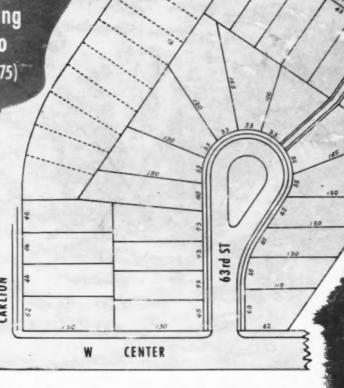
WORLD'S GREATEST BUILD'HIG PAPER BUILD'HIG PAPER BUILD'HIG PAPER

24 HOMES __ erected under a \$12,000 ceiling offered a challenge to 19 builders (pages 68 to 75)







How to lay a roof deck fast... at low cost!

Six men, working with a gasoline truck crane can hoist 14,000 square feet of Cemesto to a roof . . . and still have time to lay 8,000 feet of roof deck-ALL IN AN 8-HOUR DAY!

And this is no ordinary roof deck . . . for Cemesto* is a multi-function material-a fire-and-moisture resistant asbestos cement covered panel with a cane fibre core. It provides insulation, interior finish, and great strength with light weight.

That's why you find Cemesto so widely used today for fast, low-cost construction of not only roof decks, but also "curtain" walls and partitions. Cemesto's durable exterior and interior finish needs no painting and little maintenance.

IT'S AVAILABLE: Cemesto* is available NOW . . . for prompt delivery.

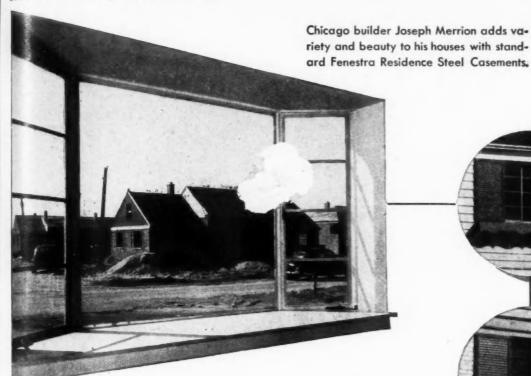
You are invited to write today for details on Cemesto applications in which you are interested. In the meantime, you'll find complete specifications on Cemesto in Sweet's File, Section 10a/7.

THE CELOTEX CORPORATION, CHICAGO 3, ILLINOIS

CEMESTO

FOR ROOF DECKS..."CURTAIN" WALLS...PARTITIONS

Published monthly by Simmons-Boardman Publishing Corporation, 105 W. Adams St., Chicago 3, Ill. Subscription price, United States, Possessions and Canada: 1 year, \$3 years, \$5.00. Foreign countries: 1 year, \$10.00; 3 years, \$20.00. Single copies, 50 cen s. Entered as second-class matter May 21, 1948, at the Post Office of Chicago, Illinoir the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Illinois. Address communications to 105 W. Adams St., Chicago 3, Illinoir the act of March 3, 1879, with additional entry as second-class matter at Mount Morris, Illinois.





.. economically

Window treatment is an effective method.

Use windows of varied heights and widths in bays, in corners, as picture windows . . . spotted differently throughout each house. And leave muntins in some; remove them from others. There's your variety. Use *standard* Fenestra* Residence Steel Casements. There's your economy.

Builder Joseph Merrion is doing it. A number of the houses in his Chicago building development have the same basic floor plan. Yet window variety helps give each its own appeal.

${\tt Standardization} = {\tt Economy} + {\tt Quality}$

Use of standard casement sections streamlines Fenestra production. And the fine quality of workmanship in the shops of America's first and largest steel window manufacturer assures you strong, attractive windows—at a cost that helps you stretch your building dollar.

A full range of types and sizes provides a *right* window for every need. See your Fenestra dealer today or write to Detroit Steel Products Co., Dept. AB-12, 2260 East Grand Blvd., Detroit 11, Mich.





WHICH IS THE RIGHT WINDOW TO USE?



For maximum economy — Type 2414. Meets most residential window needs. For all general locations. One swing leaf provides full 50% opening . . , deflects air into the room.



For maximum ventilation — Type 2424. Provides 100% opening. Costs 70% more than Type 2414 because it has two ventilators with Roto-Adjusters. Obviously, there are places where this extra ventilation makes the additional cost well worth-while.



For maximum view—Type 4424. Picture window, plus ventilation ... many other types and sizes of Fenestra Casements to provide a right window for every need.

ITIONS

ear, \$5 00; Hilinois, Illinois.

Loyalty to Quality Products ALLIANS DAYS

 $\mathbf{M}^{ ext{ANY lumber dealers have handled Upson Products}}$ for 35 years.

Hundreds have handled Upson Products for more than 25 years. Thousands more have handled Upson Products for more than 15 years.

Practically without exception in city after city—town after town across the country, you will find that the oldest, most successful, most respected dealer in the community sells Upson Products.

Through the years, these men have built stable, profitable businesses by unwavering determination to give the customer the most his money will buy. Their neverfailing loyalty to quality has made it possible for us to keep our own quality standards at the highest possible point.

Our long association with so many quality-conscious dealers is an asset we prize beyond price.

So again at Year's End, as is our custom, we wish to publicly express our warmest appreciation.

THE UPSON COMPANY

Lockport, New York



Copyric SIMMO PORAT III.; 30 ican & Buildin Buildin Builder founde

Subscription of services of se



Season's Greetings

AMERICAN BUILDER

Copyright 1948 with all rights reserved, SIMMONS-BOARDMAN PUBLISHING CORPORATION, 105 W. Adams St., Chicago 3, Ill.; 30 Church St., New York 7, N.Y. American Builder (originally "Carpentry and Building Age, National Builder, Permanent Builder, and the Builder's Journal, was founded Jan. I, 1879. Names registered in U.S. patent office and Canadian registrar of trade mark.

Subscription price: United States and Possessions and Canada, I year, \$3; 3 years, \$5; oreign countries, I year, \$10; 3 years, \$20. Single copies, \$0 cents each. Subscribers are recessted to state company connection, nature of business, title or position. Address W. L. Taylor, Circulation Manager, 30 Church Plew York 7, N.Y. Field Staff: C. L. Conley W. J. Griffith, C. R. Hartung, Joe Santers, R. J. Schnell, John Simonson.

Volume 70

DECEMBER, 1948

Number 12

In This Issue

Publisher's Page Significance of the Campaign and Election	7
Monthly Review of NAHB	61
Editorial The November Election	67
FEATURES	
24 Homes Erected Under a \$12,000 Ceiling Offered a Challenge to	
19 Builders Milwaukee Chapter of NAHB Builds Subdivision for National Home Week	68
Diversification Pays for This Home Builder	76
Home Buyers Are Voting in a New Style of Architecture	80
Popular Model Takes on New Face	82
Tribute Paid to Editor of American Builder	87
Builder Develops "Unwanted" Land. Swamp Land Is No Obstacle to Florida Builder	88
The Garden Is Part of the House Outdoors Becomes Integral Living Unit in House Design	
An Engineered Housing Project. Large Scale Development Is Completely Assembled on Site	
Low-Cost Houses with All-Aluminum Exteriors Builder Achieves Both Economy and Good Appearance	98
Engineered House Construction, Part III—Plumbing	100
The Lengthening Battle Lines R. E. Saberson's View of the Current Housing Shortage	
Varied Designs Increase Sales Appeal Subdivision of One- and Two-Story Duplexes Gets Public Acceptance	108
New Products The Latest in Equipment	111
DEPARTMENTS	
Trends	48
On and Off the Record.	51
Editors' Round Table	55
How-to-Do-It and Better Detail Plate	106
Dealer Review	114
Cotalogs	124
Index to Advertisers	196

America

Sig

that to sion l impor

confr

This

prise

most radio years Mi paigr polic sue Dew

ing l

sequ

of o

socia

enou indo was

leas siste that com beg ship util

of

CJU



in heating and plumbing

for any home you plan or build

. . . (including your own)!



Not all homes would allow for this distinctive basement design. But all of them gain from the efficient performance and economical operation of American-Standard Heating Equipment. Shown here are the EMPIRE, a compact but powerful automatic gas-fired boiler, and the always reliable BUDGET gas-fired Automatic Storage Water Heater.

Everybody everywhere wants a bathroom that's new as tomorrow. Here the charm of provincial design is combined with the modern conveniences offered by American-Standard Plumbing Fixtures. The roomy bath is the corner model MASTER PEM-BROKE, the graceful lavatory is the COMRADE, and the low, free-standing water closet is the quiet COMPACT.



FFATING - PLUMBING

■ You get a real advantage when you choose American-Standard Heating Equipment and Plumbing Fixtures. For they are first in completeness of line, to meet the needs of every size of home. They lead in variety of product, to give you wide flexibility in designing and styling. And they're noted for expert engineering and construction which assures long, satisfactory service.

Whatever the job, you can't beat American-Standard as a single, reliable manufacturing source for heating equipment and plumbing fixtures. For full details, contact your Heating and Plumbing Contractor. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

AMERICAN-Standard
First in Heating and Plumbing

AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS • DETROIT LUBRICATOR • KEWANEE BOILER • ROSS HEATER • TONAWANDA IRON

Publisher's Page



Significance of the Campaign and Election

most significant fact about the recent political campaign was that there was virtually no discussion by the politicians of the most important and fundamental issue confronting the American people. This issue was a socialist planned economy versus free private enterprise over which there had been almost constant controversy on the radio and in the press for fifteen

for this

. But all

ient per-

peration

Heating

are the

and the

leater.

Mr. Truman in the political campaign advocated all the socialistic policies necessary to present the issue to his opponent. But Mr. Dewey persistently declined the challenge. We do not recall having heard or read anything of consequence that he said in advocacy of or defense of private enterprise in general or against any specific socialistic policy. We do recall enough socialistic policies that he indorsed to indicate that his defeat was no serious blow to private enterprise. Henry Wallace had at least the virtues of clarity and consistency. He advocated in language that could not be misunderstood a complete socialist planned economy beginning with government ownership of banks, railroads and all utilities furnishing light, power and

Why did the principal spokesmen of the Republican party evade the greatest issue confronting the American people? Doubtless because they were confident they had

all real believers in private enterprise "in the bag," and they desired to avoid risking loss of the votes of important pressure groups of people who *in theory* believe in private enterprise, but who *in practice* favor specific socialistic policies by which they hope to benefit at the cost of everybody else.

Do the lack of discussion of the paramount issue during the campaign and the result of the election show that the cause of private enterprise is lost? No, it does not indicate that that cause has suffered even a serious setback. There is as much sentiment against socialistic New Deal policies as there was before the political campaign. This sentiment was not created mainly by politicians. It was created mainly by men in private life some of whom have been writing and speaking against such policies for fifteen years. The principal candidates of the Republican party have evaded attacking the socialistic domestic policies of the New Deal in four consecutive national political campaigns-in 1936, 1940, 1944 and 1948. Most politicians don't try to educate public opinion regarding important controversial issues. They try to gain votes by appealing to a public opinion that they believe already has been created by others, or by events.

The Truman administration undoubtedly will seek the passage by Congress of the same kinds of socialistic legislation that Mr. Truman

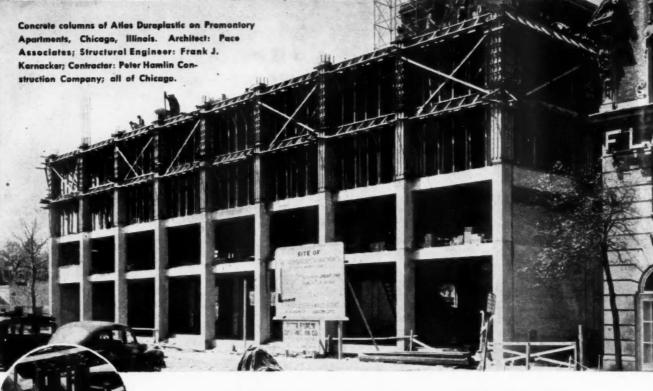
has advocated ever since he has been president. The task of educating and arraying public opinion against it will have to be performed by the same kind of people in private life who created most of the sentiment against the New Deal. Unfortunately, they may be helped by events. Perhaps the principal reason for Mr. Truman's election in 1948 was that business in general had been so good, employment so high, national income so large in the post-war period. These conditions of prosperity would not have prevailed if the government controls and socialistic policies that Mr. Truman advocated at the beginning of the post-war period had been adopted. And it seems very likely that the present prosperity will not continue during Mr. Truman's next administration unless most of the policies he advocated during the recent campaign are defeated.

The prosperity during the postwar period of which Mr. Truman and the New Dealers were the lucky beneficiaries in the election was due to private enterprise operating under policies and conditions quite different from those that Mr. Truman and the New Dealers tried to impose. If Mr. Truman and the New Dealers get their own way in Congress during its next session, that will probably prove to be bad luck for Mr. Truman, the New Dealers, business and everybody else excepting, perhaps, the Republican party.

Same O. Drun,

American Builder is published by the SIMMONS-BOARDMAN PUBLISHING CORPORATION, with editorial and executive offices at 105 W. Adams St., Chicago 3, Ill.; 30 Church St., New York 7, N.Y. Samuel O. Dunn, Chairman of the Board and President; James G. Lyne, Executive Vice President; Robert H. Morris, C. J. Wageman, F. A. Clark, Vice Presidents; J. S. Crane, Vice President and Secretary; John T. DeMott, Treasurer.

American Builder is a member of the Associated Business Papers (A.B.P.) and Audit Bureau of Circulations (A.B.C.). Printed in U.S.A.



How Duraplastic licked a tough concrete column problem

Forms in place for concreting with Atlas Duraplastic. Note steel bars and beams that forced work to be done largely by hand.



Finished columns have clean, smooth appearance, free of blemishes or air bubbles.

Outstanding proof of its placeability—concrete successfully placed in a network of steel 12 feet deep!

Filling the column forms with concrete in this mass of vertical and horizontal steel reinforcement was no easy task.

The columns were 12 feet deep with steel bars and beams so close together that no vibrator could be used. Placing with Atlas Duraplastic air-entraining cement was done entirely by hand using long bars for spading on the inside. Other workmen pounded on the outside of the forms with mallets. Concrete had a slump of approximately 5 inches. Cement content was about 7 sacks per yard and water-cement ratio 5-3/4 gallons. There were no signs of bleeding or segregation when the concrete was mixed at ground level, hoisted to the upper floors and distributed to the forms in wheelbarrows.

When the forms were removed, contractors were pleased to find a smooth, excellent-looking surface, free of blemishes or air bubbles.

More and more contractors are profiting from the unique features of Atlas Duraplastic for structural work. More uniform, more workable and more durable, Duraplastic costs no more than regular cement. It provides the proper amount of entrained air by intergrinding with the cement the precise amount of air-entraining material needed for satisfactory field performance. No new methods or materials are required.

Duraplastic complies with ASTM and Federal specifications. Write for further information to Universal Atlas Cement Company (United States Steel Corporation Subsidiary), Chrysler Building, New York 17, New York.

OFFICES: Albany, Birmingham, Boston, Chicago, Dayton, Des Moines, Duluth, Kansas City, Minneapolis, New York, Philadelphia, Pittsburgh, St. Louis, Waco

ATLAS DURAPLASTIC

AIR-ENTRAINING PORTLAND CEMENT

MAKES BETTER CONCRETE AT NO EXTRA COST



Cut Building Costs 3 Ways



STEEL CASEMENTS METAL SCREENS BASEMENT WINDOWS

No extra hardware to buy, installation costs cut 80% • Planing and fitting eliminated.

ntrac-

excel-

es or

fiting

Dura-

form, Oura-

nent.

ained

t the terial

ired.

nent

tion York Factory finished, no painting necessary • Precision made, ready to install without fitting.

Standard sizes, ready to install, eliminating work of fitting, trimming and painting.

Have you ever asked yourself "How can home building costs be reduced?" Now, that's a practical question—and here at Ceco we have an answer. Certain Ceco products will reduce home building costs. Take steel windows for example: They cost less installed, because there are no hidden costs to overlook, such as hardware, prime coat, accessories, additional labor costs. Then, too, steel windows last, and last, and last. There is no need for repair—they cannot rot...they are Bonderized and painted for protection against rust. And that goes for steel basement windows, too. Another way to save is provided by Ceco metal frame screens. Installed, they actually cost less than old-style screens, are factory finished—need no on-the-job painting, trimming, or fitting. So, to reduce building costs, recommend Ceco metal casements, basement windows, and metal frame screens.

WHY SPECIFY CECO?

CECO

STEEL

Ceco does more than design and manufacture fine construction products. Besides their wealth of technical engineering skill, there is available construction knowledge gained by 36 years of experience on the job. In 23 offices strategically located from coast to coast, Ceco stands ready to help you reduce home building costs. Call on Ceco today!

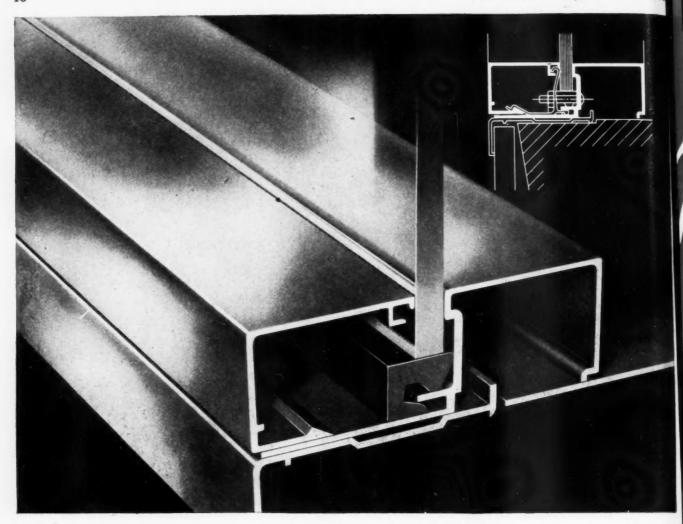
CECO STEEL PRODUCTS CORPORATION

GENERAL OFFICES: 5601 West 26th Street, Chicago 50, Illinois

Offices, warehouses and fabricating plants in principal cities

Other Ceco products include—Combination All-Aluminum Storm Panel and Screen for Wood Windows, Steel Joists, Meyer Steelforms, Reinforcing Steel, Roof Deck, Metal Lath and Accessories, Highway Products, Corrugated Roofing

In construction products CECO ENGINEERING makes the big difference



Inother addition to the Pittco De Luxe line of Store Front Metal

• This double-faced rectangular sash (Pittco De Luxe 15C) was designed as a companion piece to Pittco's single-faced rectangular sash (12C). Both are extremely popular with architects who demand a plain surface, rich in tone and gloss, for certain modern store front designs.

This new sash is especially suitable for installations above the first floor level . . . the sash can be reversed so that necessary replacements can be

made easily from inside. It can be used with any of Pittco's wide variety of De Luxe mouldings. And its strength and clear, sharp profiles are assured by its extruded method of manufacture.

Choose Pittco for your store modernization work. The ease and simplicity of setting procedures for both the De Luxe and Premier lines reduce installation time and save money. Qualified technicians from your nearest "Pittsburgh" warehouse will gladly advise you on the crection of rough work to receive "Pittsburgh" products properly. And experienced crews of "Pittsburgh" workmen set metal and glass quickly and skillfully.

"Pittsburgh" service pays off in satisfied customers as well as profits.

PITTCO STORE FRONT METAL



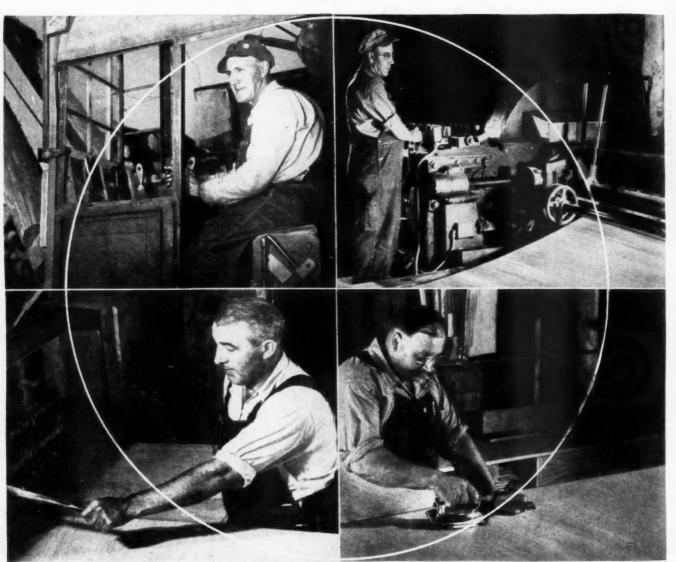
PAINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS

PITTSBURGH PLATE GLASS COMPANY



THE SAW THAT'S FIRST WITH BUILDERS

Roddiscraft Quality a family affair



• When you buy or specify Roddiscraft doors or hardwood plywood, you are sure of a craftsman's product.

In spite of modern production methods — in spite of automatic machines—craftsmanship still determines the quality of wood products. The characteristics of wood differ widely. A knowledge of these differences influences log selection, veneer cutting, drying, bonding, sanding, finishing. At Roddis the men who govern these oper-

ations are craftsmen who know wood.

True to tradition at Roddis, craftsmanship is often a family affair. A large part of the personnel is made up of families of craftsmen with many years of experience — your assurance that each production step is in trained hands.

Yes, when you buy or specify Roddiscraft — you are assured of craftsmanship quality doors and hardwood plywood. Compare Roddiscraft and see for yourself.

Another family circle of Roddis craftsmen representing more than 100 years of experience—the Herkert brothers—Charles—log yard jammer operator—responsible for classifying and stacking logs—John, lathe operator whose knowledge of wood is vital to veneer cutting—Louis—on the belt sander where skill and fine touch assure satin smooth finish and uniform thickness—and finally, at the end of the chain—Eddie, plywood inspector and retoucher—a perfectionist—with him it's perfection or rejection.

