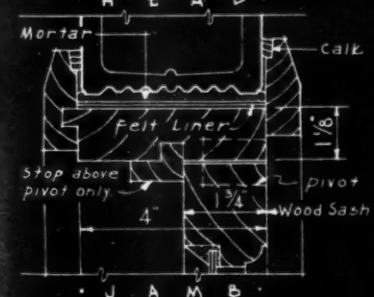
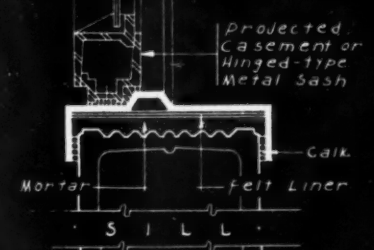
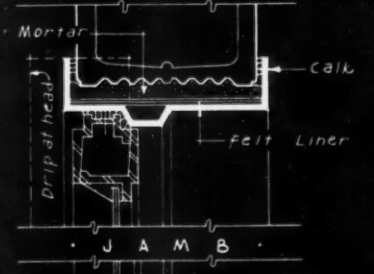
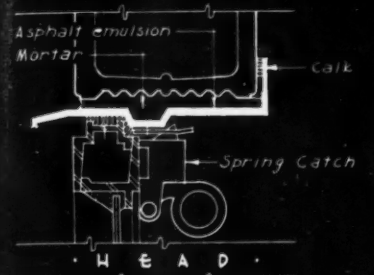
HAVE you a job pointer, a short cut or a method of solving some building problem? We are sure you have some time-and-labor saving kink you would like to pass along. Send us a rough draft of your idea. For any idea submitted which is found suitable for publication, *American Builder* will pay \$5. Address material to Architectural Editor, *American Builder*, 105 W. Adams St., Chicago 3, Ill.

AMERICAN BUILDER'S BETTER DETAIL PLATE

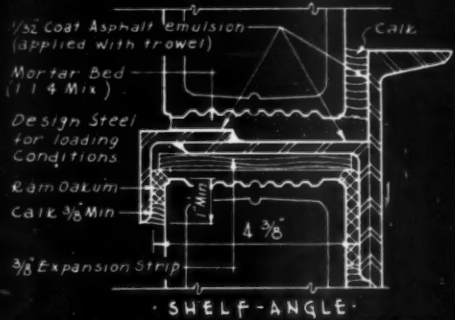
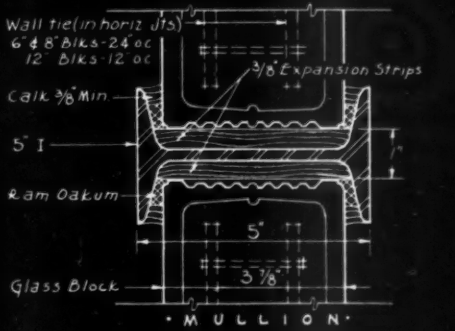
№ D-49 · GLASS · BLOCK · IN · COMMERCIAL · BUILDINGS ·

NOTES: Glass block is available in three sizes: $5\frac{3}{4} \times 5\frac{3}{4}$ inches, $7\frac{3}{4} \times 7\frac{3}{4}$ inches and $11\frac{3}{4} \times 11\frac{3}{4}$ inches. Matching corners in the $5\frac{3}{4}$ and $7\frac{3}{4}$ -inch sizes. Matching radial blocks for curved panels available in the $7\frac{3}{4}$ -inch size only. All blocks are $\frac{3}{8}$ inch thick. Glass block is a non-load-bearing material. Expansion joints are required at head and jambs. Sills require $\frac{1}{32}$ -inch coat of asphalt emulsion before mortar is applied. Minimum panel size is 144 square feet. Maximum horizontal dimension is 25 feet. Maximum vertical dimension is 20 feet. Stiffeners permit

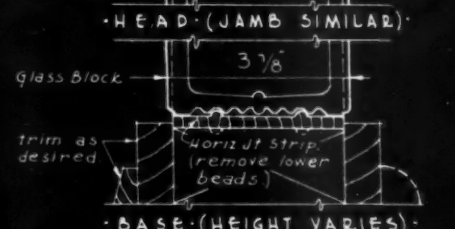
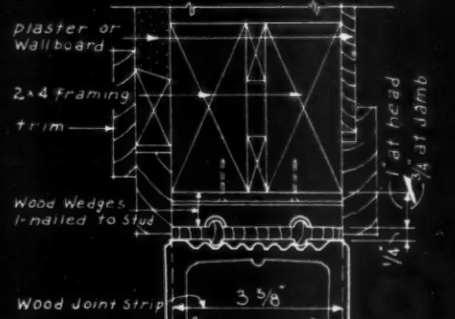
panel size to 250 square feet. Continuous horizontal panels are interrupted by mullions. Continuous vertical panels by shelf angles. Panels are held in place by chases formed by masonry or steel shapes. Small panels may be anchored by panel anchors. All panels are caulked at head and jambs. All mortar joints to be full. Selection of glass block face design determined by orientation of panels and usage of room or area. If building is not air conditioned, ventilation must be considered. Ventilators for use with glass block are available in metal and wood.



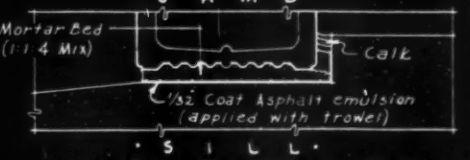
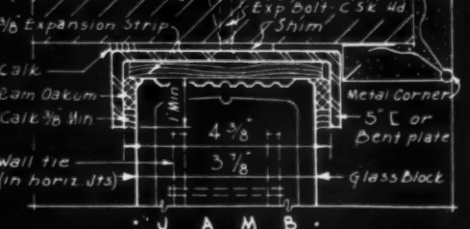
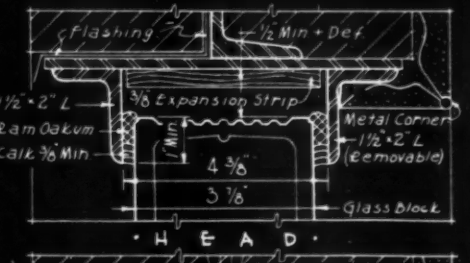
VENTILATORS · METAL & WOOD ·



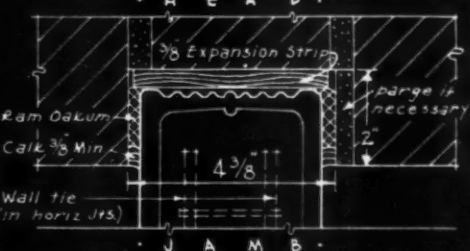
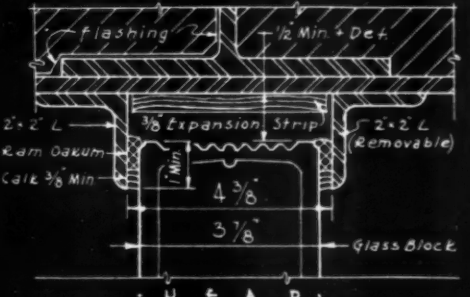
INTERMEDIATE REINFORCING · FOR LARGE PANELS ·



SET-IN-WOOD DETAILS · FOR INTERIOR PARTITIONS ·



8" MASONRY WALLS · SILL DET. SAME FOR 12" WALL ·



12" MASONRY WALLS · USE SILL DET. ABOVE ·

DEALER REVIEW



NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

Lumbermen's Fraternity Names New Officers at Annual Meeting

LEROY H. STANTON, Sr., Los Angeles, was elected Snark of the Universe of the International Concatenated Order of Hoo-Hoo at the 57th annual convention of the lumbermen's fraternity in Los Angeles, September 6 to 9. Stanton succeeds R. E. Saberson of St. Paul, who headed the organization for the last two years. Registration at the convention was about 450.

During the regime of Saberson the organization reached new highs in membership and morale. The initiation ceremony has been streamlined and the original motives of Hoo-Hoo more clearly outlined as motivating factors for meetings and local organizations. During the convention high tribute was paid to Saberson for his outstanding leadership and the hard work he put forth in traveling and speaking throughout the United States at Hoo-Hoo meetings and ini-

tiations. In addition to being in a very sound financial condition, the organization now has a total membership of 6,230.

Principal address at the meeting was delivered by Fritz B. Burns, president of Kaiser Community Homes who gave his impressions under the title, "A Builder Looks at Housing." Other speakers discussed national and international affairs.

Wm. C. Bell, managing director of the Western Retail Lumbermen's Association, and chairman of the education committee of Hoo-Hoo, reported on the uses for the educational kit now available from Hoo-Hoo for retail lumber groups. O. C. Lance, secretary of the National Door Manufacturers Association, chairman of the forest products promotion committee, reported on material available to assist in promotional work by those

(Continued to page 138)

1700 Attend Oklahoma Dealer Convention

MORE THAN 1,700 persons registered at the Oklahoma Lumbermen's Association annual convention conducted in Oklahoma City, October 5 and 6. About 110 exhibitors featured products in displays in the Zebra Room of the Municipal Auditorium.

Walter Kelly of the Hope Lumber and Supply Co., Tulsa, was elected president to succeed Barney Stewart,

Jr., of the Barney Stewart Lumber Co., Oklahoma City. R. T. Currell, of the Currell Lumber Co., Lawton, was named vice president and Alfred L. Leonhardt, of the H. E. Leonhardt Lumber Co., Oklahoma City, was re-elected treasurer. W. M. "Bill" Morgan is manager of this new state association which was organized less than two years ago.



LEFT TO RIGHT—Barney Stewart, Jr., retiring president of the Oklahoma Association; Walter Kelly, Tulsa, new president and R. T. Currell, Lawton, vice president. Alfred L. Leonhardt, Oklahoma City, is treasurer

The President's Column



By N. P. MASON.
President NRLDA

No party platform—no candidates speech so far as I can find out says anything specifically about the restoration and strengthening of the free enterprise system which built America to its present position of greatness. Too many Americans are dreaming of a Utopian security which will come as the result of some new legislation or bureaucratic edict. We are still prone to desire largess from the ruler, even though we know that the undesirability of such a system was well demonstrated in Europe, that it resulted in sending many people with initiative from thence to our shores. Too many businessmen still yearn for the brotherly arm of scarcity to help them succeed without much effort. These palliatives will not work. We can only be paid from what we produce. We in America must save ourselves.

Home ownership in America is not limited to the well-to-do as many of our new thinkers would have you believe. A statistical study recently released by the Census Bureau indicates that in 1947 more than half of America's non-farm families owned their own homes and that 46 per cent of those with incomes under \$2,000 per year also owned their own homes. The Federal Reserve Board has also given out figures which are interpreted to show that in 1947 about 2,200,000 homes were bought by American families. Seven hundred thousand of these were new homes and 1,500,000 of them were previously used homes. Thirty-nine per cent, totaling 858,000 in number, were bought by families with annual incomes less than \$3,000

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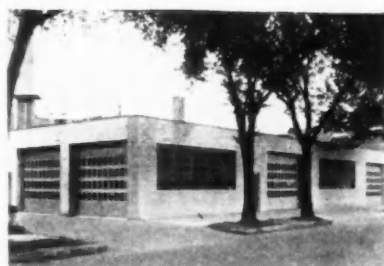
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LASTING good looks and LONG service!



A Ro-Way nationwide network of Selected Distributors are in all principal cities. Consult your classified telephone directory or write for distributor's name.

...here's how Ro-Way makes sure of both'

Line up as many makes of overhead type doors as you wish. Most of them look alike. The factory ingredients are lumber and steel. But examine the finished products. Then you'll see why Ro-Way owners can expect lasting good looks and long service.

FIRST. Look at Ro-Way lumber and millwork. Ro-Way buyers personally select at Western Lumber Mills, the Douglas Fir, Sitka Spruce, etc., we use with Fir plywood panels. Then right in our own millwork plant we produce those superior Ro-Way sections. They look the part.

SECOND. Take a look at the steel parts—the track—the rollers—the springs—all are fabricated within our plant. That's how without extra cost we can give Ro-Way users the advantage of "friction reducing" track, ball-bearing equipped rollers with double thick tread, and tailor-made springs, each one individually power-metered to fit the weight of the door it lifts. Then to fight rust on the metal and keep the painted door free from ugly rust streaks, we Parkerize and paint all metal parts after fabrication.

That's how we make sure Ro-Way Overhead Type Doors whether for residential, industrial, or commercial use have lasting good looks and give long service.

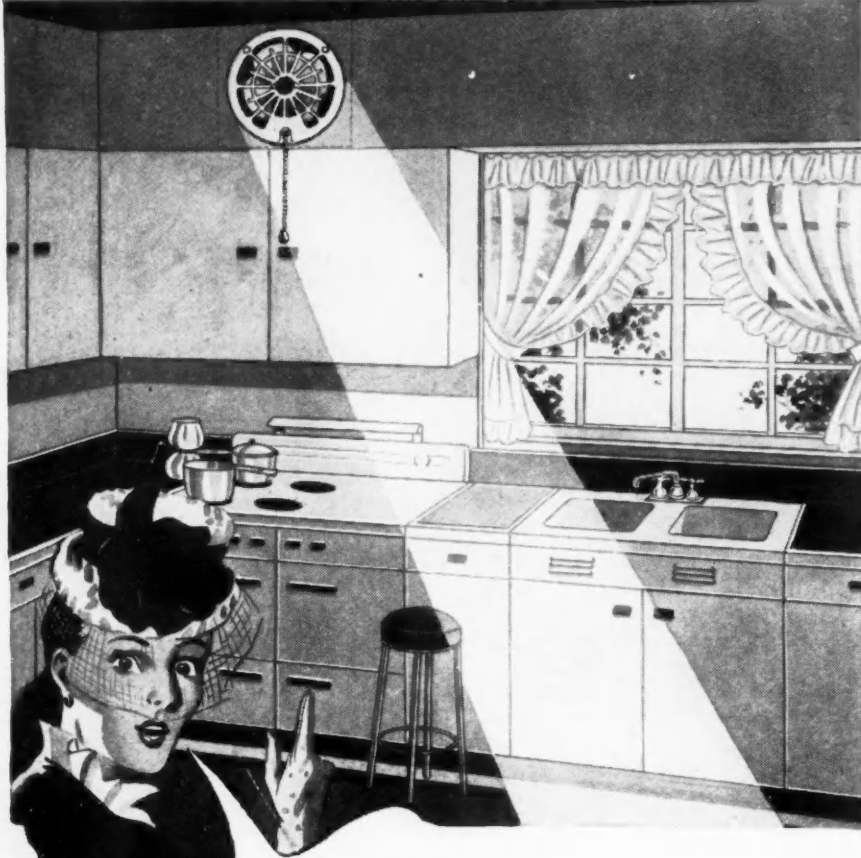
ROWE MANUFACTURING COMPANY
743 Holton Street Galesburg, Illinois, U. S. A.



There's a RoWay for every Doorway!

THE MOST IMPORTANT SQUARE FOOT

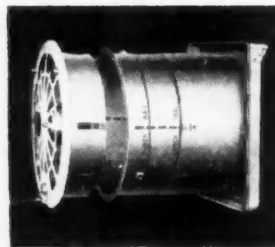
in every kitchen you build!



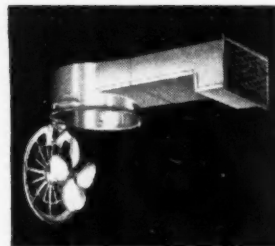
*That's where the
EMERSON-ELECTRIC KITCHEN
VENTILATOR goes!*

It's not a "mere detail" to those who work over a hot stove and breathe steam vapors that can't escape... for hours each day! That's why the square foot dedicated to an Emerson-Electric Kitchen Ventilator is so important... in pleasing clients, in making satisfied homeowners. Priced surprisingly low, easy to install in either brick or frame construction, these sturdy fans whisk out kitchen heat and cooking odors, prevent spread of greasy vapors to living room furnishings and walls. Available in two models, for wall or ceiling installation. For complete data, refer to Emerson-Electric Catalog in 1949 Sweet's Architectural File, or write for free Folder No. B-40.

THE EMERSON ELECTRIC MFG. CO.
ST. LOUIS 21, MO.



Wall-type Ventilator



Ceiling-type Ventilator

EMERSON  **ELECTRIC**
MOTORS • FANS APPLIANCES

Dealer Review

President's Column

(Continued from page 136)

and less than half that number, 396,000 were bought by families with incomes which exceeded \$5,000 per year. Eighty per cent of all the houses sold had price tickets under \$10,000 and 40 per cent were priced under \$5,000. Such are the conclusions of the United States Savings and Loan League after studying these government reports.

Are you an average dealer?

Estimates just released by the Domestic Distribution Department of the Chamber of Commerce of the U.S. indicate that the average retail lumber and building material dealer of the U.S. will serve a community of 2,900 people and have an annual business of \$140,000 during 1948. Only two establishments in his community will top his sales volume. They are the department or general merchandise store and the motor vehicle dealer. The average customer will spend 21.9 per cent of his income for groceries, 12.4 per cent of his income for direct taxes, 8.5 per cent of his income for apparel and only 8.1 per cent of his income for housing.

Would you like to rent living quarters?

Here is good news for those who do. More rental housing is being built in America in 1948 than previously. Figures just released by the government covering the first five months of 1948 show that one unit out of every five built was a rental unit compared to only one in every ten in 1947. Remember too that we built about 28 per cent more units in 1948 than in the same period in 1947. This is the sort of thing you should be telling to your home folk.

The courts of the land are having

a profound effect on this industry. First, it was the U.S. Supreme court with its decision outlawing the basing point system of pricing cement, and now I read that the New York Supreme Court has ruled that \$27 a day is a proper wage for a bricklayer.

Hoo-Hoo Officers

(Continued from page 136)

interested in forest products.

Other members of the Supreme Nine elected to work with Snark Stanton are: Martin T. Wiegand, Washington, D.C., Senior Hoo-Hoo; Martin J. McDonald, Port Arthur, Ontario, Canada, Junior Hoo-Hoo; E. W. Kettley, Chicago, Scrivener; Thomas A. Donlin, St. Cloud, Minn.,

(Continued to page 140)



You can depend on Bruce for **STYLE** in hardwood floors

■ Style is a plus value that lifts anything out of the class of the ordinary, makes people want it. Some products have style. Others do not.

Today home buyers everywhere are very conscious of the value of style . . . more so than ever before. They seek it in the design and in the individual features of their homes.

In floors, Bruce offers style that is soundly based on natural beauty and good design. This style is found in all three types of Bruce Hardwood Floors . . . distinctive

types which provide a choice to fit individual preferences and architectural trends. There is nothing temporary about this style. It lasts through the years with undiminished beauty and appeal.

When you add style to all the other familiar qualities of hardwood flooring, the result is completely satisfied home owners. That is exactly what you get with Bruce Hardwood Floors—manufactured by E. L. BRUCE CO., MEMPHIS, TENN., world's largest maker of hardwood floors.



BRUCE HARDWOOD FLOORS

Prefinished and Unfinished

When bathroom floor space is at a premium...

The FIAT BUILT-IN *Cadet* Model 19-B solves the problem easily because when completely recessed it takes up no bathroom floor space at all.

Not only is the Built-In Cadet a champion shower for remodeling where bathrooms are created out of the small space afforded by closets and odd corners, but in new construction it presents stimulating possibilities in bathroom layouts and design particularly interesting to the architect and builder.

The cabinet can be completely recessed or partly set out to line up with lavatory or other fixtures as illustrated. The exclusive Fiat escutcheon type door frame conceals the joint between wall and cabinet stiles providing a clean cut appearance that gives a new look to bathrooms.

In addition, the Built-In Cadet incorporates some of the newest improvements in shower cabinet construction such as the elimination of all exposed screw heads and loose joining seams that collect dirt. The smooth, clean, interior is a distinct advance in shower cabinet construction that owner users will appreciate.

The Zephyr glass door is recommended for Built-In Cadet installations because it adds so much to the appearance and utility of the shower at so little added cost. Owners often refer to the Built-In Cadet as the "glass shower" because the glass door is the only part exposed in the bathroom.

Size 36" x 36" x 80", receptor precast terrazzo with cast-in drain. Walls, bonderized, galvanized steel, finished with white baked-on synthetic enamel. Zephyr or Dolphin glass door, or shower curtain can be installed on the Built-In Cadet.

Metal Manufacturing Company

Chicago 13, Illinois

Long Island City 1, New York

Los Angeles 33, California

IN CANADA—Fiat showers are made by Porcelain and Metal Products, Ltd., Orillia, Ontario

Dealer Review

(Continued from page 138)

Bojum; Lynn Boyd, Pampa, Texas, Jabberwock; William C. Bell, Seattle, Wash., Custocatian; Paul P. Belenger, Jackson, Miss., Arcanoper; Thomas M. Ralston, New York City, Gurdon.

Next year's annual convention will be held in Kansas City, Mo. The convention dates always include the ninth day of the ninth month—September 9. Definite dates for the Kansas City meeting, however, will be announced later.

Changes Announced for Convention Schedule

CHANGES AND additions in the dealer association convention schedule published in the October issue of *American Builder* are as follows:

Dates of the Arizona convention changed to May 6, 7 and 8.

The Western Retail Lumbermen's Association will meet at the Olympic Hotel, Seattle, Wash., January 27, 28 and 29 and will have exhibits.

Middle Atlantic Lumbermen's Association at the Bellevue-Stratford Hotel, Philadelphia, February 9, 10 and 11, with exhibits.

Southern Sash and Door Association to Meet

THE 9th annual winter meeting of the Southern Sash and Door Jobbers Association will be conducted at the Roosevelt Hotel in New Orleans, La., December 1, 2 and 3.

Four Year Courses in Light Building Construction Now Offered by 32 Institutions

DURING the past several years, many colleges and universities have become interested in offering four-year courses designed especially for training personnel planning to enter various segments of the light construction industry. Existing courses in architecture and engineering have for years trained students to follow careers in the heavy construction industry. No training was offered for work in the light construction industry, which embraces homes, farm buildings, stores, garages, small industrial buildings of all kinds and the general field of structural repairs, remodeling and improvements.

Thirty-two universities and colleges now offer a four-year degree course in the light building construction industry. These courses must not be confused with the 30-day training courses which have been sponsored so generally in all sections of the

(Continued to page 142)

Use Both..

SISALATION and SISALKRAFT

for insulated **DRY WALL** construction
at new low cost!



This new insulated DRY WALL construction meets
FHA Vapor-Barrier Requirements (Class A, Federal Specifications UU-P-147)

This new insulated DRY WALL construction (SISALATION plus SISALKRAFT) combines insulation and vapor-barrier advantages at very low cost . . . helps stop passage of harmful moisture into walls! SISALATION, bowed in between studs, provides TWO insulating air spaces, and its

reflective surface helps keep homes warmer in winter, cooler in summer. Heavily reinforced by cross-laid sisal fibres, tough and strong, SISALATION and SISALKRAFT remain in place, permanently and effectively, for the life of the building. Here is quality construction with true economy!

Write today for further information and samples of these two products.

The SISALKRAFT Co.

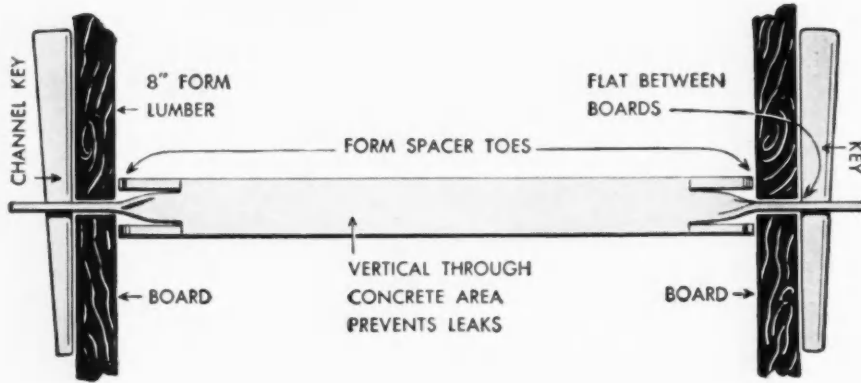
Chicago 6 • New York 17 • San Francisco 5



Modern
DRY WALL CONSTRUCTION

The SISALKRAFT Co., Dept. AB, 205 W. Wacker Drive, Chicago 6, Ill.
Please send more information, samples and where I can buy SISALATION and SISALKRAFT. I am an Architect Contractor
 Other.....
Name.....
Address.....
City & Zone..... State.....

PACO CONCRETE-FORM SPREADER-TIES



NO { permanent forms
walers
spreaders
wire or bolts

{ straighter
smoother
stronger
lower
cost

WALLS

Paco concrete-form spreader-ties provide the fastest, most economical method of setting up forms that has ever been devised. One 5-man crew completed nine basements, 24 ft. x 32 ft. in eight days. Forms removed after 18 hours.

Ties rest vertically in form; permit easy flow of concrete; eliminate air spaces and assure permanently dry wall. More than 1,000 walls have been poured without a single failure.

IMMEDIATELY AVAILABLE

Paco spreader-ties are in full production. Ample stocks are maintained to assure immediate shipment in any quantity.

PRICES and SIZES

A complete range of sizes from 6-inch to 36-inch length is available. 8-inch ties, \$47.50 per thousand; 10-inch ties, \$50.00 per thousand. Keys, fit all sizes, \$42.00 per thousand. Keys are retained as permanent equipment. Prices on other sizes quoted on request.

FREIGHT PREPAID ON INTRODUCTORY ORDERS

Where Paco ties are not available through your regular dealer we will ship C.O.D., freight prepaid, with schematic drawing and instructions. Mention name of dealer when ordering.

JOBBERs and DEALERs WANTED

Write, now, for sample tie, prices and discounts.

Dealer Review

(Continued from page 140)

country by dealer associations. The four-year courses lead to college degrees.

Institutions now offering the four-year training in light construction are:

- University of Tennessee, Knoxville, Tenn.
- Alabama Polytechnic Institute, Auburn, Ala.
- University of Minnesota, St. Paul, Minn.
- Massachusetts Institute of Technology, Cambridge, Mass.
- Michigan State College, East Lansing, Mich.
- Rensselaer Polytechnic Institute, Troy, N. Y.
- University of Denver, Denver, Colo.
- New York State College of Forestry at Syracuse University, Syracuse, N. Y.
- Georgia School of Technology, Atlanta, Ga.
- Oregon State College, Corvallis, Ore.
- University of Wisconsin, Madison, Wis.
- University of New Hampshire, Durham, N. H.
- Kansas State College, Manhattan, Kans.
- Colorado A. & M. College, Fort Collins, Colo.
- University of Kansas, Lawrence, Kans.
- University of Maine, Orono, Me.
- Massachusetts State College, Amherst, Mass.
- Oklahoma A & M College, Stillwater, Okla.
- University of Idaho, Moscow, Idaho.
- Mississippi State College, State College, Miss.
- Pennsylvania State College, State College, Pa.
- Texas A & M College, College Station, Texas.
- State College of Washington, Pullman, Wash.
- University of Florida, Gainesville, Fla.
- Iowa State College, Ames, Iowa.
- University of Illinois, Urbana, Ill.
- University of Wyoming, Laramie, Wyo.
- University of Utah, Salt Lake City, Utah.
- University of Kentucky, Lexington, Ky.
- Louisiana State University, Baton Rouge, La.
- Virginia Polytechnic Institute, Blacksburg, Va.
- Montana State College, Bozeman, Mont.

PACO 327 SOUTH MARKET ST. • WICHITA 2, KANSAS

ONLY Numetal WEATHER STRIP

has all these

EXCLUSIVE FEATURES

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 humproof.

Easily installed without removing windows or doors.

Small hammer and household scissors only tools needed.

For DOORS and WINDOWS

How to Paste Numetal on Doors



Complete

in a handy package ready to hand your customer

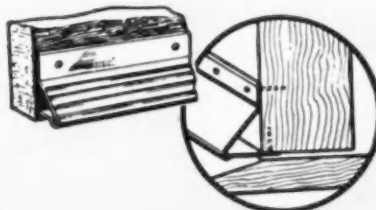
Window sets packaged for 28", 30", 32", or 36" size double hung windows. Door sets packaged for 32"x80" and 36"x84" sizes, or for any special size required. Each set complete with weatherstrip, accessories and instructions.

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

DRIP CAPS for doors and casement windows

At right, No. AFB, Brass. Furnished in any length. Holes punched, nails furnished. 20-gauge, 1 1/2" wide.

At right, No. DCB, Brass. A very effective rain drip. Very easy to install, no special rabbeting required. Furnished in any length.



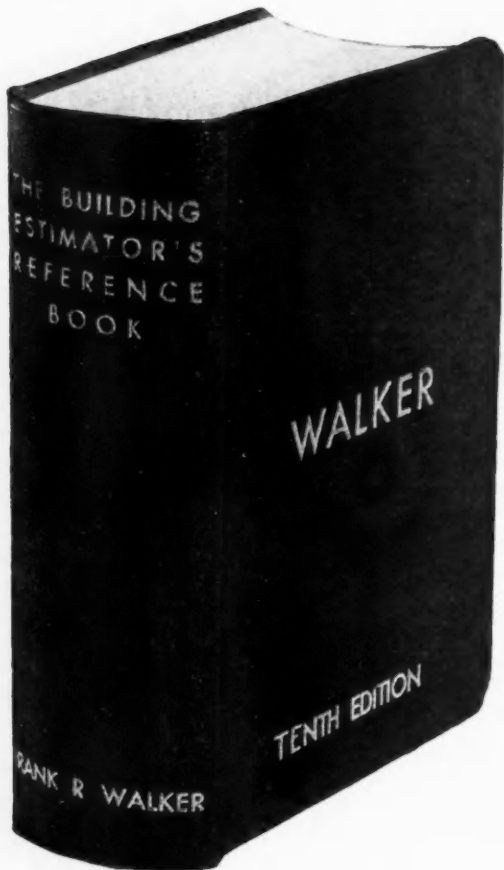
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OKLAHOMA CITY 1, OKLAHOMA

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The Building Estimator's Reference Book

By Frank R. Walker



1700 pages, 1000 illus., 1000 tables,
25-page index, 4½ x 6½, flexible

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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.

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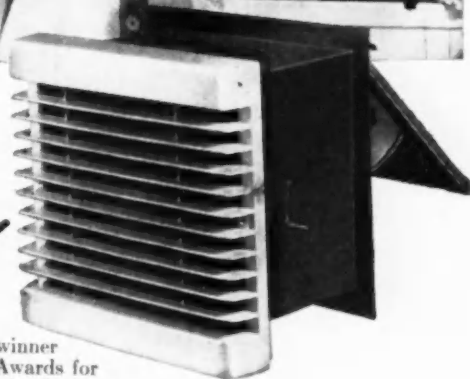
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The Vest Pocket Estimator

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.



*Build your reputation well—
Be smart! Install Aeropel!*



Aeropel Kitchen Ventilating Fan—winner of two Fine Arts Awards for beauty and utility in the home

READ WHAT THESE BUILDERS SAY:

"I installed 350 Aeropels in a recent Housing Project. Tenants were delighted with them—so am I." F. S. Co.

"We consider it good business to install Aeropel Kitchen Fans. My customers say they're swell. We installed 97 in one building." U. V. Co.

"An Aeropel makes a hit with a prospect's wife every time . . . wouldn't build a house without one." G & E Co.

"I'd just like to say this: There isn't a better Kitchen Fan made than Aeropel." K. C.

AMERICAN BLOWER

Be modern—make your houses sell faster—build satisfied customers and make more profit by installing low cost, whisper-quiet, trim appearing, Aeropel Kitchen Ventilating Fans. Ask your supply house, call our nearest branch office or mail coupon below for data.

**AMERICAN BLOWER CORPORATION, DETROIT 32, MICH;
CANADIAN SIROCCO COMPANY, LTD., WINDSOR, ONT.**

Division of **AMERICAN RADIATOR & Standard Sanitary CORPORATION**



AMERICAN BLOWER CORPORATION
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Please send me Aeropel Booklet FREE.

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For Bathroom Improvements

WOMEN today appreciate the fact that only Vitreous Plumbing Fixtures are easy to clean and keep clean. More important is the fact that Universal Lifetime Plumbing Fixtures are available in a variety of models for bathroom improvements.

UNIVERSAL SANITARY MFG. CO.
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VITREOUS PLUMBING FIXTURES



Catalogs and HOW-TO-DO-IT INFORMATION

474—METAL MOULDINGS AND ACCESSORIES—distributed by The Loxite Moulding Co., 1217 W. Washington Blvd., Chicago 7, Ill., are described in a 70-page, well-illustrated catalog. Tools and fasteners are also shown, as well as display unit ideas.

475—SALES-INSTALLATION-OPERATION-MANUAL—with service reference guide, available from Calcinator Div., Valley Welding and Boiler Co., Bay City, Mich., gives complete construction details of the Calcinator automatic disposal unit. The 30-page manual contains installation diagrams, specification tables, and numerous illustrations.

476—CANNON PATHFINDER LIGHT—is the subject of a bulletin on the Cannon Pathfinder light offered by Cannon Electric Development Co., 3209 Humboldt St., Los Angeles 31, Calif. Designed to illuminate steps, walks, driveways, and other outdoor areas.

477—FIRE-RETARDANT WOOD—is the title of a 12-page booklet issued by the Wood Preserving Division of Koppers Co., Inc., Koppers Building, Pittsburgh, Pa. Pictures of burning tests are shown, and standard specifications for fire-retardant treatment with CZO (FR), developed by Koppers, are included.

478—REGISTERS AND GRILLES—manufactured by Air Control Products, Inc., Coopersville, Mich., are described and illustrated in a 24-page catalog. Engineering data, specifications and diagrams are included.

479—SHEET METAL BUILDING PRODUCTS—Metal lath, steel ceilings and wire products are discussed in a 56-page cata-

log issued by Berger Manufacturing Div., Republic Steel Corp., Canton, Ohio. Freight per square on all forms of galvanized roofing and siding, standard roof pitches, and roofing scales are listed.

480—RESIDENCE STEEL CASEMENTS—An eight-page catalog of residential steel casement windows has been issued by Detroit Steel Products Co., 3101 Griffin St., Detroit, Mich. The catalog is liberally illustrated with architectural drawings and it includes plans and perspectives of some of the industry-engineered houses. It pictures Fenestra residence steel casements.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department (November, 1948)
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:

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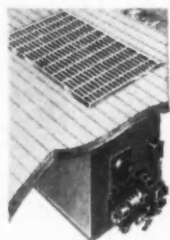
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American Builders Recommend

KRESKY THE FORCED AIR INDUCTION OIL HEATING

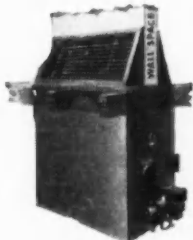
BECAUSE KRESKY IS THE SOLUTION TO ANY HOME HEATING PROBLEM

No matter the size of the house . . . or whether located on top Pike's Peak or in the lowlands . . . with or without a basement . . . or if the preference is for forced warm air circulation, radiant heating, or air conditioning heating, there is a dependable, money saving automatic KRESKY Model designed to fill the need.



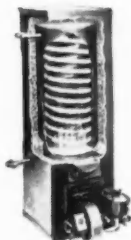
KRESKY OIL FLOOR FURNACES

Kresky Oil Floor Furnaces require no basements, built in sizes from 40,000 to 112,800 BTU per hour. Automatic or manual controls.



DUAL WALL REGISTER MODELS

Even more floor space is made useable if the Kresky Floor Furnace is used with dual wall, instead of flat floor register.



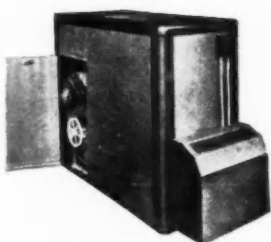
WATER HEATERS FOR RADIANT SYSTEMS

You can save up to half on the cost of a radiant system heating plant with a Kresky automatic auxiliary water heater, available in size ranging from 60 to 250 gallons recovery of 80 degrees per hour, or 56,000 to 169,000 BTU per hour.



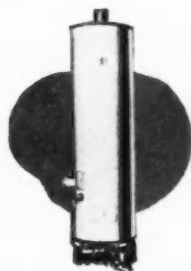
HIGHBOY FORCED AIR MODELS

The Kresky Utility Highboy Forced Filtered Air Furnace requires only the space of a small closet, is available in two sizes: 67,000 and 112,800 BTU per hour. The portable cold air intake and filter case permits installation on either side, or under the unit.



WARM AIR CONDITIONING BASEMENT FURNACE

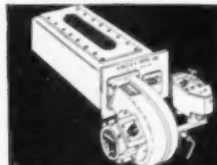
Even if the basement is planned for a game room, the compact, attractively finished Kresky Air Conditioning Furnace will add to the appearance. 72,800 to 169,200 BTU sizes.



AUTOMATIC STORAGE WATER HEATERS

The Kresky automatic oil burning storage water heater, available in 20 to 100 gallon sizes, with patented heat trap flues assuring fast recovery, furnishes all hot water required.

THE KRESKY BURNER MADE OIL HEAT LOW COST HEATING



This is the famous Kresky Patented forced air induction oil burner, the heart of every Kresky model. This is the burner which will give your customers, as it is giving to thousands of home owners, the type of heat they desire. Quick heat, carefree heat . . . and soot-free heat even with poor draft conditions. Your Kresky dealer will be glad to demonstrate the superiority of the KRESKY burner.

YOU CAN INSTALL KRESKY UNITS WITH LESS COST

Every KRESKY Unit is engineered to specifications...factory tested and inspected. This means even if you're building with pre-cut materials, on arrival the KRESKY Units fit into the framing perfectly. Heating contractors know this, and also that less time is required to install a KRESKY.

KRESKY OFFERS YOU ON-THE-SPOT SERVICE, TOO

Through a nationwide network of distributors and dealers, authoritative KRESKY advice and service is as near to you as your telephone. If you do not know your KRESKY Dealer, fill out this form and mail today.

Kresky Superiority Can Be Demonstrated

KRESKY MFG. CO., INC.

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PETALUMA, CALIF.



KRESKY MFG. CO., INC.

601 Second Street, Petaluma, Calif.

Please send me the name of your nearest dealer

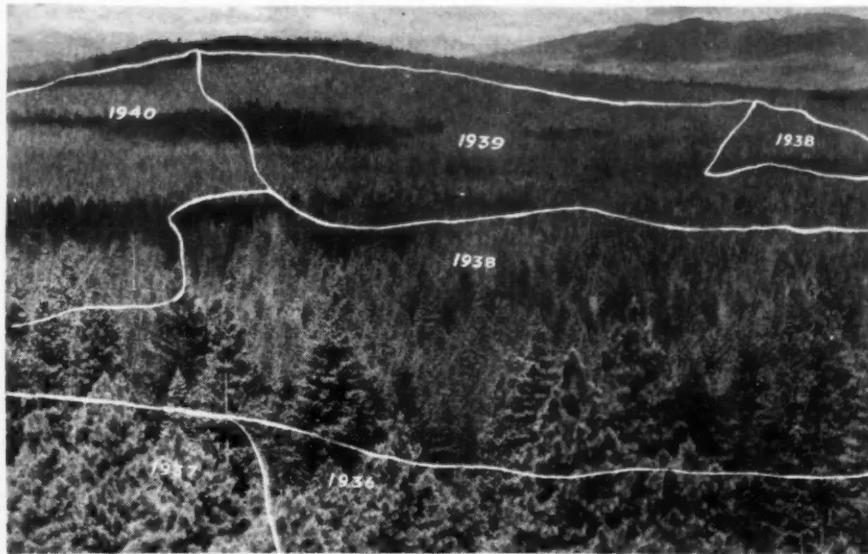
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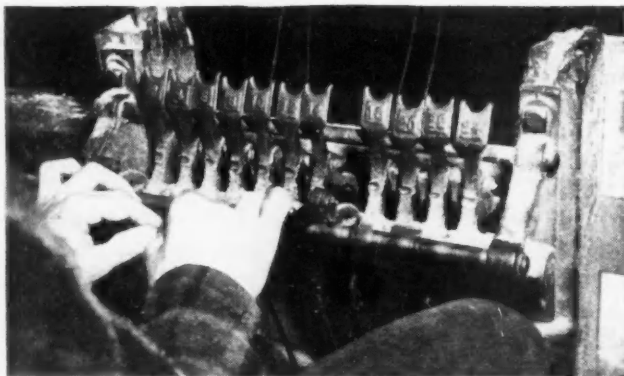
Progressive forest management...



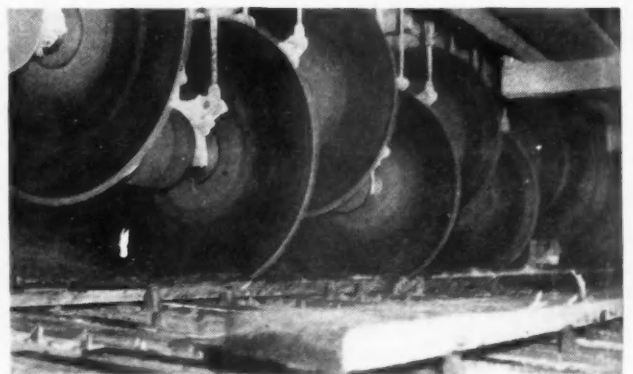
Areas logged by the Weyerhaeuser Timber Company at Klamath Falls, Oregon, during the years indicated in the illustration. From a distance it is difficult to see that the timber has been logged. Dark patches are cloud shadows.



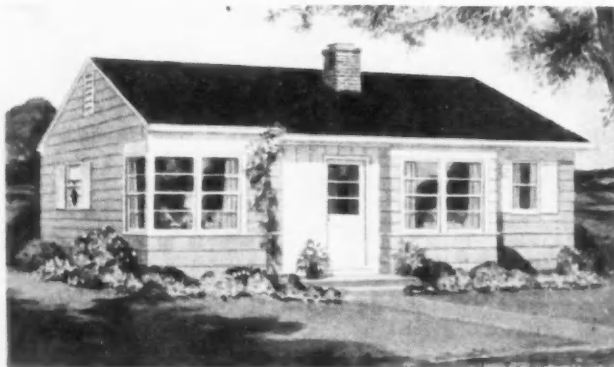
Nature has started a thrifty stand of new forest; the tall straight trunks will make fine lumber in future years.



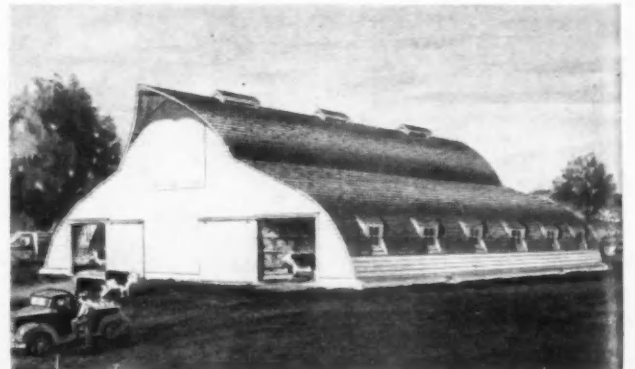
The "keyboard" of the "piano player" in a lumber mill. This particular trimmer has 13 saws, spaced at 2-foot intervals, and will handle up to 24 feet of lumber. The levers held down show that a 16-foot piece is being trimmed.



Close-up of trimmer saws. Each is individually controlled. The piece going through is practically all bark at this end and the trimmerman has dropped his saws at 4-foot intervals, slashing the piece into the only material for which it has value—fuel.



Design No. 4133 is the featured November home, the latest monthly addition to scores of designs in the Weyerhaeuser 4-Square Home Building Service. Subscribers to the Service get a complete promotional kit on this design together with blueprints and material lists.



The huge loafing and feeding barn is one of the many designs from the Weyerhaeuser 4-Square Farm Building Service. It is designed to be built with glued laminated arch rafters; strong, single-unit framing members that run from foundation to roof ridge.

Progressive lumber merchandising

MANAGEMENT of forest resources finds its closest parallel in plain dirt farming.

Forest management is also concerned with crops . . . ever-growing crops of timber . . . with crop cycles that are measured in terms of years, instead of seasons.

Progressive forest management as practiced by Weyerhaeuser is based on a policy of permanent mill operations within prescribed timber areas. In this program the timber harvest for each year is prudently scheduled.

And as the merchantable timber is cut, seed blocks are left or selective logging and manual planting are practiced as a means of recropping the forest lands. Each year this scheduled harvest continues . . . until at the beginning of the next cycle, mature trees will again be harvested from the new growth.

As a further assurance of balancing timber harvest with timber growth, Weyerhaeuser also follows the practice of protecting the timber from the ravages of fire, insects and disease.

Modern harvesting delivers more usable forest products to the processing sites where mature logs are converted into a wide variety of building materials and other products which contribute immeasurably to our national economy.

Weyerhaeuser also sees the need of progressive lumber merchandising. This begins

with good products . . . with lumber that is properly seasoned and carefully manufactured in precision lengths and sizes . . . lumber that is ready to use, which eliminates needless sawing, fitting and material waste and reduces construction costs. And to further help home owners and farmers obtain greater value from good lumber, Weyerhaeuser makes available through retail lumber dealers two authoritative building services.

**THESE TWO
POLICIES
ARE INSEPARABLE
IN
WEYERHAEUSER
OPERATIONS**

The Weyerhaeuser 4-Square Home Building Service offers home planners scores of designs of modern homes for study and consideration. Each home is designed by a leading American architect and engineered by Weyerhaeuser. Now, through this Service, even the builders of small homes can receive all the benefits that flow from good design and sound construction.

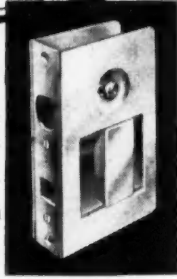
The Weyerhaeuser 4-Square Farm Building Service brings to farmers a comparable help in the planning of farm buildings. Designs for every type and size of farm structure are available. Agricultural experts and farm management people set up the functional requirements of each building and engineers design the structures to meet these requirements . . . sound, economically constructed, durable, wind-resistant buildings.

Progressive forest management and progressive lumber merchandising are inseparable policies in Weyerhaeuser operations.

**WEYERHAEUSER 4-SQUARE
LUMBER AND SERVICES**



THE NEW ADJUSTABLE
RITE-LOCK
FOR SLIDING DOORS

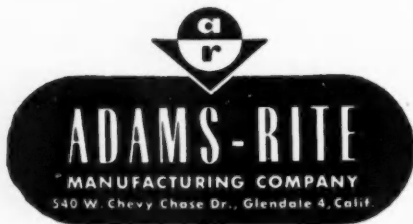


- For Entrance Doors, Bath and Inside Sets.
- Solid Brass Exterior.
- Three Escutcheon Types.

RITE-LOCK adds distinction and convenience to today's sliding doors. It's new, compact, trouble-proof...fits almost any thickness of door. The latching action is positive and releases with a natural sliding movement of the bar in the cup. For convenience and economy a finger pull is formed in the face plate. Look at these advantages:

- ★ Adjustable in width from 1-1/8" to 1-15/16"
- ★ Installs as a single assembly, requiring only a 3-1/2" x 2-5/8" notch
- ★ Adaptable to right or left hand doors
- ★ Outer case measures only 4-1/2" x 2-7/8"
- ★ Pin-tumbler 3/4" diameter cylinder available

Ask your Hardware Consultant or write us for complete details.



(Continued from page 134)

The seventh article in a series by the Asphalt Roofing Industry Bureau tells how to select the right roofing material

Select the Proper Roofing For a Better Job

Asphalt Roofing Products Adaptable to Different Structures

Asphalt Roofing Products	Milk House	Grain Elevator	Grain Storage (Small)	Machine Shed & Shop	Brooder House	Poultry Laying House	Movable Farrowing House	Hog Farrowing House	Hay Barn	Dairy and Beef Cattle Barns	General Purpose Barn	Garage	Farm Home	Prefabricated Home	Small Home	Large Suburban Home
90 Pound Roll	x	x	x	x	x	x	x	x	x	x		x				
65 Pound Roll	x	x	x	x	x	x	x	x				x				
Split Roll	x			x	x	x		x	x	x	x	x		x		
19 Inch Selvage	x	x	x	x	x	x	x	x	x	x	x	x				
Individual Giant	x	x		x		x		x		x		x	x	x	x	x
Hex. Strips	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
Square Butt Strips	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
Staple & Lock Down	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
Cold Process B.U.				x	x	x		x								
Dutch Lap & Reroofer	x			x		x		x	x	x	x	x	x	x	x	x

BUILDINGS of all sizes, shapes and purposes cause a great diversity of roofing requirements and complicate the problem of selecting the best material for each job. Because of this problem, a growing advantage of asphalt roofing is that at least one type of this single basic material is suitable for each roofing need.

Saturated felts are the standard material for built-up roofs. For pitched roofs, asphalt roofing is available in roll form or in shingles. There are numerous weights, sizes, patterns, surfaces and colors of roll roofing, and a similar variety of shingles is manufactured. This versatility of asphalt roofing calls for study of the characteristics of every type as a basis for proper selection for each job.

Most necessary from the standpoint of service is that the product chosen be one which will give adequate protection with a minimum of maintenance cost. Asphalt roofings are made in weights from 45 to 325 pounds per square, and it is generally true that

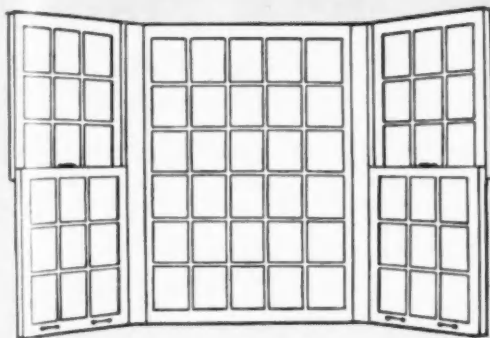
the heavier the roof, the longer service it will give.

Therefore, the heavier roofings, such as strip or individual shingles, are best adapted for permanent structures with pitched roofs. Lighter weight materials, such as the roll roofings, are suitable for some summer cottages, small farm service buildings, garages and temporary buildings.

It must be recognized, however, that no one type of asphalt roofing is best for any particular building under all circumstances. This is especially true on farms. Uniformity of appearance usually is considered important for buildings in a group. For example, if a machine storage shed is situated near the farm dwelling, a shed roof which conforms architecturally to the house roof will be preferred. If the shed is in an isolated location, a less expensive roll roofing might serve just as satisfactorily.

The Asphalt Roofing Industry Bureau
(Continued to page 152)

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erial



This bay window is made up of two Ponderosa Pine double hung windows, flanking a fixed sash unit. Window groups like this are especially valuable in small homes, because they make small rooms look larger. Ponderosa Pine stock design wood casements, too, can be combined to handle virtually any window problem.

WIDER VISTAS—ON A NARROWER MARGIN

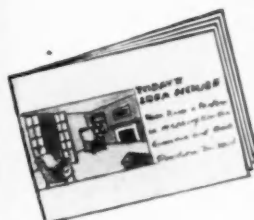
When the owner desires plenty of windows but is limited by his budget, here's an easy remedy. Stock design windows of Ponderosa Pine, because of their moderate cost, can be used generously without imposing an undue strain upon the man who foots the bill.

Consider these advantages of Ponderosa Pine stock windows: they are made in a wide variety of styles, including pre-fit modular standard sizes. They can be combined to provide window areas of any size. They save installation costs because they are precision-made. They provide the natural insulating qualities of wood—a surface that takes and holds paint firmly—a natural endurance that assures years of satisfaction. Available, too, toxic preservative treated.

Functional uses of Ponderosa Pine windows and doors are fully illustrated in our booklet "Today's Idea House." Filled with photographs, this 32-page booklet contains helpful information. You'll want a copy—and it is yours for the asking—just mail the coupon! Most lumber dealers handle Ponderosa Pine woodwork items.



For Friendly Living..
Ponderosa Pine
WOODWORK



Ponderosa Pine Woodwork
RAB-11, 38 South Dearborn Street
Chicago 3, Illinois

Please send me a copy of "Today's Idea House." (Please print.)

Name

Address

City Zone State



Use the time-proved, dependable Barber-Colman RADIO CONTROL

We designed, built, and installed RADIO CONTROL for garage doors in 1926 — over 20 years ago! Between then and 1936 we redesigned the units several times, simplifying the equipment and improving its dependability of operation. For over 10 years now (except during the war period) we have been offering a successful system which has proved its reliability in thousands of satisfactory installations.

With the Barber-Colman RADIO CONTROL for garage doors, the driver has only to touch a button on the instrument panel of the car as it approaches the garage. The door immediately opens and, if so arranged, lights in the garage and along the driveway are automatically turned on. When the door is open, it can also be closed by the RADIO CONTROL or, if preferred, from a wall switch in the garage or house. *RADIO CONTROL eliminates all need for getting out of the car to open or close the garage doors!* Consult your nearest BARBER-COLMAN representative for details of equipment and installation.

FOR FURTHER
INFORMATION



Write for current literature

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES in PRINCIPAL CITIES



BARBER-COLMAN COMPANY
104 MILL ST. • ROCKFORD, ILLINOIS



How- To- Do-It

(Continued from page 150)

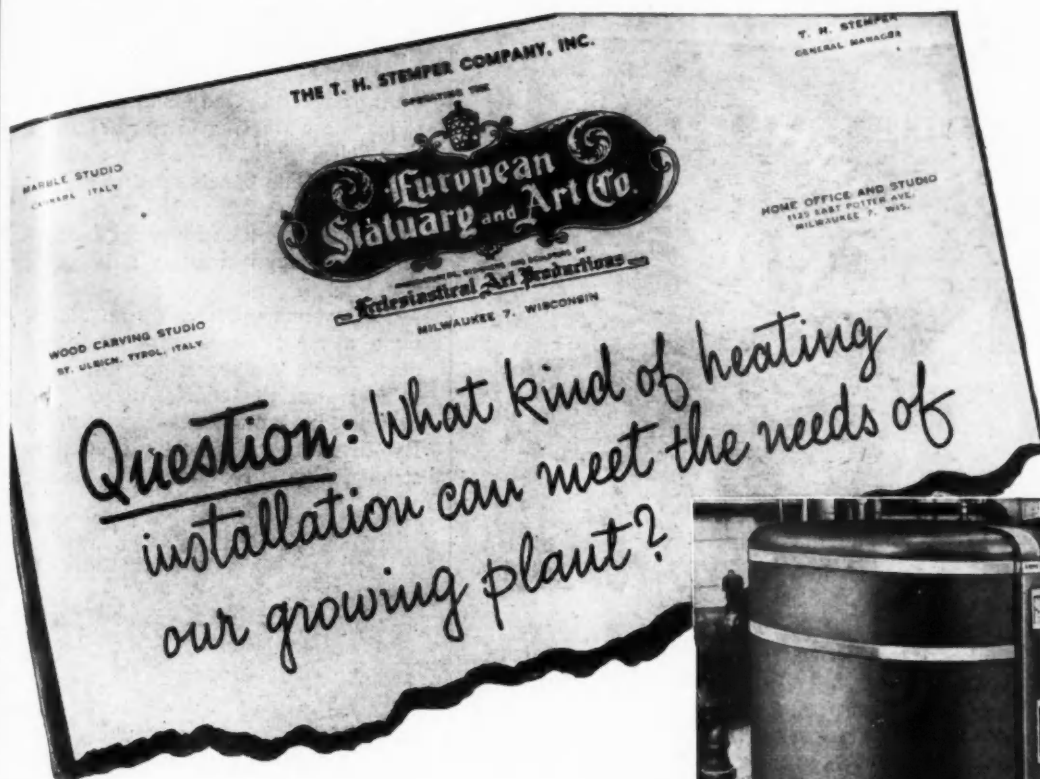
reau has prepared a table indicating types of asphalt roofing which, under different circumstances, might be suitable for some of the more important town and farm buildings. In an accompanying note, the bureau explains that "it would probably never do to put a roll roof on a large suburban house, though all types of strip shingles and individual re-roofers could be used. On the other hand, there are circumstances where practically every one of the varied products might be appropriate for a barn, poultry house, hog house, milk house or machine shed and shop and other utility buildings."

Another important consideration in the selection of roofing is the pitch or slope of a roof. Any type of shingle can be used on a roof with a rise of 4 inches or more per horizontal foot. Some roll roofings are suitable for pitches of 1 inch or more, though not all kinds of roll roofing can be used in all cases. When the pitch is less than 1 inch per foot, a built-up roof will be the only satisfactory type to apply.

Application of roll roofing by the exposed nail method is recommended only when the pitch is 3 inches or more. The concealed nail method, when a 3-inch headlap is provided, can be used when the pitch is as low as 2 inches; with a 4-inch headlap, the pitch can be 1½ inches. The only type recommended for a 1-inch pitch is 19-inch selvage roofing for the best results.

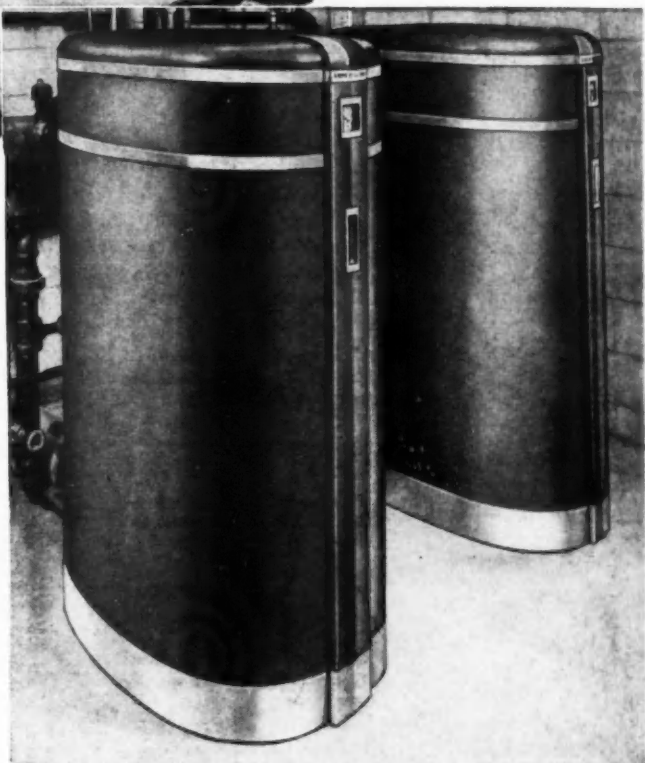
Concealed nailing of roll roofing is always better than exposed nailing. Application in windy areas should be by the concealed nail method, and the roofing should be cut lengthwise and applied in 18-inch-wide strips, not in the full width of the roll to avoid any edge to catch the wind.

"Exposure," or the portion of the shingle or roll roofing strip exposed to the weather, also influences selection of material. Whenever possible, exposure should be minimized on roofs with low pitches in order to increase headlap and provide better protection against water reaching the roof deck by being forced under the shingle during a driving rain or by the pressure of accumulated ice or snow.



Answer:

A multiple installation of  Oil-fired Boilers



Knocking out basement walls and other costly alterations faced the T. H. Stempe Company when their Milwaukee plant expanded beyond the capacity of their heating system.

Fortunately, these expenses were unnecessary. Instead of putting in a single huge boiler to meet their heating needs, they installed two compact General Electric Oil-fired Boilers. Not only did their basement provide adequate space for this multiple installation, but additional space was left for the addition of another G-E unit when further factory expansion took place.

G-E multiple installations often bring substantial savings in other ways. The G-E Oil-fired Boilers are connected in parallel, and one or more units cut out *automatically* when proper temperature is reached. These units require no continuous supervision (except where local or state laws require).

Your G-E Dealer will be glad to survey your building without charge to estimate how much you can save with a G-E Multiple installation.

General Electric Company, Air Conditioning Department, Section H81511, Bloomfield, N. J.

GENERAL  ELECTRIC

Automatic Oil and Gas Heat



What this Seal of Service Means to You!

SPA subscribers pledge to you the achievements of 33 years of continued and united effort in establishing and maintaining Southern Pine as the world's supreme structural wood. To the architect, engineer, contractor, lumber dealer and consumer, that pledge means:

Adequate, Permanent Supply of dependable Southern Pine

1

SPA subscribers, through sound forest management, backed by fertile timber-growing lands, assure an adequate, permanent supply of Southern Pine.

Proper Manufacture for Southern Pine's countless uses

2

SPA subscribers, through research, are enhancing Southern Pine's superior characteristics by improving quality through progressively better manufacture.

Carefully Supervised Grading to assure quality standards

3

SPA subscribers' production conforms to the industry's established standards, which mean: (a) *Accurate Grading*; (b) *Correct Manufacture*; and (c) *Proper Seasoning* . . . all important to you.

THESE FREE BOOKS

tell you of the organization and facilities behind this pledge . . . give you a list of dependable suppliers of Southern Pine.

Write for your copies today.

Efficient Distribution for dependable availability

4

SPA subscribers, by location and facilities, are able to serve their respective markets with maximum efficiency and economy.

Accurate Specifications for widest utilization of Southern Pine's superior qualities

5

SPA subscribers stress authentic specifications and provide technical guidance to designers and specifiers to assure the right grade in the right place.

Proper Use for homes, farms, railroads, industrials, etc.

6

SPA subscribers are working effectively with the building professions, lumber dealers and their customers to promote the time-tested advantages of Southern Pine for every one of America's building needs.



SOUTHERN PINE ASSOCIATION

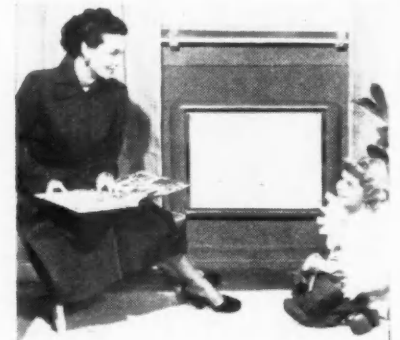
CANAL BUILDING
NEW ORLEANS 4, LOUISIANA.

Radiant Glass Heating System Introduced

RADIANT GLASS heating panels, introduced by the Continental Radiant Glass Heating Corp., 521 Fifth Ave., New York, N. Y., have no moving parts. The panels operate on AC or DC current, 220 or 110 volts. Each glass panel has a capacity for heating an area of approximately 1,200 cubic feet.

The system operates by an aluminum element fused into tempered glass panels in a secret process.

To install the panels, there is no need to knock out walls or partitions. By installing thermostatic controls strategically throughout the house,



SAFETY and attractiveness are combined in Radiant Glass heating panels



APPLICATION of Radiant Glass panels is illustrated in this bathroom

heat can be regulated to suit individual requirements. Radiant glass heat operates most efficiently in houses which are insulated with the equivalent of four inches of Rock wool and which are equipped with storm doors and sashes for winter months.

Thermostatic controls by Mercoid, Mack and Minneapolis-Honeywell work satisfactorily with the system, and are endorsed by Continental Radiant Glass Heating Corp. Recommended "zone control" of a house, when glass panels are applied, consists of one thermostat for the sleeping area; one for the living area, and individual ones for each bathroom.

The glass panel measures 16x24 inches. Overall dimensions are 21x30½ inches.

Plywood Announcement!

- 1** A New, Simplified A-B-C System of Grade Identification for Douglas Fir Plywood Is Now in Effect.
- 2** Douglas Fir Plywood Is Now Produced in Accordance with New U. S. Commercial Standard CS45-48.

In order to simplify the identification of Douglas fir plywood grades, manufacturers have adopted a new A-B-C system of grade-marking.

Plywood is manufactured in two distinct types—Exterior and Interior. Within each of these two types are several appearance grades. These grades—of either Exterior or Interior type—are determined by the appearance quality of the *outer plys* (face and back veneers).

Now, there are just four such qualities of veneer—A, B, C and D, in order of appearance quality.

Highest in appearance quality — “A” veneer — is that formerly known as “Sound.” “B” veneer is a new quality, also known as “Solid,” which presents a firm, solid surface, free from open defects. “C” and “D” veneers may contain certain restricted defects which do not affect panel serviceability, and are used where appearance is not important.

*As the new A, B, C, D veneer designations are being introduced, industry grade-trademarking of panels provides for designation either by letters or by previous terminology. Thus, as listed above, grademarks on panels may read either “PlyShield A-C” or “PlyShield SolS” (Sound 1 Side).

GRADES OF EXTERIOR-TYPE

- EXT-DFPA•A-A (Sound 2 Sides)
- EXT-DFPA•A-B (Sound 1 Side, Solid Back)
- EXT-DFPA•PlyShield•A-C (Sound 1 Side)
- EXT-DFPA•Utility•B-C (Solid 1 Side)
- EXT-DFPA•Sheathing•C-C
- EXT-DFPA•Concrete Form•B-B (Solid 2 Sides)

GRADES OF INTERIOR-TYPE

- Interior•A-A•DFPA (Sound 2 Sides)
- Interior•A-B•DFPA (Sound 1 Side, Solid Back)
- PlyPanel•A-D•DFPA (PlyPanel Sound 1 Side)
- PlyBase•B-D•DFPA (Solid 1 Side)
- PlyScord•C-D•DFPA (Sheathing)
- PlyForm•B-B•DFPA (Solid 2 Sides)

The new U. S. Commercial Standard CS45-48 for Douglas fir plywood becomes effective November 1, 1948. The Commercial Standard booklet contains complete data on the new system of grade identification* and new grade-trademarks, and sets forth more stringent performance requirements for Exterior-type plywood. A free copy will be mailed to any point in the United States. Send the coupon below.

Douglas Fir PLYWOOD
 LARGE LIGHT STRONG *Real Wood* Panels



DOUGLAS FIR PLYWOOD ASSOCIATION
 Tacoma 2, Washington

GENTLEMEN: Please send me my copy of the new U. S. Commercial Standard CS45-48, which contains new grade designations and new grade-trademarks for Douglas Fir Plywood.

NAME _____
 Firm _____
 Title _____
 Street _____
 City _____ Zone _____ State _____



THE MEASURE OF YOUR REPUTATION

A house is often judged by its roof . . . and the measure of your reputation is the roof you build.

Better roofs are built with Bird Master-Bilt Thick Butt Shingles. Tests *prove* they're better . . . and the biggest test is time. The *extra* layers of asphalt and deeply embedded mineral granules give a tougher weather-proof surface, and added fire resistance for long life of the shingle. Narrower cut-outs and heavier shadow lines give a massive appearance to the roof. Bird Master-Bilt Thick Butt Asphalt Shingles are available in a wide range of handsome colors and blends . . . *more variety than is found in any other type of roofing material* . . . there's a color perfect for every roof.

Test Bird Master-Bilts yourself — compare them. They are worthy of your best building design . . . the measure of your reputation.

In-wall condensation ruins many fine buildings. Guard against it . . . use Bird Neponset Black Vapor Barrier. On the warm side of insulation, it costs about \$20 for a \$10,000 house . . . an investment that pays. Ask about it today.

BIRD & SON
EST. INC. 1795
EAST WALPOLE, MASS.

NEW YORK

SHREVEPORT, LA.

CHICAGO

NEW PRODUCTS

(Continued from page 133)

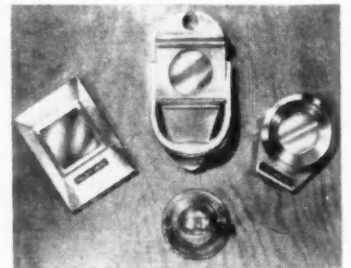
Dulux enamel finish, recessed center section, stainless steel handles, insulated doors and drawers, concealed ventilation, and storage space. Manufacturer: Tracy Manufacturing Co., Pittsburgh, Pa.

BRICKLAYER'S BRACKETS AB11843
"Jiffy Holders," adjustable brackets for edging strips, may be used by bricklayers



in setting brick sills. Brackets adjusted and clamped in place at each end of strip with thumb screws. One man can make adjustments. After sill is laid, brackets may be detached and packed in tool kit. Manufacturer: Jiffy Holders Co., Fountain Square Building, Cincinnati, Ohio.

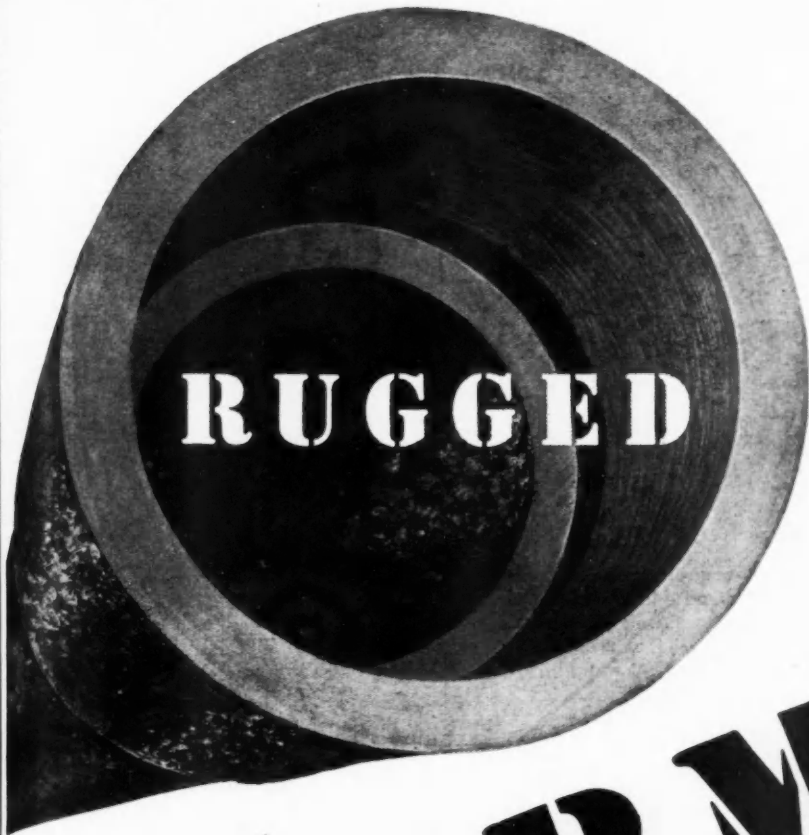
DOOR SAFETY DEVICE AB11839
"Magic Mirror Door Detective," door safety device, enables home, apartment, and hotel residents to see through closed door to identify caller outside. Caller sees only his reflection in a small mirror, a part



of device installed on exterior side of door. May be installed in wood or metal door of any thickness. Domed back, inside automatic safety lock, and invisible speaking slots which permit two-way conversation through closed door are incorporated. Three models available; two suitable for apartments and hotels. Manufacturer: Magic Mirror Associates, Inc., 687 Third Ave., New York, N. Y.

GAS-FIRED WALL FURNACE AB11805
Circularaire C-25-SW furnace is fully vented, equipped with automatic pilot, has hand control outside the casing. A single outlet 25,000 B.T.U. unit, it burns any type of gas. Internal parts concealed from view by modern front finished in baked enamel. Designed to blend with any wall or room furnishings. Requires wall opening of 24x45 $\frac{5}{8}$ inches. Recessed into wall with three inches projecting into room. Manufacturer: Hammel Radiator Engineering Co., 3348 Motor Ave., Los Angeles 34, Calif.

(Continued to page 158)



RUGGED

THAT'S BERMICO[®]

SEWER PIPE

RESISTS BREAKAGE—YOU SAVE MONEY. Strong-walled BERMICO Sewer Pipe resists breakage—saves you time and money on the truck and on the job.

LONG-LASTING BERMICO—ASSURES CUSTOMER SATISFACTION. Withstands sudden temperature changes or soil settlements. Uniform in machining of joints; in wall thickness, length and bore. Stays permanently tight, leak-proof and root-proof.

IDEAL FOR HOUSE-TO-SEWER OR SEPTIC TANK CONNECTIONS. Also perforated for drainage uses. Made in full range of sizes.

SPECIFY BERMICO, the fibre pipe that meets all Bureau of Standards requirements yet is so light and easy to lay. For information, write, Brown Company, Dept. A-1, 500 Fifth Ave., New York, N. Y.



EASY TO INSTALL

8-foot lengths reduce number of joints to be made.



EASY TO HANDLE

$\frac{2}{3}$ rds lighter than other types of sewer pipe.



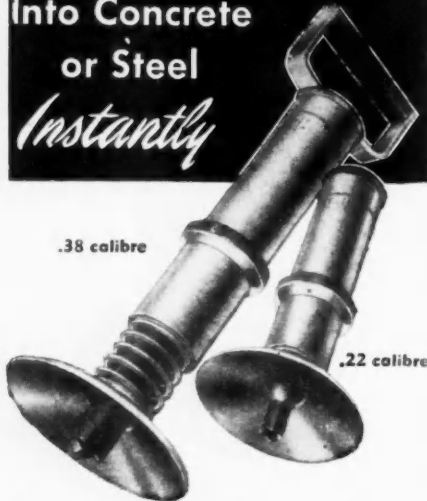
EASY TO JOIN

Root-proof, machine tapered joints require no packing.



BERMICO—A PRODUCT OF BROWN COMPANY

"Drive-It"
The Powder-Powered Tool That
DRIVES STUDS
Into Concrete
or Steel
Instantly



**Saves Time, Labor and Cost
on Every Anchoring Job!**

"DRIVE IT" drives threaded studs 3 inches into concrete or through 5/8-inch steel. Eliminates all drilling, hammering and expansion bolts. "DRIVE-IT" has made tremendous cost cuts in construction work, plumbing, air-conditioning, plastering, maintenance, highway and electrical work.

- WORKS INSTANTLY
- ANY DESIRED STUD OR PUNCH
- CARRIES ITS OWN POWER
- ABSOLUTELY SAFE
- UP TO 6000 LBS. HOLDING POWER
- NO RECOIL OR SHOCK
- LIGHTWEIGHT — EASY TO OPERATE
- ADJUSTABLE FOR ANY DEPTH
- NO DRILLING OR HAMMERING



40

Different Types
of Studs, Rivets,
Bushings and Punches

POWDER POWER

TOOL CORPORATION



P. O. BOX 1610
PORTLAND 7, OREGON Dept. (F)

Gentlemen: Please send me illustrated folder on "DRIVE-IT" Powder-Power Tools.

Name

Firm

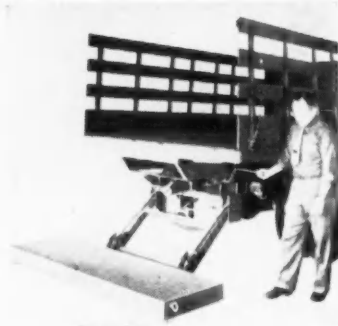
Address

City..... State.....

NEW PRODUCTS

(Continued from page 156)

HYDRAULIC TAILGATE LIFT AB11830
With "Cemco Hydraul-Lift-Tailgate," truck operator can automatically lower or raise a load to or from the ground. He can raise, lower, start or stop the load at any



position with control lever. Capacity of lift is 1,500 pounds, including allowance for safety factor to guard against overload. Lift weighs 733 pounds with all mounting parts. Manufacturer: Cemco Industries, Inc., Galion, Ohio.