Roddis Craft

Roddis Plywood Corporation

Formerly Roddis Lumber & Venner Co.

MARSHFIELD, WISCONSIN

Americ

G

1948.

ET BETTER BRICKWORK WITH BRIXI

Good workmanship requires that all head joints in both face brick and back-up work be completely filled with mortar, by any of the three methods pictured below.



Method 1. Plenty of mortar should be thrown on the end of the brick to be placed.



The brick should then be pushed into place.



So that the mortar cozes out at the top of the head joint.



Method 2. A dab of mortar should be spotted on the corner of the brick already in place.



Then plenty of mortar should be thrown on the end of the brick already in place.



So there will be more than enough mortar to fill the joint completely when the next brick is pushed into place.



Method 3. A full trowel of mortar should be rown on the wall.





that the mortar cozes out at the top of the

permits the bricklayer to do the kind of work pictured above. It does not stiffen up too fast, when it hits the brick. It remains rich and plastic long enough to allow the bricklayer to place the brick, easily and accurately.

In addition to its greater plasticity, Brixment mortar has higher water-retaining capacity and bonding quality, and greater resistance to freezing and thawing. Because of this combination of advantages, Brixment is the leading masonry cement on the market.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KENTUCKY





GIVES YOU THE TOOLS AND AMMUNITION TO DO AN EASIER SELLING JOB!



FLOOR DISPLAYS

Rich, full color floor and window display cards—"attention stoppers"—designed to give your customers suggested floor plan ideas, and call attention to the quality, permanent features of HAKO Factory Waxed ASPHALT TILE FLOORING—The Profit Line.



COUNTER CARDS

Point-of-sale counter cards that are real "eye-catchers"—that will help you sell more HAKO Factory Waxed ASPHALT TILE FLOORING—The Profit Line.



MAILING PIECES

8-color mailing pieces and other material that will create the urge to buy only HAKO Factory Waxed ASPHALT TILE FLOORING—The Profit Line Profit Line.



. When the architect or builder is involved in buying or specifying flooring material—you are backed up by an outstanding insertion in Sweet's Architectural Catalog.



T

YES job is You'll Skysci Marbl in Sin

Contr

it per

fast a many which masor

Who Cutt

Ever

The you t -VO the o arc o

You Mas

BARRAGE OF PUBLICITY

. Constant and maximum publicity -national and local-is given to HAKO DISTRIBUTORS and DEALERS wherever new and unusual HAKO Factory Waxed ASPHALT TILE installations are made.



... Many other sales promotional helps that are now under way and will be announced early in '49—all are keyed to help you sell more HAKO Factory Waxed ASPHALT TILE FLOORING—The Profit Line.



SELL THE PROFIT LINE IN '49 PHONE, WIRE OR WRITE TODAY FOR THE NAME OF YOUR NEAREST HIRD DISTRIBUTOR

HACHMEISTER Incorporated

PITTSBURGH, PA. CABLE ADDRESS "HAKO"

HAKO DISTRIBUTORS GIVE YOU FAST SERVICE ANYWHERE IN THE U.S.A.

MASONRY SAWS Speed Production WORK LIKE *MAGIC* ON EVERY JOB!

The hardest masonry materials sliced in two quickly and easily. Users everywhere acclaim Savings.

Y ES, the Value of Clipper is proven daily throughout the country. Whether your job is large or small makes no difference. You'll find Clippers just as Efficient on Skyscraper Jobs as when cutting Brick and Marble for Fireplace Trim. Clipper's excel in Simplicity, Flexibility, and Portability.



Here's the 1949 Model "HD" Clipper (cuts wet or dry!) with "Adjust-A-Cut" Control. You'll be amazed when you see it perform. Straight cuts, angles, notches so fast and easy. Yes, this new Clipper has many advanced features together with those which Clipper originated to make efficient masonry cutting possible.

What's the Clipper Cutting Principle?





You Can Zip Thru

Ever try to tear a telephone book in two? The full thickness is a real strain, but when you take a series of easy to handle sections—you can zip thru. That's the story behind the original Clipper Cutting Principle. Less are of contact means faster cutting action.

You Can Cut ANY Masonry Material



TOR

S. A.

Glazed B.ick Tile cut in 19 Seconds





cut in 21 Seconds

Natural Stone cut in 11 Seconds



Glass Blocks cut in 8 Seconds

Clipper Automatic Pressure Control



Here's a Patented Clipper feature that's no secret. Users everywhere know it's smooth, automatic action that speeds cuts and makes possible Clipper's guarantee of Longer Blade Life.

Clipper Snap-on Blade Cover

It let's you cut wet without getting wet. An out-standing Clipper safety feature for both Wet and Dry cutting.





Nine Clipper Models to select from Priced from \$195 Clipper Masonry Saws are sold direct from Clipper Factory Branches conveniently located from COAST to COAST to serve you.

Write for literature . . . Today!



These New "Grade-Trademarks" Ide Douglas Fir Douglas Fir Quantum of Highest Quantum Properties of Mighest Research Properties (New York Properties (New York

The companies listed below manufacture doors according to specifications and standards of the Fir Door Institute as promulgated by the U. S. Department of Commerce, which conform to the grading rules and inspection service of the Institute. All doors, produced by these manufacturers which bear official F. D. I. seals, are backed and guaranteed as to quality by the Fir Door Institute.

ACME DOOR COMPANY Hoquiam, Washington

BUFFELEN MANUFACTURING CO.
Tacoma 1, Washington

M & M WOOD WORKING COMPANY
Portland 3, Oregon

E. A. NORD COMPANY

Everett, Washington

ROBINSON MANUFACTURING CO.

Everett, Washington

SIMPSON LOGGING COMPANY
Seattle 1, Washington

VANCOUVER DOOR COMPANY
Montesano, Washington

THE WHEELER, OSGOOD COMPANY
Tacoma 1, Washington

The Fir Door

Identify Doors Quality and Uniformity

-as Certified by F. D. I. Inspection

Now—all fir doors produced by member factories of the Fir Door Institute, and covered by official F. D. I. inspection, carry one of the new "grade-trademarks" shown below. Selected for easy, quick identification, these distinc-

tive marks appear only on F. D. I. inspected doors—and are your insurance that the doors so grade-marked meet official F. D. I. quality standards. Look for them! Insist on officially-inspected F. D. I. doors.

*Trade-Mark Registration
Pending—U. S. Patent Office

FDI-BA

FDI:B

FDI-8BP

FDI-C

FDI-: MR

Institute, Tacoma 2, Washington

Ameri





Architect: Victor Hornbein, Denver. Photographer: Andreas Feininger, New York.

Cheerful little "EyEful" ... to give sales a lift

You know from experience how well-planned features capture every prospective home buyer's fancy. That's why it's so important to include plenty of window space to put zest in your houses.

Modern buyers have a right to expect all the sunshine and clear, colorful views which glass provides for the up-to-date residence. Glass costs so little... and adds so much.

When the glass you use bears the L·O·F label, you establish yourself with prospects as one who knows and uses quality materials. Libbey·Owens·Ford Glass Company,61128Nicholas Building, Toledo 3, Ohio.

• L·O·F also makes polished plate glass, safety glass, colorful Vitrolite* glass facing, Tufflex* tempered plate glass and other flat glasses. Only Libbey·Owens·Ford makes Thermopane*—the first mass-produced insulating windowpane.



LIBBEY-OWENS-FORD

a Great Name in GLASS

There Is Only One Bradley Brand There Is Only One Bradley Brand Quality ... the Best!



That's why Bradley's famous trade-mark is known from coast to coast as the sign of the

Standard of Comparison

Pledged to the purpose of constantly striving toward producing a better product, Bradley affords you a source of supply for dependable premium quality in

ARKANSAS SOFT PINE

Trim and Finish

Flooring Siding Boards Dimension

ful

BRADLEY PRE-FINISHED

(Straight-Line)

Hardwood Flooring in

Oak · Beech · Pecan

Stair Treads • Risers • Thresholds

Glued-up Panels

Available at your Lumber Dealer's

COMPANY of Arkansas WARREN, ARKANSAS



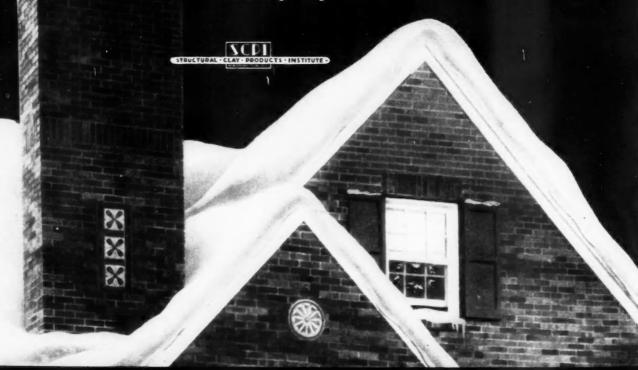
* Yes, this is the season when millions of "stockings are hung by the chimney with care."

And this year, as always, Santa Claus will be climbing down more chimneys of brick—by far—than any other kind.

At this season you can see most clearly why brick enjoys this timeless popularity, whether for chimneys or for an entire home.

For this is the time when youngsters and oldsters alike take new pleasure in the *living qualities* you build into their homes—the warmth, the comfort, the feeling of friendliness and security.

It's also the time when we would like to express our gratitude to all of you who have helped build this feeling of friendliness in our homes and in our industry—and to extend to you all, our heartiest greetings of the season.



STRUCTURAL CLAY PRODUCTS INSTITUTE

1756 K Street, N. W., Washington 6, D. C.

. .

Americ

COPI

appea

Mo tior

adv vec air

rea he

ec

174

948.

CH*the choice for Heating Comfort — in Brooklyn

*Convection Heating with TUTTLE & BAILEY STANDARDIZED

copper convectors ... again selected as the right combination for efficiency, economy, appearance . . . installed in the new 48-unit Victoria Court Apartments, Brooklyn, N. Y.



More and more, those responsible for the selection of heat distribution methods and equipment for modern apartments and homes realize the advantages of CH* with Tuttle & Bailey Convectors... the principle of heating by means of air motion that assures efficient heat transmission, real comfort...all-copper T & B heating elements that mean

savings . . . trim appearance that harmonizes with modern interiors and furnishings.

Advantages important to building owners and tenants alike that answer the demand for better heating from better-looking equipment.

ASK YOUR JOBBER TODAY

TUTTLE & BALLEY

D*tandardized*COPPER CONVECTORS

Send today for a copy of Catalog C8R...complete details for specifying and installing... write Tuttle & Bailey, Inc., New Britain, Conn.

economical operation, fuel cost

Ameri



Sure there's a better way to paint the side of a building ... a faster, easier and less costly way. Just use the brush that fits the job.

And there's a better, faster, easier way to complete every concrete, stucco and masonry job than by using regular cement for every job. You can get the full story just by mailing the coupon below, but here's a "quick look."

If you're laying up ornamental stone or brick, or a brick wall, you can do it easier, faster and better with Stoneset or Brikset.

For a stucco home you'll want Medusa Gray Waterproofed Portland Cement in the mortar coats. In the finish coat you'll prefer Medusa plain or waterproofed White Portland Cement. To speed along any rush job there's nothing like Medusa "Medco" High Early Strength Cement.

So ask your dealer about these special Medusa Cements. And get that coupon below in the mail to us today. If you have a particular type of cement job or a special problem, we'll be glad to try to help. Write us now!

"FIFTY-SIX YEARS OF CONCRETE PROGRESS"

MEDUSA WHITE MEDUSA WHITE WATERPROOFED MEDUSA GRAY WATERPROOFED "MEDCO" HIGH EARLY STRENGTH MEDUSA AIR-ENTRAINING MEDUSA BRIKSET MEDUSA STONESET

MEDUSA PORTLAND CEMENT COMPANY

1002-6 Midland Building . Cleveland 15, Ohio

Yes! I'd like complete information about the following special Medusa products that are checked:

- | Medusa White | Medusa Brikset | Medusa Air-Entraining | Medusa Stoneset | Medusa Gray Waterproofed | Medusa Gray Waterproofed | Medusa Stoneset | Medusa Gray Waterproofed | Medusa Gray Waterproofed | Medusa Brikset | Medusa Gray Waterproofed | Medusa Gray Waterproofed | Medusa Brikset | Medusa Air-Entraining | Medusa Ai

Name

Address City

1948.



Unit illustrated is a Mueller Climatrol Type 205 Oil-fired Winter Air-Conditionar (convertible to Type 105 Gas-fired Winter Air-Conditioner).

Mueller Climatrol fuel-thrifty Furnaces

serve your clients well

-and you earn their thanks for a well-planned home

Yes, a fuel-thrifty Mueller Climatrol Furnace in a home wins favor for the architect, makes profitable sales for the builder. And with good reason. The heating plant is the heart of a home. And a Mueller Climatrol Furnace is made to order for today's conditions — with fuel costs high and fuel supplies low.

Mueller Climatrol's fuel-saving story is hard to beat. Your nearby Mueller Climatrol dealer can give you the full details. Ask him about the complete Mueller Climatrol line of furnaces and winter airconditioners designed for gas, oil, or coal. Some are designed for convertibility, using gas or oil according to local restrictions. Summer air conditioning, too.

Your dealer can explain the unique burner and heat-exchanger features that protect your clients against waste-high fuel bills. He can tell you how each Mueller Climatrol furnace is scientifically engineered to serve with years of satisfying comfort and health protection. He can show you the value of giving your clients a product backed by Mueller's 91 years of specialized experience.

Years of national advertising and hundreds of thousands of satisfied users have established the name Mueller Climatrol. You know the value of that in support of an architect's recommendation, and in closing a profitable sale for a builder.

Get in touch with your Mueller Climatrol dealer today. Or write for complete information on the Mueller Climatrol line . . . L. J. Mueller Furnace Co., 2016 W. Oklahoma Avenue, Milwaukee 7, Wisconsin.



8-41

Hio

dusa



Ame

H weat conv the f

T that B

laun

clot

cost Wit

E



BUILDER

You'll please your customers—and make your work easier and more profitable—if you plan on Marlite plastic-finished wall and ceiling panels to create interiors of sparkling beauty and economical utility.

Your customers like Marlite for its gleaming beauty and the ease with which it can be kept sparkling clean and lustrous—its sealed surface is the reason!

And you'll like Marlite because these wall-size panels go up quickly and easily over new walls or old, provide an opportunity to increase your business and profits on new construction and modernization. And, because Marlite is adaptable to every type of building, domestic and commercial, where sanitary, colorful walls and ceilings are needed, you'll find Marlite opens up countless new business opportunities for you.



EASY TO INSTALL-you can do the entire job with regular

carpenter's tools.

SUITABLE FOR COMMERCIAL OR DOMESTIC BUILDINGSerever beautiful, serviceable interiors are required.

EQUALLY EFFECTIVE IN NEW CONSTRUCTION OR MODERNIZATION.

ADAPTABLE TO MANY USES—Walls, ceilings, counters, bars, etc.

SOLD BY LEADING DEALERS EVERYWHERE. PART OF A COMPLETE LINE OF WALL PRODUCTS. PUT THESE OTHER MARSH PRODUCTS TO WORK FOR YOU

MARSH MOULDINGS

MARSH ADHESIVES MARSH BATHROOM ACCESSORIES MARLITE POLISH

MARSH CAULKING

plan on



Complete
Information
Will Be Found
In SWEET'S FILE
for BUILDERS

KITCHENS SERVICE STATIONS FRESH VEGETAB

MARSH WALL PRODUCTS, INC., 1203 Main Street, Dover, Ohio

CONTROLLED

Radiant Warmth and YEAR 'ROUND

HOT WATER from the same boiler

B & G Hydro-Flo Heating adds a proved selling feature to any home . . . because it is known the country over to offer more benefits per dollar!

Here's controlled radiant warmth . . . fuel economy . . . supreme comfort in any weather. This forced hot water system permits a choice of radiators, baseboard units, convectors, or completely concealed radiant panels. Whatever your selection, you'll have the finest in automatically controlled winter warmth.

The B & G Hydro-Flo System matches the heat supp!y to the weather—so exactly that from Fall to Spring indoor temperature is held constantly at the comfort level.

Besides, *Hydro-Flo* Heating provides a year 'round supply of hot water for kitchen, laundry and bath—no separately fired heater needed. And in this day of automatic clothes washers and dish washers, abundant low-cost hot water is imperative.

Everyone can enjoy the benefits of *Hydro-Flo* Heating because it comes within the cost limits of even modest houses. Write today for new booklet "Capture the Sun With B & G *Hydro-Flo* Heating."



FREG. U S. PAT OFF

Radiant sunny warmth from Fall to Spring.



Now Johns-Manville has **2** factories making Insulating Board Products!

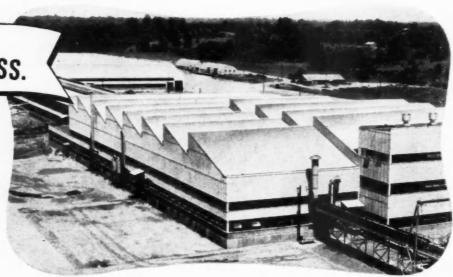


JARRATT, VA. PLANT

This modern plant has been operating at top speed for the past nine years, in an effort to catch up with the demand for J-M Glazecoat Building Board, Decorative Ceiling Panels, Bevel Planks, and other insulating board products. Despite capacity production, allotments to dealers have had to be on a limited basis.

NEW PLANT AT NATCHEZ, MISS.

Now a huge new plant has just been completed at Natchez, Miss. Like Jarratt, the Johns-Manville Natchez plant has the source of its principal raw materials right at its doorstep. It is located in the heart of Mississippi's vast pine forests. The entire production of Natchez will be devoted to the J-M Insulating Board line.





Better products—greater production!

• From these 2 big plants will come an everincreasing flow of Johns-Manville Insulating Board Products, including Building Board, Decorative Ceiling Panels, and Bevel Planks.

These products have a smooth, finely textured, decorative surface called Glazecoat, produced by J-M finishing process.

Other items in the line include Weathertite Sheathing and J-M Insulating Lath, widely used to improve construction and cut costs.

All these insulating board products offer customers many extra advantages. They are structurally strong and tough yet light in weight ... are made to exacting standards of uniform density throughout . . . and have clean sharp edges that help to make a neat job.

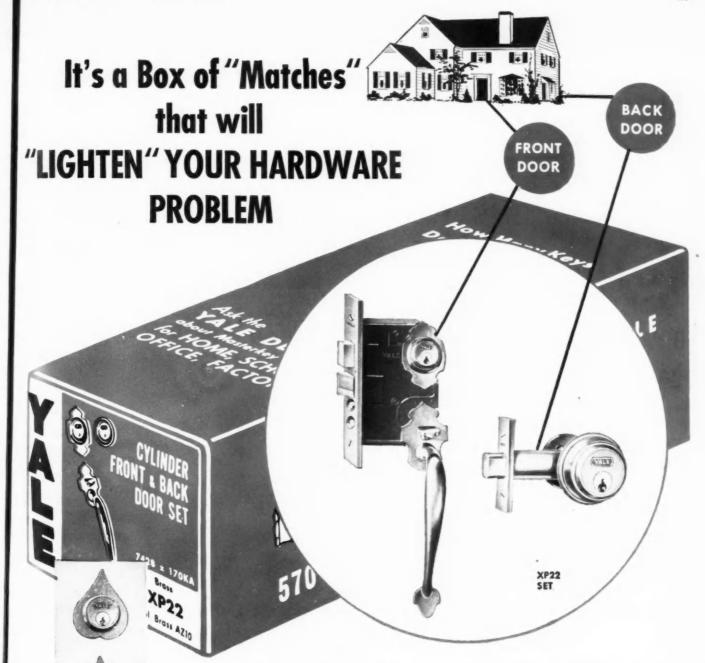
For further information about the various sizes and kinds of J-M Insulating Board products, write Johns-Manville, Box 290, New York 16, New York.

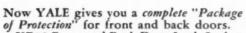


Johns-Manville
BUILDING MATERIALS

1948.

ort zeng ng ucon





XP22 Front and Back Door Lock Set has XP74281 Handle Set for front door . . . plus 170 KA Tubular Deadlock for back door.

A. Exposed front door units are matched in design.

B. Back door deadlock has chromium plated inside trim to *match* modern kitchen fixtures.

C. Keys match for both locks.
Other Yale packaged combinations are:

XP2 which consists of XP291 tubular latch set and 170KA tubular deadlock with matching cylinder collar for front door, plus 170 KA tubular deadlock for back door.

XP1-same as above, without back door lock.

The combinations are also available in XH design.

Simplify your hardware selection—choose a YALE "Package of Protection". THE YALE & TOWNE MANUFACTURING COMPANY, Stamford, Conn., U. S. A.



Makers of the famous YALE lines of Locks, Door Closers, Hardware; Pumps; Heating Units; Hoists, Industrial Trucks, Scales.

Ameri

Tr

THE

OWNER-BUILT

HOUSE TAKES AFTER ITS OWNER

Some houses are merely living quarters. But the owner-built, owner-occupied house is an expression of individual taste... outstanding for its expert design and exacting construction.

House & Garden readers to a large extent are owner-builders. Their choice is the final choice in blueprints, materials...installation, equipment. Brick or stone, steam or radiant heat...their okay decides the purchase. Leading families with leading incomes, they influence the selections of others...set

the building trends of the future. These people are important to you because theirs is the power of decision ... the power to specify your product.

of House & Garden readers live in a house

78% own their home



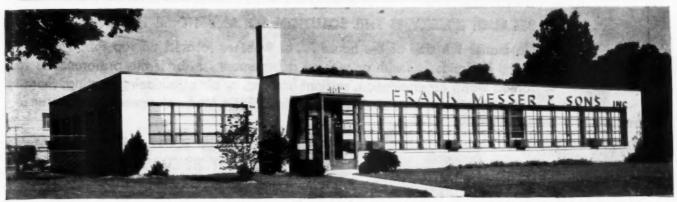
...for the OWNER-BUILDER

market

@ 1946 THE CONDÉ NAST PUBLICATIONS INC

1948.