PALLET HANDLING TRUCK AB11834
"Truck-Man Pallet Toter" is gasoline powered by "AB" 3 h.p. Wisconsin engine. Operator rides with the load. Rubber in-



sert load wheels. All controls, including brake, incorporated in single transmission lever. Speeds in either direction are from creeping to 3 miles per hour. Weight, 920 pounds. Load capacity, 3,000 pounds. Manufacturer: Truck-Man Inc., 1436 Ganson St., Jackson, Mich.

PAINT BRUSHES AB11821
"Black Prince" and "Forty-Niner" line feature non-marking bristles. Black Prince wall



brushes are in sizes 3 1/2 inches and 4 inches, typified by fount center, China bristle, satiny black handle. Forty-niner wall and flat varnish brushes are in seven sizes, ranging from 1-inch to 3-inches, made of China bristle secured by patented Sta-Set process. Manufacturer: Superkleen Brush Div., Devco & Reynolds Co., Inc., 44th St. and First Ave., New York, N. Y.

(Continued to page 160)



**WARE
ALUMINUM
WINDOWS**

THEY ARE LIGHT IN WEIGHT
YET RIGID AND ALWAYS IN
ALIGNMENT

THEY ARE OF HEAVIER
SECTION THAN USUAL

THEY NEVER NEED PAINTING

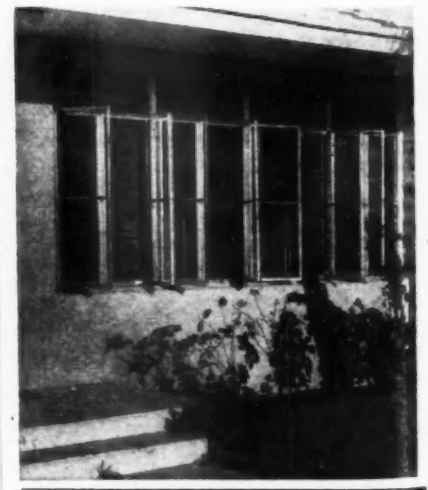
THEY ARE STORM TIGHT

(Tests show NO AIR INFILTRATION
at 25 to 40 miles per hour, and
0.76 cu. ft. min. per. at 59 m.p.h.)

Write for details

WARE LABORATORIES, Inc.

1827 Delaware Parkway Miami 35, Fla.
New York: 21 West Street Whitehall 3-6866



America
Here's
of hom
Pra
sulation
... ins
insulat
extra s
Yo
window
glass u
Yo
charac
air bet
Ford's
keeps



MAKE WINDOWS DOUBLY APPEALING
with *Thermopane* double-glass insulation

Here's beauty in a window that's sure to win admiration of home buyers.

Practicality, too, for this window has built-in insulation for year-round comfort and heating economy... insulation that ends worry about condensation... insulation achieved without putting up or taking down extra sash.

You offer all these tangible advantages when your windows are glazed with *Thermopane**, the double-glass unit.

You'll find home buyers interested in *Thermopane*'s characteristics—two panes of glass, with dehydrated air between, welded into a single unit by Libbey-Owens-Ford's *Bondermetic* (metal-to-glass) *Seal**. This seal keeps dirt and moisture from entering the air space.

Thermopane is the most talked-of, most advertised windowpane in the world today. It has been proved in many types of buildings, in all of America's varied climates. L·O·F Glass Distributors have *Thermopane* readily available in over 70 standard sizes... and can assure prompt delivery of special-size units. For more information, write for our *Thermopane* book. Libbey·Owens·Ford Glass Company, 18118 Nicholas Building, Toledo 3, Ohio.

®

Cutaway view of *Thermopane*, showing the two panes of glass, the dehydrated blanket of air and L·O·F's *Bondermetic Seal*.



IN CANADA, THERMOPANE IS SOLD BY PILKINGTON GLASS, LTD.

ONLY LIBBEY-OWENS-FORD

MAKES *Thermopane*



LIBBEY·OWENS·FORD

a Great Name in GLASS

Distributors of



- ALABAMA**
Birmingham Sash & Door Co.....Birmingham
- ARIZONA**
Southwestern Sash & Door Co.....Phoenix
Tucson
- CALIFORNIA**
Pacific Coast Aggregates.....Fresno, Oakland
Sacramento, San Francisco
San Jose, Stockton
Blue Diamond Corp.....Los Angeles
Zellerbach Paper Co.....Los Angeles
Redding, Sacramento
Gunn Carle & Co.....San Francisco
- COLORADO**
Lumber Dealers Inc.....Denver
- CONNECTICUT**
New Haven Reserve Supply.....New Haven
Igoe Brothers, Inc.....Stamford
Goldberg Building Supply Corp.....Unionville
- DISTRICT OF COLUMBIA**
Kern Distributing Co. Inc.....Washington
- FLORIDA**
Atlanta Oak Flooring Co.....Jacksonville
Huttig Sash & Door Co.....Jacksonville
Miami
I. W. Phillips Co.....Tampa
- GEORGIA**
Atlanta Oak Flooring Co.....Atlanta
- IDAHO**
Reilly Atkinson & Co., Inc.....Boise
- ILLINOIS**
National Plywoods, Inc.....Chicago
Onsrud Distributing Co.....Evanston
Insulation Dealers & Supply Co.....Peoria
Hardware Products Co.....Sterling
- INDIANA**
Indiana Wholesalers, Inc.....Evansville
Inland Distributing Corp.....Ft. Wayne
Indianapolis, South Bend
- IOWA**
Williams & Hunting Co.....Cedar Rapids
Lumbermen's Associated Buyers Co.....Des Moines
Horn Building Products Co.....Fort Dodge
The Fonda F. Rock Co.....Sioux City
Herrick Refrigerator Co.....Waterloo
- KANSAS**
The Russ Building Material Co.....Wichita
- KENTUCKY**
Huttig Sash & Door Co.....Louisville
Paducah Sash & Door Co.....Paducah
- LOUISIANA**
Woodward-Wight & Co., Ltd.....New Orleans
- MAINE**
Rice & Miller Co.....Bangor
The Emery-Waterhouse Co.....Portland
- MARYLAND**
Radford & Sanders Inc.....Baltimore
Delmarva Sash & Door Co.....Barclay
- MASSACHUSETTS**
Building Materials Wholesalers, Inc.....Charlestown
Allen Slade & Company.....Fall River
Warren F. Hoye, Inc.....Springfield
Read & Company, Inc.....Worcester
- MICHIGAN**
Clovertand Supply Co.....Crystal Falls
Quality Materials Co.....Detroit
- MINNESOTA**
Marshall-Wells Co.....Duluth
The B. F. Nelson Mfg. Co.....Minneapolis
- MISSOURI**
Rust Sash & Door Co.....Kansas City
Huttig Sash & Door Co.....St. Louis
- MONTANA**
Lumber Dealers, Inc.....Billings
Lumber Yard Supply Co.....Great Falls
- NEBRASKA**
The Gellatly Co.....Hastings
- NEVADA**
Zellerbach Paper Co.....Reno

- NEW HAMPSHIRE**
Johnson Lumber Co., Inc.....Manchester
Woodsville
- NEW JERSEY**
Igoe Brothers, Inc.....Asbury Park
Hawthorne, Newark
Interstate Roofing & Supply Co.....Trenton
- NEW MEXICO**
Southwestern Sash & Door Co.....Albuquerque
- NEW YORK**
Igoe Brothers, Inc.....Brooklyn
Hollis, L. I.
Enos & Sanderson Co.....Buffalo
Quality Materials Co.....Buffalo
Saltpoint Supply Corp.....Felts Mills
Syracuse
Times Appliance Co., Inc.....New York
Simpson Box & Lumber Co., Inc.....Rochester
Goldberg Wholesale Supply Corp.....Tarrytown
Goldberg Building Materials Corp.....Troy
John P. Reed Co.....Utica
- NORTH CAROLINA**
Huttig Sash & Door Co.....Charlotte
Atlanta Oak Flooring Co.....Charlotte
- NORTH DAKOTA**
Dakota Sash & Door Co., Inc..... Fargo
Lumbermen Associated Buyers Co..... Fargo
- OHIO**
Acme Sash & Door Co.....Cincinnati
Quality Materials Co.....Cleveland
Huttig Sash & Door Co.....Columbus
Dayton Sash & Door Co.....Dayton
- OKLAHOMA**
Bolender Material Co.....Oklahoma City
- OREGON**
McCraken-Ripley Co.....Portland
- PENNSYLVANIA**
Radford & Sanders, Inc.....Harrisburg
Delmarva Sash & Door Co.....Lancaster
Philadelphia
Quality Materials Co.....Pittsburgh
The N. B. Epstein Co.....Scranton
- RHODE ISLAND**
Read & Company, Inc.....Providence
- SOUTH DAKOTA**
The Dakota Sash & Door Co.....Aberdeen
The Knecht Lumber Co.....Rapid City
- TENNESSEE**
Huttig Sash & Door Co.....Knoxville
Memphis Sash & Door Co.....Memphis
- TEXAS**
Huttig Sash & Door Co.....Dallas
Southwestern Sash & Door Co.....El Paso
Geo. C. Vaughan & Sons.....Houston
Nederland, San Antonio
Galbraith Steel & Supply Co.....Lubbock
- UTAH**
Knudsen Builders Supply Co.....Salt Lake City
Morrison-Merrill & Co.....Salt Lake City
- VERMONT**
Workman Engineering Corp.....Essex Junction
- VIRGINIA**
Addington-Beaman Lumber Co., Inc.....Norfolk
Sash Door & Glass Corp.....Richmond
Huttig Sash & Door Co., Inc.....Roanoke
- WASHINGTON**
Pioneer Sand & Gravel Co.....Seattle
Spokane Paper & Stationery Co.....Spokane
Geo. Scaffold Co., Inc.....Tacoma
- WISCONSIN**
Lumber Dealers Supply, Inc.....Green Bay
Capital City Culvert Co.....Madison
The Marshfield Milling Co.....Marshfield
Frankfurth Hardware Co.....Milwaukee
Wisconsin's Transfer Yard.....Oshkosh
- CANADA**
Edmonton Paint & Glass Co., Ltd.....Edmonton, Alberta
Sidney Roofing & Paint Co., Ltd.....Vancouver, B. C.
Lumber Dealer's Supply Ltd.....Winnipeg, Manitoba
The Kinday Co.....Windsor, Ontario

* TRADEMARK

KIMBERLY-CLARK CORPORATION • NEENAH, WISCONSIN

122 East 42nd Street, NEW YORK 17
155 Sansome Street, SAN FRANCISCO 4

8 South Michigan Avenue, CHICAGO 3
22 Marietta Street, N. W., ATLANTA 3, GA.

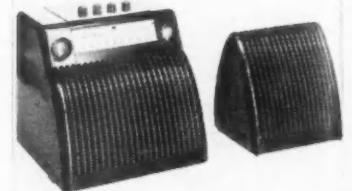
NEW PRODUCTS

(Continued from page 158)

COMBINATION INTER-CALL RADIO

AB11833

DorAfone can be used for inter-call microphone or for radio. Sensitive 5-inch speaker is mounted in wall beside door before interior of house is plastered. Exterior of unit is covered with brass grill and escutcheon. Connection cord leads to master radio which may be placed in the house

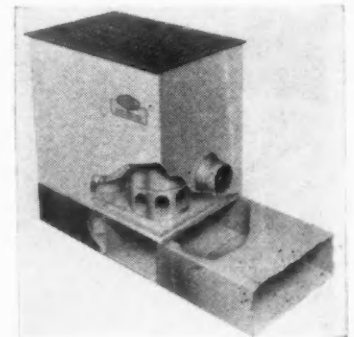


wherever convenient. Radio speaker serves as inter-call microphone. Radio, black or ivory plastic, contains four instant-heating tubes plus selenium rectifiers and built-in antenna. Operates on 115 volts, A.C. or D.C. Manufacturer: Setchell Carlson, Inc., St. Paul, Minn.

FLOOR FURNACE

AB11813

Oil-burning furnace with auxiliary cold-air return-duct system, designed to draw cold air from remote corners of building and circulate warm air uniformly. Combustion chamber and heat exchanger has air-tight welded construction. Return-duct system and thermostatic controls may be included with original installation or added later.



Commercial Standard Rating, 50,000 B.T.U. at 30 cc. per minute oil flow. Combustion chamber and heat exchanger may be lifted out as one unit for servicing. Furnace constructed of welded aluminized steel with baked enamel exterior finish. Requires 24 1/4 x 36 1/4-inch rough floor opening. Manufacturer: Oran Co., 2232 S. Third St., Columbus, Ohio.

SMALL ELECTRIC PLANT

AB11811

Onan Model AAE, four-cycle, engine driven A.C. lighting plant, generates 350 watts. Will fit into trunk compartment of an automobile. Weight, 77 pounds. Adaptable for sound recording work, portable P.A. systems, small fire rigs, or emergency lighting kits. Available in 115-volt A.C., and in 6, 12 and 32-volt D.C. battery chargers. All models have electric push-switch starting. Manufacturer: D. W. Onan & Sons, Inc., Minneapolis, Minn.

(Continued to page 162)

578 Long Beach Blvd.
Long Beach, N. Y.

Telephone
Long Beach 2138

GORDON B. ROTH BUILDER

September 22, 1947

Kimberly-Clark Corporation
Neenah, Wisconsin

Gentlemen:

It gives me great pleasure to advise you that in my twenty-five years of building private homes, apartment houses and commercial buildings, I have tried many types of insulation and have never really been satisfied until five years ago when I started using Kimsul.

In the Tompkins house, I used 3200 square feet of Double Thick Kimsul in the walls and ceilings. As a result of this, I feel fuel bills should prove to be very nominal. I have also built ten modern homes in Long Beach, New York, ranging in price from \$18,500 to \$40,000. And some twenty-five one-family houses selling from \$14,000 to \$15,000. All of these homes are insulated with Kimsul.

My post-war program is very extensive and I will continue to use Kimsul.

Very truly yours,

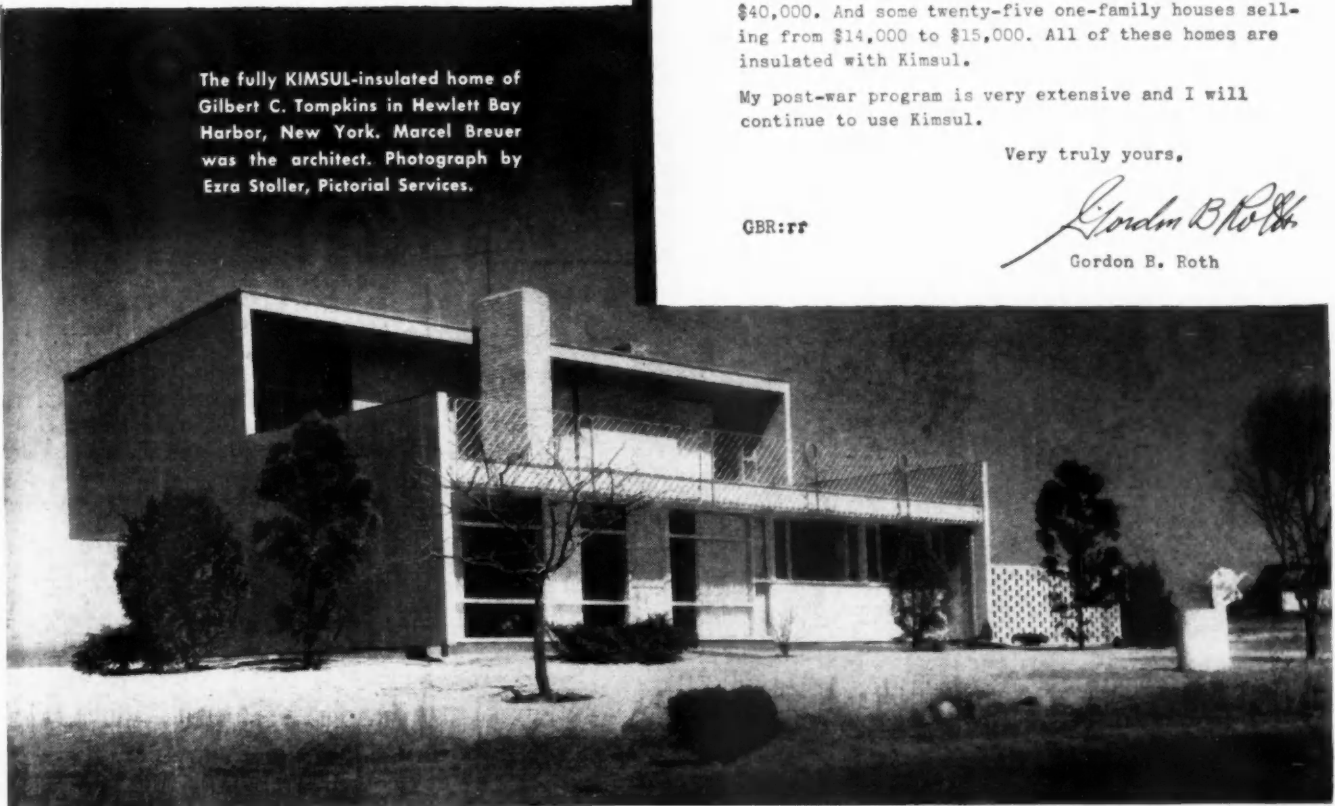
Gordon B. Roth
Gordon E. Roth

GBR:rr

Tried many insulations, satisfied only with KIMSUL*

—says leading New York builder

The fully KIMSUL-insulated home of Gilbert C. Tompkins in Hewlett Bay Harbor, New York. Marcel Breuer was the architect. Photograph by Ezra Stoller, Pictorial Services.



It's true. Many-layer KIMSUL* insulation is fast becoming the favorite of builders and architects from coast to coast. For KIMSUL automatically provides uniform insulating efficiency over every inch of covered area. Its "k" factor is 0.27. It's the only insulation with the PYROGARD* fire-resistant cover. And one of the easiest to install quickly and

profitably—no need for expensive machinery.

KIMSUL comes in handy, compact rolls, compressed to 1/5 installed length. To give maximum protection at lowest cost, specify it by thickness: Commercial Thick (about 1/2 in.) for walls and floors. Standard Thick (about 1 in.) for walls, attics and floors. Double Thick (about 2 in.) for attics.

Free insulation booklet. Here's a new, illustrated manual covering the latest techniques in the field. Write us for your free copy of the KIMSUL Insulation Book. Mail your request on your business letterhead.

KIMBERLY-CLARK CORPORATION
KIMSUL Division • Neenah, Wisconsin

Insulate when you build.
Over-all insulation
means ready salability.



*Trademark

One big saving leads to another.....



Lower Cost In Hanging

Weighing only thirty pounds, the pre-fitted Paine Rezo is easy to handle, easy to hang in many minutes less time.



Lower Cost In Finishing

The clean flush surface of Paine Rezo doors requires less than half the time needed to paint or stain common panel doors.

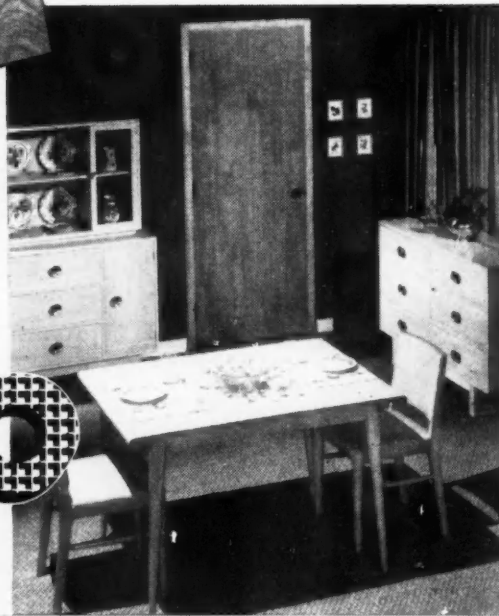


Lower Cost In Maintenance

The air-cell construction features of Paine Rezo doors are exclusive and patented — minimize warping and shrinking, provide the greatest dimensional stability of any door.

and they all lead to

PAINE REZO DOORS



The positive values that Paine Rezo Doors have to offer builders were never more pronounced than now . . . good-looking, modern flush doors with patented construction features that make them structurally better, lighter, stronger than any other door. To these advantages add an installed cost that is no more than that of a common panel door. When a premium door like this packs an economy wallop like that, it's no wonder that more than 2,000,000 of them are in service today in every type of building, everywhere.

Rezo production is still limited, but steadily increased facilities are making them increasingly available. Ask for them at your dealer; write directly for an informative full-color bulletin.

Manufactured by the

PAINE LUMBER CO., Ltd. *Oshkosh Wisconsin*

ESTABLISHED 1853

NEW PRODUCTS

(Continued from page 160)

ALUMINUM WINCH UNIT AB1180

"Saf-T-Swing" aluminum winch and stirrup unit handles loading up to 25 pounds per square foot with rated capacity of 625 pounds per winch. Includes two winches, guard rail and center post. With each winch is attached stirrup and 150 feet of



steel cable. Winch may be detached from stirrup by removing four bolts, and may then be used for other hoisting purposes. Two-way crank operation system permits raising or lowering of platform at rate of 200 feet per minute. Cable can be pulled from drum by hand. Unit weighs 55 pounds. Manufacturer: Safway Steel Products, Inc., Milwaukee, Wis.

PLASTIC FLOOR TILE AB11823

"Plastile," is a laminated plastic floor tile, consisting of 3/32-inch top layer of vinyl plastic laminated to 3/32-inch layer of resin impregnated cork. The two plies are



bonded under 20,000 pound pressure, heated to high temperature. Finished laminated sheets are 3/16-inch thick, available in cut sheets of 24 inches, 17 inches, 11-1/3 inches and 8 1/2 inches square. May be installed by skilled flooring men using standard tools. Sheets may be laid over wood, concrete, and steel. Manufacturer: U. S. Stoneware Co., Akron, Ohio.

METAL SHEARS AB11820

Shears designed to cut corrugated metal without damage to corrugations. Cuts may be made crosswise, lengthwise or diagonally. Portable Universal Metal shears also cut metal lath, sheet metal and corrugated asbestos. In making cut, shears remove one-eighth inch wide ribbon, allowing action without binding or twisting. Shears weigh 15 pounds. Manufacturer: Universal Products Co., San Francisco, Calif.

(Continued to page 164)

**Superior in detail,
low in price,
wide in range of
types and sizes...**

REYNOLDS ALUMINUM RESIDENTIAL CASEMENT, FIXED AND PICTURE WINDOWS

How to Write Air Infiltration Specification:

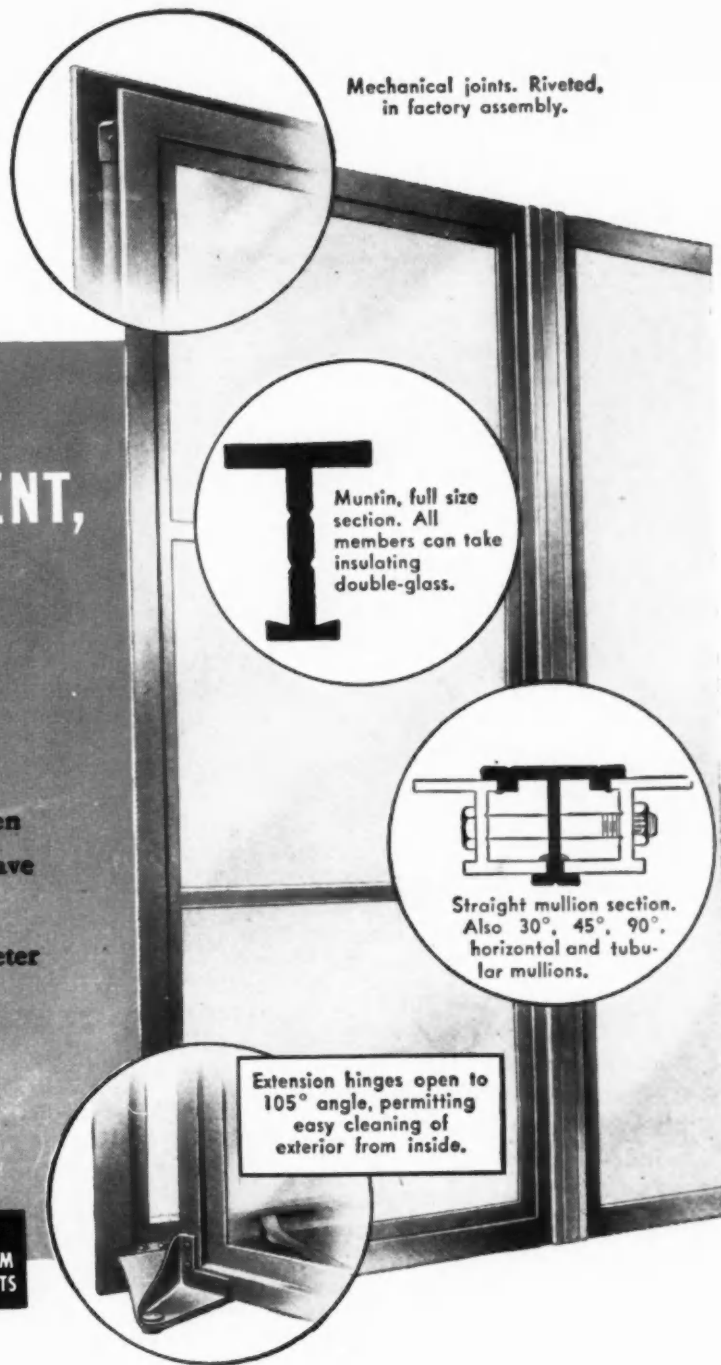
Windows of the type furnished shall have been tested by a recognized laboratory and shall have shown air infiltration not exceeding 1/2 cubic foot of air per minute per foot of vent perimeter when subjected to static pressure equivalent to a wind velocity of 25 mph.

**REYNOLDS ALUMINUM CASEMENT WINDOWS
MEET THIS SPECIFICATION.**

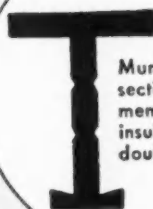
IF YOU SEE RUST
YOU KNOW IT'S NOT
ALUMINUM



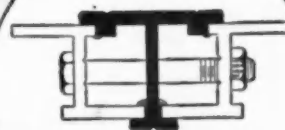
REYNOLDS
Lifetime ALUMINUM
BUILDING PRODUCTS



Mechanical joints. Riveted, in factory assembly.



Muntin, full size section. All members can take insulating double-glass.



Straight mullion section. Also 30°, 45°, 90°, horizontal and tubular mullions.

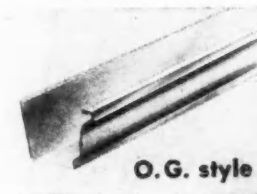
Extension hinges open to 105° angle, permitting easy cleaning of exterior from inside.



Half-round



Colonial box



O.G. style

REYNOLDS *Lifetime* ALUMINUM Gutters and Downspouts

Rustproof permanence at about half the price of other rustproof materials. Three styles available in either plain or stippled-embossed aluminum,

A.I.A. File Brochures on request from REYNOLDS METALS COMPANY, Building Products Division, Louisville 1, Ky.

WORLD'S LARGEST PRODUCER OF ALUMINUM BUILDING PRODUCTS:

Shingles, Clapboard Siding, Corrugated and 5-V Crimp, Snap-Seal and Standing Seam Roofing, Weatherboard Siding, Built-Up Roofing, Nails, Gutters, Wall Tile, Windows, Reflective Insulation, the "Alumi-Drome" (prefabricated utility building).



IT'S THE
Colors
THAT COUNT

CABOT'S HOUSE PAINTS, made by our patented collopaking process, offer you a wide choice of beautiful, non-fading colors. Development builders can find the right color for every design and a variety of color combinations that give each house in a group pleasing individuality.

Cabot's Collopakes produce a porcelain-smooth surface that shows no brush marks and resists the elements for years.

*Cabot's
Collopakes*

Write Today for color cards
and complete information!

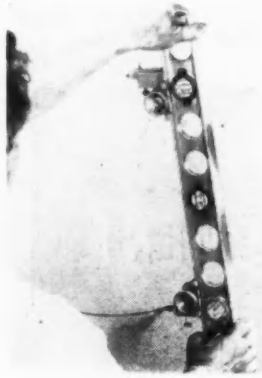
Samuel Cabot
INCORPORATED
2229 Oliver Building
Boston 9, Mass.

NEW PRODUCTS

(Continued from page 162)

LEVELS ACCESSORY AB11810

Trammel points now may be attached to Schultes levels and used for laying out circles, spacing holes around circles, and spacing 2x4's or joists. Substitutes for a beam compass for making larger drawings.

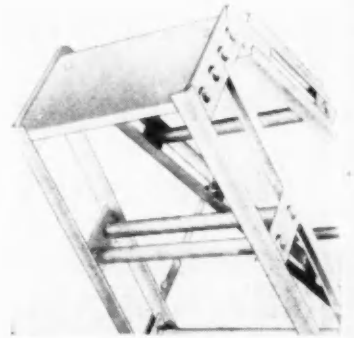


One of the points has a mechanism for fine adjustment. Points are made of aluminum. Manufacturer: Schultes Level, Inc., 17403 Gable Ave., Detroit 2, Mich.

ALUMINUM STEP LADDER AB11835

Steps of ladder formed by two aluminum ladder rungs, placed side by side. Each rung tests more than 1,000 pounds, and will bend when overloaded. It will not break. Rungs are corrugated; legs have insulated non-abrasive bases; folding braces are heavy gauge cadmium plated

steel. Top platform is waterproof marine plywood. Millwright type ladder is designed for heavy duty use in construction



work. Available in lengths from 4 to 16 feet. Manufacturer: Louisville Metal Products Co., Inc., Louisville, Ky.

HEATING BOILER AB11832

Spencer Series "21," all-purpose heating boiler, is designed to burn any type fuel. Cast iron sectional boiler convertible to oil, gas stoker or hand-fired operation. Capacity range, 340 to 1,000 net IBR steam. Grate assembly included as part of base. All sizes available with either tank or instantaneous-type domestic hot water heating coils to provide hot water automatically in winter. In summer, unit will automatically heat service water independently. Manufacturer: Spencer Heater Div., Avco Manufacturing Corp., Williamsport 19, Pa.

(Continued to page 166)



Take "The Labor" Out
of Tacking

HAMMER TACKERS

DRIVE STAPLES FROM 5-32 TO 9-16" IN LEG LENGTH
FEED AND DRIVE STAPLES AUTOMATICALLY

TACK 2 TO 4 STAPLES PER SECOND

EASY ONE HAND OPERATION



EASY TO CLEAN - EASY TO LOAD

Tacking presents no problem when you use a Duo-Fast Hammer Tacker. It is time-saving, efficient and thorough. One hand does the complete job. This is the easiest, quickest method of tacking insulation, building papers and felts. Write for information on the Duo-Fast hammer, gun and air tackers.

DUO-FAST
FASTENER CORPORATION
809 Fletcher Street Chicago 14, Illinois

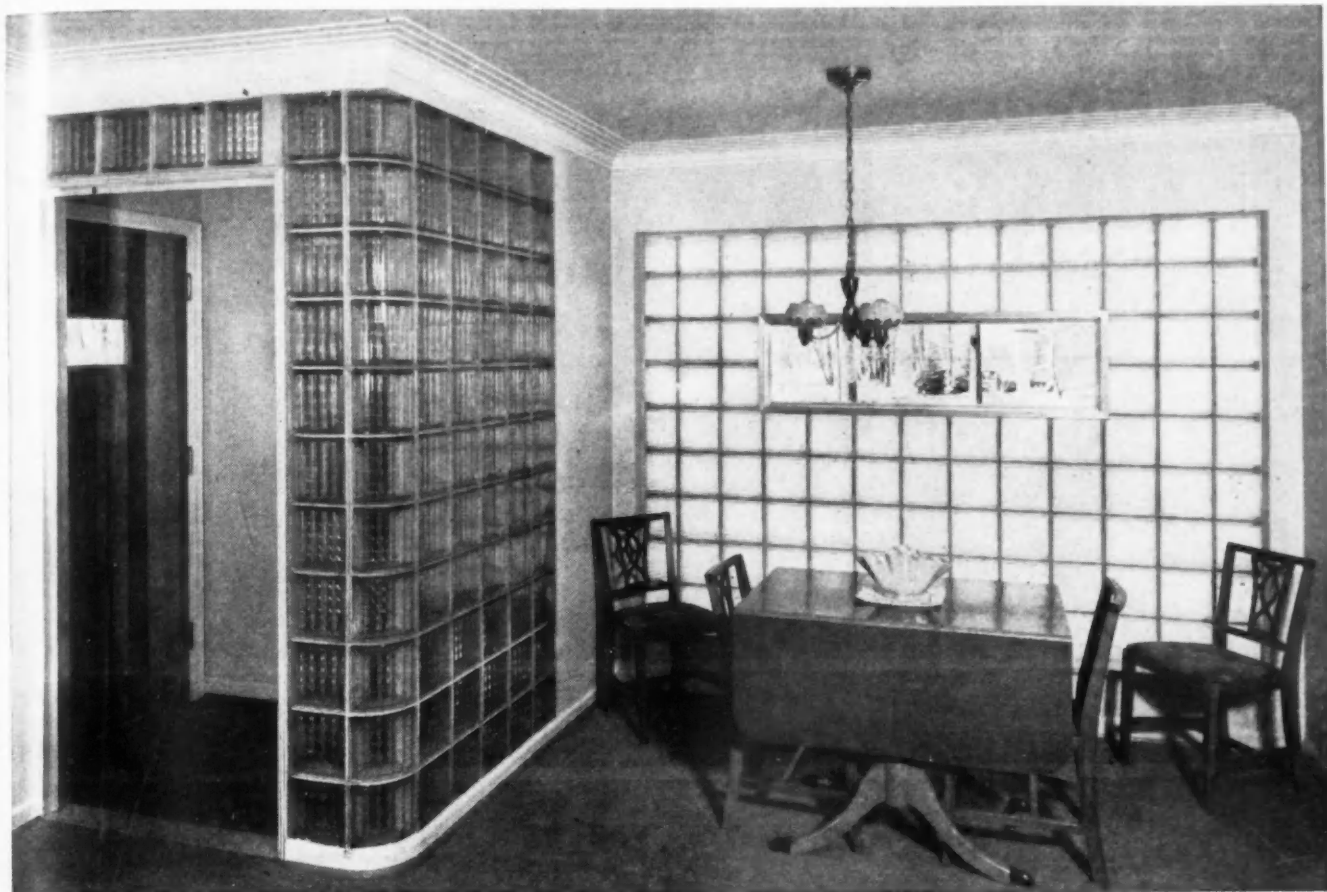
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LENGTH



Use of Insulux Glass Block No. 350 in this sun-exposed dining alcove assures evenly diffused lighting even on the brightest days. Clear vision fenestration provides visibility. Contractors: William Bortolotti & Sons, Detroit, Michigan.

For daylight with complete privacy —

THERE'S no need to sacrifice privacy to get daylight. With Insulux Glass Block panels, rooms can be made bright and cheerful without exposing occupants to curious outsiders. Insulux can be used

alone or in combination with clear vision windows.

Many builders have also discovered that Insulux Glass Block No. 350 is ideally suited for daylighting rooms with sun exposures. Panels of Insulux No. 350 diffuse daylight and distribute it evenly into interiors. Three types of design are available to meet specific needs.

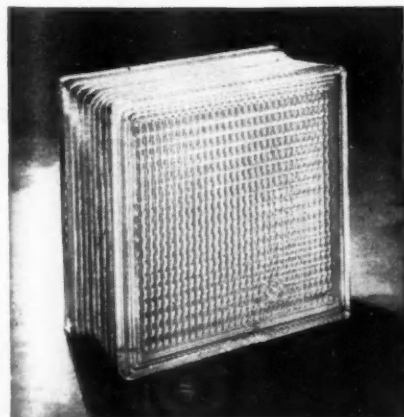
Insulux Glass Block is a versatile building material, adaptable to many applications in home construction. It gives better heat insulation and carries less noise

than other light-transmitting materials. Simple to maintain, Insulux panels can be washed with plain water.

To the builder, Insulux Glass Block offers strength plus durability and ease of installation. It is laid similar to ordinary brick and is free from rot, rust and corrosion.

• • •

Greatly expanded production facilities mean Insulux is now available for immediate delivery in large or small lots.



INSULUX
GLASS BLOCK

A AMERICAN STRUCTURAL PRODUCTS COMPANY

Subsidiary of
OWENS-ILLINOIS GLASS COMPANY



American Structural Products Company
Dept. E-60, P.O. Box 1035
Toledo 1, Ohio

Gentlemen:

Please send me your free booklet on home applications for Insulux Glass Block, "Ideas for Brighter Homes."

Name _____ Address _____

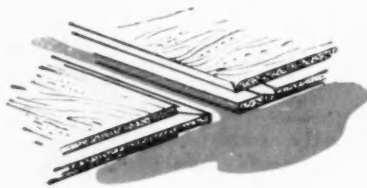
Firm _____

City _____ Zone _____ State _____



HARDWOOD BLOCK FLOORING HAS NEW CUSTOMER-APPEAL

The luxurious beauty and unusual construction and sales advantages found only in Hasko Interlocking Block Flooring are equally important to the architect and builder. Here is a Block Flooring that provides a unique, long wearing, and distinctive floor pattern of beautiful northern oak, yet is practical to install and use . . . that is equally adaptable to new or old homes and buildings. There is a substantial saving in time, materials and labor with Hasko Floor Blocks. Pre-cut, pre-finished, they require a minimum of sawing and fitting, and are ready for instant use upon laying. 12"x 12" Hasko Blocks, 3/8" thick, are built up of multiple plies of veneer, permanently bonded and cross grained, assuring floor flatness and great durability.