TRUSCON PLANNING BOARD



Truscon Architectural Projected Windows installed throughout main office building of General Contractor Frank Messer & Sons, Inc., Cincinnati, Obio.

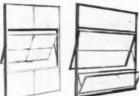
Architects: Potter, Tyler & Martin, Cincinnati, Obio.

Truscon Projected Windows Serve a Wide Range of **Architectural Planning Needs**



ew Greybound Bus Terminal, Cincinnati, Obio, features
euscon Architectural Projected Windows and Screens.
trebiects: Wischmeyer, Arrowsmith & Elswick, Louisville,
y. Contractors: J & E Warm Company, Cincinnati, Obio.

rojected



Intermediate Window. Window.

Right inset: Truscon Commercial Projected Windows are installed throughout the newly completed Fruebaul Trailer Co. plant in Avon, Ohio. Right: Truscon Architectural Projected Windows blend perfectly with the modern exterior of the ern exterior of the Fruehant Trailer Co. office building.

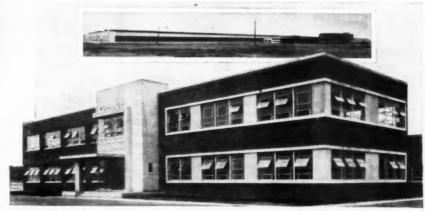


Architectural Projected Window

Perfect complement to every type of traditional or modern architecture, Truscon Projected Windows combine efficiency and distinctive appearance with economy and long life.

Advantages of projected window design include maximum flexibility of ventilation control . . . protection from inclement weather . . . ease of screening . . . and choice of different types to meet exact application requirements.

Shown on this page are typical examples of the many recent installations of Truscon Projected Windows in commercial, manufacturing and institutional structures. Write for free catalog containing full information about Truscon Steel Windows.



Below: Truscon Intermediate Projected Psychiatric Windows in Ohio State Sanitarium, Mt. Vernon, Ohio. Architects: Walker & Norwick & Templin, Dayton, O. Contractor: Knowlton Construction Co.



TRUSCON STEEL COMPANY YOUNGSTOWN 1, OHIO Steel Corporation

American Builders Recommend

KRESKY THE FORCED AIR 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.



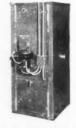
DUAL WALL REGISTER MODELS

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

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 CONDITION-ING 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 deaters, 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.

601 SECOND STREET PETALUMA, CALIF.



01 Second Street, Petal		
Please send me the name		r 📙
Literature showing your	entire line [
Name		

1943.

G

EM

for is ed.

at, ift Detter Homes & Gardens is selling these **Building Products** October, November and December



All the brands listed on the next two pages are being sold through Better Homes & Gardens during the current quarter...

October, November and December.

America's First Service Magazine

American

BUILDING PRODUCTS BEING SOLD THIS CURRENT QUARTER IN BETTER HOMES & GARDENS

AIR CONDITIONING & HEATING

Aeropel Fans Airtemp American Radiator Arvin Portable **Bell & Gossett** Bryant Burnham Base-Ray **Burnham Portable Continental Radiant** Climatrol Co-Z-Air Portable Crane Dearborn Portable Dole Valves **Dust-Stop Filters Dunham Baseboard** Electresteem Portable Flexscreen Fireplace Screen **Gardner Radiator Enclosures Heatilator Fireplace Forms** Honeywell Controls Inst. Boiler & Radiator Janitrol Ko-Z-Aire National Radiator Nu-Way Oil-O-Matic Palmaire Portable Petro Price Fireplace Forms Rheem Console Robertshaw-Fulton Controls Trane Convector-Radiators Van-Packer Chimneys Warm Morning Heaters

APPLIANCES & EQUIPMENT

Waterbury

Admiral Refrigerator American Gas Ranges Arvin Iron Arvin Grill Apex Washer Automatic Washer Bendix Washer Betty Crocker Iron Big Ben Time Bissell Sweeper Boss Range Bruce Doozit Cadillac Vacuum Caloric Range Cameron Dishwasher Coolerator Home Freezer Coolerator Refrigerator Crosley Range Deepfreeze Homefreezer Dexter Washer **Dumore Floor Polisher** Easy Washer Electromaster Range **Everhot Appliances** Filter Queen Vacuum Florence Range Friaidaire Dishwasher Frigidaire Range Frigidaire Refrigerator General Electric Dishwasher General Electric Disposall General Electric Fluorescent Lamps General Electric Homefreezer

APPLIANCES & EQUIPMENT-CONT'D

General Electric Kitchen

General Electric Lamps General Electric Range General Electric Refrigerator General Floor Polisher Gibson Range Gibson Refrigerator **Grand Range** Handyhot Appliances Hamilton Clothes Dryer Hardwick Range Harper-Wyman Gas Burners Hoover Junior Vacuum Hoover Vacuum Horton Ironer Hotpoint Disposall In-Sink-Erator Disposal Unit Kelton Time KitchenAid Coffee Grinder KitchenAid Mixer Knapp-Monarch Liquidizer L & H Range Lewyt Vacuum Magic Chef Range Maytag Dutch Oven Range Maytag Washer Monarch Range Nesco Roaster Norge Range Norge Refrigerator Philco Homefreezer Philco Refrigerator Presteline Range **Proctor Toaster** Schaefer Homefreezer Servel Refrigerator Seth Thomas Time Simplex Ironer Speed Queen Washer Standard Gas Ranges Sunbeam Mixer

FLOOR COVERINGS

Westinghouse Appliances

Tappan Range

Thor Gladiron

Voss Washer

Westclox Time

Toastmaster Toaster

Tyler HarderFreez

Wagner Sweeper

Thor Automagic Washer

Armstrong Linoleum Flexachrome Plastic Hasko Block KenTile Tile National Oak Pabco Linoleum Sloane Linoleum Tile-Tex Asphalt

HARDWARE

Autoyre Towel Bar Burgess Batteries Casco Glue Delta Flashlights Dic-A-Doo Paint Brush Bath Duco Cement Edwards Door Chimes Gerity Chrome Accessories

Graber Traverse Rods

Invizible Sash Balance Keystone Wire Mesh Kintrim Metal Trim Kirsch Blind Hardware Knape & Vogt Closet K-Veniences LOF Glass **NuTone Chimes** Page Fence Plastic Wood Pittsburgh Glass Pyrene Fire Extinguisher Smooth-On Cements Stanley Trim **Taylor Thermometers** Three-in-One Oil Yale Trim

INSULATION

Armstrong Temlok Baldwin-Hill Balsam-Wool Carey Celotex Chamberlin Eagle-Picher **Fiberalas** Flintkote Gold Bond Homasote Insl-Cotton Johns-Manville Kimsul Mortite Nu-Way Zonolite

METALS

Keystone Mesh U. S. Steel

MILLWORK & LUMBER Alcoa Windows

Alsco Windows
Crawford Doors
Curtis Prespine
Eagle-Picher Windows
Masonite Presdwood
Modernfold Doors
National Oak
Ponderosa Pine
Thermoseal Windows
Weldwood Plywood
West Coast Woods
Western Pine

PAINT & RELATED PRODUCTS

Albron
American Turpentine
Cabot Stains
Cuprinol
Devoe
Flatlux
Glidden
Imperial Wallpaper
Lawter's Luminous
Luminall
Masonite
Minwax
Mura-Tex
Pentahlorophenol

SE

T

SINE

October - November - December

BUILDING PRODUCTS BEING SOLD THIS CURRENT QUARTER IN BETTER HOMES & GARDENS

PAINT & RELATED PRODUCTS—CONT'D

Pittsburgh Texolite United Wallpaper Wall-Tex Canvas

PLUMBING

Alcoa Anodes American-Standard Fixtures American Kitchens **Briggs Fixtures Bryant Water Heaters** Burks Water Systems Church Toilet Seats Crane Fixtures Crane Kitchens Culligan Soft Water **Deming Water Systems** Eljer Fixtures Faucet Queen Spray Frigidaire Water Heater General Electric Water Heater Goulds Pumps

PLUMBING-CONT'D

Heatmaster Water Heater
Hotpoint Water Heater
Miami-Carey Cabinets
MQ Sewer Cartridges
Orangeburg Conduit
Permutit Soft Water
Permaglas Water Heater
Rheem Water Heater
Rheem Water Heater
Rud Water Heater
Servisoft Soft Water
Stover Water Softener
Thermo-Drip Humidifier
Toastmaster Water Heater
Wesix Water Heater
Youngstown Kitchens by Mullins

ROOFING & SIDING

Carey Dunstone Dunbrik Flintkote

ROOFING-CONT'D

Johns-Manville Ruberoid

WIRING & TELEPHONE

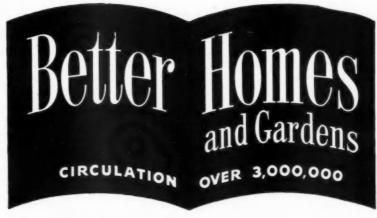
Bell System
Burgess Batteries
Cutler-Hammer Fuses
Delta Flashlights
Edwards Door Chimes
G. E. Fluorescent Lights
Lightolier Lights
Moe Lights
NuTone Chimes

MISCELLANEOUS BUILDING

Atlas Drill Press
Belsaw Saw
Black & Decker Tools
GBH-Way Homes
Majestic Incinerator
Orlyt Greenhouse
Portland Cement
Rock of Ages Monuments

he reason that Better Homes & Gardens is such a top-notch spot for these ads is just this: BH&G editorial content is 100% service on better living. 100% service appeals only to the husbands and wives who run better homes. That means husbands and wives who not only have the interest but the income for everything that makes for better living. Better Homes & Gardens' 3,000,000 high-income families are the heart of the market for everything that goes into homes. They are your best customers.

That's why it pays you to have the brands they've been pre-sold on in Better Homes & Gardens.



merican

M

Builders across
the country are
using CHASE®
COPPER TUBE
for soil, waste
and vent lines!

HERE'S WHY ...



FAST DELIVERY!

No need to wait for material for soil, waste and vent lines. Just ask for Chase Copper Tube—you'll get it right away, in all the sizes you need.



FAST INSTALLATION!

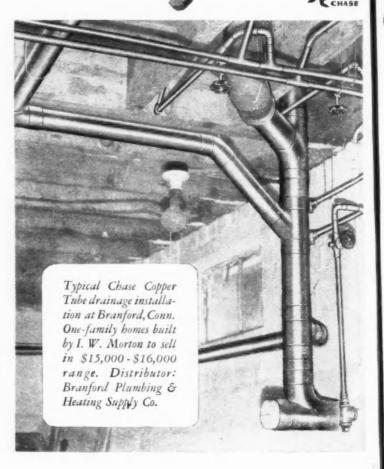
Fewer connections — tube comes in 20-foot lengths. Joints quickly made with solder-type fittings. You can pre-assemble into sturdy units that stand rough handling.



SUPERIOR MATERIAL!

Smooth tube surface does not hamper flow of wastes. Pockets at joints eliminated by solder-type fittings. Excellent resistance to corrosive action.

 Write for literature on Chase Copper Tube for drainage lines. Address Dept. AB128.





the Nation's Headquarters for BRASS & COPPER

SUBSIDIARY OF KENNECOTT COPPER CORPORATION

THIS IS THE CHASE NETWORK . . . handlest way to buy brass

ALBANYT ATLANTA BALTIMORE BOSTON CHICAGO CINCINNATI CLEVELAND DETROIT HOUSTONT INDIANAPOLIS KANSAS CITY, MO. LOS ANGELES MILWAUKEE MINNEAPOLIS NEWARK NEW ORLEANS NEW YORK PHILADELPHIA PITTSBURGH PROVIDENCE ROCHESTERT SAN FRANCISCO SEATTLE ST. LOUIS WATERBURY (Tindicate) Sales Office Only) er 1948.

USE STANLEY BLACK ORNAMENTAL HARDWARE

For added charm in in Any setting

Stanley Black Ornamental Hardware gives added charm and distinction to Colonial, Early American, Modern and Spanish architecture and decoration.

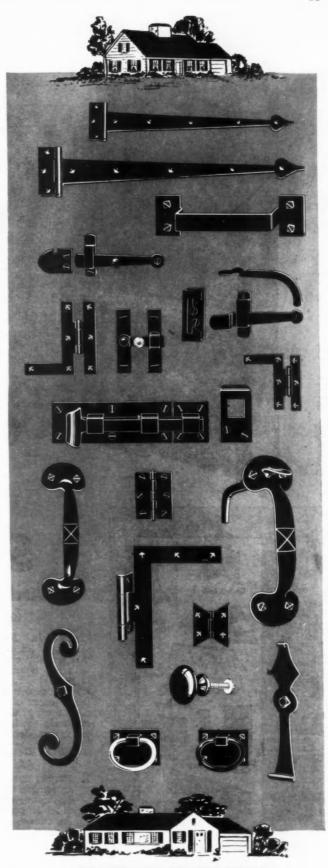
Popularly associated with natural wood finishes like knotty pine and pecky cypress, Black Hardware is just as attractive with Early American painted surfaces—white, ivory, red and blue. It is ideal not only for summer camps, lodges and guest houses, but also for single and multiple family dwellings, apartments and private executive offices.

Since there's no need for the precise, time-taking mortising required for conventional hardware, Stanley Black Ornamental Hardware is far easier and quicker to install. This means a real economy on big jobs—a worthwhile saving on small ones.

Your customers will appreciate the extra beauty Stanley Black Ornamental Hardware gives to the homes you build. Recommend it! A descriptive folder illustrating the whole line gives full details. The Stanley Works, New Britain, Conn.



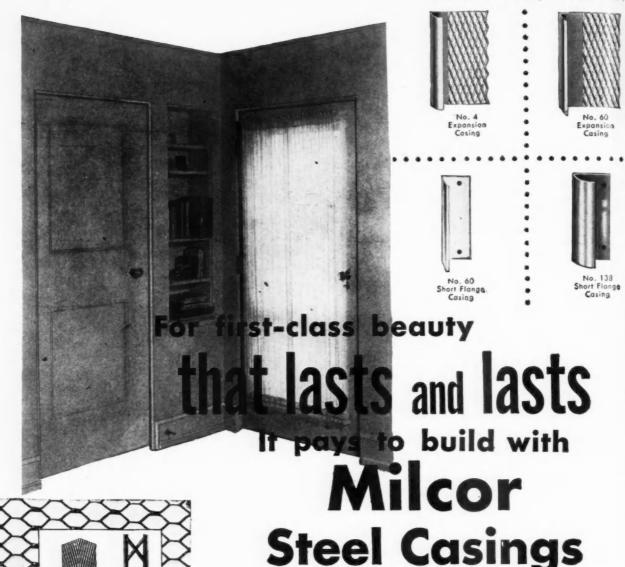
Get a supply of these idea books Form No. F9 showing the possibilities of Stanley Black Ornamental Hardware all over the house...all types of interiors.





Reg. U. S. Pat. Off

HARDWARE . HAND TOOLS . ELECTRIC TOOLS . STEEL STRAPPING



Architects and buyers thank you for a better job that actually costs less

That's right. Milcor Casings made from steel produce a beautiful, finished job that actually costs less than a job done with less durable materials. The reason is simple: Erection is easy. You don't have to sand before painting. You need fewer coats of paint. Milcor Casings cannot warp, shrink, or crack. Adjustcannot warp, shrink, or crack. Adjust-ments do not have to be made after the job is once done.

Corner Bead

Picture Mould

Short

Expansion Casing

Milcor Casings Give You These Advantages, Too!

- 1. Simple, speedy erection: All styles are straight and uniform. You get per-
- fect mitres at corners.

 Steel is permanent: In addition to the advantages mentioned above you
- get resistance to fire and impact. Good Plastering is easy: The panded metal wing feature permits the plaster to key through and form

- a strong bond with the lath beneath a bond that protects against corner cracks caused by strain due to settling.
- 4. Greater interior beauty: Milcor Casings expose only a narrow face, flush with the plaster to give a feeling of greater roominess. The flush-tight junction of wall and casing insures a sanitary finish easy to clean, with no cracks to become clogged with dirt

Recommend Milcor for Lasting Satisfaction

Milcor Casings are a part of a complete line of steel building products. Look for full information on the complete Milcor line in your Sweet's File for Builders.

Write for literature on Milcor Casings - and on other products in the Milcor steel building products line, today.

INLAND STEEL PRODUCTS COMPANY

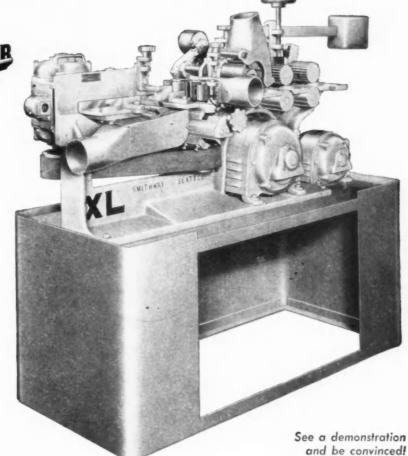
MILCOR STEEL COMPANY

MILWAUKEE 1, WISCONSIN BALTIMORE 24, MD. • BUFFALO 11, N. Y. • CHICAGO 9, ILL. • CINCINNATI 25, OHIO • CLEVELAND 14, OHIO • DETROIT 2, MICH. • KANSAS CITY 8, MO. • LOS ANGELES 23, CALIF, NEW YORK 22, N. Y. • ROCHESTER 9, N. Y. • ST. LOUIS 10, MO.

The High-Production, Low-Cost Moulder



- Takes up to 2"x4" stock.
- One-man operated. Knife changes quickly made.
- Produces 2,400 to 12,-000 feet of moulding per hour, singles and multiples.
- Will convert waste rippings into fine mouldings at high speed and low cost.
- New compact, simplified design, precision engineered for heavy duty service.
- Feed speed variable from 20 to 80 feet per minute.



SEE FOR YOURSELF this new low-cost moulder that's the sensation of the industry—the XL MOLDMATCHER! Costs less to buy, costs less to operate, pays for itself faster! Turns out any kind of fine moulding or wood specialties up to 2" x 4", including

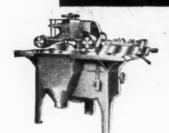
drapery rods, dowels, venetian blind accessories, etc. It's a real money-maker!
There's a MOLDMATCHER around the corner from anywhere! Ask your neighbor!
Write today for full details and name of nearest dealer!

SMITHWAY MACHINE COMPANY

Manufacturers of the XL Line of Woodworking Equipment

4617 Airport Way

Seattle 8, Washington



NEW XL RIPPER



NEW XL LOK-SAFE SHAPER COLLAR



NEW XL SPINDLE SHAPER

beneath t corner settling. Milcor

Milcor w face, feeling sh-tight nsures a with no th dirt.

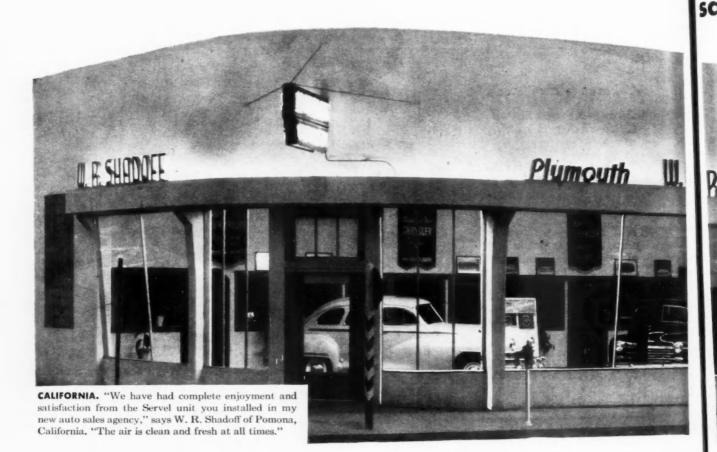
omplete ook for Milcor lers. Casings Milcor y.

-316**B**

EVELAND

Amer can

Tromotes sales, builds pru



Servel <u>All-Year</u> Air Conditioning wins praise from store owners the country over

The four stores pictured here have widely varied sales problems and are located in different parts of the country. But the owners are unanimous in their praise of the way Servel *All-Year* Air Conditioning has helped their business. And their statements are typical of hundreds of letters sent in by other business and professional men, testifying to the business-building benefits of this amazing year-round air conditioning system.

With a "flick of the finger," the Servel unit supplies cool, dehumidified air in summer . . . and warm, properly humidified air in winter. In between seasons, the same single unit provides independent air circulation at prevailing temperatures. Year round, it filters dust, dirt and irritating pollen from the air. Every

Servel unit is covered by a 5-year factory warranty.

In a Servel-conditioned store, stocks remain fresh and new-looking . . . customers are more comfortable . . . personnel more efficient and energetic. Many merchants feel that the Servel *All-Year* Air Conditioning Unit will "pay for itself" in a very short time through these benefits.

Do you have clients or prospects who would benefit from the year-round comfort and business-building advantages of Servel All-Year Air Conditioning? Your local gas company will be glad to give you detailed information on specifications, installation, etc. Or, write direct to Servel, Inc., 1812 Morton Avenue, Evansville 20, Indiana.

nber 1948

W.

anty. fresh table

Iany onditime

nefit ding our iled Or, nue,

say business men



LOUISIANA. "We have used Servel All-Year Air Conditioning for more than six years and consider the original cost repaid many times over," writes David C. Silverstein, of Silverstein's Women's Apparel, Monroe, La.

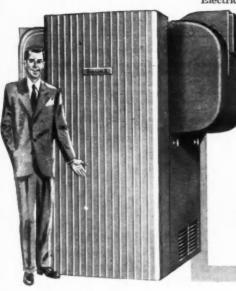








Electric Cooperative, Inc., of Cherokee, Okla. ture is normal and the air pure and clean."



Sewel

All-year AIR CONDITIONER

Charm multiplied! "Co



Distinction, harmony...variety...achieved with

ASPHALT SHINGLES and Limestone

In their Bedford Heights development, Indiana Limestone Company, Inc., under the guidance of W. W. Cordes, Architect, and F. W. Pressler, Associate, of Cincinnati, have combined the dignity and permanence of Limestone with the warmth, versatility and long life of Asphalt Shingles to achieve a community of individualized homes of unusual distinction. Through design and color the charm captured in the typical home above has been multiplied by all of Bedford Heights.

Throughout the United States, Asphalt Shingles are contributing their many unique advantages to the success of scores of outstanding modern community and industrial housing developments.

CONSTRUCTION'S BIGGEST DOLLAR'S WORTH





Its trees, hills, park and houses are for employees

Bedford Heights is proving itself both a practical product demonstration projectand a conspicuously successful employee housing development for the Indiana Limestone Company. In the capable hands of J. Harry Dickman, veteran operative builder of Cincinnati, and with the creative imaginations of W. W. Cordes, Architect, and F. W. Pressler, Associate, fitting design to material and setting, an industrial housing community of unusual distinction is nearing completion With contemporary design calling for long horizontal lines, Indiana limestone strips are being cut in random lengths up to 4 feet. Asphalt Shingles have been used throughout in black, brown and gray color groupings.

SHINGLES

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

Ludwig F sive vice Duke Con Richmone the South

Floor Fu

This is in no root costly

"Coleman Floor Furnaces CUT COSTS, UPHELD VALUE YS"... For Richmond, Va., Builder

Crestview Addition No. 3, developed and built by Duke Construction Co.—heated throughout with Coleman

Buyers feel Coleman equipment proves high quality of Duke Company's houses

Floor Furnaces to hold down costs, yet give top-quality automatic heating of the kind buyers want. DUKE CONSTRUCTION CORPORATION 7100 HORSEPEN ROAD VIRGINIA

> The Coleman Company, Inc. Gentlemen:
>
> In these days of complaints about high loss of the control of the con Wichita,

RICHMOND,

into our houses.

Duke Construction Co., Richmond, Va.



See how Coleman may help you, too, in designing to beat "price resistance"

Duke Construction Company is only one of the many leading building firms now switching to Coleman Floor Furnaces. Scores of these leaders are learning how Coleman helps cut costs: eliminates costly duct work, saves basement excavation costs, cuts skilled-labor expense for installers and plumbers.

And, like the Duke company, they are also learning two other Coleman advantages: First, how Coleman engineering really gives home-owners the "warm-floor" heating and the clean automatic heat they want. Second, how Coleman reputation for quality and service helps sell houses-by proving to prospects that the builder is using the best heating equipment the money will buy.

You, too, want to see proof of these advantages that are switching so many builders to Coleman. Use the coupon below and let us tell you how we can help meet your problem of holding down building cost and selling price. Tell us what kind of fuel you want-gas, oil, or LP-gas-we make models for all three. Do it-today!

THE COLEMAN COMPANY, INC.,

Wichita 1, Kansas; Philadelphia 8 (Terminal Commerce Bidg.), Pa.; Los Angeles 54, Calif.

This is how Coleman Floor Furnace fits into floor. Takes no room space. No basement excavation needed. No costly duct work. No added plumbing expense.

Automatic Gas, Oil, LP-Gas
FLOOR FURNACES

Coleman



The Cold	man Com B-6651,Wi	apany, Inc., Builders Contract chita 1, Kans.
cooperat	ion for bu	ree information about your special ilders and contractors, and Floor Fur- suilders. I am specially interested in:
☐ Gas	Oil	LP-Gas models
Name		
Address	L	•••••••••••••••••••••••••••••••••••••••
Town		State

La Cococio Indiana perative Cordes, setting. pletion es have

1th

Ludwig Bloch, aggressive vice president of Duke Construction Co., Richmond, Va., one of the South's small home

uilding leaders

AU York HALT INGS

HANDLE WITH CARE

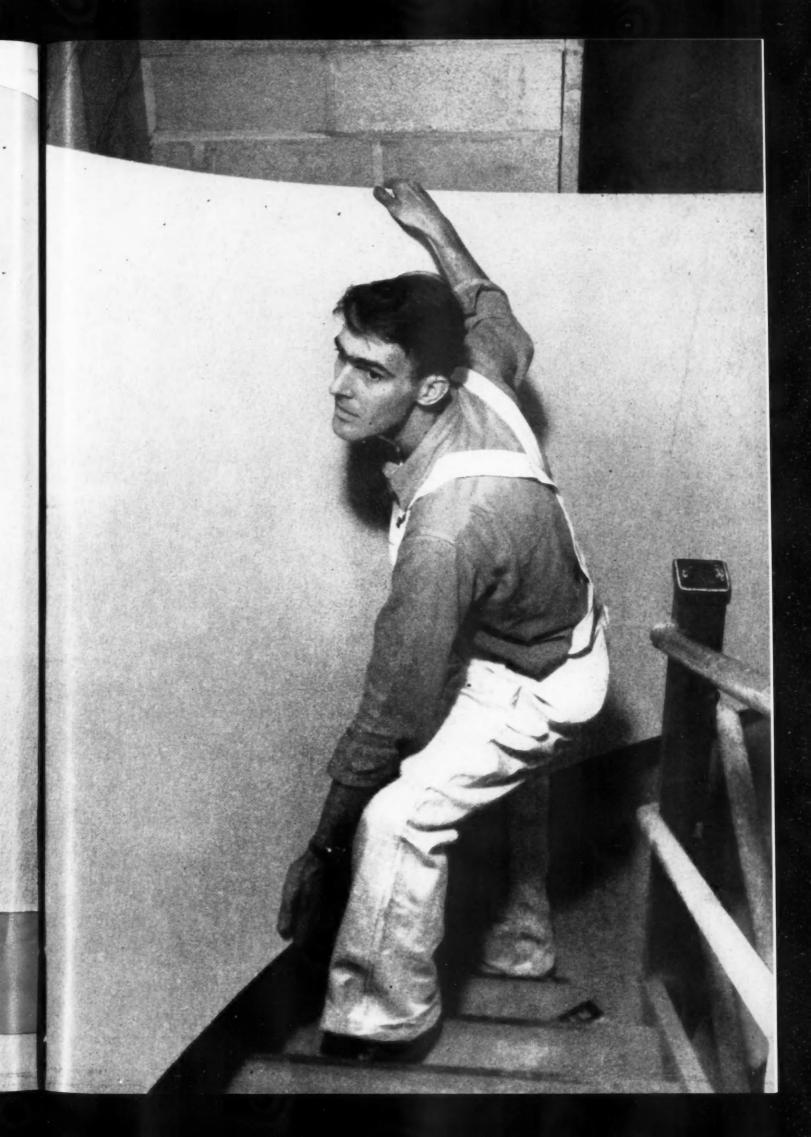
It's not easy to handle large building boards in tight quarters without occasional breakage. Armstrong's new Temlok® Insulation Board can be damaged, too. No building material is indestructible. But carpenters like to work with the new Temlok because they don't have to "handle with care."

Temlok can take a lot of abuse without damage because it has unusual strength. The millions of wood fibers that make up Armstrong's Temlok are extra long. Interlaced and pressed together, they provide uniform strength in all directions. That keeps Temlok from splitting, warping, chipping, or splintering. Such strength doesn't mean stiffness or brittleness. The large units of Temlok Insulation Board are remarkably flexible and light in weight—easy to handle on the job.

Temlok Insulation Board comes in a variety of large sizes, 4' wide and from 7' to 12' in length. It has a light, clean finish in either the natural or painted form. Its many uses make it easy to sell either as interior finish material or as a general utility board—in commercial or residential construction.

Temlok is available also in the form of Sheathing (asphalt-impregnated, with shiplapped long edges), Panels and Planks (factory-painted interior finish with special Lok-Bevel joint), Wallboard (3/8" painted insulation board), and Lath (with scoop-beveled joints). See samples and get full details from your Armstrong wholesaler or write direct to Armstrong Cork Company, Building Materials Division, 1612 Ross Street, Lancaster, Pennsylvania.

Armstrong's Temlok







'JEEP'-PROPELLED POWER-HOUSE

... The 4-Wheel-Drive Universal 'Jeep' Gets to the Job and Furnishes Power to Operate Industrial Equipment

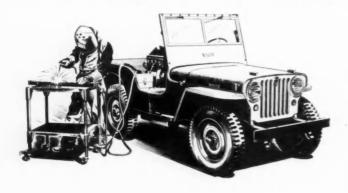
You can save the cost of an auxiliary engine and the time lost in loading or towing it by putting a Universal 'Jeep' on the job. It is an all-in-one industrial power unit for a wide variety of uses.

With its three power take-off points and famous 'Jeep' Engine, the Universal 'Jeep' can be used to operate electric power generators from 3.75 KVA to 12.5 KVA, as shown above—air compressors from 17 CFM to 105 CFM capacity for pneumatic tools—electric arc welders from 200 amperes to 300 amperes—capstan and front and rear mounted

horizontal drum type winches—and other shaft—and belt-driven equipment.

The Universal 'Jeep' has the power to deliver power and tools to the job, on or off the road. Its 4-wheel-drive traction takes it through mud, snow or sand—up steep grades—straight crosscountry. In 2-wheel drive, the 'Jeep' gives you time-saving highway speeds.

See your Willys-Overland dealer and ask him about auxiliary equipment that can be mounted on the 'Jeep' and operated by the 'Jeep' Engine.

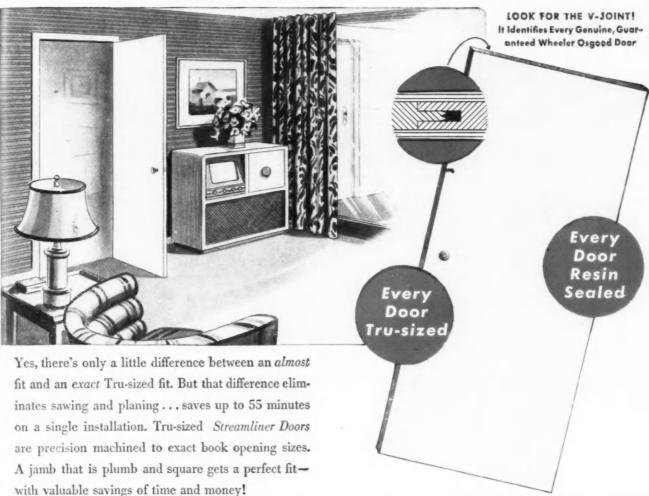


UNIVERSAL Jeep

WILLYS-OVERLAND MOTORS

MAKERS OF AMERICA'S MOST USEFUL VEHICLES

It's the Little Difference that Makes the BIG Difference in Streamliner Doors!



But there's more! Every Streamliner Door is resin sealed at the factory! Protects the door from dirt and moisture! Gives an excellent base coat for fine finishing, painting or waxing! NO priming on the job!

er

d.

d.

u

n

n

And, more! The Streamliner is lighter and stronger than old-type slab doors because it has a special horizontal girder hollow core construction...and, Wheeler Osgood uses only specially-built plywood panels made by a secret process in their own plant as a guard against warping or twisting!

Remember — Streamliner Doors are made only by Wheeler Osgood, manufacturers of fine doors, plywood and allied millwork products for nearly 60 years!

Write for facts about Streamliner Doors.

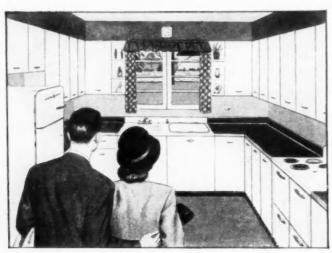
THE Wheeler Osgood company Plants and General Offices: Tacoma 1, Washington 1216 St. Paul Ave., • Broadway 9321 • Teletype TA 77

NEW YORK OFFICE 1326 Empire State Building, New York 1 Longacre 4-6520 CHICAGO OFFICE 134 South LaSalle Street, Chicago 3, Illinois State 2-5335-6-7 SAN FRANCISCO OFFICE 3045 19th Street, San Francisco, California Valencia 4-2241 LOS ANGELES OFFICE 5100 So. Boyle Ave., Los Angeles 11, California Logan 5-6245



FOR SALE

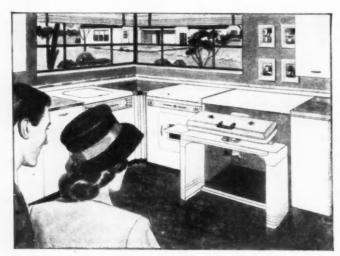
Seeing and Selling a General Electric Equipped Home



1. This beautiful General Electric kitchen-laundry inspires any buyer. In a nationwide survey, 51 per cent of the men and 53 per cent of the women said they prefer General Electric appliances. Each appliance brings you extra profit.



2. The G-E way of living in action. This Electric Sink eliminates messy clean-up jobs. The homemaker saves weeks of work each year, gets hours of extra leisure each day. Operating cost: mere pennies a day!



3. What woman could resist this General Electric Laundry Center? In this bright, sunny corner, the housewife saves time, work, money. Quick-clean washing, fluff drying, effortless ironing, efficient sewing banish washday drudgery.



4. Can they afford the G-E way of living? Yes, definitely, in a "packaged mortgage." It costs only up to \$4.80 extra each month, much less than it would cost to buy any one of these appliances on the installment plan!

America

thous living

it has

for a home that features...



The G-E Way of Living!

Today's home buyers seek houses that give them easier living... electrically! Let General Electric Home Bureau help you plan G-E equipped homes for extra profit opportunities and prestige—at first cost of only \$4.80* extra a month to the buyer! Your cost: zero!

What is the "G-E way of living"?

It means living in a house where the burdens of homemaking are shifted from people to modern electric appliances!

The G-E way of living is being enjoyed by thousands and thousands of families today in General Electric equipped homes. And today's home "lookers" are learning to insist on the comfort, convenience, and economy of the G-E way of living... in bungalows and in mansions.

In project after project—from ten homes to a thousand—it has been proved that—

G-E equipped homes bring the builder greater prestige—for a G-E equipped home combines beauty, efficiency, and economy—the best combination for sound sales appeal.

elimiwork

each

these

Talking cost and profit

The G-E way of living is easily within reach of the average prospect. A complete G-E equipped home costs him only up to \$4.80 more a month, under the "packaged mortgage" plan.

And the buyer saves on operation and maintenance of efficient General Electric appliances...often, enough to cover the slight increase in the monthly payment!

Each appliance brings you extra profit—so your G-E equipped home is a more profitable home to sell.

So you see, the G-E way of living is practical for you—and for your prospect!

How can Home Bureau help you make profit out of the G-E way of living? Read the story below.

GENERAL ELECTRIC
HOME BUREAU
SUCCESS STORY
OF THE MONTH

Cletus H. J. Jollie, California builder, features the G-E way of living in 76 new homes—sells 20 before completion of the project. Offered under the "packaged mortgage" plan, these General Electric equipped homes cost no more per month than similarly priced homes.

Let us tell you the whole story. And let us show you how G-E Home Bureau can help you plan homes for better living . . . and help you sell them faster!

Just drop a post card to the Home Bureau, General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Connecticut.

*When equipment is included in a long-term mortgage.

GENERAL DE ELECTRIC

YOU CAN PUT YOUR CONFIDENCE IN GENERAL ELECTRIC

Americ

BUILDING MATERIAL - EQUIPMENT - APPLIANCES

Prospect for Public Housing

A downward trend in housing starts has been apparent since last May but has not caused much concern because the number of starts from June through July was substantially more than last year. In both August and September, however, the number of starts slid under last year's totals. Starts for August were 83,000 as compared with 86,300 last year and for September 81,000 compared with 93,800. The most important questions the downturn brings are "Is it a buyers' strike?" and "Is the postwar housing shortage over?"

The shortage may be over or approaching an end in some communities, but nation wide there is still a back log. A Bureau of Census survey last year showed that 3 million families, representing approximately one out of every 12 American families, are living with relatives. Three out of every four are married couples mostly without children,

Youth is a predominant characteristic of the typical "subfamily" as the Census classifies them. The median age of the husband is 29 years and that of the wife about 26 years. The majority of those couples haven't any children as yet, but 29 per cent have one child. As a rule the children in these families are very young, usually under six years old.

Normally a number of families live doubled-up as a matter of choice rather than economic necessity, but it is believed that there are at least a million or two who would undouble if they could rent or buy suitable separate living quarters at a price they could afford to pay. This back log plus the fact that marriages are continuing at a rate higher than prewar is assurance that the housing shortage is not over.

There is undoubtedly a shortage of rental units at frozen rentals. They become bigger bargains as other cost of living items continue to rise and national income stays high.

If it could be anticipated that rent controls would be lifted entirely, in the near future it could be expected that rents would increase to an extent where there would be little differential between payments on a new house and rent, and the market for new homes would expand. This would assure builders of a continuous market and capacity use of materials and labor.

Injection of rent control into the economy during and after the war and the assumption that it will continue indefinitely under the new administration makes an entirely different set of circumstances. Control of one part of the economy requires controls in another part and eventually the entire economy is controlled. There is not much doubt that the Taft-Ellender-Wagner Bill will be introduced again early in 1949. Its provisions for slum clearance and public housing might be stepped up.

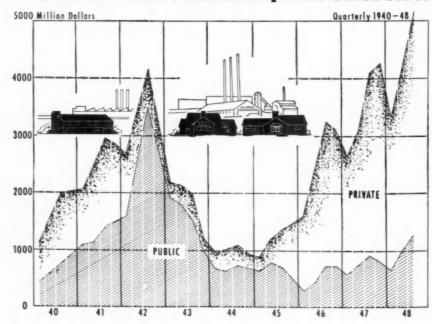
The objective of the bill introduced last year and passed by the Senate, but not by the House, is comparatively modest with respect to public housing. It aims to build 50,000 public dwelling units a year for 10 years. The total of 500,000 units would be about six month's production at the current rate of private construction.

Aimed at relieving bad housing conditions in cities it is obviously unfair to improve large cities and do nothing for small towns. Big city slums, covering many square miles, are impressive but small towns and even farms also have slums probably as large in proportion to those in big cities. Tax payers in these small towns will share any federal deficit arising from the construction and maintenance of public housing units, but will not receive any of the benefits.

Public housing rules require rigid scrutiny of the income of families before they are admitted. The family admitted becomes institutionalized, set apart from the rest of the community, branded as a failure in its attempt to maintain an adequate income.

In accordance with the bill, in projects started after July 1, 1948, the Public Housing Administration shall "not discriminate against any families because their incomes are derived from public assistance." Thus families on relief in big cities can be expected to be occupying brand new \$7,000 apartment (not including cost of land.)

Estimated New Construction Activity in the United States



Source: Federal Works Agency Office of Economic Research

Stainless-Steel

FOR ROOF DRAINAGE SYSTEMS

CONDUCTOR PIPE

GUTTER

do

city iles,

and ably big

mall ficit

iits,

igid be-

nily

zed, m-

its

in-

01-

the

lies

ved

lies

ted

000

of

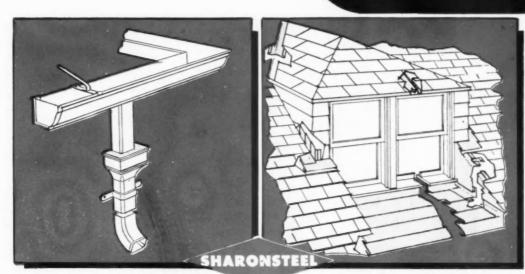
es

DOWNSPOUT

ACCESSORIES

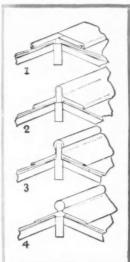
FLASHING

RIDGE ROLL



STAINLESS STEEL GUTTER, LEADER AND ACCESSORIES

STAINLESS STEEL FLASHING for Dormer



STAINLESS STEEL RIDGE ROLLS

Fig. 1 shows low ridge-flashing without a projection roll. Flashing is nailed to ridge boards with stain-less steel nails. Flashing 1" extension is bent down to roof to shed water and cover nail heads

Fig. 2 requires specially shaped ridge-piece for flashing roll. Roll is secured by screws in side apron, if more than 4" wide, should be stiffened against wind by 3/16" x 1" stainless steel clamps, or straps, about 30" apart.

Fig. 3 does not require a special ridge-piece. An excellent way of securing a large ridge roll as board keeps metal in place and stainless steel screws can be fastened to ridge-board, making it unnecessary to drill shingles or slates.

Fig. 4 shows ridge roll used without ridge board. Roll is fastened with stainless steel screws set through washers—with over-sized holes—into holes drilled in the shingles.

Especially rolled for drainage systems, Sharon Stainless Type 301 fulfills all the requirements for an attractive, everlasting system. The dense, hard surface of Sharon Stainless resists abrasion. It is a solid homogenous metal that is virtually immune to atmospheric corrosion, galvanic action, and patina type corrosion.

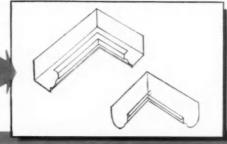
Sharon Stainless will not chip, peel, or bleed off to stain surrounding areas. And, perhaps more important, it has a yield strength almost double that of any other material used in home drainage systems

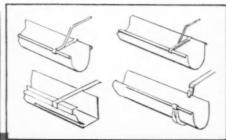
Degwing at Left -STAINLESS STEEL MITRES for Inside and Outside Gutters!

Drawing at Right -

STAINLESS STEEL STRAP HANGERS

For single and double bead gutters— Single bead gutters should have strap hanger that helps support gutter. Spacing or hangers should not be year 36".