INTEGRAL INTERLOCKING TONGUE AND GROOVE

The tongue and groove are integral parts of every Hasko Block. They interlock each block with those surrounding it to create an extra margin of assurance that the whole floor will always remain flat.



EASY TO INSTALL

Hasko Blocks can be installed with mastic directly over concrete without the use of screeds, lag screws or expansion bolts or by nailing over wood, sub-floors or old floors.

Write today for your copy of this new Haskelite Bulletin explaining in detail the design and construction advantages of Hasko Block Flooring.



ADVERTISED IN LEADING NATIONAL MAGAZINES

HASKELITE MANUFACTURING CORP., DEPT. AB, GRAND RAPIDS 2, MICH.
 New York Chicago Detroit Boston St. Louis Philadelphia Los Angeles
 CANADA: Railway & Power Engineering Corporation, Ltd.

NEW PRODUCTS

(Continued from page 164)

FIREPLACE CONTROL SCREEN AB11825

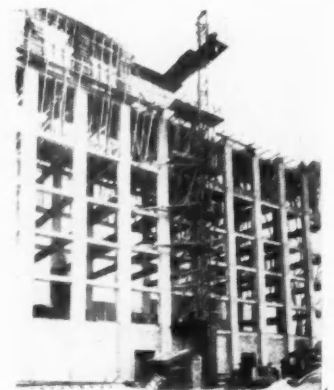
Designed to prevent flying sparks and to increase fireplace efficiency, screen control incorporates heavy plate glass louvres that can be adjusted at top or bottom to check or increase draft. Louvres spaced 1/8-inch apart allows air to pass through, cooling



glass and preventing smudges from smoke. Louvres controlled by knurled knobs. Mesh screen is behind louvres. Manufacturer: Dollinger Corp., Rochester, N. Y.

PORTABLE ELEVATOR AB11816

Elevator has allowable height of 97 feet, with platform lift of 90 feet. It is self-erecting when used at 47 feet height or under. Concrete bucket of 14 cubic feet capacity available, interchangeable with



6x6-foot platform. Both units are pin connected to facilitate easy installation. Manufacturer: American Hoist & Derrick Co., 63 S. Robert St., St. Paul 1, Minn.

CONCRETE BUCKET AB11814

Round-type concrete bucket, of medium weight, may be used for crane elevation on jobs with high walls or where forms cover wide area. Made of steel plate, it is welded throughout, with steel bar reinforcement around top and bottom. Discharge opening, 14 inches square, is closed by double-acting steel-plate gate. Gate operated by curved-pipe handle. Reinforced eye permits suspension on a crane hook. Capacity, 27 cubic feet of concrete. Height, 63 inches; diameter, 55 inches. Manufacturer: Muller Machinery Co., Metuchen, N. J.

(Continued to page 168)

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nches.
Co.,

ANDERSEN *Windowalls**

Brighten the Corner Where You Are

HERE IS A CLEVER use of ANDERSEN WINDOWALLS—as an inverted corner in a bedroom. These windows turn the sunny outdoors directly into the home, bringing plenty of fresh air to ventilate the room on torrid summer days.

In winter, ANDERSEN WINDOWALLS provide superb wall-like protection against infiltration of cold air.

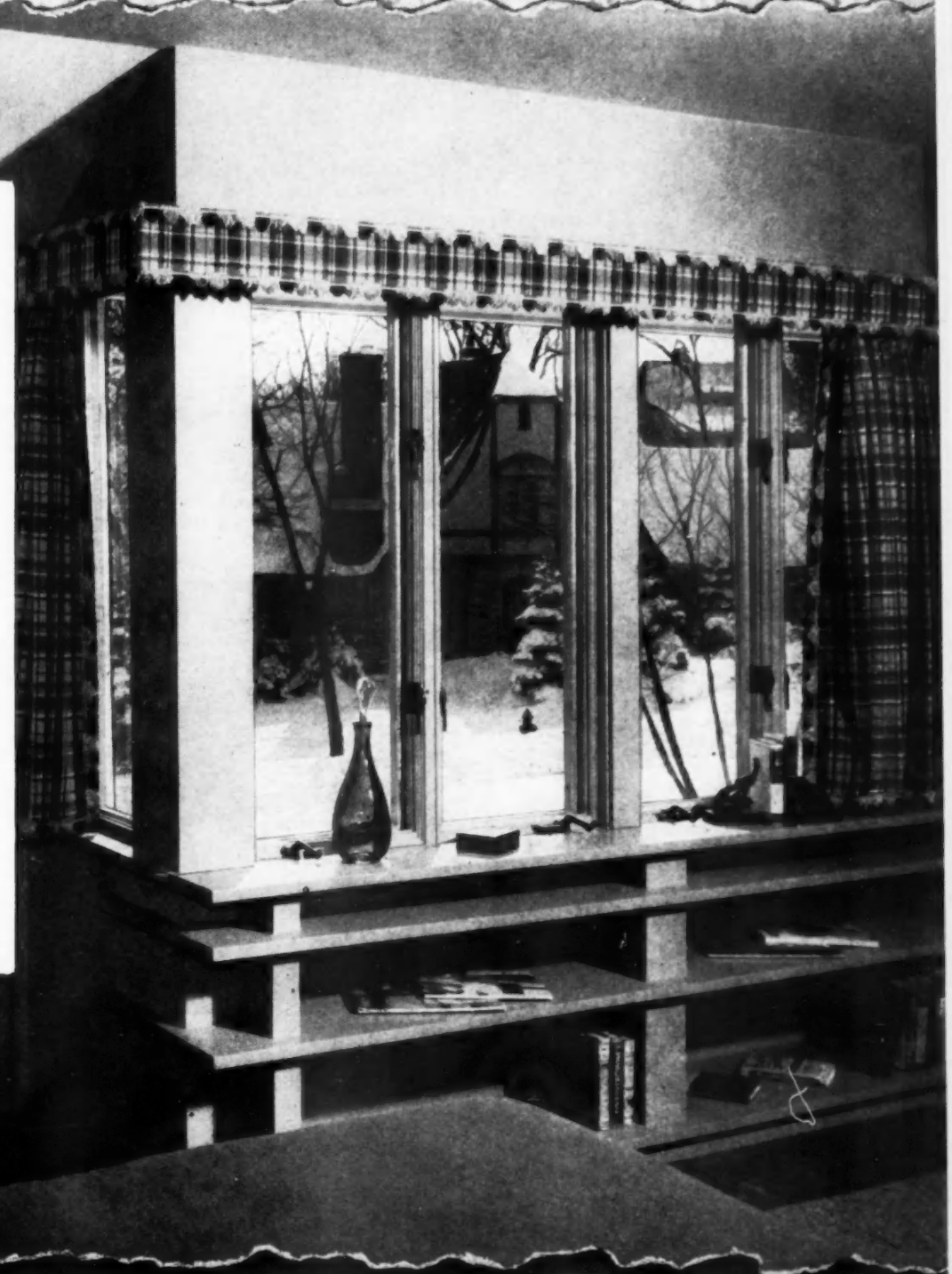
In this installation three Andersen Casement Window Units, No. 4428, with one-light glazing have been arranged together.

Specification data on ANDERSEN WINDOWALLS is in Sweet's Architectural and Builders' Catalogs, or will be sent by us upon request. See your local lumber or millwork dealer for further information.

* TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation
BAYPORT • MINNESOTA

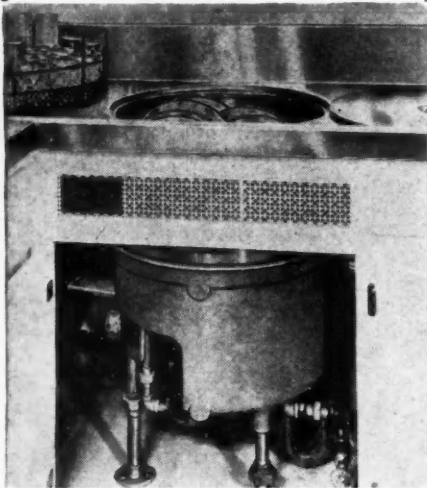
*Lions Club Model Home, Minneapolis;
Robert Cerny, Architect*



JACKSON

... A *New*
DISHWASHER
FOR THE HOME

*Backed by 23
Years Experience
in Manufacturing
Commercial Dish-
washers! . . .*



Can be installed in any 24" drain board in present kitchens or new homes. Removable Monel metal cover fits flush with drainboard—permits installation in corner location or under overhead cabinets.

THERE'S NO SUBSTITUTE FOR EXPERIENCE

and Jackson's 23 years experience brings to the home dishwashing field these exclusive features:

- **70 SECOND OPERATION**—commercial dishwashing speed brought to the home!
- **DOUBLE-REVOLVING WASH SPRAYS**—restaurants and hospitals the nation over testify to the efficiency of this exclusive Jackson method . . . now available to the home owner!
- **RUGGED, LIFETIME CONSTRUCTION** found in no other home dishwashing machine!

Write Today to Dept. AB-4, specifying Model H-1A, for full information.

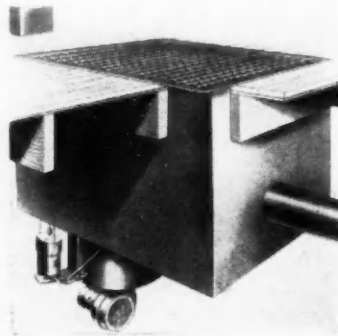
**THE
JACKSON DISHWASHER
COMPANY**

DISHWASHING SPECIALISTS SINCE 1925
3703 EAST 93rd STREET CLEVELAND 5, OHIO

NEW PRODUCTS

(Continued from page 166)

FLOOR FURNACE AB11824
Gillen Floor Furnace, a thermostatically regulated, automatic oil-burning unit, incorporates motor and blower attachment designed to furnish steady, controlled draft. Unit delivers an approximate output



of 52,500 B.T.U.'s. Overall height, 48 inches; length, 37 inches; width, 25 inches. Approved by Underwriters Laboratories, Inc. Meets U.S. Department of Commerce, Commercial Standard 113 requirements. Manufacturer: J. L. Gillen Co., 204 E. High St., Dowagiac, Mich.

SHALLOW WELL WATER SYSTEM
AB11831

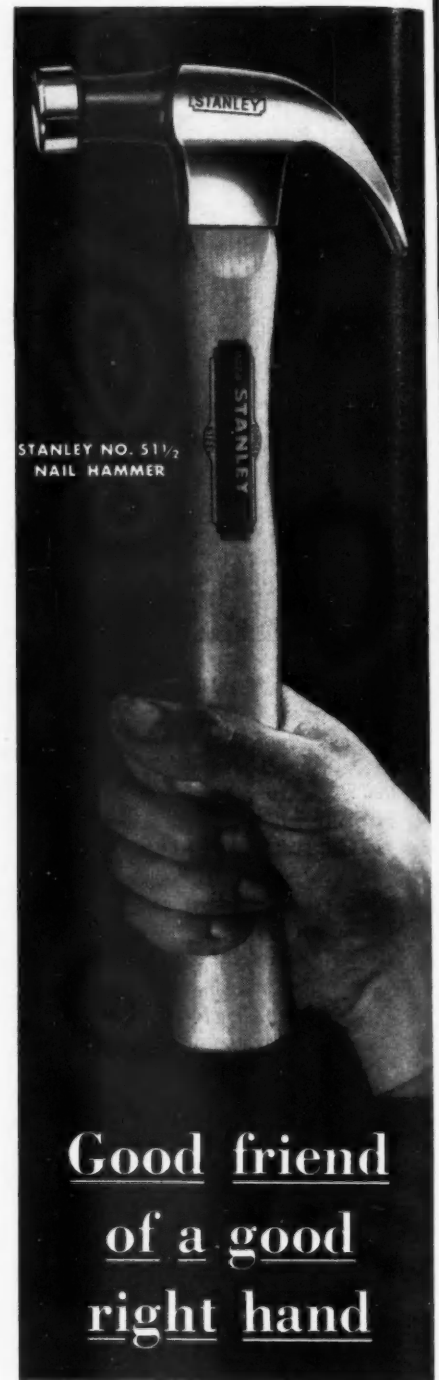
Turbin type system, Model LU-25, contains all bronze pump housing with rubber impeller, 1/4-h.p. capacitor type motor, automatic pressure switch, copper tubings and fittings. Three and one-half gallon pressure tank is top mounted. Foot valve and 8-foot electric cord and plug included.



Unit is 19 inches high, 14 1/2 inches wide and 11 inches in depth. Weight, 53 pounds. Manufacturer: Fairbanks, Morse & Co., 600 S. Michigan Ave., Chicago, Ill.

ELECTRIC DRILLS AB11828
Model No. 500 incorporates lightweight construction and sufficient power for maintenance and production drilling operations. Capacity, one-half inch. Features are balanced armature for smooth running; housing and handles of light-weight aluminum alloy; universal A.C.-D.C. motor; blower-type fan for cooling; removable side handles for close-quarter drilling, Jacobs Hex Key Chuck, and Cutler-Hammer Trig-

(Continued to page 170)



Good friend
of a good
right hand

Picking up a Stanley Hammer is like grasping the hand of an old friend. It feels just right because it's skillfully made to the measure of your own skill. Forged from special analysis steel and given two super heat treatments. Handle is locked in head by "Evertite" process, exclusive with Stanley. Stanley Tools, New Britain, Connecticut.

THE TOOL BOX OF THE WORLD

STANLEY

Reg. U.S. Pat. Off.

HARDWARE · HAND TOOLS · ELECTRIC TOOLS

"Give us nothing but
Tite-Ons in the future"



**WHAT BUILDERS WANT
... AND WHY!**

● This letter from the president of the J. Harvey Vatterott Realty and Building Co. is typical of many, many others. Tite-Ons sell on the only thing that really counts . . . PERFORMANCE!

"We are building a subdivision in South St. Louis, and have approximately 80 houses now under roof. During a recent windstorm we had roof damage to quite a number of houses, but the

houses with (Dubl-Coverage) Tite-On Shingles were not damaged. We are now sold on this shingle and have instructed your distributor to give us nothing but Tite-On Shingles in the future."

Dubl-Coverage Tite-Ons interweave and interlock, anchor down so firmly that even hurricanes haven't been able to rip them off or tear them loose. And because they make a roof that has *two* complete thicknesses over the entire roof area (*three* thicknesses at certain vital points), they give extra protection against driving rain, sleet, and snow!

No wonder many high class housing builders now use Dubl-Coverage Tite-Ons exclusively . . . these windproof shingles please everybody!

RUBEROID

DUBL-COVERAGE

TITE-ON SHINGLES

Building Materials for Home, Farm and Industry

The RUBEROID Co.

Executive Offices: 500 Fifth Ave., N. Y. 18, N. Y.

is like
friend.
skill-
your
anal-
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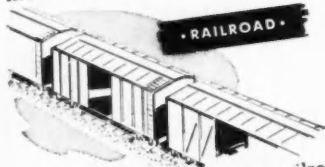
TOOLS

ZINC SERVES YOU

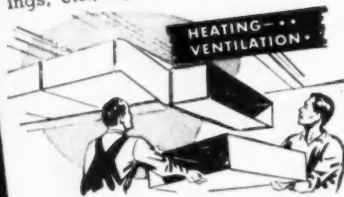
Galvanizing (Zinc coating) insures long-time, low-cost service. For as long as iron or steel is coated with Zinc, it cannot rust. For satisfaction, use galvanized materials. They're "Sealed-in-Zinc" against rust.



TIME proves galvanized sheets stay stronger longer. Used as roofing and siding, they give buildings the "strength of steel" . . . the rust protection of Zinc. The "Seal of Quality" (above) is your guide to economy in buying galvanized sheets. It means they carry at least 2 oz. of Zinc per sq. ft. Galvanizing also lengthens fence life and service.



Galvanized products in the railroad industry guard bridges, cars, buildings, etc., against rust.



Strength, workability and resistance to heat as well as rust make galvanized sheets ideal for heating and air-conditioning.

FREE BOOKLETS

Fully illustrated and packed with practical information on galvanized sheets and Metallic Zinc Paint. Send for them, *today!*



AMERICAN ZINC INSTITUTE

35 East Wacker Dr., Chicago 1, Ill. Rm. 2605

Send me without cost or obligation the illustrated booklets I have checked.

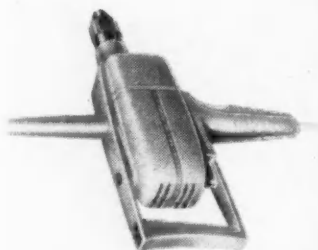
- Repair Manual on Galvanized Roofing and Siding.
- Facts about Galvanized Sheets.
- Use of Metallic Zinc Paint to Protect Metal Surfaces.

Name _____
 Address _____
 Town _____ State _____

NEW PRODUCTS

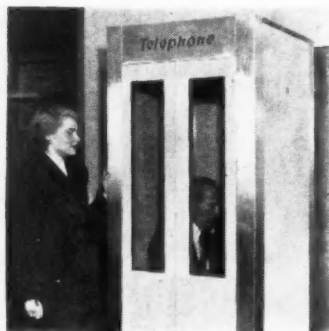
(Continued from page 168)

ger Switch. Manufacturer: Portable Electric Tools, Inc., 255-59 W. 79th St., Chicago 20, Ill.



PLASTIC PHONE BOOTH AB11822

Laminated plastic, used for walls and ceilings in Sherron telephone booth, is fabricated from Textolite melamine surfaced



panels which are laminated with phenolic varnish. "Noise eliminator" channels outside sounds into sound-absorbing cells contained in walls and ceiling. Ventilating van which operates automatically with folding door is optional. Light operated simultaneously. Manufacturer: General Electric Co., Plastics Div., Pittsfield, Mass.

SCREEN DOOR CLOSER AB11826

Norton Model 44 closes screen doors and controls storm doors. Contains heavy, brass, seamless cylinder; oil-impregnated



piston rod bearing, enclosed in flat wire spring. Steel plunger capped with oil-impregnated leather with brass spring expander. Moving parts enclosed. Manufacturer: Norton Door Closer Co., 2900 N. Weston Ave., Chicago 18, Ill.

(Continued to page 172)

Shevlin-McCloud Lumber Company

Successors to Shevlin Pine Sales Co.
 *Member of the Western Pine Association.



DISTRIBUTORS OF

SHEVLIN PINE

REG. U. S. PAT. OFF.

SELLING THE PRODUCTS OF
 *The McCloud River Lumber Co.
 McCloud, California

*The Shevlin-Hixon Company
 Bend, Oregon

SPECIES

PONDEROSA PINE
 (PINUS PONDEROSA)

SUGAR (Genuine White) PINE
 (PINUS LAMBERTIANA)

EXECUTIVE OFFICE
 900 First National Soo Line Building

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This ADDING MACHINE Adds and Subtracts FEET and INCHES!



and only \$12.95

No other ADDING MACHINE matches all of Addometer's advantages

Handiest helper on construction jobs you ever saw! Adds, subtracts FEET AND INCHES and $\frac{1}{8}$ fractions quickly, accurately—right on the job. Only 11 $\frac{1}{2}$ x 2 $\frac{1}{2}$ in. size, weighs 14 oz.; 8-column capacity; single stroke dial clearance. Also adds dollars and cents up to \$10,000.00.

"Can't Do Without It," Users Say

Contractors, architects, engineers, highly praise Addometer's advantages—thousands in daily use.

Money-Back Guarantee

The Addometer is yours for only \$12.95, postage prepaid—10-day money-back guarantee if not fully satisfied. Descriptive folder on request—or, send check or money order NOW.



Reliable Typewriter & Adding Machine Co.
 Dept. M-11, 303 W. Monroe St., Chicago 6, Ill.

open for inspection!



And this means inspection — close inspection — of the smart, crisp freshness of the new authoritative Pratt & Lambert Paint colors. They stand the closest inspection and make buyers want the houses on which they are used.

These fine products save you time and money because they cover more surface per gallon and hide in fewer coats. They save you material and labor. And your painters will like Pratt & Lambert Paint and Varnish because they are so easy to work with. Pratt & Lambert-Inc., 80 Tonawanda St., Buffalo 7, N.Y. In Canada, 6 Courtwright St., Fort Erie North, Ontario

PRATT & LAMBERT
paint and varnish



**DOOR CLOSER
SPECIFYING
MADE EASY**



New EAGLE
Universal DOOR CLOSER
Fills All Surface
Closer Needs For
Standard Wood or
Metal Interior Doors

No longer do you have to worry about indicating right hand, left hand, hold open or non-hold open operation on your specifications for surface closers on interior doors. Now, for the first time, here's a truly universal hydraulic door closer which fills all these applications without mechanical change.

When you specify the Eagle Door Closer, you can be sure this advanced-type closer will give you the door control required for standard interior wood or metal doors.

Distinguished by its functional design and attractive statuary bronze finish, the Eagle Closer provides dignified simplicity and beauty that harmonizes with any setting.

For the complete story on this timely development, write for a copy of the illustrated Eagle Door Closer brochure.

The **EAGLE LOCK** Company
Eagle Industries, Inc.,
National Sales Representative
110 North Franklin Street,
Chicago 6, Illinois



America's First Truly Universal
Hydraulic Door Closer

NEW PRODUCTS

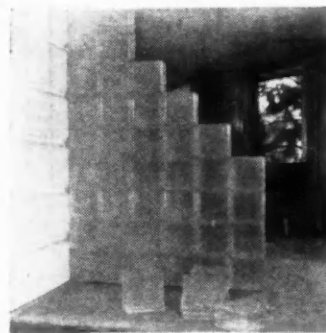
(Continued from page 170)

FLOOR SANDER AB11844
Model F-10 floor sander is designed to follow contour of uneven floors. Drum cover is interchangeable, and may independently be returned to factory should



rubber cushions become worn. Fan, 6 3/4 inches in diameter, turns at speed of 5,400 r.p.m. Drum is 10 inches wide. Allowing for 2-inch lap on each cut, machine cuts 8-inch strip, cutting within 1-inch of wall. Manufacturer: Porter-Cable Machine Co., 1714 North Salina Street, Syracuse 8, N.Y.

PLASTIC PARTITION BLOCKS AB11817
Interlocking blocks for interior use, made of Styron, a Dow plastic, are approximately 7 3/4 inches square and 4 inches deep. Outer surface is smooth; inner surface composed of many diamond-like facets for light



effect. The blocks are lightweight, and permit good light transmission. Interlocking rib produces decorative, non-load-bearing partition. Patents on block design now pending. Manufacturer: Columbia Protokosite Co., Inc., Carlstadt, N. J.

DOOR CLOSER AB11818
Made of lightweight alloy, this door closer incorporates two-speed operation system. First speed through general swinging arc from any degree of door opening is fully automatic and self-adjusting. "V" slots machined into inner walls of cylinders regulate speed, and give diminishing speed to door as it reaches latch speed. About 6 inches before closed position, door may be controlled by regulating screw, providing desired speed at final closing. Manufacturer: Eagle Industries, Inc., 110 N. Franklin St., Chicago 6, Ill



**Attention DEALERS,
BUILDERS, AND CONTRACTORS**

The most beautiful all chrome finish fluorescent medicine cabinet with plate engraved Everlast mirror, all General Electric equipment, plastic caps, Underwriters' approved, **retails at \$43.75**. This medicine cabinet unit is built for the purpose of saving all wiring and fixtures necessary for the bathroom as it contains all the wiring and switches necessary and also a convenience outlet for electric razor or any other use. Each fixture has a separate switch so that you may light one or two lights as you desire and will provide sufficient light for any bathroom without any extra fixtures. The only thing necessary is to connect the cabinet with the main line. The price of this cabinet is very reasonable and at the same time it covers all the cost of wiring and fixtures for the bathroom.

Manufacturers representatives and distributors invited.

Manufactured by
FLUORESCENT LIGHTING CO.
MONTICELLO, N. Y.

**Homes Dressed Up
QUICKLY—EASILY**
At Low Cost

. . . with Coffman Grilles, Posts,
Brackets, and Entrance Rails

SMALL HOMES are easily beautified at very little expense with Coffman Ornamental Iron! All the charm of Old New Orleans and Charleston is built into these hand-wrought ornamental iron posts, brackets, grilles, and railings. Designed by master craftsmen, their architectural proportion is exact, their quality —unsurpassed!

Stock Designs, Sizes . . . Low Prices

Lumber and Building Supply Dealers have Coffman Ornamental Iron instantly available from stock. Easy to install, all Coffman designs save labor, give lasting satisfaction. They are superior to wood or masonry, and won't rot, split, warp, or shrink; and, of course, they are termite-proof.

DEALERS

Coffman low cost hand-wrought ornamental iron has a wide market in the small home field. Its quality of design and construction, together with standardized production economies makes selling easy to the low cost home builder . . . he can afford ornamental iron, NOW! If you are not stocking this line at present, be sure to get the facts.

Manufacturers of the Original
"Complete Builders Line"
of Hand-wrought Ornamental Iron

Write Department AB, P. O. Box 259, for
free catalog of designs, sizes and prices.

The R. J. Coffman Co. Inc.
ORLANDO, FLORIDA
ESTABLISHED 1925

PROVIDENCE WAREHOUSE WITH 22,000 SQ. FT. FLOOR AREA USES CHASE COPPER TUBE FOR RADIANT HEATING!



HERE'S WHY
 you, too, will want Chase Copper Tube
 in your Radiant Heating Installations!

EASY TO BEND	LONG LENGTHS
LOW COST	LIGHT IN WEIGHT
SOLDERED FITTINGS	LONG LIFE
SMALL DIAMETERS	

Pouring concrete over 12,000 feet of Chase Copper Tube. Installation also included 5500 feet for office ceiling and 1200 feet for sidewalk and drive snow removal. Architect: Charles A. Maguire & Associates, Providence, R. I. Building Contractor: A. F. Smiley Construction Co., Pawtucket, R. I. Heating Contractor: J. F. Higgins Heating Co., Providence, R. I.

BIG jobs . . . little jobs, Chase Copper Tube has the advantages that mean fast, economical installation . . . dependability! For instance: you reduce costly, time-consuming connections because Chase Copper Tube is available in coils up to 100 feet long. Its flexibility means quick, easy hand-bending! And no fittings are needed at bends.

In floor installations, as illustrated, there's no need for accurate leveling of Chase Copper Tube. For ceilings, its light weight makes this overhead work easier . . . and its small diameter does not require extra plaster for coverage. Send for instructive, informative booklet that discusses radiant heating in theory and practice. Write Dept. AB-118.

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 "Suggestions for Designing
 RADIANT PANEL HEATING
 with Copper Tube."
MAIL THIS COUPON TODAY!

Chase Brass & Copper Co., Dept. AB-118
 Waterbury 91, Conn.

Please forward your book "Suggestions for Designing Radiant Panel Heating with Copper Tube."

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 Address _____
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Chase

the Nation's Headquarters for
BRASS & COPPER

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THIS IS THE CHASE NETWORK . . . handiest way to buy brass

ALBANY! ATLANTA BALTIMORE BOSTON CHICAGO CINCINNATI CLEVELAND DETROIT HOUSTON! INDIANAPOLIS KANSAS CITY, MO. LOS ANGELES MILWAUKEE MINNEAPOLIS
 NEWARK NEW ORLEANS NEW YORK PHILADELPHIA PITTSBURGH PROVIDENCE ROCHESTER! SAN FRANCISCO SEATTLE ST. LOUIS WATERBURY (Indicates Sales Office Only)

REZ

for better...easier
...more economical
WOOD FINISHING



REZ Primer and Sealer
...The foundation for all wood finishes. Controls dimensions and provides a perfect hard surface for paint, enamel or varnish.



WHITE REZ Intermediate Coat... A superior undercoat to be applied after sealing the wood with REZ. Makes possible beautiful finishes on softwoods, such as Douglas fir plywood and pine.



HI-GLOSS REZ... A clear, transparent, sparkling surface finish for furniture, built-ins, interior woodwork, millwork, panels, toys, paneling, athletic equipment and all kinds of cabinet work.

Ask your dealer or jobber for further information and copies of new folder, "Wood Finishing"—or write direct to **MONSANTO CHEMICAL COMPANY**, Western Division, Seattle 4, Wash. District Sales Offices in Los Angeles, San Francisco, Portland, Lockport, N.Y. Rez: Reg. U.S. Pat. Off.



SERVING INDUSTRY... WHICH SERVES MANKIND

Books

Prize Homes by Chicago Tribune. Publisher, Wilcox & Follett, 1255 S. Wabash, Chicago 5, Ill. Price, \$3.50. A book of up-to-date postwar homes conceived to give fullest expression to the latest and best thinking in small home construction, and to utilize to best advantage the most practical and economical ideas, methods, and building materials. The book presents ninety-two houses, complete with floor plans and elevations, including the twenty-four prize winners in full color and sixty-eight other excellent designs submitted in the Chicago Tribune's \$24,000 prize homes competition.

Building Forum Booklets by Good Housekeeping Magazine, 57th Street at 8th Ave., New York 19, N. Y. Price, 25c each. The first of a series of booklets covering the various aspects of home building has been released by Good Housekeeping. Prepared primarily for consumers, these books contain much that is of interest to the professional. Booklet No. 1 titled "Foundations and Basements" offers ideas on installing crack-proof foundations, and suggests ways and means of improving basements in old houses. Booklet No. 2 titled "Heating and Air Conditioning" is designed to inform buyers of the major differences in heating systems to enable them to select the one best suited to their needs; and Booklet No. 3 titled "Insulation, Weatherstripping, Storm Sash" answers such questions as where to weatherprotect a house, and why; how to determine which insulation is best suited to a job; and what to do to stop condensation.

Strength of Houses, Application of Engineering Principles to Structural Design by Herbert L. Whittemore, John B. Cotter, Ambrose H. Stang, and Vincent B. Phelan. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C. Price, \$1.50. This book is a complete report of an extensive research program on building materials and structures to determine how much excessive material is being used in today's small house. Sponsored by the Bureau of Standards, U.S. Dept. of Commerce, the report describes how engineering methods can be applied to the design of houses to determine their strength. The engineering approach to strength of houses, it is thought, will open the way for designers to introduce unconventional materials and unusual methods of fabrication by determining in the lab-

(Continued to page 176)

Art in Iron

NEW stock designs — lower prices!



Artcraft stock rails No. 395 in 4 lengths. Priced per pair.
2'6" — \$12.00 3'6" — \$14.00
3'0" — 13.00 4'0" — 15.00

STOCK PORCH COLUMNS
Corner & Single-panel
Height corners 12" panels
7'0" \$25.00 ea. \$14.50 ea.
7'6" 27.00 ea. 15.50 ea.
8'0" 29.00 ea. 16.50 ea.

IMMEDIATE DELIVERY on all Artcraft stock items. Prices net F.O.B. Columbus, Ohio. Terms: Payment with order or C.O.D. Have ARTCRAFT do your most exacting custom iron work too. ORDER DIRECT! SATISFACTION GUARANTEED!

No. 20 Ohioans add 3% Sales Tax No. 14

Write for our new 40 page catalogue
ARTCRAFT Ornamental Iron Co.
724 E. Hudson St. Columbus 11, Ohio



NEW! Atlas 10" SAW

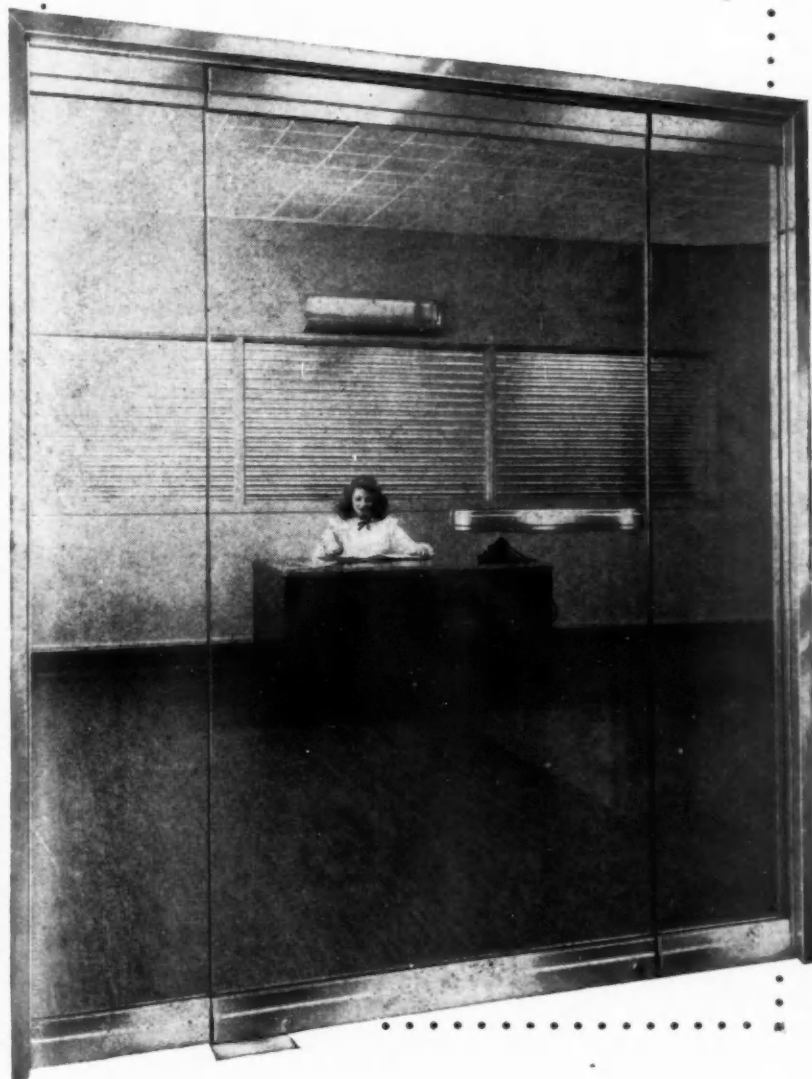
Your work moves along faster and more profitably with a new Atlas 10" Tilt/Arbor Bench Saw on the job. It's ruggedly designed to handle heavy sawing... precision built for the finest cabinet work. 10" dia. blade cuts 3 1/4" deep, tilts 45° for angle work. Three models, with 25" deep work table in widths of 22", 33 3/4", and 45 1/2". 12 3/4" table surface ahead of blade. Dado capacity 13/16". Fast positioning rip fence. Send for complete details.

ATLAS PRESS CO.
1139 NO. PITCHER ST.,
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MATCHED PRECISION TOOLS FOR
WOODWORKING AND METALWORKING

"Pittsburgh's" new
HERCULITE
DOOR-FRAME ASSEMBLY
*is simple, adaptable,
 easy to install*



FROM specification to installation, utter simplicity marks this new Herculite Door-Frame Assembly. In ordering, all you do is specify "Herculite Door-Frame Assembly" and give the style number and size needed. There are twelve standard designs from which to choose, affording unusual versatility and adaptability to many varied requirements. And the ease with which these frames are handled appeals to all — architects, contractors, chain store executives, and retail merchants.

Using special checking gauges to assure the accuracy of all dimensions, these factory-built (no assembly is necessary on the job) units meet the highest standards of fabrication. Architectural styling has been combined with structural and mechanical engineering to produce frames that are handsome, well constructed. They are built of special shapes and of heavy extruded aluminum, heavily reinforced with structural steel. They are supplied complete with Pitco Checking Floor Hinge, moldings for transom glass, supports for sidelights, strikes for locks, sockets for bolts, and thresholds when specified.

Why not get the full story on this revolutionary door-frame? Simply fill in and return the coupon below for your free copy of our booklet. Do it now.



Only 6 1/4" x 6 1/4", the Pitco Checking Floor Hinge provides positive door speed control, a separate checking control, and a built-in hold-open feature. It is sealed in oil for life. Case and cover are drop-forged. Main working parts are hardened and ground tool steel. Bearings are anti-friction, precision-ground.

This sectional view illustrates the handsome, rugged design of the frame. Made of extra-heavy extruded aluminum, highly polished and anodized, it is heavily reinforced with steel channels and tie rods as partially shown here.

Pittsburgh Plate Glass Company
 2362-8 Grant Building, Pittsburgh 19, Pa.
 Without obligation on my part, please send me a copy of your free booklet on "Pittsburgh's" new factory-built Herculite Door-Frame Assembly.

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

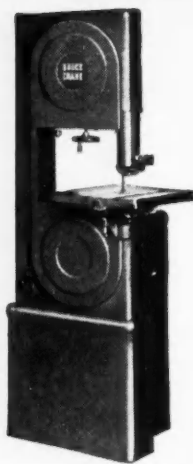


PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

**SMOOTHER
FASTER
CUTTING**

**BOICE-CRANE
14" BAND SAW**



Operates at higher speed—4,400 blade feet per minute. Saws from two to four times more lumber footage in a given time than any other 14 inch band saw. High speed super sawing smoothness saves sanding labor on every cut. Sturdy. Accurate. Single and 8-speed back-gearred models for cutting practically any material. Clears 8 3/4" under the guide. One-piece welded steel frame has tremendous strength. Wheels and blade, except at cutting point, are entirely enclosed. Cabinet type base has sealed-off motor compartment. High safety rating. Blade guides adjust by a single control, and with full safety, even when machine is running. Close balance, and light but strong Textolite wheels permit twice the speed of other 14" machines. Less vibration, and longer bearing life. Saws wood two to four times faster.