SHARON STEEL CORPORATION

Sharon, Pennsylvania

PRODUCTS OF SHARON STEEL CORPORATION AND SUBSIDIARIES: THE MILES POLLING MILL COMPANY, NILES, OMIO; DETROIT TUBE AND STEEL COMPANY, DETROIT, MICHIGAN; BRAINARD STEEL COMPANY, WARREN, OHIO; SHARONSTEEL PRODUCTS COMPANY, DETROIT, MICHIGAN, AND FARRELL, PENNSYLVANIA; CARPENTERTOWN COAL & COKE CO., MT. PLEASANT, PENNA.; FAIRMONT CORE WORKS, FAIRMONT, W. VA.; MORGANTOWN COKE WORKS, MORGANTOWN, W. VA. Hot and Cold Rolled Strinless Strip Steel—Alloy Strip Steel—Moley Strip Steel—Selvanite Special Coated Froducts—Cooperage Hoop—Detroit Seamless Goodwarts Seemelss Cooperage Hoop—Detroit Seamless Goodwarts Seemelss—Colorated Sheets—Hot Rolled Anneeled and Deoxidized Sheets—Galvanized Sheets—Hot Rolled Anneeled and Deoxidized Sheets—Galvanized Sheets—Electrical Strep Steel Strepping, Tools and Accessories.

DISTRICT SALES OFFICES: Chicago, Ill., Cincinneti, O., Cleveland, O., Detroit, Mich., Indianapolis, Ind., Milwaukee, Wis., New York, N. Y., Philadelphia, Pe., Rochester, N. Y., Los Angeles, Celif., San Francisco, Celif., St. Louis, Mo., Montreal, Que., Toronto, Ont.

Simplify Installation of Weldwood Paneling with . . .

NEW WELDWOOD MOLDINGS

Sensational New Weldwood Moldings eliminate practically all face-nailing, counter-sinking and puttying. Matching wood veneer faces blend perfectly with Weldwood-Paneled rooms.

The minute you see these new moldings you'll recognize their value. For here, at long last, are the ideal moldings for matching Weldwood paneling.

In addition to perfect match and perfect fit, these new moldings climinate the need for almost all facenailing, counter-sinking and puttying. All that's necessary is to nail the moldings themselves to the studding. Panels are held firmly and permanently, yet there's ample allowance for contraction and expansion.

Weldwood Moldings are made of extruded aluminum in 8' lengths to fit 4" panels. Wood facings currently available are: oak, Korina, mahogany, walnut, birch, Prima Vera and maple.

There's a style for every requirement: outside corner, inside corner, cap strip and divider strip.

Look into this important new development. See for yourself how Weldwood Moldings cut cost and time required for the installation of Weldwood paneling. You'll get a better finished job at less cost on residential. commercial and fixture work when you rely on the speed, ease and economy of Weldwood Moldings.

We'll be glad to send you samples and literature. Just write: United States Plywood Corporation, New York 18, N. Y.

WELDWOOD Plywood

Weldwood Phywood and Mengel Flush Doors are products of UNITED STATES PLYWOOD CORPORATION THE MENGEL COMPANY New York 18, N. Y. Louisville 1. Kv.

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

Weldwood* Hardwood Plywood Douglas Fir Weldwood Mengel Flush Doors Douglas Fir Doors Overhead Garage Doors Molded Plywood Armorphy* (metal-faced plywood) Tekwood* (paper-faced plywood)

Flexmetl Weldwood Glue* and other adhesives Weldwood (Striated plywood) Decorative Micarta* Flexwood* Flexglass* Firzite*

*Reg. U. S. Pat. Off.



Weldwood Plywood is made in both Interior and Exterior types, the former bonded with extended area resins and other approved bonding agents; the latter with phenol Plastics and Wood Welded for Good formaldehyde synthetic resin.



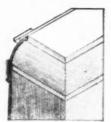
Corporation.

A FEW EXAMPLES

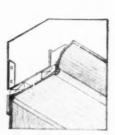
OF HOW

WELDWOOD MOLDINGS

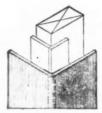
SPEED UP WORK



Divider Strip combined with Cove & Cap



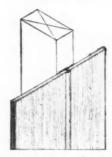
Inside Corner, Outside Corner, combined with Cove — as light trough



Outside Comer Detail



Inside Corner Detail



Divider Strip & Detail

the d good Rath us al ticabl ing t

RAY

gover

Americ

differ all o ton won reali latio

LOU to (earr pos mi-10 1 the

> the dist the CO

thi

r 1948.

manu-

ributed

ywood



RAYMOND FOLEY—"We (in government) do not hold that it is the duty of government to provide good housing for every family. Rather, we believe it is the duty of us all together to provide a practicable opportunity for good housing to all American families." The difference is fine, but significantly important. Apparently, though, not all of the law makers in Washington believe it. If they did there would be less theory and more realism in proposed housing legislation.

Louis D. Brandels—According to Collier's issue of August 28, the noted jurist said in 1905, "The employees should strive to make the earnings of any business as large as possible. There can be no greater mistake for the workingman than to restrict the output of the individual. . . . Any restriction upon the output of the individual reduces the fund of profits available for distribution, besides demoralizing the man who is so restricted. Nor does restriction of the output make more work for others."

collier's comment—"It was said in February, 1905, by the great thinker, great jurist, and one of the idols of many labor leaders and "liberals" now. Wonder how these folks ever lost sight of that particular Brandeis Boston speech." American Builder also wonders.

MAKE-WORK-A Joliet, Ill., contractor testified in November in a Chicago court that make-work practices of Glaziers union No. 27. AFL Brotherhood of Painters and Paperhangers, more than doubled glazing costs of homes. He testified that union rules forbid members of the union to work with factory glazed windows or to install winlows where factory glazed sash had been used in the past unless the union glaziers first re-glazed the ash on the job, in many cases using entirely new materials in the re-glazing.

CASE IN POINT—The contractor testified that he took a subcontract to install windows in some houses in a private project. The glaziers, discovering that factory glazed sash had been used in some of the other houses, refused to work until the factory glazed sash in the other houses were removed and re-glazed with glass which the builder purchased from the subcontractor.

JOLIET GLAZIERS — They probably find it difficult or impossible to buy the homes on which they work. If they do, the fault is principally theirs, and a full reading of the Brandeis speech of 1905 might be helpful to them.

PRELIMINARY INJUNCTION-

Judge Walter J. LaBuy in federal District Court in Chicago November 10 issued a preliminary injunction against the AFL Chicago Glaziers union.

NORMAN MASON—The energetic NRLDA leader recently found these statements by Livingston W. Houston, president of Rensselaer Polytechnic Institute: "We should have soundly financed, government-aided housing for the lowest income group. The present situation demands 1.500,000 new homes a year for the next ten years . . . America's homes have a median age of more than thirty years . . . Existing units are wearing out faster than new ones are being built."

OH. YES?—Comments Mr, Mason, "would Houston tell America what is sound financing of public housing by a government with an astronomical national debt? Does he think a house is no longer livable after 30 years of use? Has he had the opportunity to read government statistics which show our housing to be in much better condition than it was prewar? Certainly, America has a right to expect her educators to be well informed and factual."



New York

Chicago

speed

will for



Nature at its best—an attractive setting, showing the natural beauty of #57 "Century" Siding and #30 "Century" Black Roofing Shingles,

K&M "Century" Asbestos-Cement Siding

Natural beauty... economical to apply

Original manufacturers of Ashestos-Cement Shingles in this country.



"Century" Asbestos-Cement Siding not only assures lasting protection to your buildings, but offers a trim, attractive appearance... an exterior that will strengthen with age.

"Century" Asbestos-Cement Siding has a deep-grained, weathered cypress finish that effectively duplicates wood...yet resists fire, weather, rot, termites, rodents. And it never needs protective painting.

"Century" Siding comes in large unit sizes ... $12'' \times 24''$... which makes for speedy, accurate application. Any good carpenter can install them easily and quickly. Write for further details ... we'll answer promptly.

KEASBEY & MATTISON

CHRYSLER AIRTEMP

AUTOMATIC HEATING

WINS PROMPT APPROVAL, SPEEDS SALES!

-say leading builders like Charles E. Metz & Son Company

(YARDLEY, PENN.)



"The name Chrysler and its reputation for quality eliminates any question in the buyer's mind regarding heating," writes Charles E. Metz, Jr. of the Yardley, Penn., firm, Charles E. Metz & Son

Company. "Chrysler Airtemp heating systems — praised by every customer who owns one—have won a splendid reputation. This means they are accorded prompt approval by new buyers, which helps to speed the sale."

To insure customer satisfaction—before and after the sale—always specify Chrysler Airtemp heating. These precision-built products bear the stamp of Airtemp engineering excellence; they win good will for you year after year as they deliver perfect indoor comfort at low cost with minimum maintenance and service. Yes, it's always a wise rule to specify *Chrysler Airtemp*.



MORE COMFORT FROM ANY TYPE OF FUEL . . . AUTOMATICALLY!



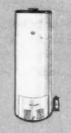
Winter Air Conditioner. Gas or Oil.



Convertible Furnace for Oil, Gus or Coal.



Year-Around Air Conditioner Heats and Cools.



Automatic Oil Water Heaters



Boilers for Steam and Hot Water.

Nation-Wide Dealer Organization -

There is a Chrysler Airtemp dealer nearby to serve you. Depend on him for prompt delivery, expert installation . . . and for the speedy, efficient maintenance that keep buyers happy.

AIRTEMP DIVISION OF CHRYSLER CORPORATION
DAYTON 1, OHIO

In Canada: Therm-O-Rite Products, Ltd., Toronto





As you know, home buyers won't take just anything; they don't hesitate to tell you what they want. Today the trend is to Electric Ranges. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that this year over 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!



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

won't be

ADMIRAL CROSLEY ESTATE HEATROLA FRIGIDAIRE GENERAL ELECTRIC GIBSON HOTPOINT MONARCH QUALITY UNIVERSAL



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

RO

An erica

A gate of our jected vembe come a quiet. can ke this f very g

> The Table previ issue. would his h it wo ers 1 how

Onc tors of a the stat rou No line mo Ma like par

> It bu A in

sib fer th:

STABOL OF ADEQUATE

ber 1948

EDITORS' ROUND TABLE

A gate crasher in the form of one of our advertising salesmen projected himself into the editors' November meeting. Salesmen are welcome at these meetings if they keep quiet. But, what good salesman can keep quiet for very long? And this fellow is a good salesman, a very good one. He had an idea.

The idea was that the Round Table start each month with a brief preview of the contents of the next issue. Whether he thought that would make good sales material in his hands or whether he thought it would be interesting to the readers never was made quite clear. The only way to get rid of him, however, was to acquiesce.

Once upon a time when the editors were asked about the contents of a forthcoming issue they silenced the questioner with the simple statement that it would be a "wellrounded issue." That is all out. Now the salesmen are given an outline of the issues six to eight months in advance. They like it. Maybe the gate crashing salesman likes it so well he thinks the readers should be let in on at least a part of the secret. It was not possible to find out, however, since few salesmen ever will tell editors that they are doing anything well. It was ever thus in the relations of production to sales staffs in any husiness.

Anyway, here is the January issue in brief. A symposium of opinions regarding the outlook for home building in 1949 by a selected list of builders, manufacturers, retail dealers, financial men and others. As recognized authorities, their views should be an accurate prediction.

Victor Sherman reappears in the pages of American Builder after an absence of several years with an article comparing cost, utility and construction of the basement house with the basementless house.

Other features include unique financing, sales and construction methods of a large low-cost housing project; a 3-room detached tourist apartment project; a very modern retail lumber yard; a 608 apartment project of two-story, four-unit buildings; a motel where all service is rendered from the in-

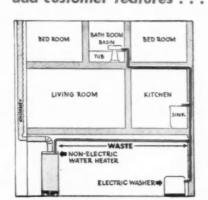
(Continued to page 56)

BORN TO GROW RIGI



The sales of Electric Water Heaters can't help growingbecause they're what home buyers want! 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.

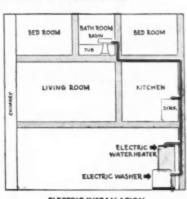
How to reduce construction costs and add customer features . . .



NON-ELECTRIC INSTALLATION

Construction costs can be reduced with Electric Water Heaters because there's no flue or vent; installation can be made anywhere—in the kitchen, in the bathroom, in the utility room or even in a closet - cutting piping costs to a minimum.

Customers like Electric Water Heaters



ELECTRIC INSTALLATION

because they are: (1) AUTOMATIC (contingious hot water, no attention); (2) CLEAN (smokeless, sootless); (3) DE-PENDABLE AND TROUBLE-FREE (as electric light); (4) ECONOMICAL (fully insulated storage, short hot water lines); (5) SAFE (all-electric dependable temperature control); (6) FLEX-IBLE (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.

B & F . BRYANT . FOWLER . FRIGEDAIRE . GENERAL ELECTRIC . HOTPOINT . HOTSTREAM JOHN WOOD . KELVINATOR . MERTLAND . MONARCH . NORGE . PEMCO . REX RHEEM . SELECTRIC . SEPCO . SMITHWAY . SUNBEAU . THERMOGRAY TOASTMASTER . UNIVERSAL . WESIX . WESTINGHOUSE

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

America



(Continued from page 55)

side, through a center core; a modern low-cost school for urban or rural communities; several others not yet definitely selected.

The trouble with publishing a specific list of features is that conditions do arise that make necessary the postponement at the last minute of certain stories, from time to time. There seems to be no reason why the foregoing schedule cannot be carried out, but if substitutions are necessary, the inventory of unused features will be drawn on with no sacrifice of quality or diversity.

Hope that makes our gate crasher happy, and even more important, that it will whet the reading appetites of the readers. If it is interesting to anyone besides the gate crasher the editors would like to know it.

The right way, in this column of the September issue, receives a lengthy comment from a reader. Part of it follows. "The method proposed would certainly prevent water vapor from rising past the layer of aluminum foil, particularly if that layer were not thinner than 0.0008 inches. To the extent that water vapor did not penetrate the cinder fill, the fill would act as a better insulator against heat loss, because water is a good conductor of heat. But, with the method suggested, one would not eliminate condensation on the foil itself, and the cinders. Under the method proposed by the builder in your column, whenever the daily dew point was reached, there would be a heavy condensation, which naturally would increase the conduction of the cinder fill, and cause greater heat loss

"Aluminum foil is valueless as an insulator when used as suggested in your column. There must be an air space for aluminum to function as a heat insulator. Whenever the surface of aluminum is not bounded by an air space, the surface does not function as an insulator. Even if the walls and ceiling of the building in question were properly insulated, following the law that heat flows to cold, there would be a great loss of heat, not only by conduction along the wall, through the air, and by means of every object in the room that touched the floor, but there would be a much greater

(Continued to page 58)



YOU GET DURABILITY. BERMICO Sewer Pipe stays tight, leak-proof, rootproof. It's corrosion-resistant, built for a life-time of trouble-free service.

YOU GET RUGGEDNESS. BERMICO's strong walls resist breakage, on the truck and on the job. Uniform machining of wall thickness, joints, and fittings, length and bore—withstands sudden temperature changes and soil settlements.

YOU GET FASTER LAYING. One-two-three quick hammer blows—that's all it takes to make a tight joint with BERMICO Sewer Pipe. No joining compound necessary.

FOR HOUSE-TO-SEWER OR SEPTIC TANK Specify BERMICO. Made in a full range of sizes, connections, bends, reducers, adaptors, etc. Nationally advertised. Use BERMICO Perforated pipe for drainage purposes. For further 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 JOIN



Root-proof, machine tapered joints require no packing.

EASY TO HANDLE



2/3rds lighter than other types of sewer pipe.

BERMICO meets with an ample margin all requirements of Commercial Standards CS 116-44 as issued by National Bureau of Standards, U. S. Department of Commerce.



BERMICO-A PRODUCT OF BROWN COMPANY

LE

modoan or others

a specondiessary minme to eason annot utions of un-1 with ersity.

asher rtant, appeintergate ke to

nn of es a ader. ethod event t the larly than that e the as a loss, ictor suginate and pro-

coloint e a iturtion eater sted e an tion the ided loes

ven iild-111reat e a onthe ject por,

ater

STRIP BLOCK You CAN please everybody!

> Architects, builders, floor layers and home owners all prefer Bruce Hardwood Floors for beauty, style, quality, and dependability.

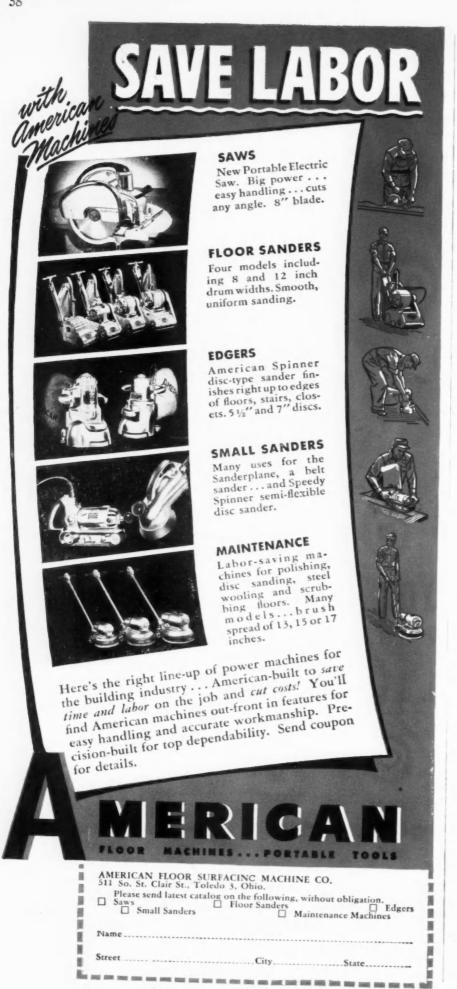
BRUCE HARDWOOD FLOORS (BRUCE) Prefinished and Unfinished



Products of E. L. Bruce Co., Memphis, Tenn. World's largest maker of hardwood floors

Bruce also makes Household Products, Terminix, Hardwood and Yellow Pine Lumber, Furniture Dimension, Moulding and Trim, Everbond X Mastic, Terminix Ventilator.





ROUND TABLE

(Continued from page 56)

loss by way of radiation in the form of invisible no-temperature heat rays. These heat rays possess merely energy, until they are absorbed by the surface, in this case the floor, and then the heat which is formed flows by conduction down to the earth.

"There is a very simple way of eliminating practically all heat flow to the ground, and all condensation and moisture formation in the fiber and the flow of all vapor from the ground into the building. This is by use of multiple reflective air spaces. Three sheets of aluminum are spaced one inch apart, or two sheets of aluminum spaced two inches apart with a sheet of paper midway between them, set in the middle of 2x4 horizontal joists, would change the picture entirely.

"Such construction would eliminate the possibility of condensation formation on the aluminum. At no point within the two inches of insulation, and 34-inch air space on either side of it, could a dempoint be reached. The top foil immediately assumes the temperature of the warmer side, and with no exchange of heat possible, there would be no condensation. The cold foil would remain cold."

Well, there it is. The Round Table is ready to continue the discussion if anything further is needed.

October saw our editors visiting Wichita, Oklahoma City, Los Angeles, Flint and Detroit, Michigan, Toledo, Columbus, Pittsburgh, Washington, D. C., Boston and numerous points between these cities.

One of our staff has developed a unique way of picking up a story when he is unable to find anyone on the job. Just outside one large city, he noted a half-dozen new, well designed and well built houses. Failing to see any identification of the builder, and failing to arouse anyone in the houses, he set up his camera. With him, that is an elaborate operation, and it usually gets results. About the time he was ready to snap his photograph, a woman emerged from one of the houses. She was the builder's wife. Everybody is curious about a man taking a picture, and our roving editor knows it. As usual, he got results, and the results will be in a future issue.



mber 194

the form ure heat possess are abthis case at which

way of heat flow lensation the fiber. This is ctive air uminum, or two of paper t in the I joists.

minum.

o inches
ir space
a den
foil imerature
with no
c, there
1. The

entirely, ld elimndensa-

l Table cussion d.

visiting os Anchigan, burgh, nd nucities.

story nyone Large new, ouses, ion of trouse up his elaby gets was ph. a

y gets
was
ph, a
of the
wife,
man
oving
e got
in a



with the New

Miracle Walls by



INTERIORS OF PERMANENT BEAUTY

Consistent sales build consistent profit. TYLAC dealers and distributors everywhere have always found this beautiful, superior wall covering a ready seller and an above average profit maker. But, with the advent of

The New
HI-BAKED PLASTIC ENAMEL SURFACE

Miracle Walls by TYILAC

the ultimate in fine prefabricated wall board coverings — sales have stepped up far beyond their expectations.

We believe the reasons for this ready consumer acceptance, are obvious: Every known feature of superiority is "built-in" for the users benefit. Beauty, Adaptability, Permanence and Economy—are only a few of them. Four basic patterns and 18 lustrous colors offer endless varieties of combinations to suit every users individual decorative preference.

Miracle Walls by TYLAC are used everywhere: In homes, offices, stores, factories, hospitals, hotels, theatres — wherever there's an interior wall there's a use, and a need for TYLAC.

Our new, liberal sales, advertising and dealer helps program will really help you sell more TYLAC — and build more profits. Why not write us today for full information. You'll be glad you did.

"Miracle Walls by TYLAC" is the registered trademark of the Tylac Company in the United States.

The Greatest Post-War Development in the Industry



Now you can supply your customers with the finest in modern wall board coverings — Miracle Walls by TYLAC. It does not chip, crack or craze, it is impervious to household acids, stains, alcohol, grime, etc. Needs no renewing — just a swipe or two with a damp cloth restores its original lustre.