SPECIFICATIONS

Sawing Capacity: Blade to guard, 13 1/2", 27" dia. work. Guide to work table 8 3/4".
Table: Tilts on Double Trunnions. Size 15" x 15 1/2".
Height Overall of Floor Model: 67".
Blade Widths: 3/16", 1/4", 5/8", 1/2", and 3/4".
Length of Blade: 98".
Wheels: Disc. Moulded Textolite, 14" dia. 1" face.
Bearings: Grease-sealed Ball Bearings.
Blade-speed at 1200 r.p.m.: 4,400 ft. per min.

**BOICE-CRANE
POWER TOOLS**

- Designed for ready adaptability to a wide range of projects, fewer machines are needed to fill all your requirements.
- As nearly 100% safe as modern devices permit.
- Durably constructed, they can take a beating which would incapacitate most machines.

WRITE FOR FREE LITERATURE.

BOICE-CRANE COMPANY
966 Central Avenue • Toledo 6, Ohio

BAND SAWS • JIG SAWS • SAW JOINTERS • BELT SANDERS
SPINDLE SANDERS • LATHES • THICKNESS PLANERS
SPINDLE SHAPERS • DRILL PRESSES • JOINTERS

(Continued from page 174)

oratory whether constructions have the necessary strengths, thus greatly shortening the time required to develop and obtain acceptance of new constructions for houses.

1948 Store Modernization Clinics, published by Store Modernization Show, Inc., 40 E. 49th St., New York 17, N.Y. Price, \$5.00. The highly informative clinic discussions of the 1948 store modernization show provide the material for this volume. Illustrations chosen to accompany the text were selected from the slides, diagrams and photographs used by the speakers. Subjects covered include "Store Layout and Traffic," "Store Lighting and Color," "Displays and Fixturing," "Store Fronts," and "Planning and Budgeting for Modernization."

Manufacture, Selection, and Application of Asphalt Roofing Products, published by Asphalt Roofing Industry Bureau, 2 West 45th St., New York City, N.Y. Price, 35 cents. Illustrated throughout with specially prepared drawings, this book gives detailed instructions for applying various styles of strip and individual shingles, roll roofing, pattern edge roll roofing and 19-inch selvage double coverage roll roofing. Methods for estimating quantities of roofing, and instructions for roof deck construction and for construction of flashings, valleys, chimneys and soil stacks are among the other subjects covered in the book.

100 Fireplace Ideas, published by Price Fireplace Heater & Tank Corp., 47 W. Austin St., Buffalo 7, N. Y. Price, 25 cents. This book contains a wealth of ideas on fireplace design. The ideas are presented pictorially beginning with the early Colonial fireplace and carrying through to today's streamlined modern version. Another feature is the outdoor grill. The publishers manufacture the Fyro-Place, a scientifically designed steel form around which almost any style or design of fireplace can be built.

Warm Air Heating and Air Conditioning by John W. Norris, vice president, The Lennox Furnace Co., Marshalltown, Iowa. Price, \$5.00. The principles of design of various types of heating systems are graphically and simply described in layman's language in this heating book. The up-to-date text includes material on new techniques in warm air heating, constant air circulation, electrostatic air cleaning and gravity heating of basementless houses.

"USE YOUR ATTIC"



For free information, see your building material dealer or write—

MARCO
STAIRWAYS
1697 N. CLEVELAND AVE.
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**LITH-I-BLOCK
Machine**

Rated Capacity
3840
8x8x16"
BLOCKS
Per Day

or
40,000
BRICKS
Per Day



Tomorrow's block machine is here today, the result of 12 years research by Lith-I-Bar engineers plus over two years of actual production on the pilot model.

It will produce light weight, as well as sand and gravel block. It makes all standard sizes of block, brick and chimney block.

A few of the advantages which have been so widely acclaimed are: unusually quiet operation—continually clean pallets—size changes in as little as 15 minutes—automatic pallet feed—easily adjusted vibrating cycle—instantly adjustable feed timing—off-bearing cycle reduced to one-half of production cycle—simple installation.

Write today for complete details. The Lith-I-Bar Company, Holland, Michigan.

LITH-I-BAR CO.
BOX 114B HOLLAND, MICHIGAN



WHAT DO YOU REALLY KNOW ABOUT ALUMINUM SIDING?

When Kaiser Aluminum Siding is mentioned, perhaps you're inclined to think: "Oh, yes—know all about it."

But do you?

Granted you may know that Kaiser Aluminum Siding is made of highest grade, roll formed aluminum.

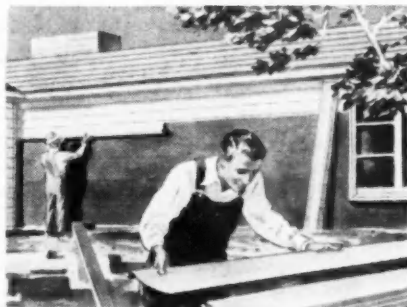
Granted you may know that it's strong and dent-resistant... that its permanent beauty can't be marred by splits, knots or sawing scars.

But do you know all these *other* facts which make Kaiser Aluminum Siding superior to any other? For instance...

Curved surface

creates tension

Result: A weatherproof lock



DO YOU KNOW Kaiser Aluminum Siding has a preformed curved surface—a feature found in no other siding? This deliberately engineered feature makes it the strongest residential siding used. It produces a rigid weathertight joint and creates a tension which eliminates waves or buckles as each piece is nailed down. And it creates clean lines.

DO YOU KNOW that Kaiser Aluminum Siding costs no more than other fine materials? And that in many ways it *saves* money for builders and home owners? Its light weight speeds construction, cuts labor costs—and it requires no special tools for application. What's more, it takes fewer nails and its non-porous surface requires less paint. Paint goes on faster, too!

DO YOU KNOW that with Kaiser Aluminum Siding on their homes your clients can forget about the usual maintenance problems? For Kaiser Aluminum Siding will never rot, rust, warp or crack in any climate. It's fire resistant and can't be damaged by rats or termites. And its surface is especially prepared to assure firm paint adherence and lasting finishes.

Want to know more? Write for additional information on Kaiser Aluminum Siding—the new material with a unique combination of advantages!

Kaiser Aluminum Siding specifications:

Length . . . 10, 12, 14 and 16 ft. standard lengths
 Width . . . 6 1/2" Thickness030"
 Weight . . . 580 lbs. per 1146 base feet (1000 sq. ft.)
 Shipped in cartons containing 200 base feet, weighing 106 lbs. overall.

Kaiser Aluminum

SIDING

product of Permanente Metals Corp.

SOLD BY PERMANENTE PRODUCTS COMPANY, KAISER BUILDING, OAKLAND 12, CALIFORNIA . . . WITH OFFICES IN:
 Atlanta • Chicago • Cincinnati • Cleveland • Dallas • Detroit • Houston • Indianapolis • Kansas City • Los Angeles • Milwaukee
 Minneapolis • New York • Oakland • Philadelphia • Portland, Ore. • Salt Lake City • Seattle • Spokane • St. Louis • Wichita

Every Builder Should Know!

Spaced Sheathing Saves Money

He should know that, because of their extra strength, he can apply Certigrades on *SPACED* sheathing boards. This provides approximately 50% savings in cost of sheathing lumber and sheathing application.

Long Life Means Low Cost

The expert applicator knows that a Certigrade Shingle roof will last for decades, at a cost which is remarkably low per square per year.

Application Methods Give Strength

Certigrade Shingles, because of their over-lapping "bridging" application add strength to the roof where so many other roof materials add only the burden of weight

Weather Resistance Is Essential

The roof will be safer—rugged in its resistance to hail, wind, rain . . . as proved in the storm areas throughout America.

. . . He knows that the dealer who sold the shingles, the contractor who recommended them, and the home-owner who paid for them—all were considering the *ultimate* cost. He knows that their careful consideration proved that the long-lasting luxury of Certigrade Shingles is the *most economical* choice because Certigrades provide *more years of carefree service* for every dollar of cost!

RED CEDAR SHINGLE BUREAU

8310 White Building, Seattle 1, Washington
or Metropolitan Bldg., Vancouver, B. C., Can.



**CERTIGRADE
CEDAR SHINGLES**



General Plywood Announces Executive Staff Changes

SAMUEL E. STOUT, chairman of the board, General Plywood Corp., has announced that Edwin O. Dulaney has resigned as president and director of the company due to ill health. Carl B. Robbins, an executive vice president of McCann-Erickson, Inc., since 1943, has been named successor to the posts left vacant by Dulaney.

Other executive changes announced by Stout are the resignation of Calvin M. Hilton as vice president and director; the election of John L. Farris, secretary, to the office of vice president; the election of James W. Thomas, controller, to that of treasurer; and the election of Ford M. Hettich to the office of secretary.

Jesse H. Lide, formerly account executive of McCann-Erickson has joined the staff as vice president in charge of sales and advertising; Irving W. Clark, formerly associated with Great Lakes Steel Corp. who joined the staff as general sales manager, and Marion W. Lewis, Jr., president of Fairfield Distributing Co. and president of Lewis & Co., who has been named to the board of directors.

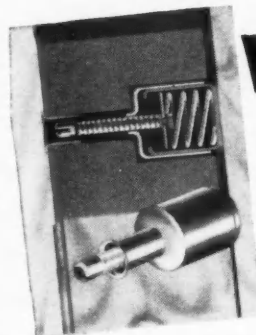
Savings and Loan Assns. Report Increased Deposits

DESPITE the higher cost of daily essentials, the American people placed more savings in savings and loan associations during the first eight months of 1948 than in 1947, according to James J. O'Malley, of Wilkes-Barre, Pa., president of the National Savings and Loan League. New savings placed by the public in savings and loan associations totaled \$2,657,219,000 in the first eight months of this year, as compared with \$2,309,178,000 in the same period last year.

"This is really remarkable when all factors of the present economic situation are considered, and plainly indicates that Americans are determined to retain their thrift habits regardless of the squeeze on the pocketbook by the rising cost of living," O'Malley said. "Our nation is on definitely strong foundations when its people keep up their regular savings habits."

Citing statistics prepared by the Home Loan Bank Board, O'Malley also pointed to the record job in home financing being done by savings and loan associations and others, emphasizing that home mortgages recorded in the first eight months of 1948 reached the "staggering total" of about 8 billion dollars, or some six per cent ahead of the same period of 1947.

For Windows Everywhere



VIKRE NEW ECONOMY SASH- HOLDER

More and more, builders are discovering the true economy of Vikre New Economy Sash Holders. Cost installed compares favorably even with that of spring bolts.

No Weights — no cords — no mortising. Just drill one hole, that's all. No drafty weight pockets to give you insulation headaches. For true economy and lasting satisfaction use Vikre New Economy Sash Holders for windows everywhere.

Tested and proved for years on thousands of construction jobs, Vikre Sash Holders are available through your building supply dealer. For full details, write:

J. N. VIKRE CO.

3016 14th Ave. S. • Minneapolis, Minn.

Take Our Tip

If you want to keep abreast of new developments in building you should have a reference shelf of standard handbooks and new books to consult. No one can keep all this information in his head or in private note books. The information on current developments in the trade press is fragmentary. It is brought together in books after being tested on the job and found worthy of permanent record. The information is stripped down to basic facts and in many instances clearly illustrated or compared with other data in tabular form.

To build up a small reference shelf of building books you need to know what books are available on subjects of particular interest, what they contain, the year of publication or last revision, and their current prices. You will need some good plan books, a few estimating books and forms, and some carpentry and building details books, among others. We have three Recommended Lists of books on these subjects which are free on request. Take our tip and send for them today.

Book Service Department

AMERICAN BUILDER

30 Church Street

New York 7, N. Y.

DOUBLE DUTY INSULITE

* (BILDRITE SHEATHING)



BUILDS



INSULATES

When you give good value in products, it pays off—in fast sales and satisfied customers. A house sheathed with Insulite is a *better* house because it's warmer and braced stronger (twice as strong as wood sheathing horizontally applied). That's good for your customers, but it's also good for *you* because you can always make more sales, be sure of good profits.

See Sweet's File for Builders — 2c/11

**BUILDS AS IT...
INSULATES**

double-duty
INSULITE

**INSULATES
AS IT BUILDS**

The GENUINE

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

INSULITE DIVISION
PAPER COMPANY
MINNEAPOLIS 2, MINNESOTA

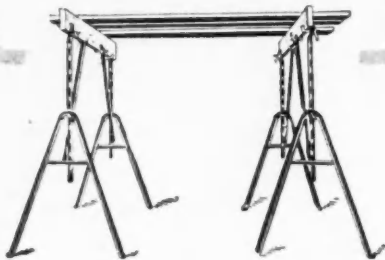


DO....

ALL OVERHEAD WORK
This easy, low-cost way!



"Trouble-Saver"
Adjustable
STEEL TRESTLES



SAFE! STRONG! ECONOMICAL!



• Details of the quickly-adjustable "Trouble-Saver" Steel Trestle.

Builders, contractors, maintenance men and others save time, labor and material with "Trouble-Saver" Adjustable Steel Trestles. They're unequalled as a safe, sure, low-cost method of handling all overhead work under a wide variety of conditions.

Write for new catalog and complete information.

SIZES — SPECIFICATIONS, ETC.

Size No.	Low Point	High Point	Number of Adjustments	For Working Heights
2	16"	22"	4	7½ to 7¾'
3	2'	3'	5	8 to 9'
3½	2½'	3½'	5	8½ to 9½'
4	3'	4¼'	6	9 to 10¼'
6	4'	6'	9	10 to 12'
8	5½'	8'	11	11½ to 14'
10	6½'	10'	15	12½ to 16'
12	7'	12'	19	13 to 18'

**THE STEEL
SCAFFOLDING
CO., INC.**

856 Humboldt St., Brooklyn 22, New York
Telephone: EVergreen 3-5510

**Asbestos Limited, Inc.,
Changes Name**

THE NAME of Asbestos Limited, Inc., Millington, N.J., has been changed to Smith Asbestos Products, Inc. The change in name followed the acquisition of this long established producer of asbestos products by the Smith Asbestos Products Co.

According to R. R. Galloway, president, a complete rehabilitation of the plant and the installation of modern manufacturing equipment is underway. The work is expected to be completed early in 1949.

**New Central Manager
For Portland Cement**

R. F. DIERKING, Des Moines, Iowa, was appointed manager of west central offices of the Portland Cement Association, effective September 15. He succeeds R. W. Winters, who resigned. Dierking's headquarters will be in Kansas City, Mo. He was district engineer in charge of the Association's office in Des Moines since 1937.

**Walter Scott to Head
Schollhorn Division**

WALTER SCOTT, for 21 years a sales representative for Sargent and Co., New Haven, Conn., has been appointed sales manager of the Schollhorn Division of Sargent and Co. This division handles products of the former 75-year old William Schollhorn Co. which was recently taken over by Sargent.

From his experience in the field, primarily in the Central Atlantic



WALTER SCOTT

States around Washington, Scott brings an intimate knowledge of the hardware field. Schollhorn outlets of distribution will be continued.

**James R. Ritchay
To Head HomeOla Corp.**

DIRECTORS of The HomeOla Corp., Chicago, Ill., manufacturers of prefabricated houses and modular house parts, elected James R. Ritchay

president, to succeed the late Jacques Willis. Ritchay continues his duties as treasurer. Vice presidents R. J. Willis, John S. Townsend, Jr., and Jack Dietrich were re-elected.

Ritchay was associated with the Continental Illinois National Bank & Trust Co. of Chicago prior to joining the HomeOla Corp. in 1946.

**John W. Humphrey Joins
Philip Carey Mfg. Co.**

R. S. KING, president of the Philip Carey Manufacturing Co., Cincinnati, Ohio, today announced the appointment of John W. Humphrey



JOHN W. HUMPHREY

as executive vice president. He succeeds C. A. Lambie, Sr., who recently retired from this post.

Humphrey joins the Carey organization with an outstanding business record. He has made contributions in the field of management to such organizations as General Motors, National Cash Register and International Telephone and Telegraph Corp.

A member of the Engineers Club of Cincinnati, the Queen City Club and the Newman Society, Humphrey is also a director of the Buckeye Tool Corp., Dayton, Ohio, Chesley Industries of Detroit, Mich., and Cincinnati Metalcrafts.

**Building Costs May Go
Higher In Larger Cities**

HOMEBUILDING costs have begun to level off in most smaller towns and cities, but may climb still further in larger metropolitan centers, a nationwide poll by the United States Savings and Loan League has indicated.

Results of the poll were announced after a survey of 250 savings and loan association executives throughout the country had been completed by the League.

In the opinion of 72 per cent of those polled, building costs have not yet run the full course of the inflation spiral. The remaining 28 per cent, most of them from smaller

(Continued to page 182)

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Luxurious
MIAMI BEACH HOTEL
 chooses
AllianceWare

● Designed to provide its guests with the utmost in gracious living, the new Kenilworth Hotel, on the oceanfront, Miami Beach, has won acclaim far and wide for its beauty and modernity. Planned during the war years when building was restricted, the owners carefully searched for perfection in every detail of construction.

When bathroom equipment was selected, AllianceWare porcelain-on-steel tubs were the choice. The hotel is completely equipped in its more than 150 rooms with AllianceWare five-foot tubs. The management reports, "We are exceedingly well pleased with the AllianceWare installations."

Whether it's one tub or a thousand, those who value quality and long-lasting attractiveness find complete satisfaction in AllianceWare. Your plumbing contractor can give you complete details of AllianceWare. Or, write us direct.

ALLIANCEWARE, INC. • Alliance, Ohio
Bathtubs • Lavatories • Sinks

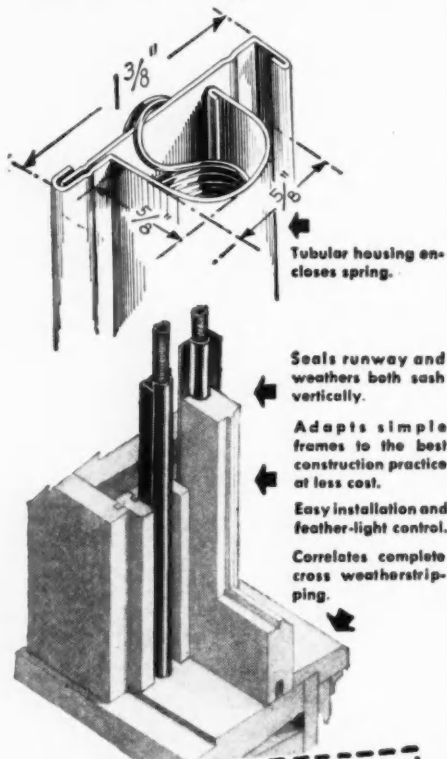


An announcement

■ The Allmetal Weatherstrip Company, manufacturers of quality weatherstrip equipment since 1915 announces a NEW and SUPERIOR patented Sash Balance and Weatherstrip Unit.

Details are shown below.
Here are the features . . .

- 1 Balancing equipment for double-hung sash has always emphasized sash suspension. The Allmetal Unit is engineered to counter-balance sash in two ways; with coil spring tension to overcome gravity and metal housing tension to provide stability. Note that the tubular housing which covers the spring is a free-moving member. Under easy compression in the sash groove it offers maximum surface contact with the wood yet maintains free vertical movement.
- 2 Spring is enclosed and invisible.
- 3 Effective weather protection for the runways is assured with flexible hemmed side rib.
- 4 Non-corrosive and rust-proofed metal construction throughout.



ALLMETAL WEATHERSTRIP CO. 39, III.
2243 N. Knox Avenue, Chicago

Centlemen: Please send me complete information and prices.

Name _____

Address _____

Town _____

THE ALLMETAL SASH BALANCE & WEATHERSTRIP UNIT

(Continued from page 180)

towns and cities, thought costs had started to stabilize. Only one of the men polled—from a small Michigan city—saw a downward trend in building costs in the near future.

American Lumber and Treating Co. Opens New Sales Offices

THE AMERICAN Lumber and Treating Co. has recently opened sales offices in Philadelphia, Pa., and



J. P. JOHNSON, JR.

in Baltimore, Md., J. G. Coolidge, eastern sales manager, announced recently.

J. P. Johnson, Jr., formerly with the company's Washington, D.C. office, is sales representative in Philadelphia with offices at 123 S. Broad St. W. E. Wilkins, recently in the New York sales department, is Baltimore representative with offices at the



W. E. WILKINS

company's new plant on the Fairfield district waterfront. These appointments take effect immediately.

Both Johnson and Wilkins are graduates in chemistry from Virginia Military Institute and, prior to the war, both spent several years in the company's wood preserving plants, technical department, and sales offices. During the war both Johnson and Wilkins served on active duty in the Army.

Goodyear Assigns Weeden To Builders' Supply Section

APPOINTMENT of Kenneth L. Weeden, formerly of Butler, N.J., to the staff of the Builders' Supply



KENNETH L. WEEDEN

and Flooring department, The Goodyear Tire & Rubber Co., has been announced by A. W. Biggs, department manager.

Weeden, a graduate of Kent State university, served more than three years in the Pacific with the Marine Corps, and had been with Goodyear five years before his war duty.

General Industries, Inc., To Produce Low-Cost Prefabricated House

PRODUCTION of a new low-cost home for low-income families has been announced by General Industries, Inc., prefabricated home manufacturers of Fort Wayne, Ind. Four of these houses, opened to the public in Fort Wayne during National Home Week, were promptly sold. They were financed under the new provision of the Housing Act of 1948, providing 95 per cent, 30-year mortgages insured by the Federal Housing Administration.

The basic house, designed to answer the need for a \$6,000 home within the means of lower-income families, is of stressed-skin plywood construction, 24 feet, 3 inches square. It has two bedrooms, living room with dining area, kitchen, bath and a utility room, with additional storage room in the attic space. The house is built on concrete slab. Inside walls are finished with wall paper or are painted. The buyer has several choices in exterior finish including asbestos shingles and plywood.

Fiberglas Establishes Pacific Coast Division

ESTABLISHMENT of a Pacific Coast division of Owens-Corning Fiberglas Corp. and the appointment of L. R. Kessler as its general manager has been announced by Harold Boeschstein, president.

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WHY THIS Galvannealed STEEL DOOR IS AMERICA'S GREATEST GARAGE DOOR VALUE



THE PROTECTION OF GALVANNEALING, added to the strength of steel, assures lifetime durability and makes this door an unequalled value (see illustration at right). Galvannealing provides a hot galvanized zinc coat for rust protection, PLUS high temperature heat treating that effects a perfect, permanent bond between base metal and zinc coat. Assures a smooth, uniformly coated surface and a clinging base for paint, without the need for a special priming coat.

BUILT FOR STRENGTH—welded all-steel one piece door leaf, and welded all-steel frame and braces, provide outstanding strength for a lifetime. (Steel will never sag, warp, shrink, swell or rot.)

OPERATES EASILY. A child can open the Strand Door. Simple, efficient hardware is designed for trouble-free service.

INSTALLED QUICKER—an experienced man can install the Strand Canopy Door in a prepared opening in *minutes*; the Receding (track-type), too, is quickly and easily installed.

AMERICA'S GREATEST GARAGE DOOR VALUE—Give your customers the durability and performance of this galvannealed steel door—at an amazingly low price. This is the result of volume production in one plant and standardization on two models.

Strand Doors are available without waiting and without limit. Order today from your dealer, or mail the coupon, giving dealer's name.

Galvannealed
.. RUST PROTECTED

First—A Hot Galvanized Zinc Coat

Then—High Temperature Heat Treating

Provides Clinging Base For Paint

No Prime Coat Needed!

A
Tenestra
BUILDING PRODUCT
—produced by Strand Building Products Co., a subsidiary of Detroit Steel Products Co.

ALL STEEL GALVANNEALED • OVERHEAD • ONE PIECE

STRAND GARAGE DOORS

TWO TYPES . . . RECEDING (TRACK) AND CANOPY

STRAND BUILDING PRODUCTS COMPANY
Dept. AB11, 1710 Buhl Bldg., Detroit 26, Mich.

Please rush literature with detailed descriptions of Strand all-steel Garage Doors.

I am a () Builder, () Dealer, () Prospective Owner,
() Other _____

Name _____

Address _____

City _____ State _____



**He's a PLUS
in Paranite Service!**

Don't overlook this man if you have a knotty problem involving wire or cable. He's the Paranite representative from any of the strategically located points shown above. As a specialist in applying the correct solution to wiring problems from Paranite's diversified line, he has helped smooth wrinkles from many brows. Or, if it is something special, he'll work with you and Paranite engineers and production men in coming up with the right answer.

If he can help you, just contact through your wholesaler, the nearest Paranite office, or Fort Wayne.



Paranite wire or cable is made under the watchful eye of SQC—Statistical Quality Control! Nothing is left to chance. Scores of graphs, tests, measurements—figures and figures—are drilled and marshalled, compiled and analyzed with individual operations still in progress. With SQC you can confidently recommend and use Paranite for lasting satisfaction.

IF IT'S PARANITE IT'S RIGHT!

DISTRIBUTED THROUGH WHOLESALERS

PARANITE WIRE AND CABLE
Division of ESSEX WIRE CORPORATION
FORT WAYNE 6, INDIANA

WAREHOUSES AND SALES OFFICES: Atlanta, Ga.; Chicago, Ill.; Cleveland, Ohio; Dallas, Texas; Detroit, Mich.; Kansas City, Mo.; Los Angeles, Calif.; Newark, N. J.; Philadelphia, Pa.; Portland, Ore.; St. Louis, Mo.; San Diego, Calif.; San Francisco, Calif.

Industry Spends Millions Annually For Research, Committee Study Reveals

AT LEAST \$15,000,000 a year is being spent by the building industry on organized technical research, designed to lower cost and improve quality of housing and other construction, according to a study made by economists of the the Construction Industry Information Committee.

Large additional amounts are being spent, also, for construction research by universities, technical colleges, and institutions. Another \$1,500,000 is being spent by federal agencies.

This large annual outlay, according to the committee, results in a steady stream of new building products, improvements in the quality and performance of existing products, and improved methods of combining individual building materials to raise the quality of finished structures.

"While there is pressing need for expansion of building research, accomplishments to date have been far more spectacular than the public realizes," the committee reported.

Among the many completely new products developed in the industry's extensive research program are gypsum board, fluorescent lighting, baseboard, and radiant heating, glazed structural tile, new types of insulation, laminated wood arches, and glass block.

Flintkote Executive To Head Association

JUL Z. HOLLMANN was elected president of the National Mineral Wool Association at the association's annual meeting.

Hollmann is manager of the Insulating Materials division, Flintkote



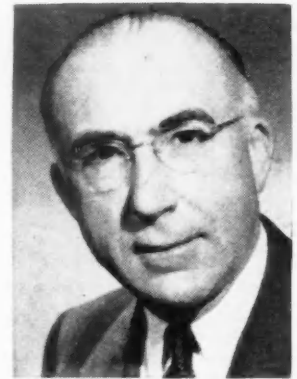
JUL Z. HOLLMANN

Co., New York, N.Y. He was general sales manager of the Celotex Corp. before joining Flintkote. He is a graduate of Washington State College, and resides in Larchmont, N.Y.

Rusco Awning Division Gets New Sales Manager

APPOINTMENT of H. A. Malcom as sales manager of the Rusco Awning division of the F. C. Russell Co., Cleveland, Ohio, has been announced by A. V. Padou, director of sales.

Prior to his association with the F. C. Russell Co., Malcom gained broad experience in the distribution



H. A. MALCOM

and specialty selling fields. He was general sales manager of the Airtemp division of Chrysler Corp., and has served both Westinghouse Electrical Supply Co. and Frigidaire division of General Motors.

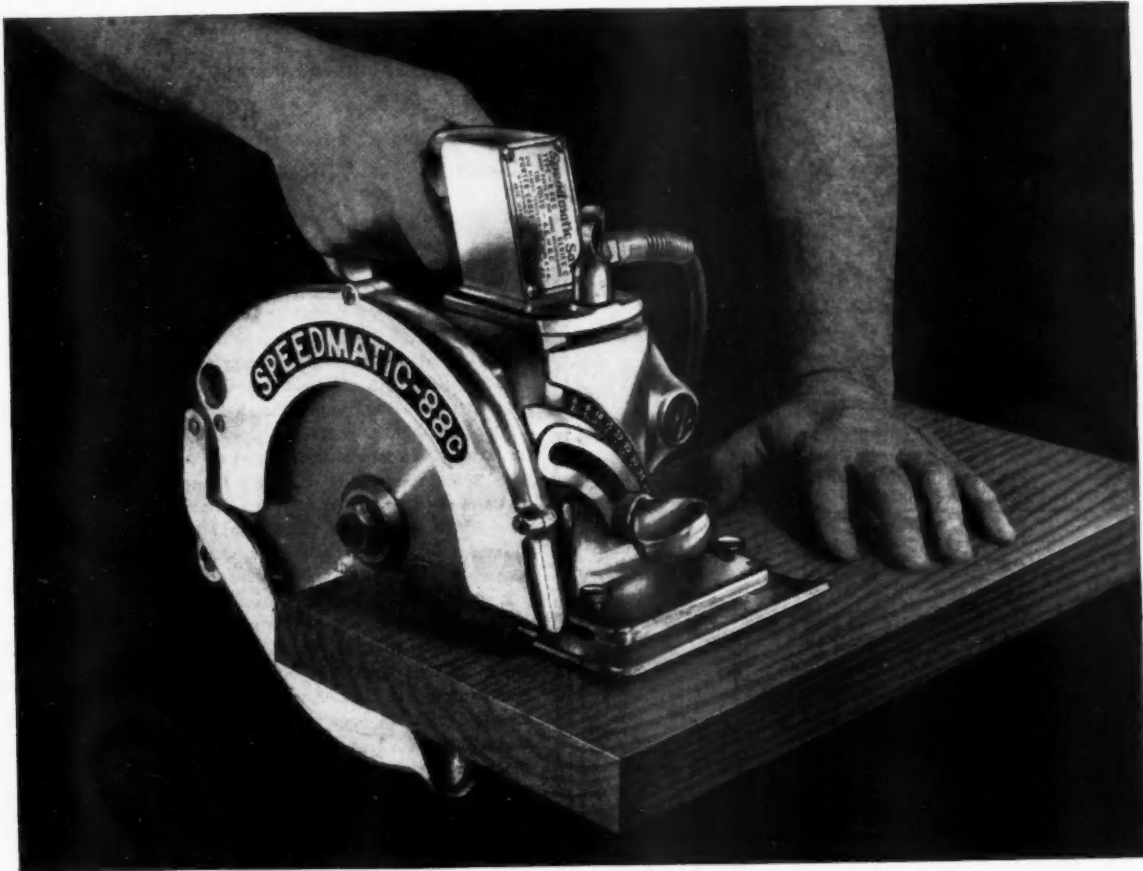
Lighting Exposition To Give Award Certificates

INTEREST accorded last year's Merit Award Competition sponsored by the International Lighting Exposition, Chicago, Ill., has inspired the sponsors of that organization to continue the Merit Award Competition in a third exposition. The third exposition and conference will be held at the Stevens Hotel, Chicago, Ill., March 29 to April 1, 1949.

The Merit Award Competition presents an opportunity for participants to enter one or more Lighting Case Studies which they have had a part in designing or installing during 1948. Five separate competitions allow the following to participate: Electrical contractors; utility lighting and power representatives; architects and consulting engineers; electrical wholesalers, owners, lighting specialists and salesmen; users of commercial lighting.

Announce New Model

LUMBER Fabricators, Inc., with main offices in the Fisher Building, Detroit, Mich., have announced that 66 new 1949 model homes will supplant all previous models manufactured by the company.



ONLY *Speedmatic* PORTABLE ELECTRIC SAWS

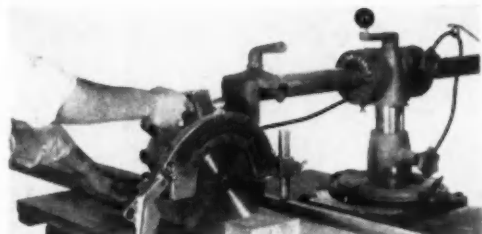
have all these time and effort saving features!

Here is the story . . . and a good one for All builders who are striving for top production

- 1. Easier one-hand operation**—The SPEEDMATIC has balanced, light weight. The handle is on top—where it should be—instead of behind the center of gravity. You can use it in any position . . . and that means a lot when you have to hold a piece of stock . . . or hold on to a ladder or scaffolding with the other hand.
- 2. No tipping, no swerving, no tilting**—And that's real saw performance, requiring no tiresome steadying—and just a light touch for guiding. Reasons: The broad shoe and the center-line power application. (By the way, SPEEDMATIC lies safely on its side when not in use.)
- 3. Practically feeds itself**—You don't have to nurse SPEEDMATIC. This saw really has POWER . . . unflinching power. Blade enters the cut at 7000 rpm—cutting edge travels faster than two miles a minute. The helical drive delivers 11% more usable power to the cutting blade. The fastest, cleanest, easiest sawing you've ever done!

4. Does bevels, notches, dados, mitres, tenons, curves, etc.—Blade raises and lowers for cuts ranging from a scratch to 4" depending on model. Blade also tilts up to 45°. Adaptable to nearly all building materials . . . wood, composition, ceramics and metal.

5. SPEEDMATIC Radial Arm gives extra utility—Saw is easily set to any cutting position . . . raised, lowered, swung. Automatic indexing at 45° either to right or left . . . also at 90° for ripping.



The SPEEDMATIC comes in four models

- K-75 7½" blade with max. cut of 2½". Weighs 15 lbs.
- K-88C 8" blade with max. cut of 2¾". Weighs 17 lbs.
- BK-10 10¼" blade with max. cut of 3¾". Weighs 24 lbs.
- BK-12 12" blade with max. cut of 4¾". Weighs 37 lbs.

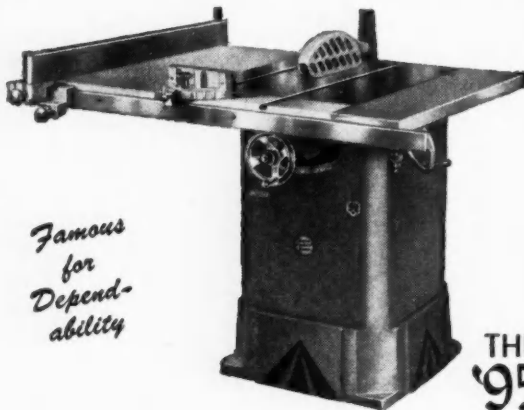
Easier to handle . . . faster than 5 Men with Handsaws!

PORTER-CABLE Machine Co.
1721-11 N. Salina St. Syracuse 8, N. Y.

TRY A SPEEDMATIC . . . FEEL THE DIFFERENCE . . . THEN COMPARE!



NATION-WIDE acceptance by Builders and Contractors—leaders of one of America's great industries—is impressive proof of the acknowledged superiority of DARRA-JAMES Power Tools. If you want the best, choose one of these 12-inch Tilting Arbor Saws:

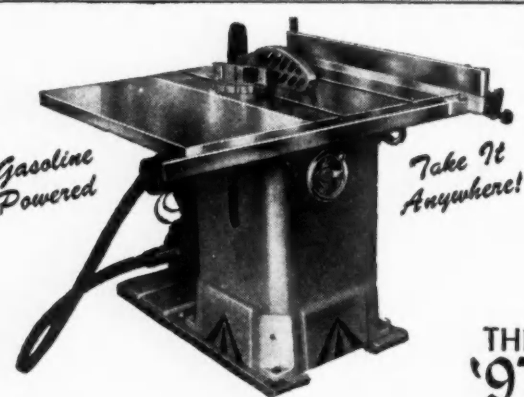


Famous for Dependability

THE '95'

This fine production unit has cast iron table, 3 aluminum extensions . . . self-aligning fence with micrometer adjustment . . . de luxe miter gage . . . advanced tilting and elevating mechanism . . . ball bearings . . . steel base.

Darra-James
SUPERIOR POWER TOOLS



Gasoline Powered

Take It Anywhere!

THE '97'

Take it on the job—anywhere! Carries own power, a 3 h.p. Gasoline Motor with 5 foot, 1/2-inch diameter core Flexible Shaft. Saw and motor mounted on heavy timber skids. Other specifications same as Model 95.

For Literature and Prices, Write Dept. V-2

toolcraft CORPORATION
WATERBURY 91, CONNECTICUT



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, published monthly at Chicago, Ill., for Oct. 1, 1948.

State of Illinois }
County of Cook } ss.

Before me, a Notary Public in and for the State and county aforesaid, personally appeared Robert H. Morris, who, having been duly sworn according to law, deposes and says that he is the Business Manager of the American Builder 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, semi-weekly 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 manager are: Publisher, Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N.Y.; editor, Edward G. Gavin, 105 W. Adams St., Chicago 3, Ill.; managing editor, Lyn E. Arant, 105 W. Adams St., Chicago 3, Ill.; business manager, Robert H. Morris, 105 W. Adams St., Chicago 3, Ill.