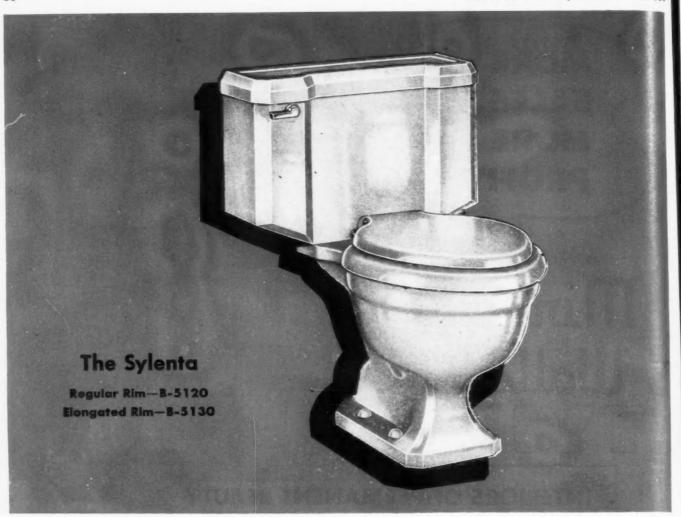
And, remember, the same prices that applied to Miracle Walls by TYLAC back in '39 — are in force now.

Build more sales and more profits with — TYLAC.



TYLAZ ZUMIZANY MONTICELLO, ILLINOIS

PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY



Quality Features...that Cultivate Customers

The Eljer Sylenta Closet Combination combines quality features that every homeowner would prefer to have.

This vitreous china combination is easy to keep spotlessly clean because the hard, glasslike finish resists stains and is impervious to all ordinary acids.

Other features are: syphonic jet-action bowl with "Elvortex" whirlpool jet; overflow and ground-in valve seat of *china*—a part of the tank itself . . . eliminating the need for

thin metal parts that are vulnerable to the corrosive action of water; ball cock, adjustable to variations in water pressure...means longer service.

The Eljer Line is complete ... to meet the requirements of every purse and purpose. See your Eljer Distributor for fine plumbing fixtures, in Vitreous China and Enameled Cast Iron ... available in white or popular pastel colors, or write Eljer Co., General Offices, Ford City, Pennsylvania.

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



NEWS

Bui

expections turne Hous tives Home of th lenge A

Far

spon take the was was are indithei

she built bet

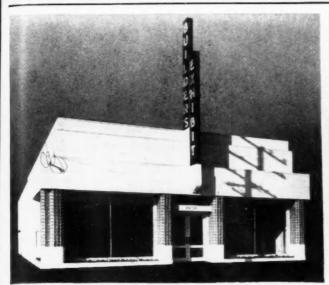
imp

thi



MONTHLY REVIEW

NEWS OF THE NATIONAL ASSOCIATION OF HOME BUILDERS AND AFFILIATED ASSOCIATIONS





Builders Face Challenge of Election Result On Firm Foundation With Sound Program

Survey of NAHB locals reveals efforts to really meet the low-cost house need

Far from being dismayed by the unexpected turn which the national elections took when American voters returned President Truman to the White House for another four years, executives of the National Association of Home Builders have taken inventory of their assets to meet the new challenge imposed.

rs

A survey of what NAHB has advocated in the last year, and the manner in which its local chapters have responded, shows that it could not have taken a better course had it expected the election to turn out as it did. It was the right program, no matter who was elected. So far as home builders are concerned, the election did not indicate any fundamental weakness in their basic program, but only the fact that the program needs to be carried out on a greater scale. It needs faster implementation.

Program showing results

Here are some of the results that show definite progress among the builders in recognizing the need for better industry and public relations, and in doing something to meet those needs.

First, there are the tangible, visible things that started small and are growing larger. One of the biggest of these

is the annual Convention and Exposition of NAHB, staged each February in Chicago under the direction of Paul Van Auken. The one planned for February 20-24 in 1949 will be the largest to date.

Then there is the large board of directors of NAHB, which really gives nationwide representation to builders. The latest move of having the directors' meeting in Los Angeles, broke the precedent that all such meetings must be held in Washington. It also proved the value of letting the directors actually see what is going on outside their own regions.

The efforts of local chapters to focus public attention on their activities receives tangible expression in the newest "Builders Exhibit" home of the Peninsula General Contractors and Builders Assn. of Burlingame, Cal., and in the first structure of that kind, the Chicago Metropolitan Home Builders Center in the heart of the Chicago Loop.

Of even greater importance are the educational efforts of the national association in encouraging locals to form apprentice training programs and to cultivate good public relations through newspaper publicity and on the radio.

(Continued to page 62)

OFFICERS of the Peninsula General Contractors and Builders Association of Burlingame. Calif., reflect satisfaction in their smiles at opening of their new "Builders Exhibit" structure — another step in improving public relations. Left to right, seated: W. A. Gould, secretary-treasurer: E. B. Standish, president: Perry A. Bygdnes, director. Standing, Harry P. Kime, director: Harry E. Smith, executive vice president, and Richard Delucchi, the vice president

All Exhibit Space Assigned For 1949 NAHB Exposition

Exhibits at the 1949 NAHB Convention and Exposition will carry out the theme "Home Building's Parade of Progress". Dates are February 20 to 24 inclusive at the Stevens Hotel, Chicago. Wherever possible displays will contrast original and early models of products with 1949 models. Highlights, of course, will be the hundreds of products available for today's home.

Convention and Exposition Director Paul S. Van Auken reports that competition for exhibit space in the 1949 show has been unusually keen. Within three weeks after applications were mailed to manufacturers, more than 80 per cent of the available exhibit space had been assigned, and a short time after that all space was filled.

The plan to havet a special section partitioned off for power tool manufacturers to demonstrate their equipment has been abandoned. Instead the power tool manufacturers will have regular exhibits.

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

The reelection of President Truman and a Democratic Congress proves that the home builders' only sure defense against public housing is the actual demonstration of the truth that socialized housing is not needed.

The talse belief that the people of this country are compelled to depend on charitable government for homes must give way to the fact that the home building industry can produce them. Only when evidence of this fact is so clear that no one can miss it can we relax.

We who are close to the industry know that builders are working now to deliver Economy homes at prices that the average veteran and others can afford. It has been a difficult job finding out how to do it. But in every city a number of builders are now doing it.

But not enough of us!

We have not yet given enough examples to the public to convince it that no better job can be done by Uncle Sam than is being done by the home builders of America.

Mr. Truman's return to office shows that the people believe in his policies, and we know that public housing is included in those policies.

Our biggest job now stands out clearly. We must build more Economy houses. We must prove to the people, to the Congress, and to Mr. Truman that we can do it. We must prove that we can provide more homes, more cheaply, than any government agency—by doing it.

During the last two years, private builders have fought to hold down costs against insurmountable odds. In 1948, our national association and all its locals have aimed specifically at carrying out an Economy Housing program. It is fortunate that we did start such a program, and regrettable that its effects could not be felt more quickly.

These things are in our favor:

1. The National Association of Home Builders has a solid groundwork laid for an effort to build more Economy homes all over the country.

2. Our associations will realize, from President Truman's reelection, that studying the problems of cutting the cost of homes is insufficient—our members will work harder than ever.

3. With our program already rolling, we will be in a much better position to show concrete examples of our achievements in the low-price field to the 81st Congress. The legislative mill may grind fast and by the time a housing bill comes up for consideration we will be much better prepared than we were last year.

4. President Truman has shown that he can change his mind when he is convinced that it is in the interests of a majority of the people to do so. He knows that a change of mind is nothing to be ashamed of—it only shows a man knows a little more today than he did yesterday. He will listen to facts—if they are backed up with evidence.

5. The complexion of the new Congress makes it fairly certain that something may be done to bolster the financing of homes—we hope it will be a move that will provide far more new dwelling units than any kind of socialized housing program can do, and more speedily.

In every city throughout the nation builders are now breaking ground for Economy Houses. This term applies to houses ranging from 600 square feet to 800 square feet and which, although built as soundly as larger homes, sell for several thousand dollars less than the average size homes being built in these same communities.

The National Association of Home Builders will present these facts to the 81st Congress. It will show that the industry is catching up with the imprecedented housing demand and will urge that Congress permit us to build to the full limit of manpower and materials available.

NAHB's Program

(Continued from page 61)

The culmination of this effort was seen in the first National Home Week this year, an effort whose impact has not yet been fully appraised.

Of prime importance, in light of today's conditions, is the Economy House program which began to roll last February at the Chicago convention. More and more of the local chapters have formed Economy Housing committees that are persuading members to put a part of their efforts into this class of house.

Most builders are convinced and are trying. The Florida association in September spent most of its effort on trying to implement an Economy House program. At least one member had already begun, with the blessing of the Jacksonville FHA office.

Economy House projects

A current bulletin from Chicago states that the chapter president, Nathan Manilow, has acquired land for 2,000 dwelling units in the economy price range. E. C. Mahoney, another member, has bought land in the south of Chicago to do the same. Henry J. Kranz, another member, already has completed test units in nearby Hobart, Ind.

In Rochester, N. Y., Joseph Entress, president of the Rochester chapter, is



THE "Keys to Happiness," latest NAHB idea for a public relations device, as shown at the directors' meeting in Los Angeles. Idea was submitted to lock and key manufacturers for the design of a distinctive front door key with the name of the association and the insignia on it. Yale & Towne Mfg. Co. already has generously responded with the one shown above. Builders who put in a Yale & Towne lock of a certain kind can mail in the key which came with it and receive a pair like the above to present to buyer when the house is turned over

completing 90 homes under \$8,000 and sharing his knowledge of how to do it with other builders.

The Cleveland Plan is already so well known to association members as to need no further introduction, and it now is beginning to bear fruit.

Hamilton Crawford has been meet-

ing the
Baton R
were bui
In Richn
recognit
same lir
Oakland
Tract do
at \$7,300

American

At the Californ show h overcon progres The fo Service tive m reporte tion of interio dimens merous Carl I cities confer sional

> a spe heen a secure housin

> > In

Con

FHA

furth home Los well ries belief inch mus stru T mitt lem vine

B tect abl rt was Week act has of to-

er 1948.

House t Feb-. More s have nittees put a ass of nd are

n Sepn try-House r had ng of ts nicago

d for nomy other south iry J. obart,

, Na-

er, is

tress,

AHB Los lock n of the gnia

ady one n a can and sent ver

nd et-

ing the Economy House challenge in Baton Rouge, La., where 250 houses were built to sell at \$6,300 and \$7,700. In Richmond, Va., Mark Bane received recognition for his efforts along the same line. In the East Bay area near Oakland, Calif., Earl Smith's Serpa Tract development is providing houses at \$7,300 and \$8,100.

At the national director's meeting in California, evidence was presented to show how associations are driving to overcome obstacles which slow the progress of the Economy House effort. The formation of NAHB's Technical Service Department was one constructive move. This department, it was reported, has started to get cooperation of manufacturers in standardizing interior door locks, interior door sizes, dimensions of framing lumber and numerous items of millwork. Its director, Carl Lans, has visited more than 25 cities since his recent appointment to confer with builders and other professional groups.

FHA recognizes effort

Commissioner Frank Richards of FILA has invited Lans to confer with a special FHA committee that has been appointed to define problems and secure solutions to economy priced housing.

Time for Fun at Los Angeles Meeting



THERE was some time for relaxing at the Los Angeles meeting of NAHB directors. Here, at a party given by Fritz Burns in his famous post-war home are, left to right, William B. Dixon, Jr., national director at large for the Pittsburgh chapter; Ralph Scherger, Pittsburgh president; Milt Brock, NAHB president; Mrs. Brock: Fritz Bruns and Frank J. Nerone, executive director of Pittsburgh

HBI Begins Economy House Plan Service In Working Arrangement With Architects

To encourage its members toward further construction of economy priced homes, the Home Builders Institute of Los Angeles has arranged with three well known architects to provide a series of basic house plans which they believe can be built to sell under \$7,000, including all expenses. The houses must be of modern design, quality construction and adequate livability.

The institute's Economy House committee has been working on the problem for months, and finally is convinced that a complete Economy House package can and must be produced.

Beginning October 15, the new architectural plan service was made available to members. It embodies complete

plans of homes, detailed specifications, blueprints and even tract layout assistance. Nine basic plans have been completed with three elevation variations apiece. The architects cooperating in the plan are Robert Alexander, Paul Duncan and Hugh Gibbs.

Among the advantages of the plan are the saving of costly experiments in design and engineering by builders, the elimination of grief and time in controversy with FHA and with community planners. It should save as much as 60 days in processing FHA or VA applications. It will give a direct method for obtaining maximum valuations from lending and financing institutions.



SPIROS G. PONTY, left, president of Home Builder's Institute, and Jim Driggers, chairman of the Economy House committee, view designs of Economy House plans submitted by the institute's consulting architects. The institute guarantees \$1,000 to each of three architects to assure the purchase of at least three basic plans from each. Arrangement specifies that each house shall have at least 750 square feet and must be capable of being built for \$5,000, exclusive of land, overhead, profit

Detroit Tosses Hot Potato Back to Public Housers

The Builders Association of Metropolitan Detroit has accepted the challenge that the industry is not building low cost homes, and has undertaken an Economy House program with a new twist. It is building a group of houses to sell at prices that will permit buyers to carry them at charges of from \$19 to \$34 per month-and it will challenge the public housers to show why they should not be permitted to continue building such houses in volume,

For the homes which the Detroit builders will produce are outlawed in most communities by antiquated building codes, restrictions, zoning regulations, FHA procedure and financing limitations.

This is a new and constructive approach to finding an answer to the current housing cost problem-for it will give the people of Detroit a chance to act as jury and see whether the building industry has been letting the public down, or whether the blame lies elsewhere. More important, it will produce something tangible to be dis-

Minneapolis Builders Work For Building Code Revision

The Minneapolis Home Builders Association presented a request to the city council of that city for approval of gypsum sheathing in home building in Minneapolis. It is expected a public hearing will be given the proposition, and further support will then he possible.



Seattle Builders Undertake Economy House Experiments

The Scattle Master Builders Association, as a result of the drive being made by NAHB to get more Economy Houses built by its members, has undertaken to develop plans for their construction in the Scattle area,

Archie Iverson, chairman of the Economy House program committee, has started two houses as experimental units which he hopes to build and sell at \$6,500. The houses are said to be well designed, and have two bedrooms.

The Seattle association met with the national officers at a dinner in the Edmund Meany Hotel recently.

Tucson Builders Plan to Aid Crippled Vets: Name Moore

The Tucson Home Builders Association has named Capt. Ralph B. Moore as assistant executive secretary to conduct a survey among Tucson crippled veterans to determine if there are any who meet VA requirements



CAPT. RALPH B. MOORE

for construction of homes especially built to meet their needs.

Capt. Moore was a reconnaissance officer in Germany during the war and was wounded in action about a week before the war ended. After his discharge from the hospital, he worked

THE Seattle Master Builders Association turned out in force for the national officers' visit to their meeting recently at the Edmund Meany Hotel in Portland

with the army of occupation as an industrial engineer at Frankfort, where he contracted polio and a severe case of arthritis. Sent to the Army-Navy General Hospital at Hot Springs, Ark., he came in contact with many crippled veterans of the type with whom he will work in his new post.

Manny Delugach to Guide Memphis Economy Program

Manny Delugach has been named chairman of the newly formed Economy House committee of the Memphis Home Builders Association. The committee has held its first meeting to try and work out a method of building houses in the low brackets range which is now the building industry's challenge.

Other members of the committee include Charles K. Chandler, Charles Freeburg, John B. Goodwin and Joe Margolin for the builders; Tom Faires representing the architects; James E. McGhee, mortgage bankers; B. W. Horner, FHA; E. P. Schumacher, VA; Forrest Ladd, building materials dealers, and Joseph A. Fowler, City of Memphis.

St. Petersburg Stages Home Builders Show

The Home Builders Association of St. Petersburg, Fla., has completed a model home for the American Legion drive for aid to crippled children and opened its Builders Home Show to draw emphasis to the association and to that house.

Co-sponsors of the home show are the St. Petersburg Times and Radio Station WTSP. Excellent publicity was obtained with their co-operation.

The model home, which was turned over to the American Legion, is a two-bath, six room design embodying the latest in building materials and accessories.

Gen. Smykal Heads Veterans Committee for Chicago

General Richard Smykal, commanding general of the 33rd Infantry Division of the Illinois National Guard and former chief of staff for the late General Joseph Stillwell, has been named chairman of the committee of veterans housing for the Chicago Metropolitan Home Builders Association.

The committee, comprised entirely of veterans from every branch of the



GEN. RICHARD SMYKAL

building industry, has been organized to investigate reasons for inadequate production of veterans' housing and to coordinate activities of government agencies to increase that production.

NAHB Sponsors Movie to Show Public How Not to Build Houses

A motion picture short subject entitled How Not to Build a House is now being produced for NAHB by Gibraltar Pictures in Hollywood.

of

Stressing pitfalls awaiting the amateur builder who tries to erect his own home without professional help, the short movie will drive home the fact that methods used by organized, upto-date builders are streamlined, keyed for economical production.

Kitchen Planning with

ndowall



LIONS CLUB MODEL HOME, MINNEAPOLIS... ARCHITECT: ROBERT CERNY

To satisfy the woman of the home (and she is mighty important), ANDERSEN WINDOWALLS are called upon to brighten the kitchen, open its workroom space to a view of the outdoors, ventilate it effectively the natural way in summer, and keep it snugly weathertight in winter. In this home two Andersen Casement Window Units,

Number 4326, with one-light glazing, have been arranged into a wall of windows.

Andersen windowalls are sold only through regular lumber and millwork dealer channels. See your millwork distributor or write us for further information.

Andersen Corporation
BAYPORT · MINNESOTA

onal land

rans ımand-Divi-Guard he late been ttee of Met-

iation. rely of of the

nized quate nd to ment ction.

how ses C11se is

ımaown the fact up-

5 Refrigerators

all one width!

American Builder, December 1948.

Americ

7 cv. ft. and larger ONE-WIDTH Kelvinators make kitchen plans easy!

> PICK YOUR MODEL BY BUDGET ... No Changes in Floor Plans Needed!

Choose any combination of top-quality Kelvinators. Regardless of capacity, 5 new Kelvinator Refrigerators are all 3114 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!

Kelvinator-of Course!



"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. Top-of-the-line quality throughout. For further information, write Kelvinator Division, Nash-Kelvinator Corporation, Detroit, Michigan.



4 Ranges and Home Freezer all one width!

AMERICAN BUILDER

E D I T O R I A L

The November Elections

THERE IS little justification at this moment for attitudes of extreme joy or extreme dismay toward the results of the November elections. That applies equally to those engaged in or affiliated with home building, and to the home buying and home owning public.

In the first place, during the election campaigns, both major party candidates promised more "liberal" housing legislation. Campaign speeches of both candidates implied without specifying that the type of housing legislation each had in mind differed less in broad policy than in operation details. Regardless, therefore, of which way the election went, Congressional consideration of new housing legislation was a certainty in 1949.

It is idle to speculate on what kind of housing legislation would have been proposed by a Republican administration. A purpose can be served, however, in speculating on the policy of the new administration in 1949.

There are a number of possibilities not apparent in an appraisal of the new Congress, based merely on party majority, or an appraisal of President Truman, based on past performance. The new Congress, for instance, will have both "conservatives" and "liberals" in each party. The chairmen of most of the important committees will be Southerners who, with few exceptions, are opposed to radical changes in federal government. Thus, the character of proposed new housing legislation is not likely to be determined by party labels or party allegiance. And there is no reason now to believe that the 81st Congress will be materially less conservative than its predecessor.

There are some sound reasons for assuming that the President Truman of 1949 will not be the President Truman of 1948. As the heir of the New Deal, the President inherited party commitments and party leaders that he had to go along with during the term that expires next month. Considering his background of Missouri conservatism, it is doubtful if President Truman was in accord with all of his heritage of men and policies.

Now, however, having won the presidency in his own right, after what looked like almost a lone battle, he is the unquestioned leader of his party, and is, therefore, in position for the first time to project his own views and choose his own advisors. What and who these are remains to be seen. But, again considering the President's background among other influences, there is more likelihood that he will tend slightly to the right rather than sharply to the left.

Too many issues and lack of clear definition of most of them, together with a very small popular vote majority gives the President and the new Congress neither a broad nor a clear mandate. The only course open to the new Congress, therefore, is one close to middle-of-the-road. Mr. Truman appreciates more than anyone else his opportunity to become a great president, and doubtless knows that the chief ingredients of presidential greatness are sound advice, able administrators and ability to choose and stay on a safe course. If Congress reads the election results correctly, and the President reaches his own aspirations, there will be no occasion for joy on the part of radicals or dismay on the part of conservatives.

PUBLISHING DIRECTOR
Robert H, Morris
EDITOR
Edward G, Gavin
MANAGING EDITOR
Lyn E, Arent
ASSOCIATE EDITOR

B. H. Wambolt

ARCHITECTURAL EDITOR
Arthur V. Hansen
EASTERN EDITOR
Newell L. Clark
WESTERN EDITOR
William C. Rodd
FIELD EDITOR
Robert Charles

ASSISTANT TO THE EDITOR
Margaret C. Carroll
PRODUCTION EDITOR
Ruth M. Balmes
ART EDITOR
George M. Clark
CHIEF DRAFTSMAN
J. T. Froh

Editorial Office, 105 W. Adams St., Chicago 3, III.

Every effort will be made to return material submitted for possible publication (if accompanied by stamped, addressed envelope), but the editors and the corporation will not be responsible for loss or damage.



24 Homes

MES Erected Under a \$12,000 Ceiling Offered a Stiff Challenge to 19 Builders

AS PART OF NAHB's National Home Demonstration Week, nineteen members of the Milwaukee Builders' Association cooperated to erect 24 dwelling units in a home demonstration project which was not only outstandingly successful, but was unusual in plan and procedure. The houses, all built under a \$12,000 ceiling price exclusive of land, were grouped on a single plat of ground in a growing residential section of Milwaukee.

President Roland Teske of the As-

sociation named Elton Schultz general chairman of the project. Early last summer committees were set up and decisions made as to price limits, location and general operation. Teske obtained the land and the Builders' Association took title to it. The land planning committee platted the lots so that the open end of a cul-de-sac faced one of the principal thoroughfares. The 19 members who signed up for participation, each of whom deposited \$200 in a general expense fund, then drew lots for the location

of their houses in the project. One corner lot was reserved for an Association model home which served as headquarters on the site.

possi

and o

takin

and e

sibili

such

able

finis

utili

were

with

tor's lot, er f

ther

gaa

furi

hou

nitt

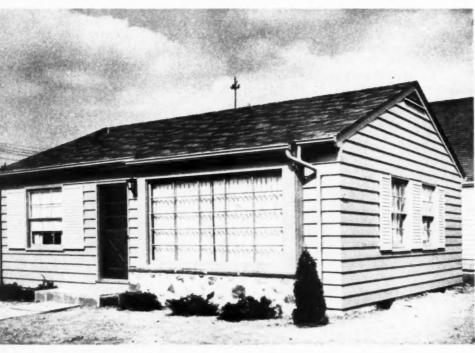
nis vol of thr

de

H

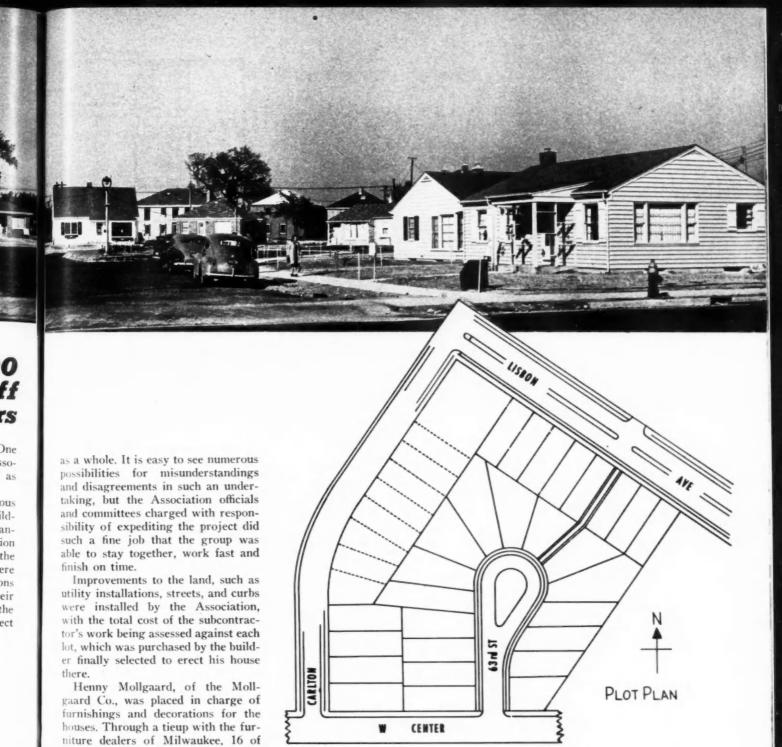
In

After lot locations for the various builders were determined, each builder submitted plans for his house to another committee of the Association which had to approve them before the member could proceed. There were some adjustments made on locations after the builders submitted their plans. This was done to enhance the beauty and symmetry of the project



THIS MODEL home was erected by the Mollgaard Co. and served as "Parade of Homes" headquarters. Interior is plastered over gypsum lath with two walls in the living room finished in knotty pine. The price, including the lot, was \$12.500





THE 24 units were erected by 19 builders on the lots shown here. The Association took title to the land and sublet all work for improvements. The cost of the im-

provements was prorated among the various lots, which were purchased by the builders

MILWAUKEE BUILDERS PARTICIPATING IN "PARADE OF HOMES"

James R. Baer Beverly Realty Co. Sid Dwyer & Associates Economy Builders, Inc. Forman Construction Co. Charles W. George Goelzer & Schultz Co. R. A. Lainey & Co. Joe P. Linke

Moligaard Co. Nordale Realty Co. Northwestern Builders, Inc. Pioneer Builders, Inc. Roth & Taplin Roy R. Sawyer Roland J. Teske Van Dyke Builders Alfred J. Weter

Zielinski Builders, Inc.

Houses shown on the front cover of this issue, left to right, were built by: Nordale Realty Co. (\$13,700); Northwestern Builders, Inc., (\$13,500); Alfred J. Wetor (\$12,500); Joe P. Linke (\$13,800); Zielinski Builders, Inc. (\$11,940)

through 17 and more than 150,000 people visited them. No admission was charged. Ten houses were sold before the demonstration was completed.

The houses were open from October

the 24 houses were completely furnished, and the furniture dealers in-

volved also agreed to handle the bulk

converted to a group of completed

houses, ready for inspection. The

deadline for completion was set for

September 25 and was generally met.

After houses were well along toward

completion the committee which had

et the \$12,000 ceiling price on the

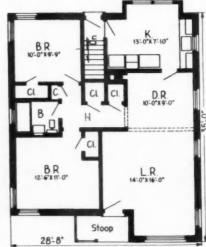
louses, voted to allow the builders to

add \$200 for shrubbery and lawns.

of paid advertising and promotion. Ground was broken July 1 and in three months the raw land had been







FIRST F



THREE of the four houses built by Van Dyke Builders from one basic floor plan. Exterior of the two at the right is plywood cut in 2-foot wide strips and lapped. Prices are from \$12.700 to \$13.550 including the lots

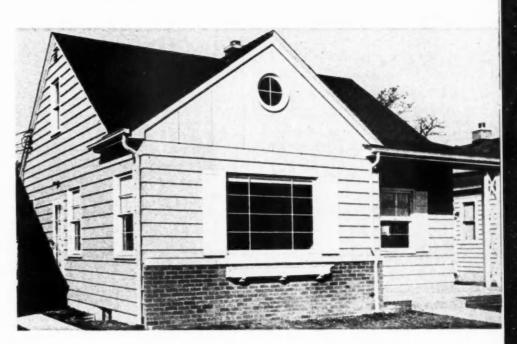


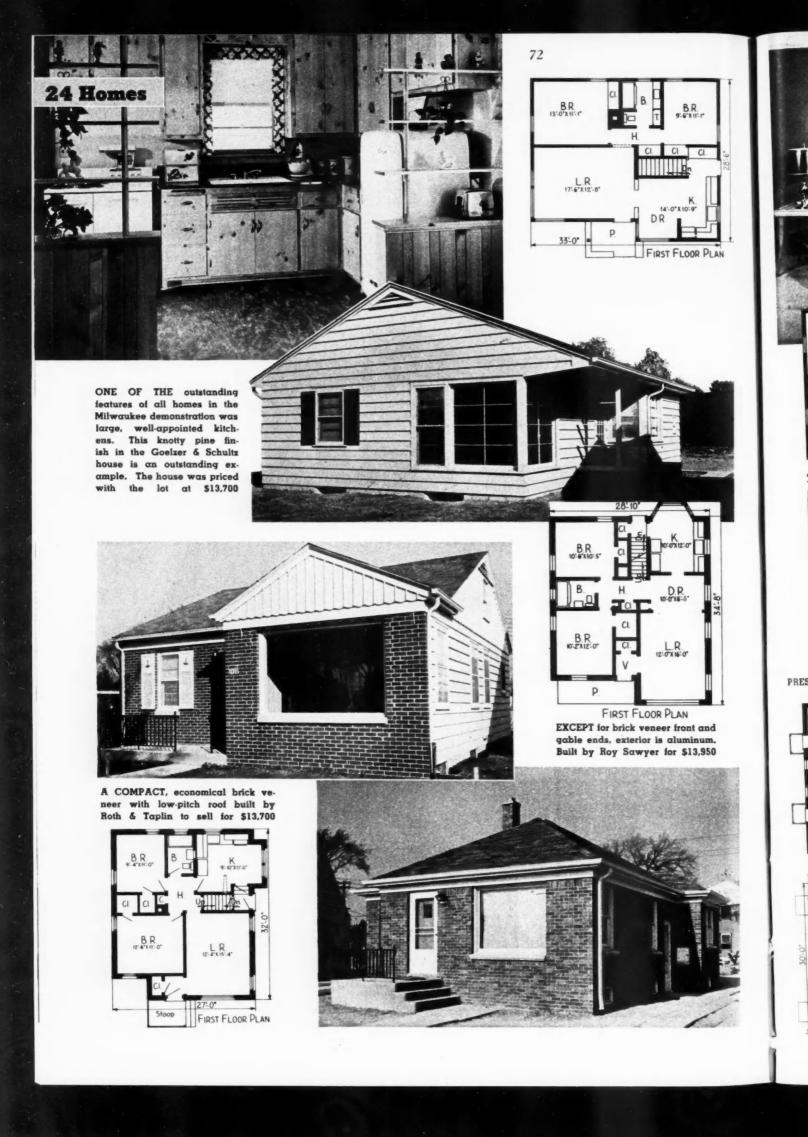


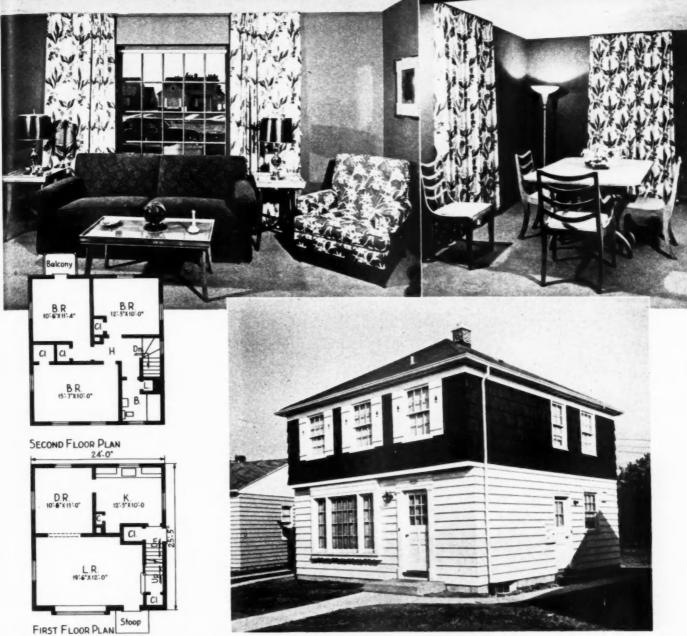


FIRST FLOOR PLAN

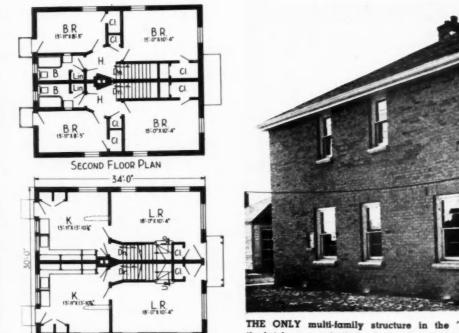
THE INTERIOR of this house is gypsum board dry wall, one of three finished in this manner. Built by Economy Builders, Inc., the price was set at \$13,500





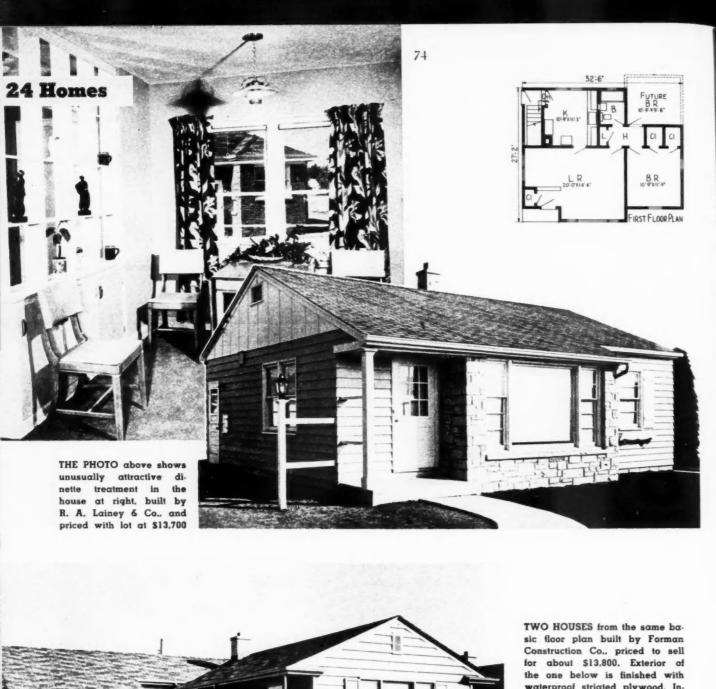


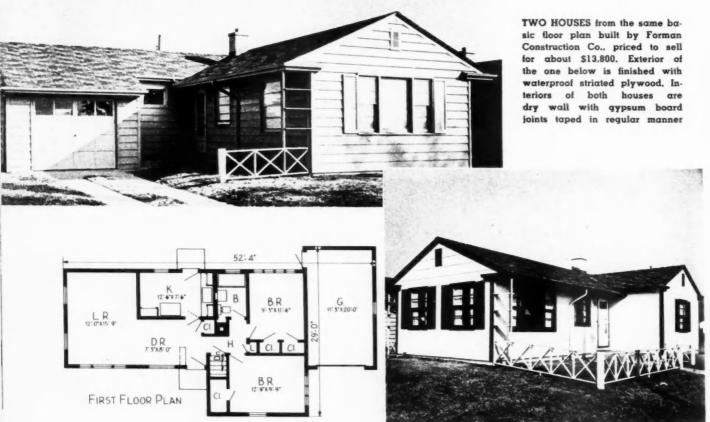
PRESIDENT Roland J. Teske of the Milwaukee Association built a 2-story frame with unfinished powder room to sell for \$13,700



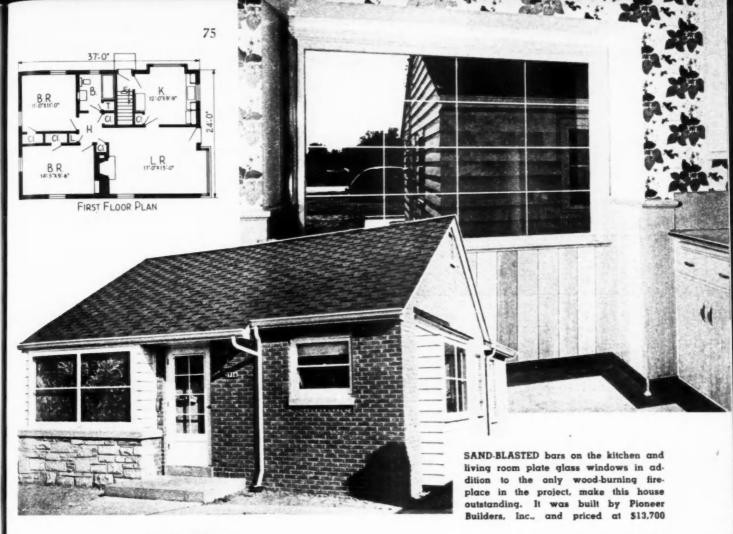
FIRST FLOOR PLAN

THE ONLY multi-family structure in the "Parade of Homes" is this 2-story, 2-family brick veneer built by James R. Baer, at a cost per unit under the \$12,000 ceiling





FIRST

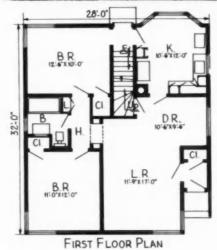




HOUSE at right, built by Beverly Realty Co., was priced at \$13.800. The house below was built by Sid Dwyer & Associates and priced to sell for \$13,700





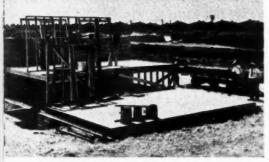




J. E. MERRION

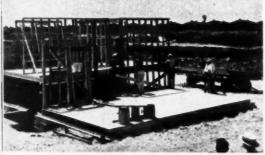


STREAMLINED precutting, preassembly framing operation. No jigs used for nailing



CREWS ARE trained for specialized work.

Men are erecting partition sections



TRAILERS are used to haul house sections



TYPICAL street view in Merrionette Manor, a planned community of 542 duplex units

DIVERSIFICATION

Chicago firm is now engaged in building 542 duplex ranch houses, 108 apartment units and a sizeable commercial corner

THOSE DYNAMIC TWINS—ingenuity and resourcefulness—have enabled J. E. Merron, Chicago builder, to lower costs and also expedite production on his diverse operations. These include 542 three-level duplex ranch house units in Merrionette Manor, 108 apartment homes and a commercial corner, all on Chicago's south side.

Well up on the list of Merrion special methods is an on-site fabrication and pre-assembly plant. Lumber is precision cut to standard sizes, and assembled into wall and partition sections. Jigs have been eliminated by using "master"

sections to start and then nailing each section similar to that, one above the other, until the pile reaches a height which makes it impractical for men to nail. The entire pile is then loaded before another is started. This eliminates one extra handling where each section has to be removed from a jig as it is completed, placed on a pile and then loaded for transport to the site.

Interior doors are prefit with specially built power equipment and all hardware attached in the plant. All stairway units are likewise precut and assembled in the



HERE EXTERIOR wall sections are put in place. Sheathing crew will come on next

4merica

GOOD

Pa

works
in pla
tion w
a spec
is asso
be set
few n
Wh

cours
ventice
has ta
pract
and cent
is ab
in th
price
plant
speci

auth

the c

N. D. Company

111

PRE

948.

ing

one

pile

it

he

an-

tes

ec-

jig

ile

to

ith

ent

he

ce-

he





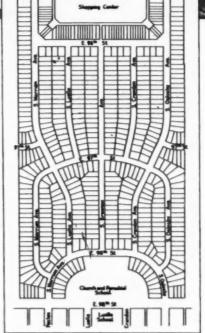
GOOD VARIETY is achieved with three basic floor plans and more than 20 elevations

Pays for This Home Builder

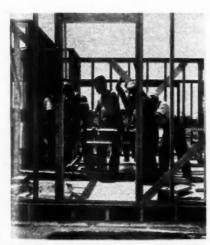
workshop so they are ready to set in place on the site. In cooperation with the plumbing contractor, a special one-unit plumbling stack is assembled in the shop so it can be set in place in the house in a few moments.

What Merrion is doing, as he freely admits, is to steer a middle course between pre-fab and conventional methods of building. He has taken the most economical and practical characteristics of both and combined them into his present methods. The fact that he is able to deliver attractive homes in the \$10,000 price range in high-priced Chicago is a tribute to his planning and methods. Under a special arrangement with city code authorities and unions, he is using the dry wall gypsum board method

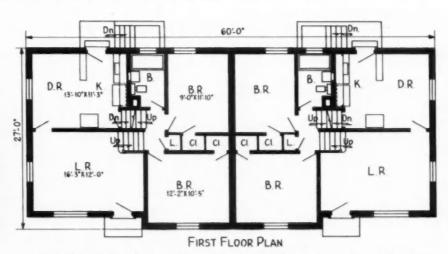
of interior wall finish throughout Merrionette Manor. Quality is not sacrified in the least by any of these cost-cutting methods, but in the precutting and preassembly shop operation alone Merrion reports a saving of 17.2 per cent on carpenter labor and lumber. By buying lumber in lengths suited to the framing plan, dimension waste in framing each duplex unit is so small it can be carried away in a bushel basket. In an actual demonstration for Chicago newspapermen, framing material was cut, assembled, and erected on the boxed foundation, sheathing on, rafters up and plumbing stacks installed in about four hours on one of the duplex ranch houses. Scaffolding is erected on each house but once, as the sheathing goes up. When



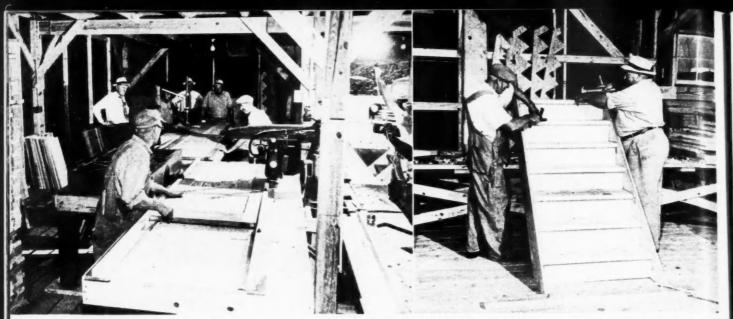
THIS 80-ACRE tract platted for Merrionette Manor includes a complete shopping center at north end and a church and parochial school at south end, Until school and church are built, a completely equipped playground will occupy site



PREASSEMBLED plumbing stack goes up



THIS IS typical basic floor plan of the three-level duplex ranch-type houses



PORTION OF shop where doors are prefit and hardware installed with power equipment. Stair units are assembled in the shop



LIVING ROOM interior in one of the duplex ranch houses. Heat is torced warm air

that crew is finished, windows are installed, trim and siding is applied and painted, followed by brick or stone veneer to complete the exterior and permit removal of the scaffolding. At the present time about 250 units are completed and occupied. They are being erected at the rate of about 12 to 18 per week, with final completion of all

living units scheduled for the spring of 1949.

The 80-acre plot was scientifically platted with a church and parochial school at the south end and a large shopping center at the north end. A group of two-story dwellings will screen the shopping center from the duplex ranch houses. The curvilinear streets are paved with

state specification asphalt. Two trees are being planted on each lot and around the outside of the development to screen it and set it apart from the surrounding area. Ornamental entrances will also be constructed.

ette M

large-se

made 1

each o

ments

two-be

tect M

Americ

ated th

front v

is prov

heated

forced

concre

finishe

tones

the h

and la

featur

"apar

is being

range

purch

porat

tary !

self a

whiel

renta

with

gage

per 1

and :

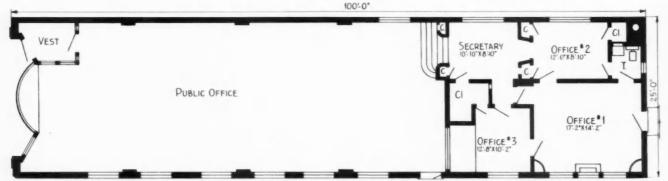
and

Mer

-arra

Architect Emil Minx has provided three basic floor plans and more than a score of different front elevations to provide excellent variety in appearance of the units. The duplex ranch house idea has proved to be unusually popular. The units are being sold for \$10,300 with coal-fired furnaces and for \$10,500 with oil-fired units. All heat is forced warm air. Under the G.I. loan plan, veterans pay \$500 down and \$68.62 per month on a 25-year mortgage. Each resident automatically becomes a member of an association organized to care for maintenance of all common portions of the project. After three years the assocation management will be turned over by Merrion to the residents. The entire setup is so popular that 44 units were sold in one weekend of this year's Chicago Home and Home Furnishings Festival. At present there are 750 qualified buyers listed for purchase of about 200 remaining units.