2. That the owners are: Simmons-Boardman Publishing Corporation, 30 Church St., New York 7, N.Y.; Stockholders of 1 per cent or more of the total amount of stock are: Mrs. I. R. Simmons, Pelham Manor, N.Y.; S. O. Dunn, 105 West Adams St., Chicago, Ill.; Mrs. C. E. Dunn, 3500 Sheridan Blvd., Chicago, Ill.; Mrs. Mae E. Howson, 6922 Paxton Ave., Chicago, Ill.; Ella L. Mills or Catherin S. Mills, Westfield, N.J.; Mrs. E. G. Wright, 398 North Walnut St., East Orange, N.J.; Mrs. E. H. Thompson, East Cleveland, Ohio; Mrs. Maude E. Slate, Summit, N.J.; Mrs. M. J. Blechner, Woodbury, Conn.; Henry Lee, Hopatcong, N.J.; Mrs. Pearl A. Lee, Hopatcong, N.J.; Ingalls & Snyder, 100 Broadway, New York, N.Y. General partners of Ingalls & Snyder are: Roscoe C. Ingalls; John T. Snyder; Warner W. Kent; Daniel L. Monroe; Samuel H. Watts; Ralph P. Hinchman, Jr.; Thorvald F. H. Tenney; Chester C. Veldran, all of 100 Broadway, New York, N.Y. J. Streicher & Co., 2 Rector St., New York, N.Y. Partners of J. Streicher & Co. are: Joseph Streicher; Jack L. Streicher; Ethel Streicher; Judson L. Streicher, all of 2 Rector St., New York, N.Y. Spencer Trask & Co., 25 Broad St., New York, N.Y. General partners of Spencer Trask & Co. are: Edwin M. Bulkeley, Ltd., 817 Fifth Ave., New York 21, N.Y.; Estate of Acosta Nichols, Ltd., c/o Arthur H. Gilbert, Exec., 25 Broad St., New York 4, N.Y.; Cecil Barret, Ltd., Bar Harbor, Maine; C. Everett Bacon, c/o Gerald C. Holbrook, High Tide, Hobe Sound, Fla.; F. Malbone Blodget, 65 Patterson Ave., Greenwich, Conn.; Arthur H. Gilbert, 440 Park Ave., New York 22, N.Y.; Henry S. Allen, 407 Highland Ave., Orange, N.J.; William Kurt Beckers, 1115-5th Ave., New York 28, N.Y.; Edwin M. Bulkeley, Jr., 18 West Trail Tokeneke, Darien, Conn.; Charles F. Bryan, 83 Adams St., Garden City, L.I., N.Y.; Harold H. Cook, 259 South Mountain Ave., Montclair, N.J.; Brittin C. Eustis, Old Chester Road, Essex Fells, N.J.; Anton Henry Rice, Jr., 1 Riverview Rd., Irvington-on-Hudson, N.Y.; R. Inslee Clark, 87-10th St., Garden City, L.I., N.Y.; Hartwell H. Bellows, 1 Ascan Ave., Forest Hills, N.Y.; Allan Chotard Eustis, Jr., Hulda Hill Road, Wilton, Conn.

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.

ROBERT H. MORRIS,
Business Manager.

Sworn to and subscribed before me this 27th day of September, 1948.

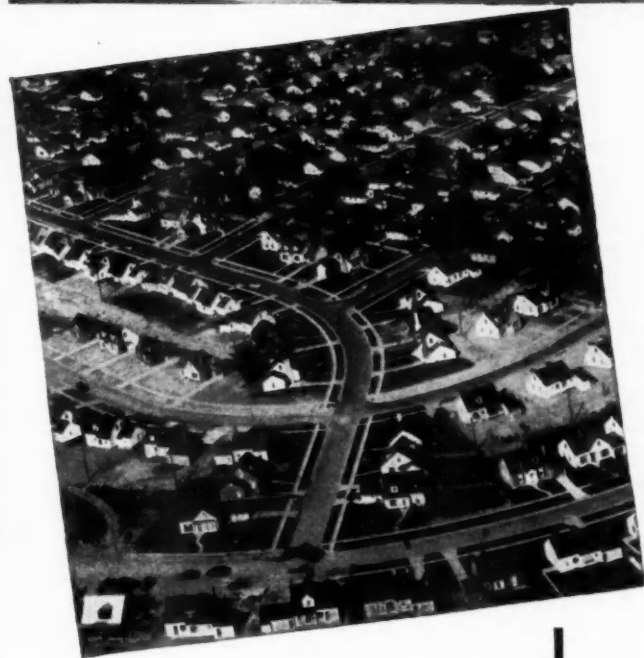
(SEAL)

RALPH E. WESTERMAN,
Notary Public.
(My commission expires Feb. 3, 1949.)

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As Robert P. Gerholz says:
*"Asphalt Shingles help houses
 stand apart—and yet fit together"*



NEWEST GERHOLZ PROJECT ZOOMS WITH ON-SITE BUILDING OF TWENTY-FIVE HOUSES AT A TIME

● The experience of 26 years in large home and neighborhood construction is focused in Mott Park of Flint, Mich., latest community development of Robert P. Gerholz and Gerholz Community Homes, Inc. Air view is of Bassett Park, recently completed project handled by Gerholz-Healy Co. All of Bassett Park's 601 homes are roofed with asphalt shingles—as will be all of Mott Park's 250 rambling colonials. Half completed, Mott Park benefits from efficiencies proved in other projects. Construction proceeds year round with 25 houses going up simultaneously. Architect for both developments is Charles Noble of Ann Arbor and Detroit.

**Community of spirit pays
 in *Community Development***

Again and again in modern community building, asphalt shingles are demonstrating their ability to spread charm, individuality, variety throughout an entire development.

Mr. Gerholz, president of Gerholz Community Homes, Inc., and past president of Natl. Assn. of Home Builders, puts it this way: "Asphalt shingles fit each house in an individual, personal way—and they help all houses fit together, in harmony and to the advantage of all."

Color, of course, is one of asphalt's big features. Fire resistance, with its resulting insurance savings, is important, too. Add to these asphalt's low relative cost, its adaptability, its neat modern appearance, the simplicity of proper application, its long, dependable service life and you have reasons to spare for its popularity.

**ASPHALT
 SHINGLES**

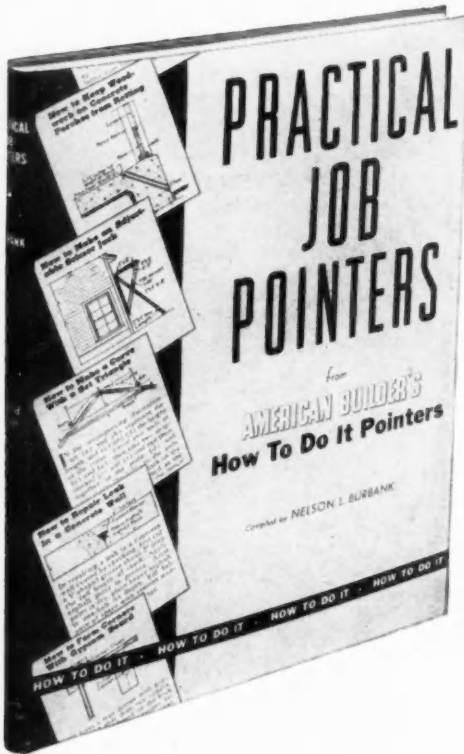
CONSTRUCTION'S BIGGEST DOLLAR'S WORTH

ASPHALT ROOFING INDUSTRY BUREAU

2 West 45th Street New York 19, New York

SPONSORED BY 28 LEADING MANUFACTURERS OF ASPHALT SHINGLES . . . SIDINGS . . . ROLL AND BUILT-UP ROOFINGS

New Third Edition



PRACTICAL JOB POINTERS

Compiled by NELSON L. BURBANK

Author of

**CARPENTRY AND JOINERY WORK;
HOUSE CONSTRUCTION DETAILS**

This collection of practical job pointers, kinks, short cuts and "tricks of the trade" which have appeared in the *How-to-Do-It Pointers* department of *American Builder* during the past decade, are brought together and cross-indexed for ready reference in this new edition. Nearly all of the 850 modern methods of doing carpentry and general repair jobs on a house are illustrated with a working drawing. The saving in time and effort to be made by use of almost any of the improved methods of doing a job which are shown in this book will more than cover its cost.

Contents

Use and Care of Tools—Workbenches and Attachments—Portable Equipment—Excavations; Foundations; Forms—Sills; Girders; Joists; Sub-Flooring—Exterior Wall Construction; Inside Wall Framing—Exterior Wall Covering—Roof Construction; Bay Construction; Roofing—Cornices and Porches—Interior Wall Covering; Interior Trim—Steps; Stair Construction—Windows—Doors—Closets; Shelves; Built-in Equipment—Finished Flooring—Painting; Finishing—Screen Repairing; Screens—Sanitary Equipment—Electrical Wiring—Scaffolds; Ladders; Hoists—Garage Doors—Short Cuts in Laying Out Work.

1947. 3rd. 212 pages, 800 illus., 9 x 11½, cloth, \$4.00

BOOK DEPARTMENT

AMERICAN BUILDER and BUILDING AGE

SIMMONS-BOARDMAN PUBLISHING CORPORATION

30 Church Street

New York 7, N. Y.

I Love My Builder

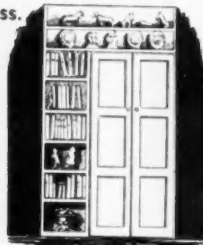
Because he knew how convenient I would find my Fain Dina-Fold. We eliminated the cost of a breakfast room, yet I have a splendid table and two benches to seat five people comfortably. The Dina-Fold is recessed into the wall, to be completely out of the way when I'm busy in the kitchen. When I need it, it's set up in a jiffy! My idea of a perfect built-in dining unit is definitely **DINA-FOLD** the Fain



Mr. Builder: You can have lots of happy clients with the Fain Dina-Fold! It's a feature that sells homes and apartments by virtue of its practical economy and space-saving compactness.

Handsome decorative effects are easily achieved with Fain Dina-Fold!

Working space is conveniently provided for any number of home activities.



ST. JOHN MANUFACTURING COMPANY
3658 West 139th St. • Hawthorne, California

Please send me the necessary information on your space-saver, the Fain Dina-Fold.

Name _____
Address _____
City _____ State _____

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How the reader benefits

Through the constant exchange of editorial and publishing ideas with fellow ABP members, each individual editor and publisher is able to give his readers the benefit of the best experience in publishing.

One interesting result of this cooperative affiliation has been a program, sponsored by ABP publishers, wherein they work with advertisers to help them make their messages more informative and useful to business magazine readers. *American Builder*, as an active participant, has interviewed many of its readers to find out from Builders and Dealers themselves what some of their *problems* are that are also *opportunities* for manufacturers who know something that will help.

How the advertiser benefits

The more helpful a business publication is to its readers—the more avid and constant its readership; hence, the more assurance the advertiser has that his message, *if as helpful and informative as the editorial pages*, will be read, understood and acted upon. Advertising can be *more* interesting and useful to readers because it can talk more specifically of *user benefits* than is generally possible in editorial material.

A number of our advertisers have expressed interest in applying specifically to the building field some of the "Tell All"* principles brought out in ABP's crusade to help advertisers get a bigger return on their investment.

To dig up material that might reveal angles of interest to advertisers, we employed a Field Reporter to call on Builders and Dealers. He is specially trained by ABP in the art of "drawing out" readers. His field reports are being passed along to manufacturers with the thought that this first-hand, up-to-the-minute picture of reader problems and viewpoints might reveal opportunities for them to step up the interest and usefulness of their advertising. We believe that those manufacturers of building materials and equipment who do this will get a greater value for their money and, of course, it will make *American Builder* more interesting and valuable to the readers.

And what does American Builder Get out of it?

These benefits of ABP membership help us build a better business publication for our special group of "fan" readers, hence a better vehicle for the messages of manufacturers who have something of interest to say to those same readers. It's a matter of record that fruitful advertising usually means more advertising. And that means more income with which to improve our publishing business.

*Definition of "Tell All" Advertising: Each and every advertisement should be given a specific and sufficient objective and should tell all that the business minded business paper reader must know before the advertisement can attain that objective.

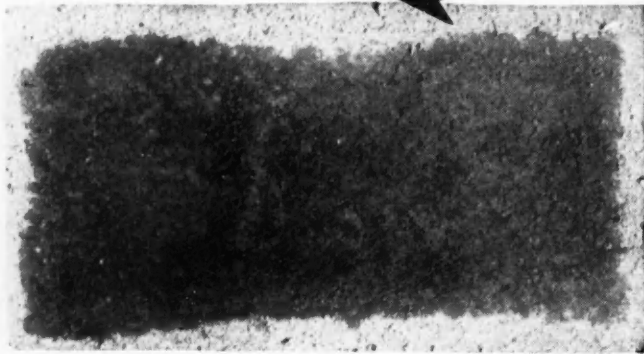


Chicago 3, Illinois: 105 West Adams St.; New York 7, N.Y.: 30 Church St.; Cleveland 13, Ohio: Terminal Tower; Ann Arbor, Mich.: 1080 Stein Road; Washington 4, D.C.: 832 National Press Building; Seattle 1, Wash.: 1038 Henry Building; San Francisco 4, Calif.: 309 Montgomery St.; Los Angeles 14, Calif.: 530 West 6th St.; Dallas, Texas: P. O. Box 1808.

Here's why
CRYSTAL
 waterproofs in
 one coat!

Actual unretouched photo (7/8 size) of brick sawed through after Crystal-treatment, and dipped in water. Outside dry portion shows Crystal penetration of 1/8" to more than 1/4".

PROOF OF PENETRATION
 waterproofs to full depth of its penetration



Crystal the ONLY silicone masonry waterproofer is not to be confused as just another waterproofer. One coat is easily-quickly brushed or sprayed on brick, stucco, concrete, cinder blocks or precast stone, for lasting effectiveness.

It's transparent and invisible after application; does not change color or texture of surfaces.



AND PROVE IT TO YOURSELF AT OUR RISK

Try a gallon of Crystal yourself — covers 100 to 200 square feet — One coat only is needed. Pay for it only if you're satisfied... We want you to prove it before you pay... or there's no cost or obligation to you.

Send this convenient coupon for **PROMPT ACTION**

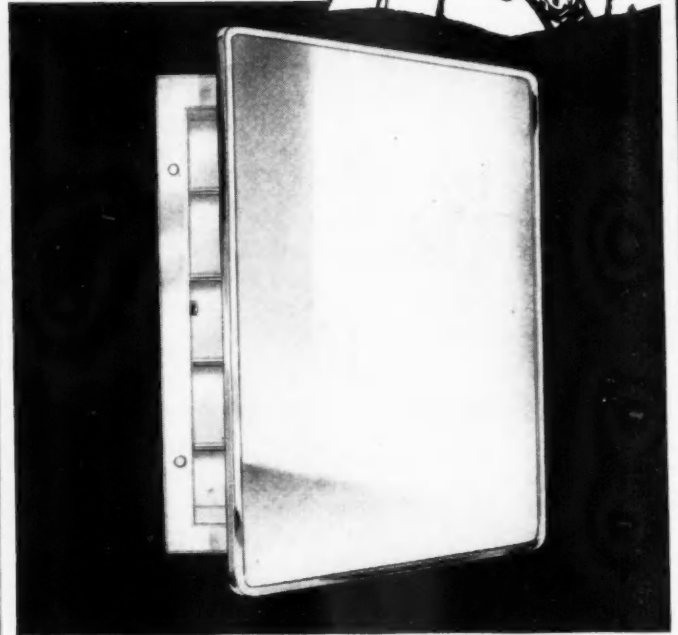
WURDACK CHEMICAL CO., 4956 Fyler Ave., St. Louis, Mo.

- Ship to me, one gallon can of CRYSTAL — for which I will pay \$5.25 if I am satisfied... otherwise there will be no charge or obligation on my part.
- Send me literature and prices on CRYSTAL.

Name
 Firm
 Address
 City State Zone

My suppliers name is:

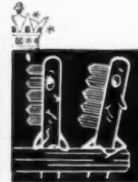
the
Prince
 of
Mirro-Glo



... a legend of quality



A dazzling combination of stainless steel frame and polished plate glass mirror,



The sanitary toothbrush holder holds all brushes firmly and is removable.

There is no fairy tale involved with the Prince of Mirro-Glo; but there is a reputation for quality and craftsmanship attached to every member of Mirro-Glo's royal family. Strength, efficiency and modern design make this medicine cabinet fit for a palace, but the price makes it fit into any home. For additional information send for a free copy of the Royal Family Album, Today!



THE MIRRO-GLO CABINET CO.
 3131 W. 49th PLACE, CHICAGO 32, ILLINOIS

Gentlemen: Please send me a free copy of the Royal Family Album

FIRM NAME _____
 LINE OF BUSINESS _____
 ADDRESS _____
 CITY _____ ZONE _____ STATE _____



Timken Silent Automatic

"Duty-Designed" Units are

especially designed, built and priced to meet small home heating needs. Quietness and reliability of operation are unequaled.

Created Especially for—Not Just Adapted to—Small Home Heating Requirements

There's no compromise with performance, with dependability, with value, in Timken Silent Automatic units that are "Duty-Designed" for small home installation!

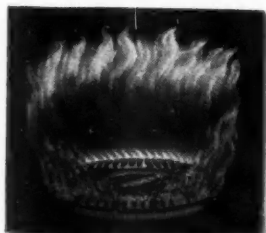
These compact new units meet every demand of architects and builders—satisfy every owner's need. This is no scaled-down equipment originally intended for larger homes—it is newly engineered from start to finish.

"Duty-Designed" units bear little resemblance, in either appearance or performance, to conventional small home units. Compactness, quietness, reliability of operation, and heating efficiency—all are truly remarkable and prices are equally so.

It will pay you to learn more about Timken Silent Automatic "Duty-Designed" small home units! Write the factory or phone your Timken Silent Automatic Authorized Dealer. He's listed in the "yellow pages".

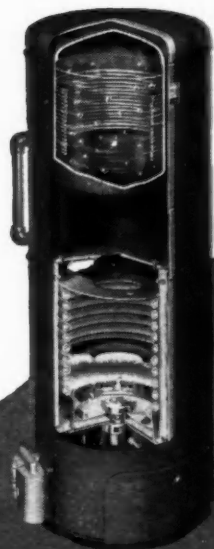


"Duty-Designed" Hi-Boilers combine in one cabinet a wall-flame oil burner, heating boiler, expansion tank, and water heater. Model shown has copper coil boiler or heat exchanger. Other models have welded steel heat exchanger. Capacities range up to 80,000 Btu. at outlet.



EQUIPPED WITH A SPECIAL DUTY-DESIGNED WALL-FLAME OIL BURNER, TOO!

The heart of every Timken Silent Automatic "Duty-Designed" small home unit is the same wall-flame type oil burner which, for more than 20 years, has been "The Accepted Standard" for quality and performance in the automatic home heating field.



Other "Duty-Designed" units include Lo-Boilers, Hi-Furnaces, coil and tank type water heaters, and standard oil furnaces.

TIMKEN
Silent Automatic
OIL HEAT

TIMKEN SILENT AUTOMATIC DIVISION
The Timken-Detroit Axle Company • Jackson, Michigan



*easy to
install*



THORN ALUMINUM WINDOWS

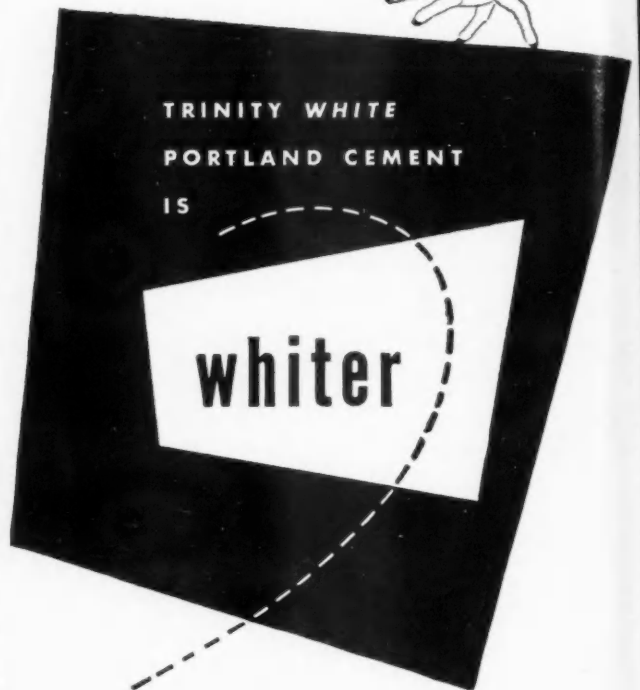
Thorn aluminum double hung windows are complete, sturdy units.

Sash are hung in the frames; all hardware applied; weatherstripping is built in at the factory. Simply set them on the wall, apply the support clips, furnished with the windows, and they are ready for glazing.

There is nothing more to it than just that. No special tools are needed—No skilled mechanics are required.

In addition to the very low cost of installing, you save at least two coats of field paint.

J. S. THORN COMPANY
PHILADELPHIA 32, PA.



a gleaming, sparkling white

Recommend and sell

**Trinity White . . . for greater beauty
. . . greater light reflection**

The uses of white cement are constantly increasing. It has always sold for its beauty in concrete products, terrazzo, cement paint, prepared stucco—and it always will. But its use as a means of improving lighting greatly expands the market. For example, white floors in many types of occupancy greatly improve the lighting. It has gained wide popularity for light-reflective traffic and safety signs and markers. It may be used in roof slabs and parapets to reflect natural light to interiors through saw tooth windows.

Trinity White is a whiter white. It is a true portland cement. Recommend and sell it. It is a better value for light reflection and beauty. For complete information, write, wire, or phone Trinity Portland Cement Division, General Portland Cement Co., Republic Bank Bldg., Dallas, Texas, or 111 West Monroe Street, Chicago 1.



TRINITY WHITE
PORTLAND CEMENT
PLAIN OR WATERPROOFED

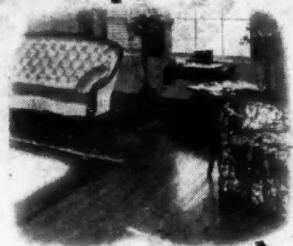


AS WHITE AS SNOW

ARKANSAS SOFT PINE
TRADE MARK
REGISTERED

This Symbol

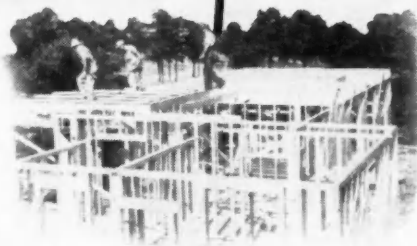
is your guide to lumber products of the finest quality. Arkansas Soft Pine is a wood of extra soft texture, fine grain and freedom from pitch. It works easily, does not gum edged tools or split at nail holes. For interior trim, paneling and cabinet work, it provides matchless, satin-like surfaces that absorb primers evenly and take applied finishes without raised grain. These definitely superior qualities are inherent in trade marked Arkansas Soft Pine . . . the mark that protects your workmanship.



for beautiful floors.

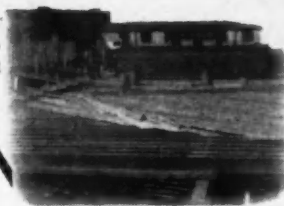
What Arkansas Soft Pine Is

Arkansas Soft Pine is the highest quality of shortleaf pine (*Pinus Echinata*). Uncle Sam himself says this about it in U. S. Forest Bulletin No. 106, "Shortleaf pine in Arkansas is generally considered of a higher grade than the same species grown in other regions. It is soft, of good color and the annual rings show well in the growth."



for framing better-built homes.

for light commercial construction.



Where To Get It

Trade marked Arkansas Soft Pine is produced exclusively by big, modern mills. It is well manufactured to standard sizes, scientifically kiln dried and seasoned to specified moisture content, and available to you at local lumber dealers and planing mills east of the Rockies. For complete information, data and how to specify, write now for your copy of this useful handbook.

Send for
Your
FREE COPY



for satin-like interior
woodwork and paneling.

ARKANSAS SOFT PINE BUREAU . . .

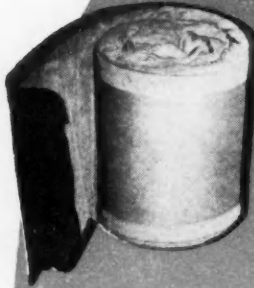
348 Boyle Building,
Little Rock, Arkansas

Copr-fibre

INSULATION

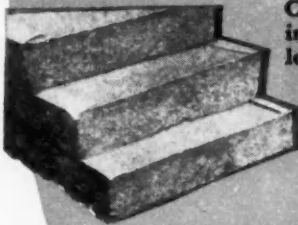
**BONUS VALUES
FOR EVERY
BUILDING NEED!**

Copr-fibre BLANKETS



Eight-foot blankets that one man can easily install... almost as fast as two men can install batts or rolls! Copr-fibre Blankets are available with either standard vapor-barrier or aluminum foil backing for extra insulation value. Made in standard 15-inch widths, fully enclosed... semi- or full-thick.

Copr-fibre BATTs



Clean, resilient Copr-fibre Batt's, in convenient 4-foot or 2-foot lengths, semi-thick, full-thick or extra-thick, are the builders' choice for easy handling and real insulation value. Fireproof, rotproof, vibration and vermin proof.

Copr-fibre POURING WOOL

Ideal for poured insulation, Copr-fibre Pouring Wool has permanently low thermal conductivity; will not pack down or absorb moisture. Clean, uniform Copr-fibre wool makes installation easy, either by hand or by blowing machine.



Use the coupon below to get full details on Copr-fibre Insulation.

FORTY-EIGHT INSULATIONS, INC.
AURORA, ILLINOIS

Send me samples and complete data on
Copr-fibre Blankets Batt's Pouring Wool.

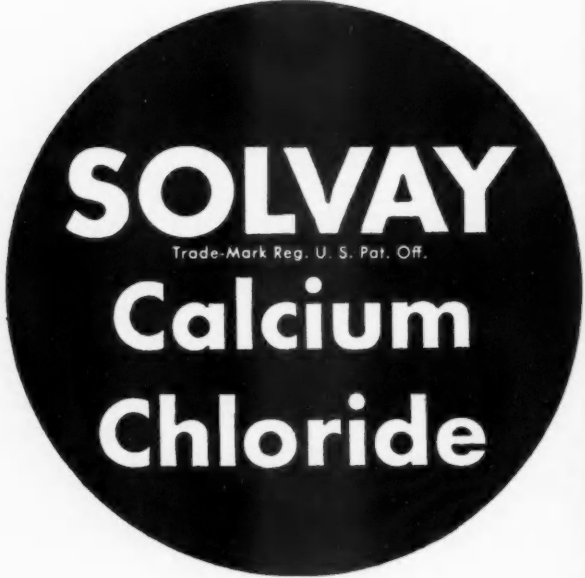
Name _____

Company _____

Street _____

City _____ Zone _____ State _____

Use



for WINTER CONCRETE

- Cuts Delays
- Speeds Strength
- Adds Extra Safety

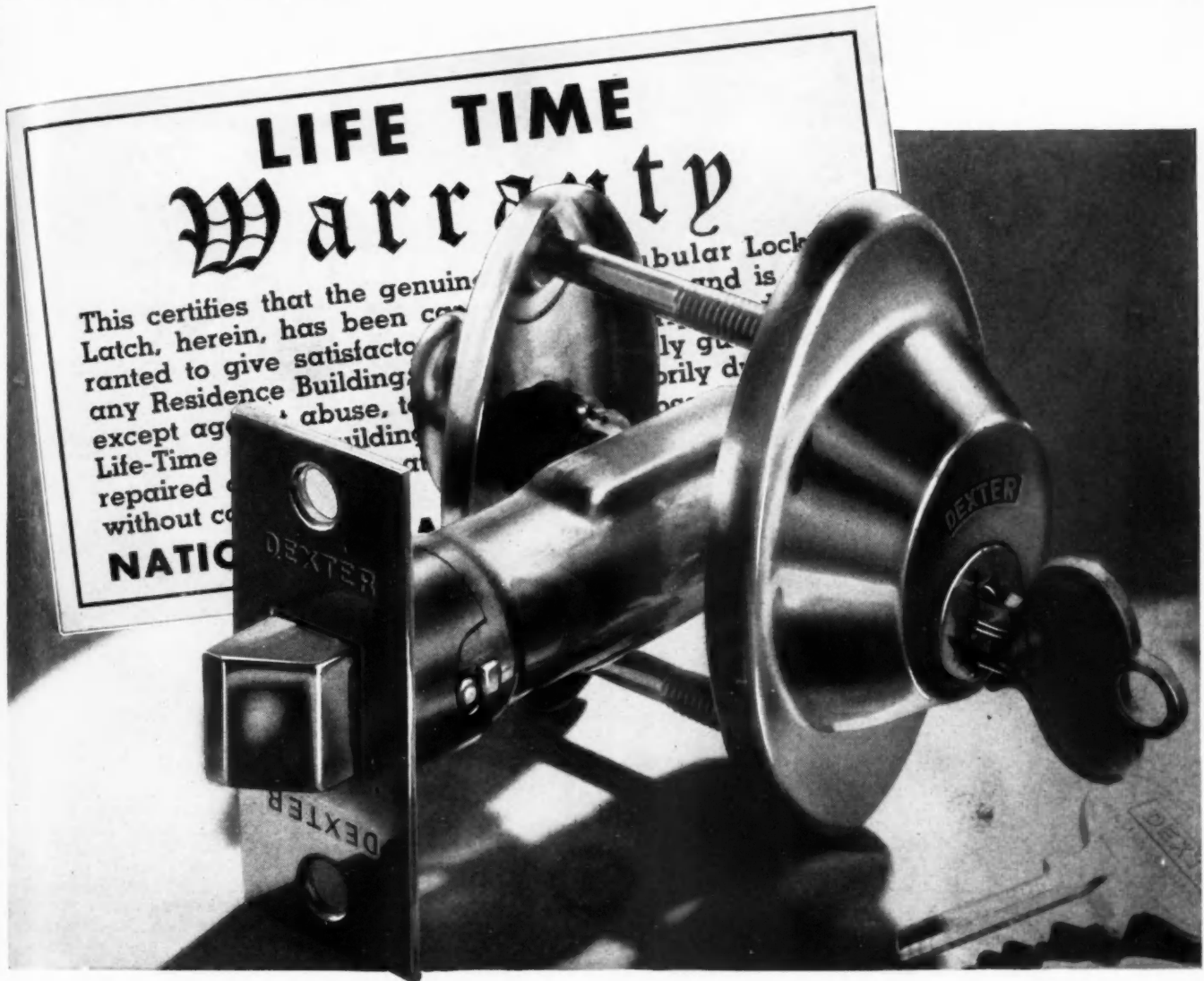


SOLVAY SALES DIVISION

Allied Chemical & Dye Corporation

40 Rector Street

New York 6, N. Y.



Only DEXTER TUBULARS

have all these 9 features of superiority

Dexter originated the tubular lock and latch. Dexter was also first to back its product with an unconditional, written, lifetime warranty. This is your absolute assurance of satisfaction. Certainly it stands to reason that Dexter can make such a warranty only because every Dexter tubular is precision-built to live up to its lifetime guarantee.

Look for this warranty when you buy Dexter tubulars.

- 1 Stay-tite Set Screw
- 2 Two Big Coil Springs
- 3 All Steel Interior
- 4 Solid Brass Trim
- 5 Uniform Boring for Locks and Latches
- 6 Self-Adjusting Alignment
- 7 25 Years Specialized Experience
- 8 Shallow Face Plate Mortise
- 9 Lifetime Guarantee

NATIONAL BRASS COMPANY
Grand Rapids, Michigan

MAKERS OF BUILDERS, CABINET, SCREEN DOOR
AND SHELF HARDWARE

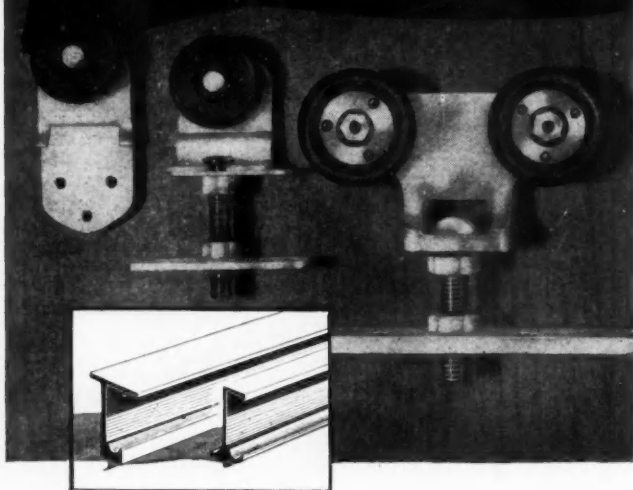
In Canada: Dexter Lock Canada Ltd., Guelph, Ontario



CHAMPION  QUALITY

HAR-VEY ROLLING DOOR HARDWARE

to meet all your residential requirements



Now you can have fingertip action for *all* your rolling doors—for Har-Vey Hardware is available in sizes to match any residential rolling door! Each size features smooth, silent bearing action and is precision-made of the finest materials.

Save Space, Time and Money—Rolling doors permit full use of every square inch of every room and allow reduced cubic footage, with substantial savings in construction and finishing time and costs. Use of Har-Vey Hardware assures simple installation and smooth operation.

Send today for folder showing varied uses & installation details of rolling doors & complete information on Har-Vey Hardware:

Hardware Division N

METAL PRODUCTS CORPORATION

807 N. W. 20th St. Miami, Florida

NAME _____
 COMPANY _____
 STREET _____
 CITY _____ STATE _____
 YOUR DEALER'S NAME _____

SPEED Home Construction

WITH ONAN Portable ELECTRIC PLANTS



Model shown with carrying frame. Also available dolly-mounted

Model 5CK-115M
5,000 watts D.C.
Only 315 pounds!



• ELECTRIC SAW



• ELECTRIC SANDER



• ELECTRIC PLANER



• ELECTRIC PIPE-THREADER

Send Coupon Today for FREE Catalog



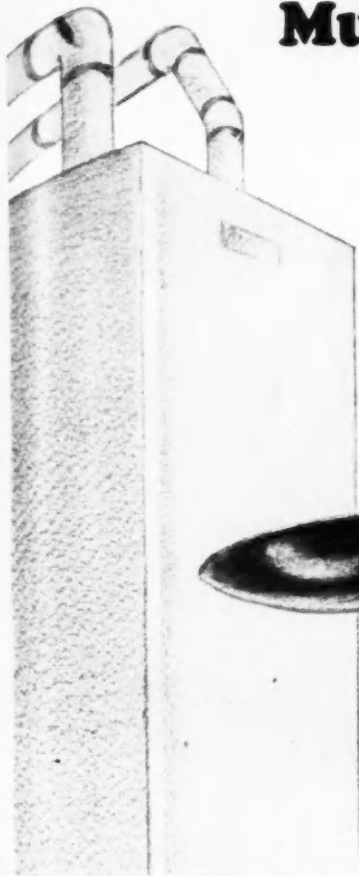
D. W. ONAN & SONS INC.

5472 Royalston Ave., Minneapolis 5, Minn.

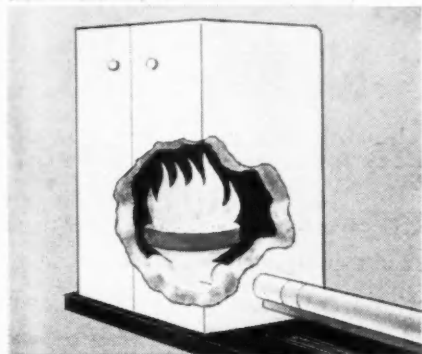
Please send your folder on portable electric plants.

NAME _____
 ADDRESS _____
 CITY _____ STATE _____

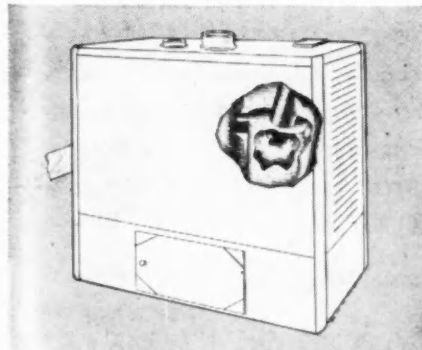
Must owners of your new houses watch EVERY SPOONFUL OF FUEL?



Experts predict shortages of some fuels for 3 to 5 more years!



Automatic Anthracite Stokers Installed in an existing boiler or furnace and in new houses, automatic hard coal stokers deliver *plenty* of heat quickly . . . save up to 50% on fuel bills . . . eliminate fuel worries.



The Revolutionary Anthratube The Anthratube saves on fuel bills . . . its proved efficiency is over 80%. This scientifically engineered boiler-burner unit, with "Whirling Heat" and other revolutionary features, produces quicker response and superior performance than units using other types of fuel.

There are No Ifs, Ands or Buts when you specify Automatic Anthracite Equipment

• Owners of your new houses can have *plenty* of worry-free heat because there's plenty of hard coal and there is anthracite equipment to fit the heating requirements of every dwelling.

A whole winter's supply of anthracite can be stored easily in advance. Homeowners want this kind of

security and convenience. They have *just that* when you specify automatic anthracite equipment.

Look over the two types of anthracite equipment shown here. They burn a cheaper size of hard coal . . . completely automatic from bin feed to ash removal. Then write to us for more detailed information.



ANTHRACITE INSTITUTE

101 Park Avenue

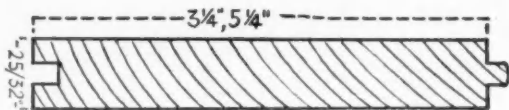
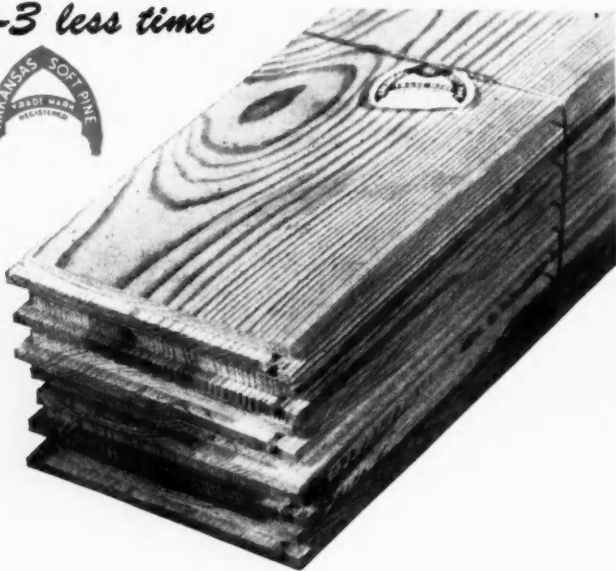
New York 17, New York

Crossett

Center & end matched

Sheathing

for
a better job in
1-3 less time



Here's Why . . .

- No trimming at studs
- Accurate matching, goes on fast
- Kiln dried, bright stock
- Soft texture, nails easily, no splitting
- Maximum stiffness to sub-wall
- Strictly flush base for siding

Crossett sheathing bears the Arkansas Soft Pine trade-mark by which you may identify it at your lumber dealer's.

CROSSETT LUMBER COMPANY

CROSSETT, ARKANSAS



Add style with tile!

VIKON METAL TILES

give true tile beauty at low cost!

It's the "custom" touches, like this delightful sewing nook, that appeal to women . . . and that often swing a sale your way.

Vikon Metal Tiles provide endless opportunity for smart effects . . . are available in 27 fade-resistant decorator colors and stainless steel. Vikon Tiles are easy on the estimate, too, for they are made of steel or aluminum with a durable face of baked-on synthetic enamel. They can be applied easily over any fairly smooth surface and are so light in weight that walls need no extra strengthening.

Use Vikon Metal Tiles for walls and ceiling of kitchen, bath, shower, laundry, utility and game room, halls and so on. They will not chip, crack or craze . . . are highly resistant to heat and ordinary household chemicals. Fire-resistant, waterproof, a seal against insects. Write today for complete information.

See our catalog in Sweet's Files

VIKON TILE

BEAUTY • ECONOMY **COLOR FUSED ON METAL** DURABILITY

VIKON TILE CORPORATION, WASHINGTON, N. J.

IN ANY
buyers
One rea
Every
tiful
satisfac
long lif
and sty
Y
Youngs
wall an
enamel



When you're buying kitchens . . .

Modern Styling is important

IN ANY house, a Youngstown Kitchen helps buyers see greater value in the price.

One reason is Youngstown *modern styling*.

Every Youngstown unit is rugged and beautiful . . . built to give years and years of satisfaction. It's a combination hard to beat: long life, carefully-planned utility features and styling completely modern.

Youngstown Quality Is Tops

Youngstown Kitchenaid cabinet sinks, wall and base cabinets are welded, white-enameled steel. They're sound-deadened

throughout. Sink tops are finest acid-resisting porcelain-enamel. Youngstown units are mass produced and priced to meet moderate budgets.

Every Youngstown unit is precision-built to rigid standards established through years of steel-stamping experience.

Sixty Mullins field men and 7500 Youngstown Kitchen dealers throughout the country are ready to cooperate with you. They give you the advantage of Youngstown's great experience and pioneering in the kitchen business. For name of nearest distributor or field man, please write.

MULLINS MANUFACTURING CORPORATION • WARREN, OHIO

*** OTHER YOUNGSTOWN FEATURES**

- Easy Installation
-
- National Acceptance
-
- Top Quality
-
- Wide Selection
-
- Low Cost
-
- Easy Handling
-
- Sold Everywhere

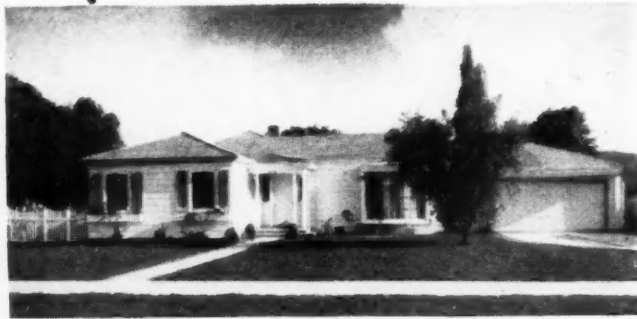


Youngstown Kitchens

BY MULLINS

World's Largest Makers of Steel Kitchens

Endowed



With



Beauty

When a home is built of Western Pines* it is endowed with beauty for life.

In every room where these even-grained, easily-worked woods are used, there is constant admiration for the charm they impart. Outdoors the carefully seasoned Western Pines take and hold paint — make woodwork that fits snugly through the years in all weathers.

The outstanding reputation of Western Pines is the reason architects and builders throughout the nation confidently specify and use these fine woods. Western Pine Association, Yeon Building, Portland 4, Oregon.



*These are the Western Pines

*Idaho White Pine *Ponderosa Pine
*Sugar Pine

These are Associated Woods

Larch • Douglas Fir • White Fir
Spruce • Cedar • Lodgepole Pine

Well manufactured—thoroughly seasoned—carefully graded—by all Association member mills

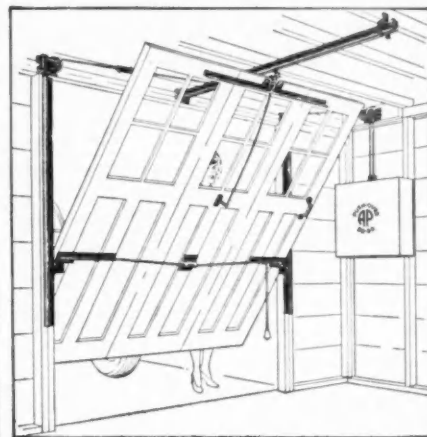
Structural Reinforcing or other Blding Steel Shipped from Stock

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

Customer Satisfaction Assured with easy-to-install



ALLITH

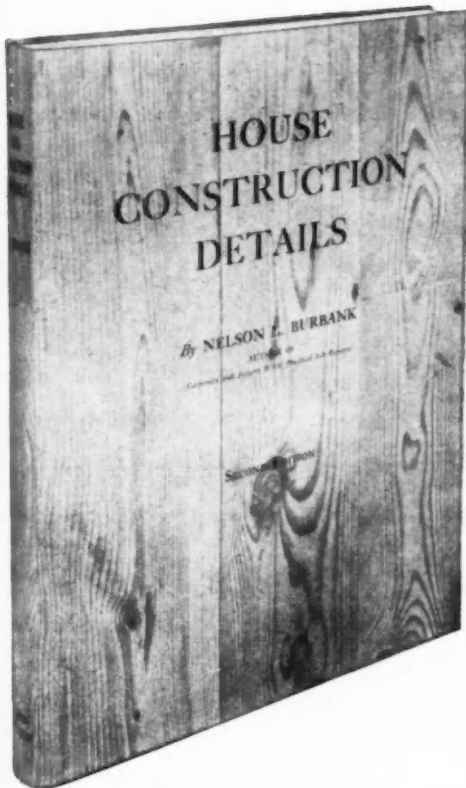
50-50 PUSH-OVER GARAGE DOOR HARDWARE

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

HOUSE CONSTRUCTION DETAILS

By NELSON L. BURBANK



314 pages, 1,500 illustrations, index, 8 1/8 x 11, cloth, \$4.50

Practical builders find this book very helpful when making alterations in a set of stock plans or drawing up a complete set of plans for a house or small building. The details shown in clear line drawings and in photographs conform with standardizations recommended by housing authorities wherever such have been established.

The chapters are in construction sequence and as such serve as a guide in detailing each step in the construction of a dwelling, from foundation to finish. Just enough description is included to explain general principles.

Many of the new materials such as plywood are shown in application. Various systems of pre-fabrication are shown in addition to traditional methods of house carpentry. Chapters on painting, wiring, insulation and sound proofing, and on heating and air conditioning show modern methods. Graphic and factual information from widely scattered sources is brought together and cross-indexed for quick reference.

Look over the table of contents below and see the wide scope of its information. Then send for a copy on our money back guarantee and give it a five days working tryout.

Fill Out This Guaranteed Order Form

American Builder and Building Age
30 Church Street, New York 7, N.Y.

Enclosed find \$4.50 for which send me a copy of the Second Edition of HOUSE CONSTRUCTION DETAILS by Burbank. If I do not find the book satisfactory I will mail it back within five days of receipt and you will refund my \$4.50.

Name _____

Address _____

City _____ Zone _____ State _____

A. B. 11-48

Contents

Floor Plans; Sets of House Plans—Excavations; Foundations Forms; Foundations—Sills; Girders; Joists; Sub-Flooring—Outside Walls—Inside Walls; Wall Sheathing; Ceiling Joists—Roof Construction; Bay Construction; Roofing—Cornices and Porches—Exterior Wall Construction—Interior Wall Coverings; Interior Trim—Stair Construction—Windows—Doors—Hardware—Closets; Shelves; Built-in Equipment—Finished Flooring—Chimneys and Fireplaces—Scaffolds—Garages—Wiring for Modern Homes—Insulation; Sound Proofing—Gates; Garden Furniture—Camps; Cabins; Cottages—Farm Buildings—Painting and Finishing—Modern Homes—Modern Building Materials—Heating; Air Conditioning—Pre-Fabrication.

Easy Way to
CUT HOME COST
Improve Construction

Saves
INSTALLATION TIME
Instantly adjustable from 5 ft. 7 in. to 8 ft. 4 in. Built-in jack tightens to exact fit.

Cuts
BUILDING COSTS
Time and labor saving make Tel-O-Post most economical to use. Cuts cost substantially.

Improves
CONSTRUCTION
Shrinkage and settling during and after construction can be quickly corrected to always maintain floor beams level.

Increases
SALABILITY
Permanence of steel and easy maintenance of floor level make appealing extra attraction to home buyer.

Immediate Delivery

TEL-O-POST

THE ADJUSTABLE ALL-STEEL JACK POST FOR BASEMENT BEAMS AND OTHER USES

Builders, everywhere, have been quick to profit by Tel-O-Post advantages. Installation is so quick and easy—no cutting, shimming, and fitting is necessary. You simply adjust the Tel-O-Post height to basement depth and tighten to exact fit with the built-in jack. Any shrinkage or settling can be quickly corrected at any time, during or after construction, by a few turns of the jack. Tel-O-Post all steel, collapse-proof construction safely supports over 20,000 lbs. and is officially approved by leading codes. Use Tel-O-Post on your next job—see the difference in construction improvement, time and cost saving. Write, today, for full information.

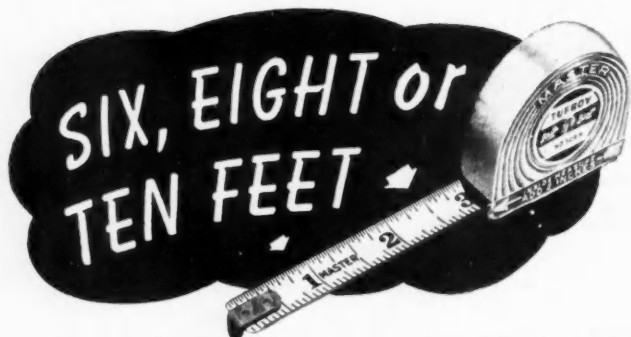
SHARONSTEEL

Now manufactured exclusively by
BRAINARD STEEL COMPANY
TEL-O-POST DIVISION

WARREN 6, OHIO



SIX, EIGHT or TEN FEET



of MEASURING ACCURACY!

Mechanics and craftsmen will welcome Brite-Blade's accuracy as well as its flashing white blade which simplifies reading. The chrome plated, zinc alloy case will take the toughest punishment with ease. You can get a Brite-Blade at all good hardware stores or building supply houses—or if you prefer, use coupon.



MASTER RULE MFG. CO., INC. F-11
201 Main Street, White Plains, New York

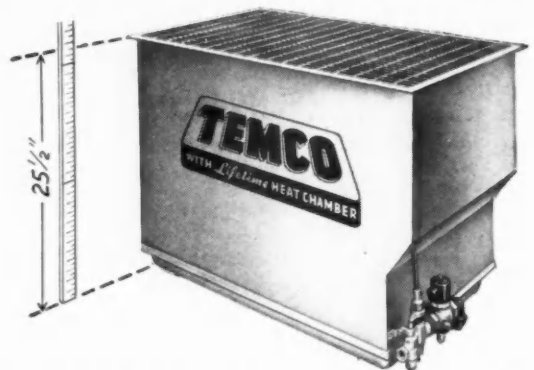
Please send me

306W— 6 ft. Brite-Blade—\$1.75
308W— 8 ft. Brite-Blade—\$1.90
310W—10 ft. Brite-Blade—\$2.25

My check (or Money Order) is enclosed.

NAME _____
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GAS FLOOR FURNACE



- **ONLY 25 1/2" TOTAL DEPTH**
- Easily Accessible Control Assembly.
- Shallow Construction Eliminates Excavation in Most Cases.
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- "Lifetime" Porcelain Enamel Heat Chamber.
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3 REASONS WHY MORE CONTRACTORS ARE USING

Keymesh

REINFORCING FOR STUCCO, OVERCOATING AND PLASTER

Contractors who have used Keymesh quickly recognize that it handles easier, keeps its shape—and they prefer to continue using Keymesh for these good builder reasons:

1 LAYS FLAT

Keymesh unrolls flat, remains flat. Insures a "true" wall by eliminating bulges and high spots. One workman easily handles a roll of Keymesh—there are no ragged surfaces to cut the hands. It's flexible, doesn't buckle, forms easily around corners.

2 TROWELS EASILY

The surface of Keymesh is smooth to the trowel in any direction. Plasterers like Keymesh. Applied with Keymesh furring nails, it keeps its proper distance from the wall—allows the stucco to be worked to an even thickness—helps eliminate "thin spots." Keymesh can be joined with compact, smooth laps—no high spots in first stucco coat.

3 REINFORCES BETTER

The open design of Keymesh permits each steel wire to be completely surrounded by the first, or scratch coat, insuring a stronger, more durable wall. Keymesh is heavily galvanized for lasting strength and corrosion resistance. It's stronger—the round cross-section is the strongest shape per weight and volume.

Contractors and Builders: Make your own on-the-job test of Keymesh. Find out how it saves lather's and plasterer's time—helps to keep your costs down. And write for your copy of the new Contractor's Data Book on Stucco and Keymesh Stucco Reinforcing.

Shipped in handy sized rolls, 150 feet x 3 feet.

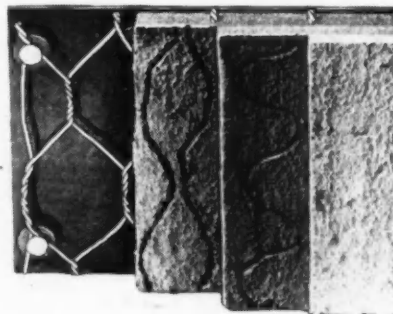
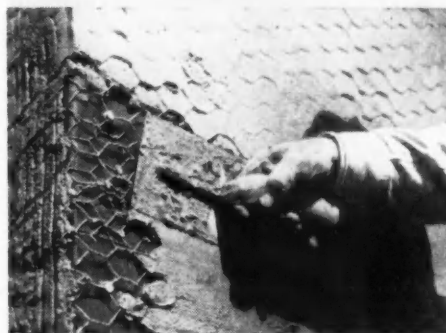
For EXTERIOR Stucco or Overcoating, use: Keymesh—1½" hexagon mesh, 17 gauge galvanized wire, or 1" hexagon mesh, 18 gauge wire.

For INTERIOR Plaster or Base for Tile, use: Keymesh—1" hexagon mesh, 20 gauge galvanized wire.



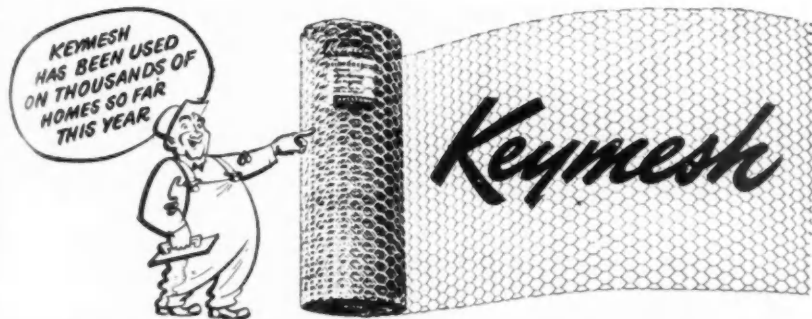
Keymesh being applied to side of house. Note how it unrolls flat—no bulging or sagging.

Photo shows how Keymesh reinforcing easily forms around corners without buckling.



Sectional view of finished wall. Each strand of Keymesh reinforcing is completely imbedded by the scratch coat.

Special Keymesh furring nails help to insure uniform thickness of wall.

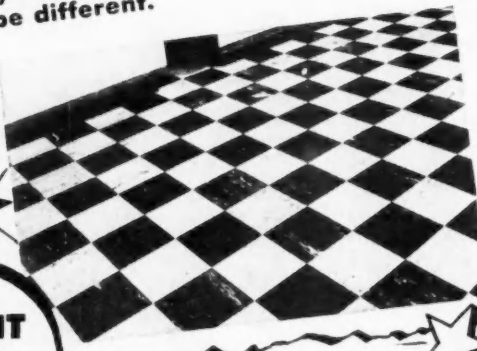


KEYSTONE STEEL & WIRE COMPANY
PEORIA 7, ILLINOIS

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TAILORIZED FLOORS BY FREMONT

... floors that are stylized to meet every preference... an endless variety of beautiful patterns to match every situation. Every installation can be different.



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AFFORDS ADVANTAGES NOT TO BE HAD IN ANY OTHER!

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Colors go all the way through the tile, can't show wear. Non-fading. Loveliness to be admired throughout the years.

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Sweeping or light mopping keeps it spotlessly clean, looking like new.

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Suppresses the sound of noisy, irritating, distracting footsteps.

• **COMFORT UNDERFOOT**

Cushions every step, lessens fatigue.

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Lasts practically forever. Withstands heaviest traffic, denting, scuffing. Burning cigarettes leave no blemish. Grease-resistant.

• **SAFETY UNDERFOOT**

Great non-slip properties.

• **UTMOST SANITATION**

No pores to hold dirt.

• **VARIETY OF RICH COLORS**

Eleven solid and marbled combinations.

• **EASE OF APPLICATION**

Lies flat. Cut accurately. Uniform thickness.

It is easy to select or originate a pattern which takes into consideration the elements of room size, location, temperature, lighting, traffic, furnishings, business aims and desired psychological effects

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9" x 9" tile die cut so that the center may be removed and a 6" x 6" tile of another color inserted



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No. 30 Fuelless Incinerator

REAP IMMEDIATE PROFITS with this modern solution to an old problem

The Majestic Fuelless Incinerator is a safe, easy, sanitary way to burn wet and dry garbage and rubbish at home, in basement or utility room. Especially needed in automatically heated homes (rubbish cannot be burned in furnace). Unit taps to regular flue. Does not affect furnace efficiency. Its unique downdraft dries waste constantly; speeds burning. Height 32 in. Diam. 2 ft. Capacity approx. 3 bushels. Heat-resisting blue duo-tone enamel finish.

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of the
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What It Means To You: Certified Adequate Wiring makes today's home buyers tomorrow's boosters. It helps you build houses that stay modern for years to come. It helps you sell houses easier and quicker because: (1) it overcomes today's buyer resistance; (2) it assures you of promotional support from your local electrical industry.

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Please send me, without charge, information on how to take advantage of Adequate Wiring as a sales feature.

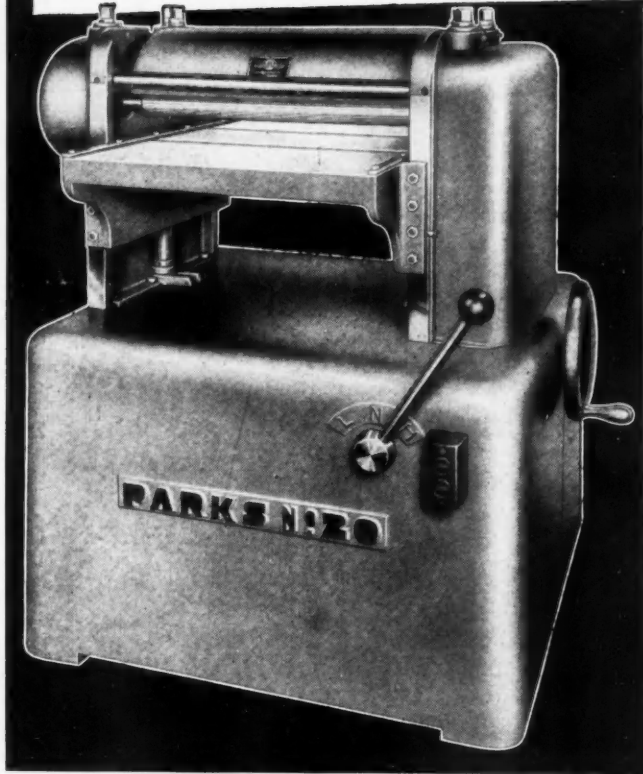
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50' and 150' rolls—36" wide

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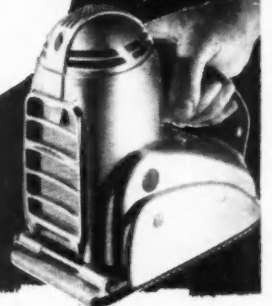
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What do your Flooring Specifications call for on jobs like these?

RANCH HOUSE DEVELOPMENT...



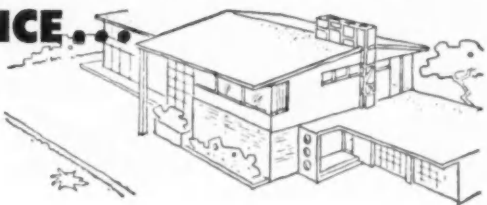
Basementless, concrete slab construction. More and more cost-conscious operative builders are turning to Tile-Tex* Asphalt Tile as the all purpose flooring for a one story ranch house. It's low in cost, has an amazing record of long life . . . and is the only type of resilient flooring which can be installed with perfect safety over a non-waterproofed concrete slab. No other sub-flooring required. Can be installed in gay, colorful patterns or solid tones. Appeals to home owners because it can be used with or without rugs or carpeting.

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Tile-Tex Asphalt Tile is installed by expert flooring contractors located in principal cities and towns. Write The Tile-Tex Company, Inc., (subsidiary of The Flintkote Company), Chicago Heights, Illinois for the name of the flooring contractor nearest you. Sales offices in Chicago, New York, Los Angeles and New Orleans.



THE TILE-TEX CO., Inc.
CHICAGO HEIGHTS, ILLINOIS

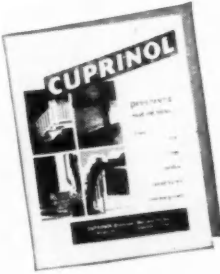
*REGISTERED TRADEMARK OF THE TILE-TEX COMPANY

On-the-Job Treatment Against Rot & Insects

CUPRINOL [®] **WOOD PRESERVATIVE**
STOPS ROT

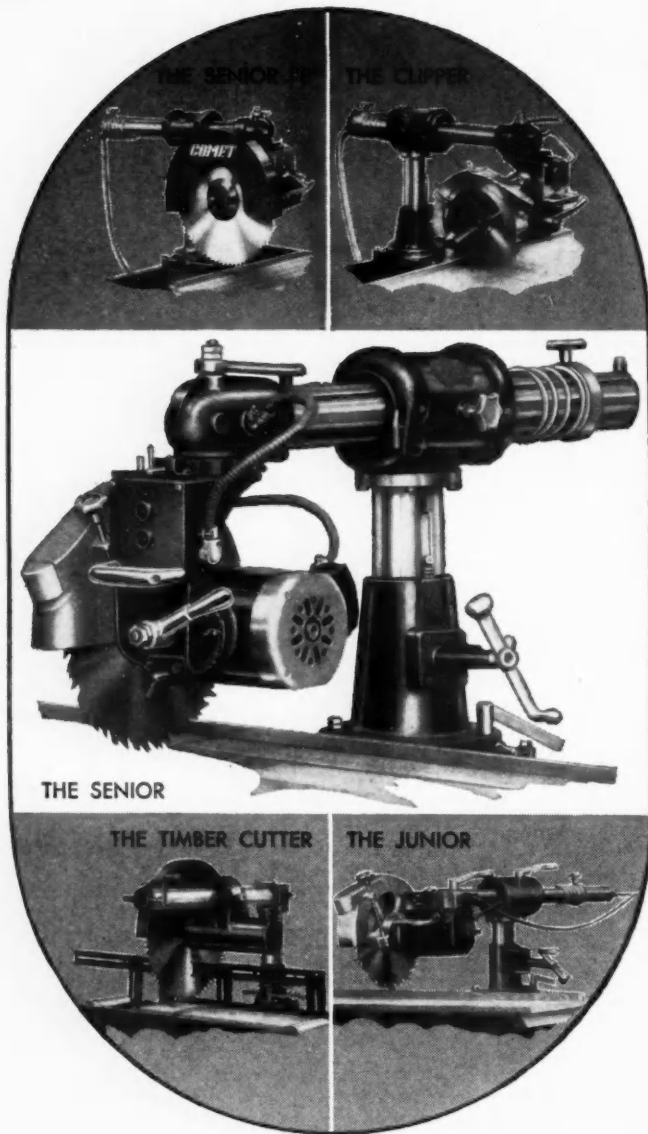
Sills, cornices, any wood in contact with masonry or concrete, bolt and screw holes—all can be quickly rot-proofed right on-the-job with Cuprinol.

Cuprinol is readily applied by brush, spray or dip. Dries quickly. Can be painted over. Protective clothing not necessary. If your dealer does not stock it now, he can easily get it. Quote "Cuprinol treatment against rot and insects" on your estimates. Rot-proofing adds quality to every job.



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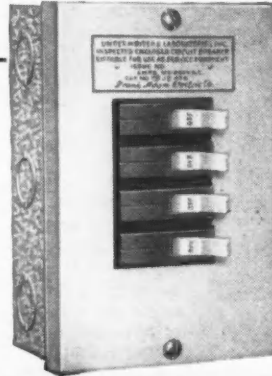
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Small and compact, these efficient units interrupt short circuits and dangerous overloads *automatically* and trip the handle to the “off” position. To restore service, simply flip the handle back to the “on” position.

You'll want more information about JUNIOR, so write for Bulletin No. 203.

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Oil Burner
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Protection,
Small Homes,
Stores, Garages
or
Wherever a
smaller capacity
circuit breaker
is needed



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LOAD CENTER
10-15-20-30
Amperes
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Single Pole

Frank Adam
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Your customers get interested the moment they see the LaBelle Door Knob Lock in this counter display. And they're sold when they begin working the non-jamming knob with the tumbler cylinder lock built into it. Your sales story is on one compact display piece — how LaBelle ends the need for lockplates and old-fashioned key-holes; how it spins when locked; how it modernizes old doors and makes brand-new ones even better looking. Order this new, self-selling hardware staple from your jobber. Display unit at no extra charge on initial order for one dozen.

LaBelle Industries, Inc.

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HANSEN ONE-HAND TACKERS

The economical way to apply insulation - screening - building paper etc.

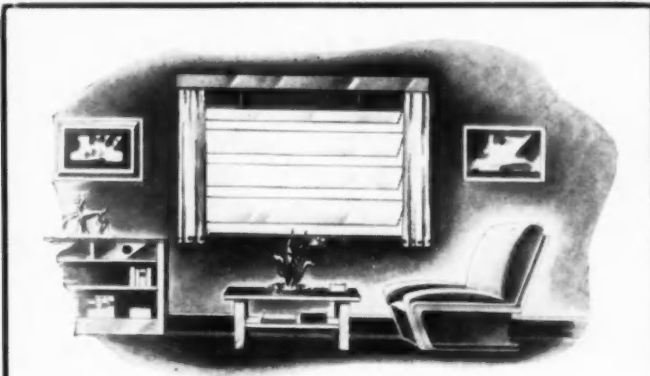
ZIP! Zip! Fast as you grip—you tack insulation, building paper, screens, with the Hansen Tacker. One-hand operation insures neat, accurate application of all types of material. Channel Cleaner makes Hansen easy to service and keep on job.

Between rafters, studs or overhead the light weight and easy gripping action of the Hansen makes it safe and easy to tack selvage strips of insulation in place. Unique operating principle and balanced design assure greater uniformity, improve results, save time, materials and money. Investigate!

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AMERICA'S OLDEST CASEMENT WINDOW MANUFACTURER

CROFT STEEL PRODUCTS, INC.
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National Association of HOME BUILDERS

Annual CONVENTION and EXPOSITION

Chicago

February 20-24, 1949

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Manufacturers of HOME BUILDING MATERIALS !!

Display, Demonstrate, Explain your products and services to the Home

Builders of America who will

assemble in Chicago

February 20-24, 1949

for the Annual

Convention and Exposition

of the

National Association of

Home Builders

Registration records from the 1948 show reveal the following attendance:

- 6,827 Builders, Contractors & Realtors
- 775 Architects and Engineers
- 284 Finance & Insurance Representatives
- 3,475 Lumber and Material Dealers
- 1,469 Manufacturers Representatives
- 1,534 Exhibit Personnel
- 1,890 including the Press, Speakers, Government Officials and Ladies

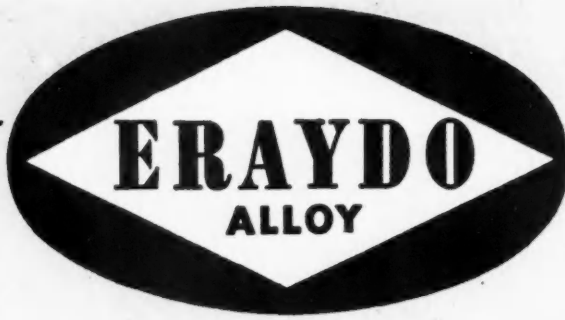
16,254 people definitely affiliated with the Home Building Industry

The 1949 Show promises to be even larger.

First assignment of space was made October 15. Only a few spaces remain. Exhibit Prospectus and Floor Plan will be sent upon request.

NATIONAL ASSOCIATION OF Home Builders
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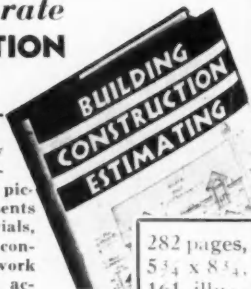
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THE PERMANENT SHEET METAL
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282 pages,
5 3/4 x 8 3/4,
161 illus.,
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This book outlines the many administrative and technical skills involved in constructing a building, showing the relationship between the contractor, architect and the owner, and giving specific details on plans, specifications, contracts and estimating costs.

Gives you helpful tips on

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Send me Cooper's Building Construction Estimating for 10 days examination on approval. In 10 days I will send \$3.00, plus few cents postage, or return book postpaid.*

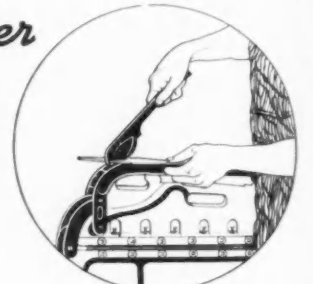
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- This cutter is light in weight. Castings holding the upper and lower blades are of high grade aluminum alloy.
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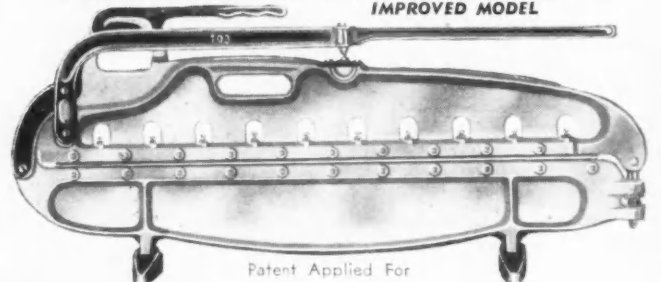


The

- The Notcher
- Scientifically engineered

Big Chief KUTTER

FOR ASBESTOS SIDING AND SHINGLES
IMPROVED MODEL



Patent Applied For

We also manufacture The CHIEF Kutter which is designed identically as the Big Chief Kutter with the exception of all castings being of gray iron. The cutting blade length of this cutter is 27 inches.

Retail Price
\$34.50

F.O.B. Fort Worth

- Has Two high grade tool steel heat-treated cutting blades, 32" long, capable of making a single cut up to 30 inches.

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The BEAVER will make every cut necessary in building a house

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every cellar, at one time or another, will spring a leak if it is not properly THOROSEALED on the inside at points which cannot be reached from the outside

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FULLY ENCLOSED OR OPEN TYPE INSL-COTTON EXCEEDS GOVERNMENT SPECIFICATIONS...

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This, plus Insl-Cotton's extreme light weight, easy installation at low labor cost, its always uniform thickness, moisture and insect immunity and non-settling qualities are some of the reasons why Insl-Cotton is rapidly becoming first choice among architects, contractors, builders and homeowners alike.

Certified Insl-Cotton contains no second-hand material. Every lot is tested and certified to the U. S. Government. No other insulation except flame-proof, fire-retarding cotton insulation made under Federal supervision can make this claim.

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New and Superior
DOOR CUTTER

Turns out dowel doors equal to those produced in large door plants with door stickers, mortisers and tenoners that cost thousands of dollars.

Yes, a shaper is all you need for 1 3/8" and 1 3/4" O.G. or cove and bead doweled doors using 1/4", 5/16" or 3/8" thick panels or glass.

An inexpensive cutter—made of high carbon steel milled to pattern and retaining original shape until entirely worn out.

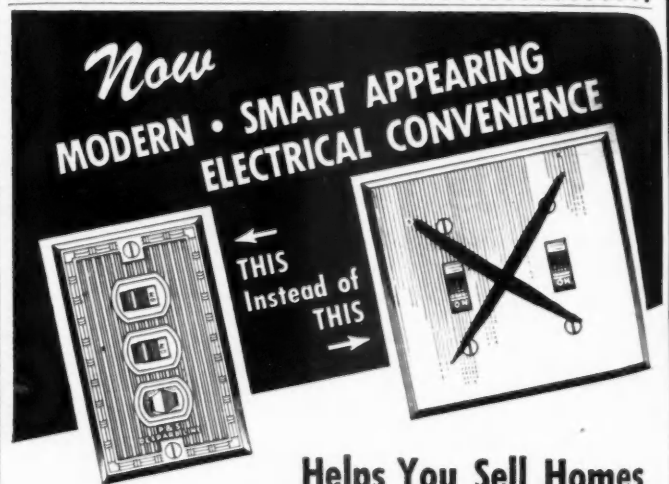
Send for large catalog showing over 200 patterns of molding, door sash, screen and cabinet cutters.

ALSO IN STOCK

High speed ball-bearing shapers. When ordering advise size of shaper spindle, its rpm and size motor use.

WOODWORKERS' TOOL WORKS

222 South Jefferson Street Chicago 6, Illinois



Helps You Sell Homes Costs Less Than You Think



Any combination of electrical conveniences... two or three switches, switches and outlets, pilots, night lights—installed under good-looking, modern, *single gang plates*.

Send for your copy of our Home Wiring Booklet.

PASS & SEYMOUR, INC.
Dept. A, Syracuse 9, New York



Complete
OVER-THE-TOP[®]
DOOR UNITS
 with Wood or Aluminum Doors



Give your customers "Over-the-Top" garage door convenience at surprisingly low cost. If you plans call for standard openings 8' wide x 7' high, you'll find the No. 10 "Over-the-Top" Complete Unit... wood paneled door, complete with hardware... will do the job. Only 2" of headroom are required! Door is prefitted; even the holes are bored for bolts. Has automobile-type Handle-lock (catches engage on both jambs):

Aluminum Door Popular

The No. 17 "Over-the-Top" Aluminum Door Unit combines the lightness and durability of aluminum, the strength and sound-absorbency of a sturdy pine frame and the smooth, effortless operation of "Over-the-Top" Door Equipment. For openings 8' wide x 7' high, 8' wide x 7'-6" high, or 8' wide x 8' high.



You Can Specify "Over-the-Top" Equipment for Any Size Door

For architecturally designed, custom-built doors, or doors heavier than 150 lbs., the ideal solution is "Over-the-Top" Door Equipment. Nineteen sets fit any size or weight door. Write today for free illustrated literature on the complete line of "Over-the-Top" Door Equipment, including Wood and Aluminum Door Units:

FRANTZ

GUARANTEED BUILDERS HARDWARE

FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

CUT YOUR BUILDING COSTS.. AND STILL DO A BETTER JOB



CHING
 That Amazing New Metal

- FOR FLASHING**
- 1 VALLEYS
 - 2 CHIMNEYS
 - 3 WINDOW FRAMES
 - 4 EAVES
 - 5 RIDGES
 - 6 GUTTERS-DOWNSPOUTS
 - 7 TERMITE SHIELDS

HIGH Grade zinc, copper and magnesium are combined to produce a tough, strong, workable sheet metal at less than half the cost of 16 oz. copper. Can't rust, solders easily, forms readily, doesn't stain white trim, doesn't corrode in mortar joints, and stands up at the seashore where so many metals meet their doom. Made in rolls, strips, sheets and a full line of rain carrying equipment, including gutters and downspouts, all 26 U. S. gauge. Meets government requirements for housing. Sold by distributors everywhere. Send for literature and sample. Another CHENEY Product

THE ALLAN CORP.
 623 Prospect Street
 Trenton 8, New Jersey

UNUSUAL OPPORTUNITY For Builders and Building Supply Dealers

Due to a change in marketing plans a nationally-known manufacturer has available for immediate shipment, a large stock of

SPRING TYPE OVERHEAD GARAGE DOOR HARDWARE SETS

These high quality sets are designed for use in better class homes. Made to assure long, trouble-free operation. Easy to install.

Operating spring is of torsion type, mounted above door. No springs, levers or arms project inward from the jamb to interfere with passage.

Spring assembly is complete with drums and shaft made up as one unit. Ball-bearing guide rolls. Vertical rails have slotted holes to per-

mit easy lateral adjustment. Cable drum is tapered to compensate for change in tension as it unwinds.

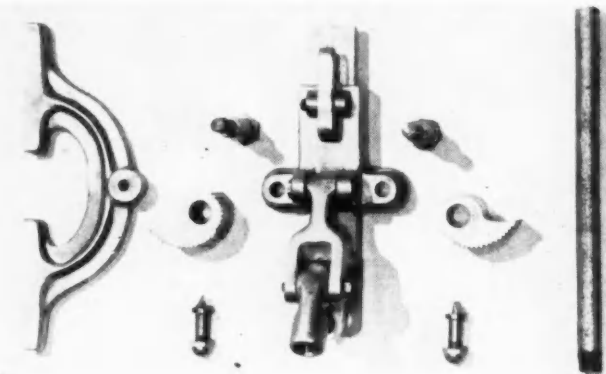
Designed for one-piece garage doors with opening up to 8 ft. wide and 7 to 8 ft. high, weighing up to 150 lbs. Auxiliary spring available for heavier doors. Requires only 5 1/2 in. headroom. Has chromium-plated handle with cylinder lock built in. Packed in wire-bound crate for easy storage and handling. Available in any quantity.

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**The Armstrong
Lumber Jack**
SAVES
TIME • MATERIAL • TEMPER



Here is a NEW tool for carpenters and builders that takes a lot of the hard work out of laying flooring, placing siding and many other similar jobs. Small, lightweight all-aluminum construction and so easy to use—the Armstrong Lumber Jack helps you do these jobs faster and easier and will mean more jobs for you.

So compact it fits easily in your tool box, the Armstrong Lumber Jack insures tighter fitting flooring, fits warped boards without surface damage, does not mash tongue or groove and straightens crooked studding.

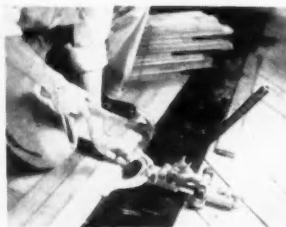
For a Good Job Done Better . . .

See the Armstrong Lumber Jack at your Lumber Yard, Building Supply or Hardware Dealers, or write direct for descriptive material. (Dealers: It will pay you to get full details now. Your customers will be asking for it.)



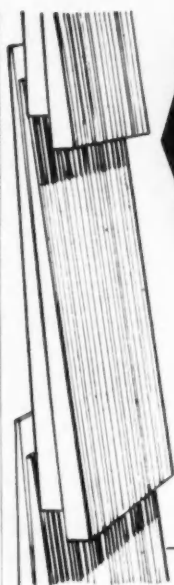
Armstrong Lumber Jack in position on subflooring. Simple attachments make it readily used on joists.

Easy, even pressure forces flooring in position. Pressure plate pattern prevents damage to tongue and groove.



Flooring is held in place by ratchet catch. Both hands free for nailing.

ARMSTRONG-JONES, INC.
TIPTON INDIANA



Duo-Laps

DOUBLE-COURSE SHINGLES

. . . for MODERN
RED CEDAR SIDING

All the beauty of expensive, wide, Red Cedar siding with deeper horizontal shadows at a fraction of the cost. Use DUO-LAPS double-course shingles laid with full 12" or 14" exposure over solid or spaced sheathing. Hand-dipped-stained, butted, squared and tapered for easy application. No painting required. Apply DUO-LAPS, the job's done. The unexcelled insulating properties of DUO-LAPS genuine Red Cedar keeps homes warm in winter, cool in summer.

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THE American

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OR SHOULD NOT CLIMB STAIRS**

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STAIR-TRAVELORS

SEDGWICK pioneered this safe, simple and practical way to travel from floor to floor in Residence Elevators of either electric or manual operation. Also available is the compact and highly efficient Sedgwick Stair-Travelor illustrated.

You may know a home owner among your customers who has real need for this heart-saving equipment. He will be glad to have you bring it to his attention. Write us for full information showing how easy it is to install a Sedgwick Elevator or Stair-Travelor. Prompt shipments. Complete directions for installing.

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RESIDENCE ELEVATORS

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ELEVATORS • ROTO-WAITERS • DUMB WAITERS • STAIR-TRAVELORS

IF YOU CAN MATCH THE BID... AND BUILD IT QUICKER

THE JOB IS YOURS!



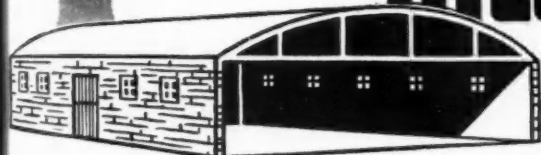
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● Glued laminated wood rafters and trusses help you to edge into important jobs. Rilco framing goes up fast . . . and immediate delivery will get you off to a flying start.

Strong Rilco framing members just naturally fit into the planning of a warehouse, garage, factory, or recreation center. That's because Rilco construction provides framing that is free of posts and braces.

Investigate Rilco Laminated wood rafters and trusses for all types of commercial buildings. Write for literature.

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TYPE 70 TIED RAFTER

for Easier Installation

for Longer Life!



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Hidalift

THE 100% CONCEALED SASH BALANCE

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WRITE for completely descriptive literature which includes installation details and lists sizes and specifications to fit all standard sash.

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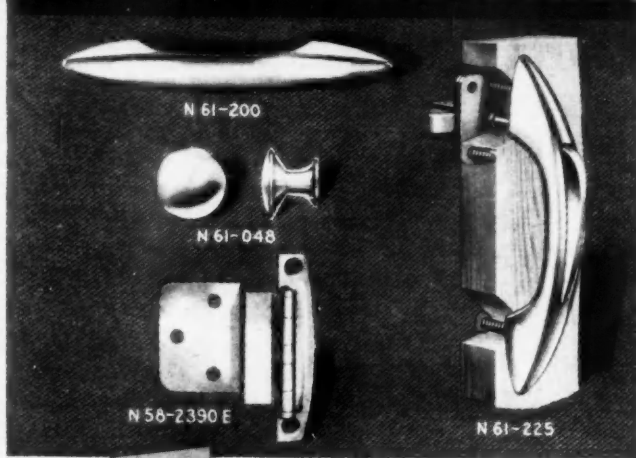
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NATIONAL LOCK
CABINET HARDWARE



Throughout the nation, aggressive hardware merchants are reporting outstanding profits from the sale of NATIONAL LOCK Cabinet Hardware. In store after store it is considered an important source of revenue the year round.

Ask your jobber. Order an adequate stock. Then use the effective counter display boards, newspaper mats and other profitable sales tools. Ask, too, about Screws and Bolts, Locks and fine Sash Hardware.

THE NAME IS "TOPS"!

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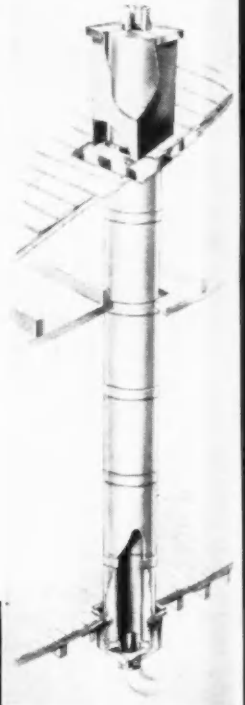
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BUILD THRU WINTER with
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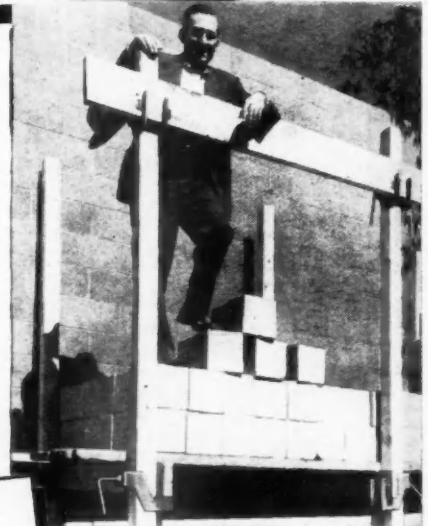
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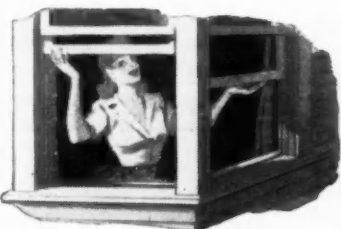
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concealed in the sash . . . no tapes . . . no cables.

EASY TO INSTALL
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10 SIZES FIT 95%
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SEE OUR CATALOG IN SWEET'S

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There is a tremendous market, a real profit opportunity for alert dealers featuring TAPCO — the all-steel, precision-built floor jack. Tapco has superior features and is approved for new home construction.

- In 3 sizes — each with full-range height adjustment
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CHOOSE KEYSTONE INSECT WIRE CLOTH



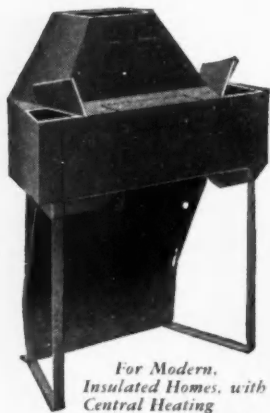
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DIVISION OF
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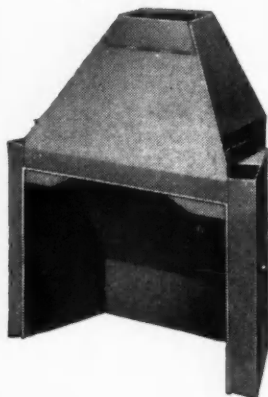
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Jaeger 65, 115 and 165 Mixers pour more concrete per day because they have famous "Dual-Mix" drums for faster mixing and discharging, charging skips that load while the previous batch mixes then rise and shake their loads into the drums fast and clean, automotive transmissions, big clutches, oversize engines, and fast skip-hoisting and lowering device. They all mean greater production per wage dollar. Write for Catalog M-8.



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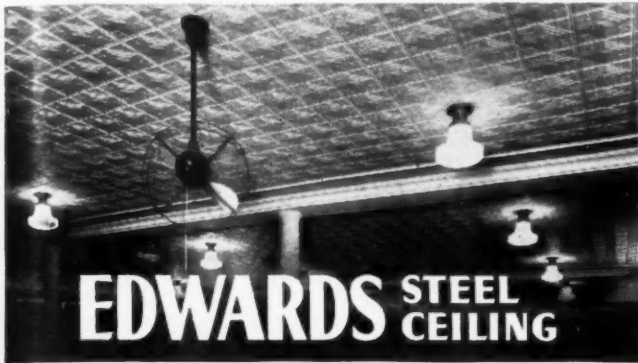


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No need to wait for plasterers to finish that important job. Your own carpenters can do it better, faster and at lower cost with Edwards Modernistic Steel Ceiling. No dirt, no muss and no delay. Apply Edwards Steel Ceiling direct on new construction or over old plaster. You will have a better job, rat-proof, fire-resisting, permanent and beautiful. It will never crack, chip or peel. Your customer will be delighted.

Send measurements for estimate and layout. We guarantee prompt shipment if you order now.

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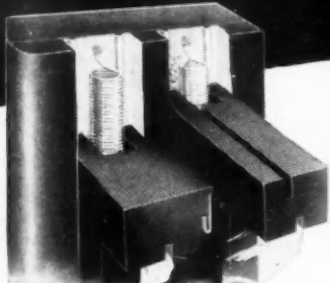
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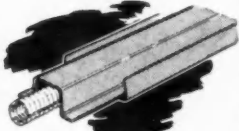
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Please rush me folder A-11 and price list on Milwaukee Combination Sash Balance-Weatherstrip.

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Bronze Spring Cover

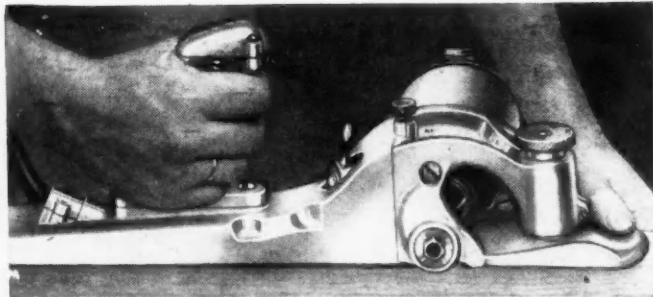
Bronze covers that completely hide springs are now available, if desired. No sacrifice of basic simplicity. You still get smooth, positive action; accurate balance; seal against draft, dust, moisture.



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STANLEY-CARTER POWER PLANE**

See the chips fly from that piece of lumber. The one-piece spiral cutter, turning at 18,000 R.P.M., removes material fast, from tough woods, with or against the grain. The workman furnishes the skill—the powerful 1 H.P. motor of the Carter J5 does the drudge work,—getting heavy work done better, faster, cheaper.

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**RUGGED
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Truly the finest in accuracy and dependability, the Universal Level-Transit is smoothly converted from a precision level to a highly accurate transit in 2 easy motions. A practical all-around builders' instrument.

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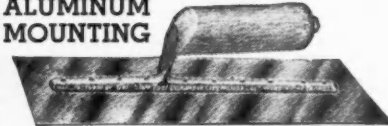
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Steel-mounted ash handle 7 feet long.

- Size 18 x 5 inches, Price each..... \$ 8.00
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ALUMINUM MOUNTING



Correctly tempered flexible steel, pre-war quality blade. 10 1/2 or 11 inch lengths.

CEMENT FINISHERS' TROWELS

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All prices F.O.B. Kansas City, Mo.

A complete line of Cementers' Sidewalk Edgers, Curb Tools, Sidewalk or Pavers' Groovers.

GOLDBLATT PLASTERING TROWELS

**No. 2S
each
\$3.35**

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TRADE MARK REGISTERED
Top Quality, Best Known Masons Tools of All Kinds for Over 60 Years.
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Lends unsurpassed beauty and charm to homes—old and new. The modern fireplace that fulfills all modern day requirements—used with gas or electricity.

Large variety of attractive models in brick, stone, wood, etc., available.

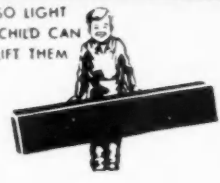
Furnished complete—ready to be installed in hour's time of handy man—shipped anywhere.

DEALERS, BUILDERS and HOMEOWNERS write for catalog and full information.

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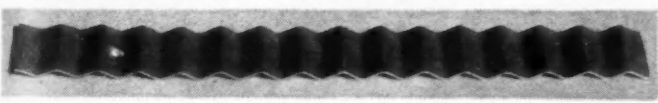
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SO LIGHT
A CHILD CAN
LIFT THEM



**Walls
Cylinders
Floors
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**Irvington
FORM & TANK CORP.**
Irvington 52,
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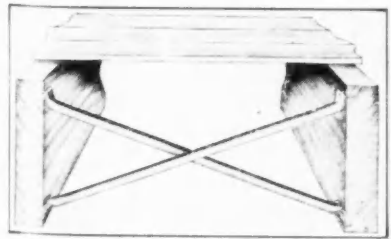
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AVAILABLE FOR IMMEDIATE DELIVERY

Made from heavy galvanized steel 7 in. x 1 in. with nail hole perforated. Price \$4.50 per thousand, F.O.B. Wichita; shipping weight, approximately 40 lb. per M. Limit 10,000 ties per order No C.O.D., please. Send check or money order payable to

PACO 327 South Market • Wichita 2, Kansas



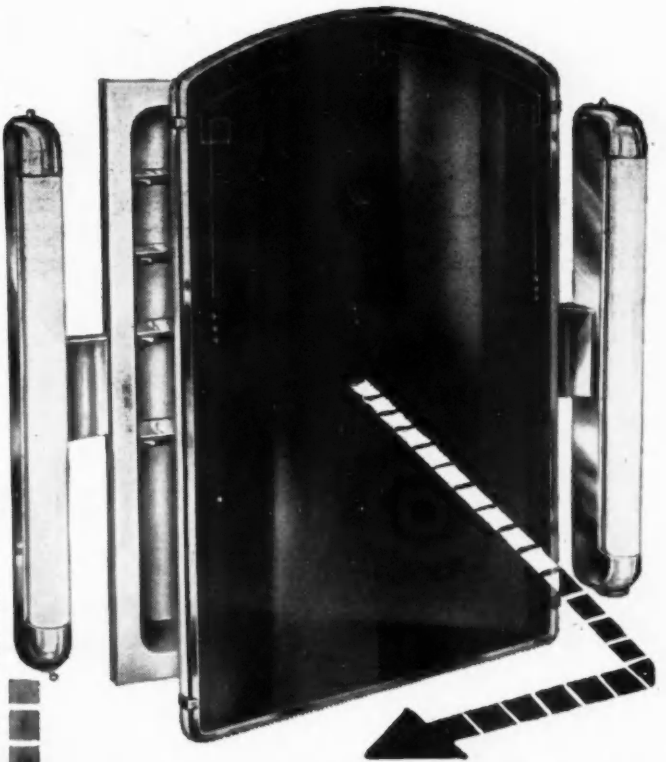
STA-TITE STEEL BRIDGING for WOOD JOISTS

is made of half-hardened channel steel with flanged ends that hold firmly so floors can't buckle or

budge. Shrinking or sagging of joists tightens instead of loosens Sta-Tite bridging. Easily installed with only one nail required in each end. High efficiency for low cost!

WRITE TODAY FOR COMPLETE INFORMATION

BELOIT STEEL INDUSTRIES, Inc.
307 City Hall Bldg. Rockford, Ill.



LAWSON BATHROOM CABINETS always smile back at you

It is always good business to recommend this beautifully styled, modern, new fluorescent-lighted LAWSON bathroom cabinet. We call it No. 2388-70. Your customers will call it "wonderful."

Many points of superiority sell this cabinet ... a one-piece drawn steel body, select quality, beveled edge plate glass mirror; rounded inside corners, easy to clean. Stainless steel shelf supports; stainless steel piano type hinge; high lustre, baked enamel body finish.

Fluorescent lights especially designed for this cabinet... give steady, shadowless light. You'll find Lawson's new No. 2388-70 a cabinet that smiles back at you in customer satisfaction.

Also many other styles. Write for Catalog of Bathroom Cabinets and chrome accessories.

**WORLD'S LARGEST
BUILDER OF
BATHROOM CABINETS**
THE F. H. LAWSON CO.
801 Evans Street
Cincinnati 4, Ohio





**THE NEW HERMAN NELSON
Economy Model Portable Heater**

- **ELECTRIC MOTOR-DRIVEN**
- **BURNS WHITE DISTILLATE FUEL**
- **Provides Quick, Clean, Safe heat—without smoke, soot, fumes or open flame!**
- **Abundant fresh, heated air—forced to areas where most needed!**

Burns range oil, kerosene or prime white distillate—costs but 19c per hour!

125,000 BTU per hour capacity—enough to heat almost two ordinary 5-room houses!

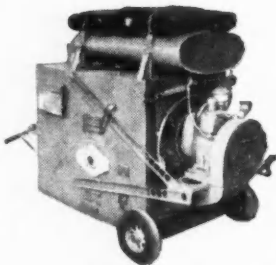
Electric motor powered; 115-230 volt, 60 cycle, single phase.

One 12" dia. x 12' long, extendable hot air duct. Small, compact, light weight.

LOW PRICED FOR THE SMALLER JOBS!

Still Available

The original Herman Nelson, gasoline burning, gasoline engine powered, Portable Heaters. For areas lacking electric power. Completely self-powered. Easily portable by one man.



Write for Interesting Free Booklet on "Cost Control"



THE HERMAN NELSON CORPORATION
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Since 1906 Manufacturers of Quality Heating and Ventilating Products

Roof Trusses!
ONE
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AMERICAN Roof Truss Co.

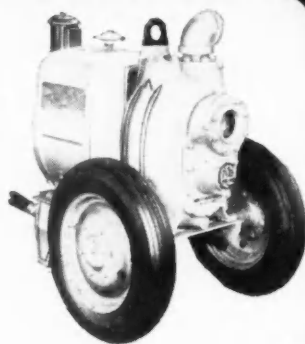
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PUMPS

Unbeatable strength, stamina and service have been built into this CMC 30M—4" Pump. Available on skids, steel wheels or pneumatics.



The CMC Pump line is complete from a 1½" pump, with a capacity of 3,000 gallons per hour, to a big 10" pump, with a capacity of 200,000 gallons per hour. Also 3" and 4" Diaphragm pumps. See your CMC Distributor or write us about your specific needs.

Construction Machinery Co.
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Solid ANCHOR SUPPORT 50 TO 10,000 LBS.

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- MACHINE SCREW SIZES 6-32 through 5/8-11

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EASILY INSTALLED
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Hammer until load sets around cone



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Every home with oak floors which you build today will make friends for you tomorrow. That's because of the beauty, durability, adaptability and long-time economy of oak.

Ten years from now, owners will point to the enduring warmth and charm of their oak floors and be glad they bought them... grateful to you for selling them. They'll see them gleam in the sunlight and glow in the lamplight, and say—"Aren't they beautiful... even after ten years?"

To help owners appreciate the value of oak floors today, your dealer has available, without charge, the home-owner booklets—*Oak Floors for Long-time Beauty*. He will also give you the new *Builders' Data Book* which provides detailed information and specifications for planning, laying and finishing oak floors. Get these two helpful books today.

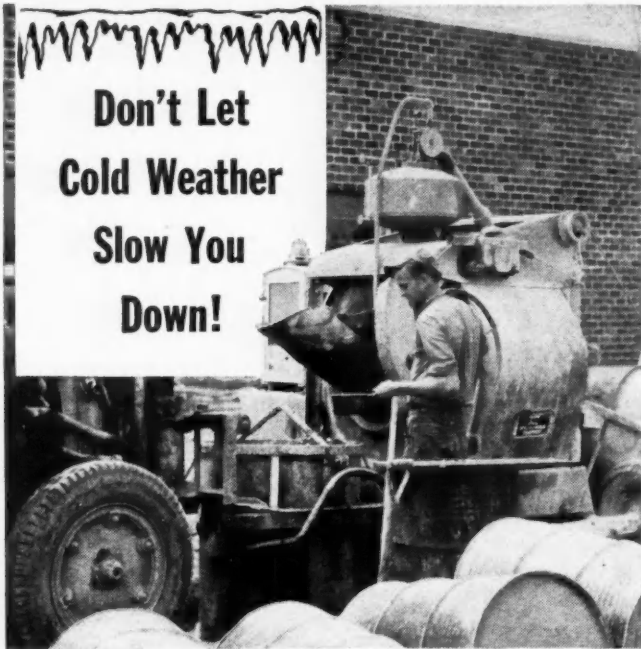
And remember: you'll make lasting friends with oak floors.

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OAK FLOORS

BEAUTY • DURABILITY
ADAPTABILITY → ECONOMY





TRIMIX being used during construction of Dr. Salisbury's Laboratories, Charles City, Iowa.

**Don't Let
Cold Weather
Slow You
Down!**

KEEP WINTER CONCRETE WORK ON SCHEDULE WITH **TRIMIX**

All winter long, TRIMIX helps keep concreting costs low, quality high, work on schedule. It aids mixing, pouring and placing of concrete at sub-freezing temperatures.

TRIMIX improves workability of mix, accelerates set, produces high early compressive strength and increases cement dispersion. Covering and heating time is reduced, forms are removed sooner.

Yes, winter concreting — like all concrete work the year 'round—is safer, easier, faster and better with TRIMIX.

MULTI-PURPOSE LIQUID ADMIXTURE

TRIMIX is used extensively in ready-mixed, hand-mixed or Gunit concrete — for foundation walls and footings, floor construction, integral hardening, patching and maintenance, grouting, other work. Excellent for stucco, mortar and cement plaster work, too.

See SWEET's for further information, or for descriptive folder write Dept. B11.



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"BUILDING SAVERS"

*"If It's Worth
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Floor Treatments • Waxes • Paints and Protective Coatings
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RED DEVIL TOOLS. IRVINGTON 11, N. J., U. S. A.

NEW HOLLY "25"

SINGLE WALL HEATER 25,000 BTU



MEASURE IT . . . Rough-in dimensions only 14"x50½" in standard 4" wall. No studs to cut.

STUDY IT Exclusive "ClearFlo" grille directs warm air into room — not up the wall. Panel always safely cool. Return air taken from floor.

TEST IT rated at a full 25,000 BTU input by A.G.A. — 100% shut-off safety valve is standard.

Holly Manufacturing Co., 883 S. Arroyo Parkway, Pasadena 2, Calif.

Down Hill ALL THE WAY!

*Well
Balanced
FOR
EASY WHEELING!*



Sterling barrows wheel so easily, they make it seem like going down hill all the way. Lightweight . . . well-balanced . . . equipped with modern, anti-friction bearings. Sterlings relieve the operator of fully 80% of the load. Delivery of Sterlings will be as prompt as conditions permit.



STERLING WHEELBARROW CO., Milwaukee 14, Wis.  Look for this Mark of STERLING Quality

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WHEELBARROWS

80,000 Subscribers-YES

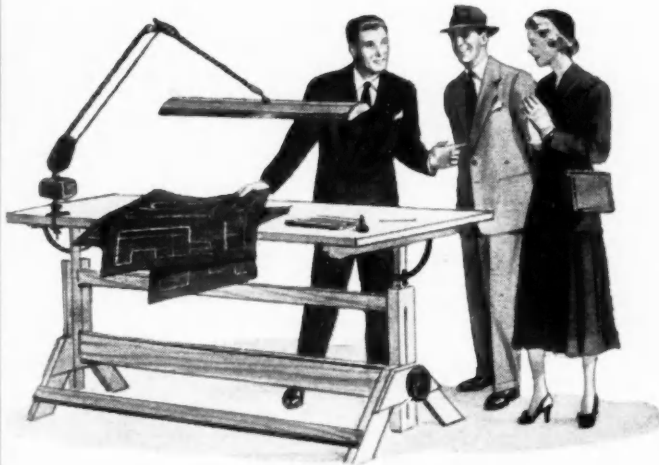
But — More Important

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Building Professionals
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A big plus-

THAT COSTS SO LITTLE!



PROGRESSIVE builders and contractors know the powerful appeal which a pleasant, cool, odorless, smokeless, greaseless kitchen has for women prospects! A kitchen whose paint, woodwork, and wallpaper will stay fresh longer!

That's why quiet, clean, effective kitchen ventilation has become a "must" today!

That's also why so many builders and contractors specify a G-E kitchen Ventilating Fan. It's plain common sense!

The motor's the heart!

Of course the heart of any ventilating

fan is the motor. And need we blow the horn for the famous G-E Motor?

Tell your prospects this:

"A G-E Ventilating Fan completely and quietly renews the air in an average-size kitchen many times an hour!

"It provides constant fresh air—without drafts—in kitchens and other rooms where heat, smoke, grease, and odors are likely to accumulate. It makes everyday living infinitely more comfortable." (P. S. And they're ideal for laundries!)

HERE'S THE BIG FEATURE

The outstanding feature of G-E kitchen Ventilating Fan (aside from its motor) is the fact that it's automatic in operation!

Flip a switch—outside cabinet door opens—blades begin their quiet, efficient spinning.

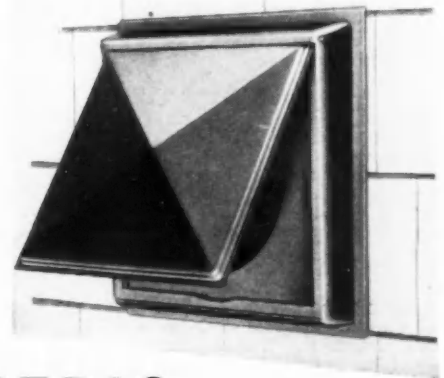
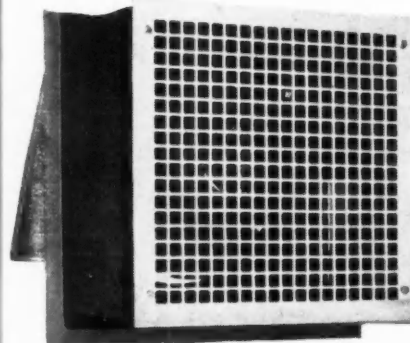
Flip switch again—fan stops—outside door closes forming a tight seal against weather and insects. AUTOMATIC! No chains to haul on. They're easy to install.

G-E Ventilating Fan:

Wall switch controls fan. Outside door opens automatically when fan is ON; shuts when fan is OFF!

Easily installed—adjustable wall box fits walls from 5½ to 11 inches thick.

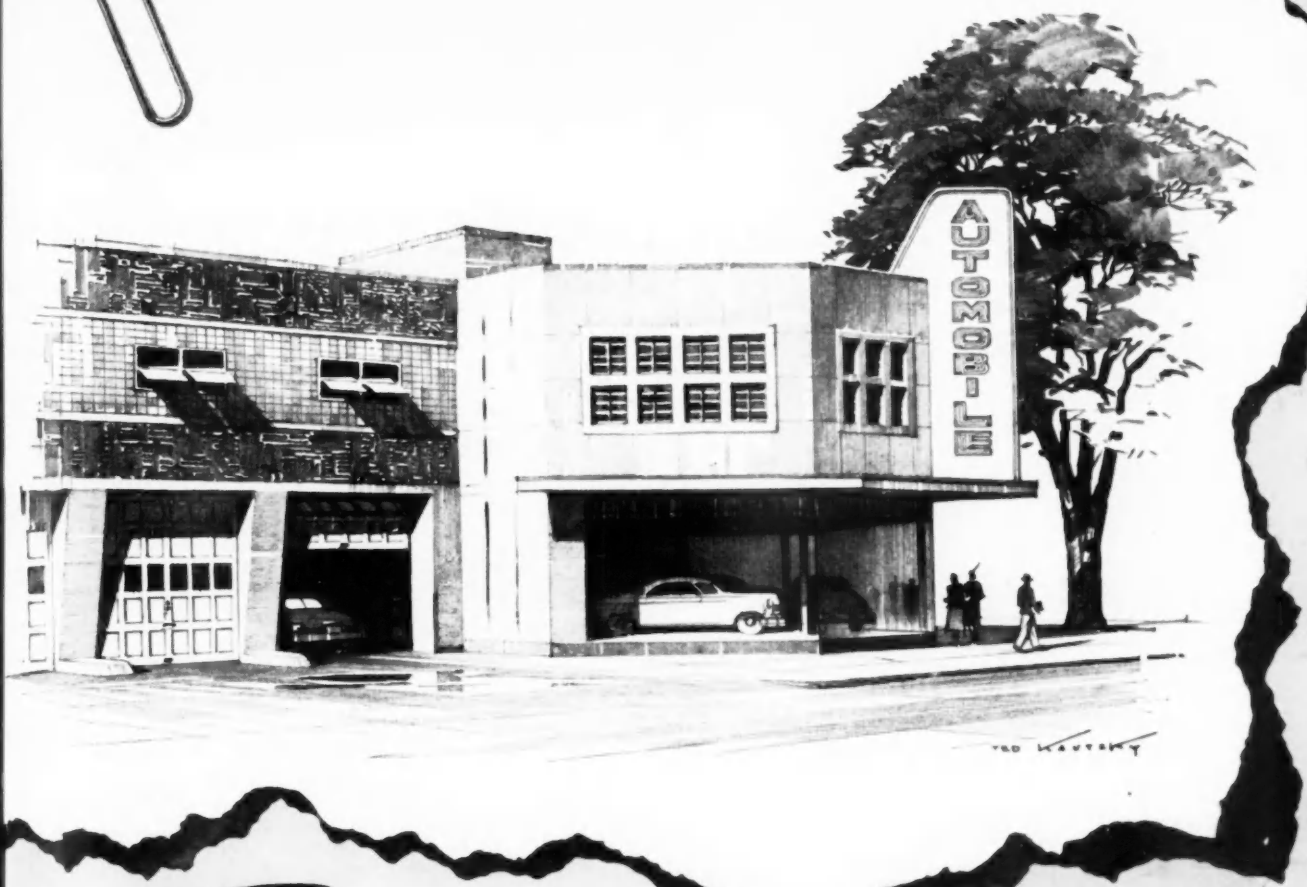
Needs only 12¾ inches square opening in wall. 110/120 volts, 60 cycles. Model FM 10C1. General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Connecticut.



GENERAL ELECTRIC

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Enduring strength and service!

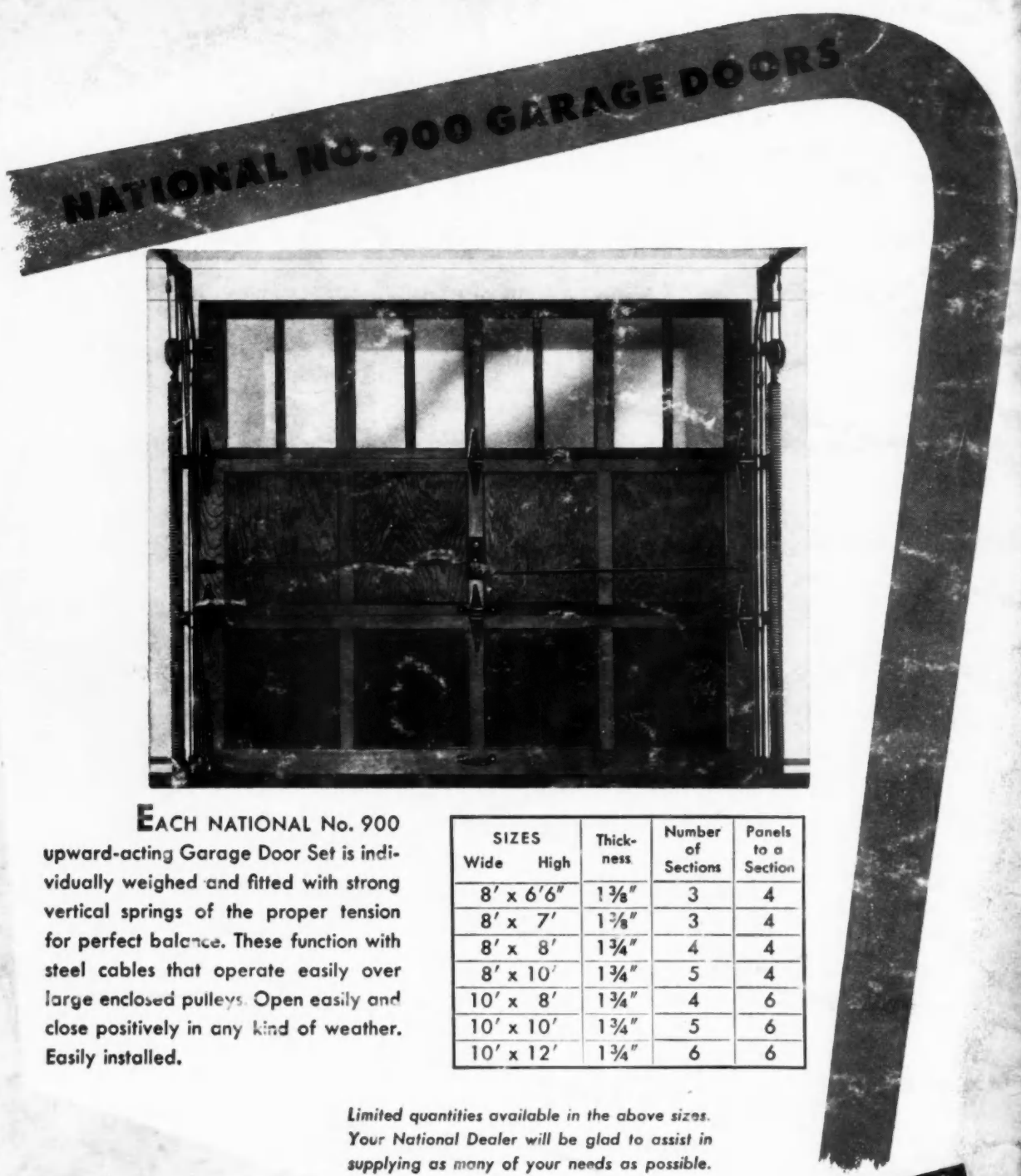
● Structural strength and mechanical perfection built into The "OVERHEAD DOOR" with the Miracle Wedge insure its long life and faultless operation. The trim, handsome wood construction is light, but stronger than steel of the same weight. The Miracle Wedge allows the door to roll freely upward and out of the way, or to descend easily to a weathertight closure. Any "OVERHEAD DOOR" may be manually or electrically operated. Long lasting construction and instant, dependable performance make this door invaluable in commercial, residential, and industrial structures.

TRACKS AND HARDWARE OF SALT SPRAY STEEL

THE
OVERHEAD DOOR
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MIRACLE WEDGE

NATION-WIDE
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OVERHEAD DOOR CORPORATION • Hartford City, Indiana, U. S. A.



EACH NATIONAL No. 900 upward-acting Garage Door Set is individually weighed and fitted with strong vertical springs of the proper tension for perfect balance. These function with steel cables that operate easily over large enclosed pulleys. Open easily and close positively in any kind of weather. Easily installed.

SIZES		Thick-ness	Number of Sections	Panels to a Section
Wide	High			
8'	6'6"	1 3/8"	3	4
8'	7'	1 3/8"	3	4
8'	8'	1 3/4"	4	4
8'	10'	1 3/4"	5	4
10'	8'	1 3/4"	4	6
10'	10'	1 3/4"	5	6
10'	12'	1 3/4"	6	6

Limited quantities available in the above sizes. Your National Dealer will be glad to assist in supplying as many of your needs as possible.

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No 900



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MANUFACTURING CO

Sterling, Ill