Twenty blocks north of Merrion-



FLOOR PLAN of J. E. Merrion & Co. new offices which will occupy about one-third of new Williamsburg Block, a business corner



A PORTION of Merrion Square, a 108-unit "apartment homes" project. Each of the 2-bedroom units

ette Manor is Merrion Square-a large-scale apartment project. It is made up of six separate buildings each of which contains 18 apartments or a total of 108 units, all two-bedroom. Designed by Architect Martin H. Braun in modern American style, units are so situated that each living room has a front view. A central heating plant is provided for each 18 apartments, heated with radiant baseboard forced hot water. The reinforced concrete and brick buildings are finished on the exterior with two tones of face brick-buff and grey -arranged with color contrasts on the horizontal plane. Glass block and large windows are outstanding features.

shop Two

h lot

de-

et it

area.

o be

pro-

and

ront

va-

nits.

has

ular.

1,300

for

heat

the

\$500

n a

dent

nber

care

mon

hree

nent

n to

p is

sold

Chi-

ings

750

iase

ion-

rnei

Merrion prefers to call these "apartment homes" and each unit is being sold to its occupant. Prices range from \$13,500 to \$16,000. Each purchaser buys stock in the corporation and then gets a proprietary lease, thus renting from himself as a member of the corporation which runs the project. Monthly rental, where equity is established with no more than a \$9,000 mortgage, runs from \$79.80 to \$88.40 per month to retire the mortgage and pay upkeep on buildings, heat, and janitor service. Off-street park-





B.R.

RENDERING of Williamsburg Block. New Merrion offices will be in building at left

ing, full basement facilities and completely equipped playgrounds

Another Merrion project, the Williamsburg Block, located at 79th St. and Jeffrey Ave., to be completed about January 1, is one of Chicago's newest and probably most unusual commercial structures. It is built on traditional Colonial lines of old rose soft-tone brick and white frame trim. Designed by Architect Ray Gergori, the commercial structure is receiving unusual attention from Merrion because about one-third of it will be devoted to new offices for J. E. Merrion & Co.

Merrion is not only doing a good job of building. He is also conducting an excellent public relations program. One of the highlights of his activity in 1948 was a press tour of Merrionette Manor in August. Written invitations were mailed to Chicago real estate editors, trade press representatives, national magazine editors and outof-town newspapers with Chicago correspondents. Merrion took all of them on a personally conducted tour of his project, answering questions and explaining operations.

Home Buyers

ACCELERATED sale of homes—the goal of every builder—is now becoming an obligation upon the man who plans the houses. If an architect cannot design a house that will outsell its competitors, he is facing the prospect of looking for a job in the carbon paper industry.

The reason this burden devolves upon the architect is that sales today rest on three big factors that form an equilateral triangle. The three sides of this triangle can be designated: (1) design, (2) cost, and (3) public acceptance.

If you will examine such a triangle and label the sides, you will see the importance of the proper relationship of all three.

If the design is too costly, or otherwise faulty, the house will be hard to sell. If cost gets out of hand, it may cramp design and hurt marketability. If marketability—which includes sound merchandising—is lacking, neither attractive costs nor excellent design may be able to salvage that sale. (That could happen in an undesirable location with poor advertising or salesmanship.)

In abnormal times when almost any house will sell at a profit, some corners may be cut in this triangle. But as soon as sales slow down, there is a scramble to adjust these three main factors.

In anticipation of a possible intensification of competitive selling next year in the New York home building area, a "look-see" at what other sections of the country were doing was necessary. Architectural publications have stressed so strongly the strides made in modern — functional — contemporary—or what have you, designs on the West Coast, that I boarded a plane for Los Angeles to see what they really did have out there.

After more than 11,000 miles of travel, renting cars to canvass each major metropolitan area of the Pacific states, I was back in New York six weeks later with more than 400 photographs, plus a firm conviction that a new American style of architecture is now being evolved. It is not being evolved through architects'



abstract the salesr This to contrary this new

Imerican

Are I

What

Well, thing fresomethin oping of buyers' digest of best of tern, inscident this res as each out bein tation.

In sh looks li appeal The me in n ity was out th

Easterntion to was in Midwe and an Coast overhall In b

buildin

Angel Portla impre lack of gener extrement in the ers

1948

Are Voting in a New Type of Architecture

By Rudolph A. Matern

Matern & York, Architects

A report of home building trends, observed by this Long Island architect whose plans are being used in 43 developments, was made after his recent cross country trip that covered 11,000 miles



RUDOLPH A. MATERN

abstract dreams, but directly across the salesman's desk.

This means that home buyers—contrary to all polls—are voting in this new style of domestic architecture.

What is it? What does it look like?

Well, to begin with, it is not something freakish. It is not a fad. It is something that is growing and developing on the sound basis of home buyers' preferences. It constitutes a digest of the best of the old and the best of the new. It is fresh and modern, insofar as it is receptive to new ideas that serve a purpose. And in this respect it is functional, insofar as each detail serves efficiently without being sacrificed to arbitrary affectation.

In short, it looks like a house that looks like a house. And it has sales appeal plus.

The most surprising discovery to me in my survey of West Coast activity was the extent to which builders out there had adapted traditional Eastern details of design in application to contemporary design. Also it was interesting to see how much the Midwest and the East have utilized, and are destined to develop, West Coast ideas in design, such as roof overhangs and large picture windows.

In browsing through the new home building areas around San Diego, Los Angeles, San Francisco, Sacramento, Portland, Tacoma and Seattle, it was impressive to see the comparative lack of so-called modern design. The general impression was that although extreme architecture in small homes in the West is probably double that in the East, the proportion of "mod-

ern" design to conventional is only about 4 per cent.

In many cases, it was obvious that the modern designs were based on the sole desire to do something different rather than to consider costs or logic.

However, especially noticeable throughout the Pacific states is the heritage from homes of the Northeast. The charm of New England colonial themes, Cape Cod cottages, Long Island and Pennsylvania farm houses, is apparent on every hand. Yet each has been interpreted to meet local buyers' demands for larger windows, terraces and patios, and deeper roof overhangs.

We already have seen the western ranch house, its low and rambling lines, and its accent on outdoor living, borrowed and adapted to Midwest and Eastern climatic conditions. Now it is safe to predict that the greater roof overhang of western design will be widely adapted across the continent.

The reason is purely economic. It will meet all requirements of our triangle of salability. It will serve costs by permitting use of a greater variety of exterior materials. It will enhance marketability by improving design

A western practice, of which you

will see more east of the Rockies, is the use of split hollow brick. This material comes to the job in blocks with holes in the center similar to flue tile. When dropped on its edge it falls apart into four individual bricks. At the fracture line a rough edge shows, and on the opposite side a smooth edge. This allows an alternative of having a rough texture finish or a smooth texture job. The shape of this brick accentuates horizontal lines and its versatility offers infinite possibilities in design.

Also in this line of appearance, the influence of the West in color is destined to foment a revolution in small house design throughout the whole country.

Women like color, and the importance of women as sales closers, particularly in home buying can not be disparaged.

Because of climatic advantages, the West can and does exploit color through both materials and landscaping. The East has much to learn on this score. The builder who will increase his sales by boosting marketability through the use of color in his designs—without burdening in any way the factor of cost—will have to depend upon architects experienced in popular preferences.

You may be ready to ask, what will happen when buyers tire of some of these striking effects and special features in years to come.

If that happens, it would be a tremendous boon to the home building industry.

One of the greatest incentives for people to buy new automobiles in normal times is the rapid outmoding of design year by year. If, through the logical use of improvements in design, this same desire could be created in relation to home ownership, an increased turnover of houses would bring greater advantages in techniques of building, design, equipment and all of the other factors bearing on successful home selling—all within a proper relationship of design-to-cost-to-marketability.



nes—
now
man
nitect
outg the
the
olves

oday

m an

sides

ated:

ublic

the ship therd to may abil-

udes

cing, llent

that

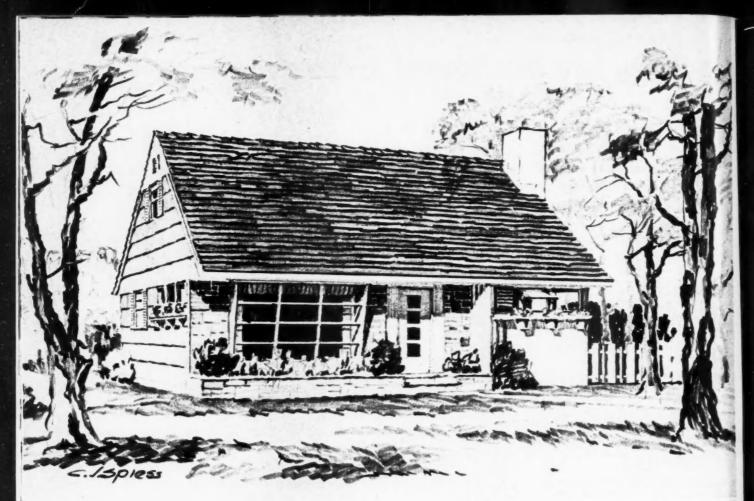
unrtismost ome ngle. here

ensnext ding secwas ions ides conde-

t I s to out

each Paork 400 tion chi-

t is



THE INTEREST in this house lies in unusual window treatment of front and sides, and long unbroken roof line. Stone planting box is a continuation of front stoop

Popular Model Takes on New Face

THIS MONTH'S blueprint house is designed by Matern and York, New York architects. This house is a practical application of the gradual transition now taking place in domestic architecture. In anticipation of competitive selling next year, Matern is revising a number of popular post-war designs. Approximately 1,500 houses were built on Long Island from the design shown in the small inset.

Matern has found that to maintain a ready public acceptance, a house must rely on three basic factors, namely: Design, cost and marketability. With the trend in design toward the contemporary, or a modern adaption of the traditional, the current blueprint house is a spendid example of the gradual change taking place in design arrangement. The basic floor plan conforms to the most popular post-war model.

The rectangular type of plan that Matern has used produces the greatest economy per square foot of floor space. Twelve-foot joists are supported on center beams and columns with bearing partitions above. The stairs, placed in the center of the house near the entrance door, leave space for a bedroom on either side of the second floor hall. The top riser of the stairs, which is at the center of the second floor hall, also eliminates the need of dormers in the roof. The kitchen, placed at the corner of the house, permits cross ventilation, and also avoids a third door which would be necessary if the position of the dining room and the kitchen were reversed.

This house is planned for a 50-foot wide lot, allowing 15 feet for a side yard. Matern has estimated that the sales price in the Long Island area would be approximately \$11,000. This does not include finished rooms on the second floor.

The house is of frame construction

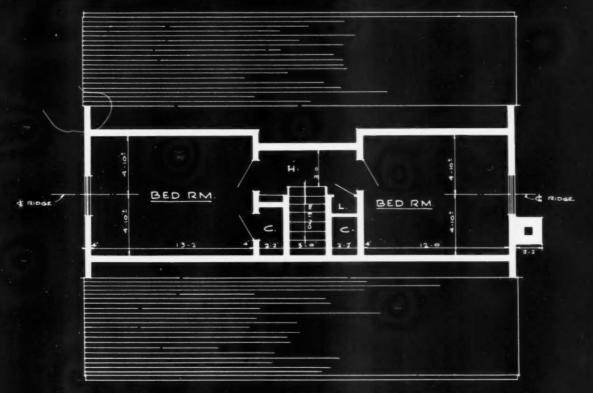


POPULAR post-war model had ready acceptance because of its practicalness

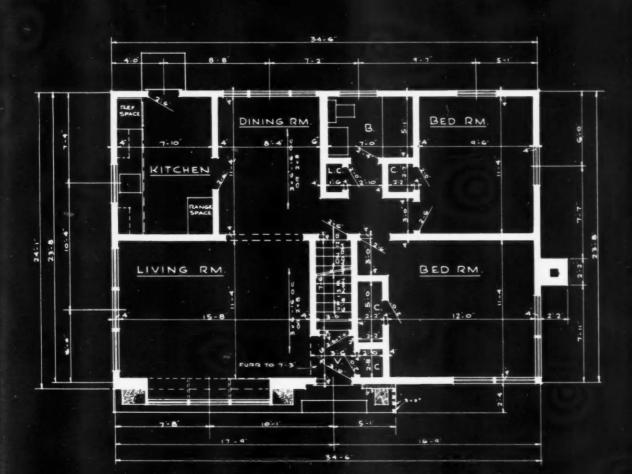
AMERICAN BUILDER Blueprint House Number 23

Matern and York
Architects

placed upon a concrete foundation. The entire basement is available for services and recreation. Exterior walls are covered with 24-inch wood shakes placed 18 inches to the weather, and vertical boards. Fixed and awning-type sash are used in all windows. The roof is covered with thickbutt asphalt shingles.



FUTURE SECOND FLOOR

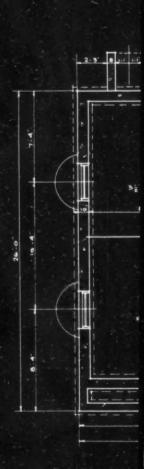


ly ac-

R

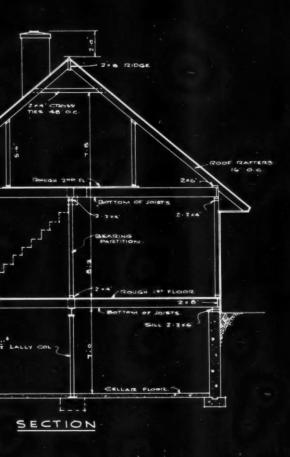
tion.
for erior wood the ixed n all with

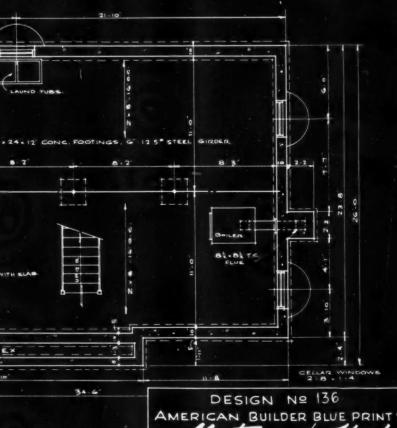
FIRST FLOOR PLAN



CE







DESIGN Nº 136

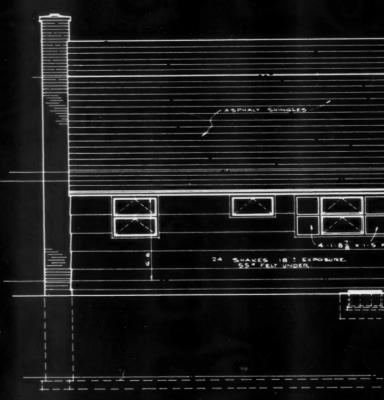
AMERICAN BUILDER BLUE PRINT SERIES.

Matern & York

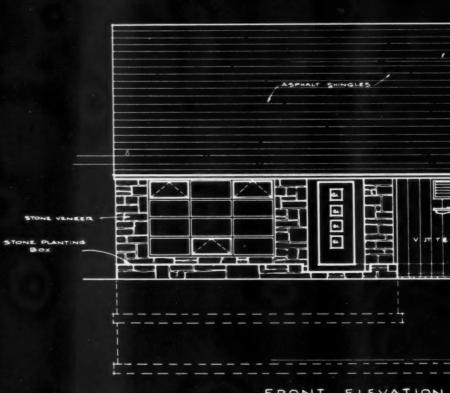
A R C H T E C T S

90-04 IGIST ST JAMAICA 2, NEW YORK

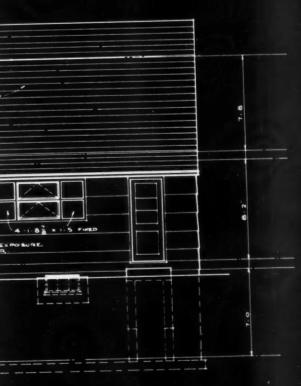
Simmons Boardman Pub Corp., 105 W Adams St. Chicago. III.



REAR ELEVATION



FRONT ELEVATION



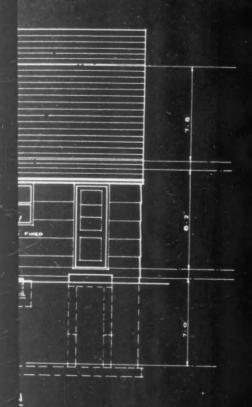
3 4 3 WOOD

EVATION



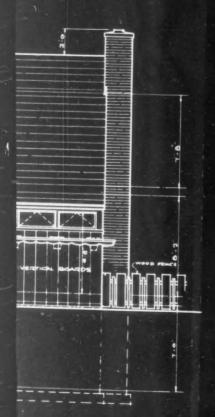
EVATION

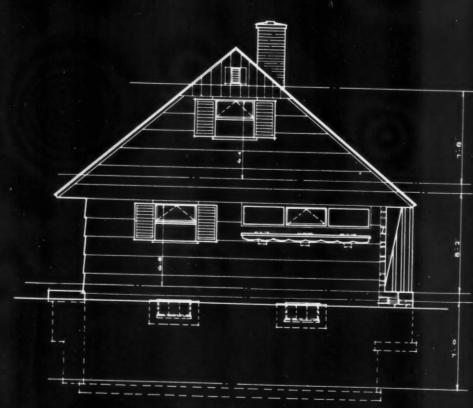
SCALE : 110





RIGHT SIDE ELEVATION





LEFT SIDE ELEVATION

Tribute Paid to Editor Of American Builder

E. G. Gavin acclaimed as originator of National Home Week by NAHB at directors' meeting in California. Outstanding success of this year's demonstration has established the promotion as a definite part of NAHB program



E. G. GAVIN

AFTER BEING personally invited to be present at one of the directors' sessions of the National Association of Home Builders at Los Angeles in October, E. G. Gavin, editor of American Builder was presented by President Milton Brock and acclaimed as the originator of National Home Week. Brock's statement included warm thanks and appreciation from the members of NAHB for the conception and development of an idea that has proved to be the most effective public relations program ever devised in the interest of home builders.

American Builder's publishers in turn appreciate the action of Brock and the National Association of Home Builders in publicly crediting their editor with the origination of National Home Week.

Gavin first presented the idea and an outline of procedure, together with some of the achievements possible, at a session of NAHB directors during the annual Convention and Exposition in Chicago last February. The idea and plan of procedure was accepted as sound by the directors. Committees were appointed to work on the project and to coordinate the work of individual NAHB chapters. Shortly after the annual convention adjourned, a steady stream of bulletins carrying ideas and plans of procedure for the local chapters emanated from the Washington office. September 5 to 12 was established as the 1948 National Home Week,—the first one ever staged. Because the plan was new and a few chapters were late in getting started, a number of home demonstration weeks were staged later in September and a few in October.

City mayors cooperated by issuing proclamations establishing dates for Home Week in their municipalities. Newspapers, radio stations and civic groups of all types saw beyond the purely business side of the promotion and recognized the value of fostering home ownership as an essential portion of any plan to improve the outlook for their cities.

In response to a questionnaire from NAHB, more than 40 chapters located in leading cities throughout the United States reported active participation in National Home Week and were virtually unanimous in approving a similar promotion in 1949. For the first time home builders have a national promotion plan which can be used to maximum advantage by members of the industry in cities of all sizes for all types of operations, from the largest to the smallest. National Home Week, in one year, has become another of the many activities carried on by NAHB for the betterment of the nation's home building industry. *American Builder* congratulates NAHB for successfully conducting this year's National Home Week and extends best wishes for increasing success as future demonstrations are staged.

BUILDER



WALTER R. CRABTREE

On 165 acres of waste land, an area overlooked for years by others, a subdivision is under construction, containing 300 homes, 200 apartments, and a sizable shopping center

METAL grille work on doors and ornamental touches on structuraliron corner posts dress up apartment entrances

HOUSE shows typical three-bedroom design in development. It was designed by C. F. Irish, architect, Jacksonville. Florida

Americ

THE of the within often is see be of oth them I builde of wa commoccup ments to cat

of Jac is La the co matel home ping tually been is un Ot Crab admi age swai deep nece line the

> stre of the

and liab the a w T buil

DEVELOPS "Unwanted" Land

THE DISCOVERY of large tracts of usable land for home building within easy reach of urban centers often requires only enough vision to see beyond the erroneous judgment of other developers who have passed them by. Such vision on the part of a builder is now transforming 165 acres of waste land into a self contained community with single family, owner-occupied houses, rental garden apartments, and a sizable shopping center to cater to needs of the residents.

The builder is Walter R. Crabtree of Jacksonville, Fla. His development is Lakewood, located five miles from the center of the city. Lakewood ultimately will have 300 single family homes; 200 apartments and a shopping center. The apartments are virtually complete; many singles have been erected and the shopping center is under construction.

and.

for

bdi-

ruc-

mes,

d a

ter

Other builders passed up the site Crabtree chose for Lakewood. They admit freely that he had more courage than they to try and reclaim the swampy lagoon that ran through a deep ravine bisecting the tract. It was necessary to support a 100-ton dragline on a tremulous crust overlaying the muck in order to dredge it out and turn it into an asset instead of a liability. Most of the land cost is in the reclamation effort, but is proving a worthwhile investment.

The size of the tract enabled the builder to do a comprehensive community planning job. Curvilinear streets are laid out to take advantage of excellent views of the lagoon for the single family homes. The two-story garden apartments also overlook



GARDEN TYPE apartments at Lakewood subdivision are arranged with open courts

the lagoon, and serve as buffers between the single family houses and the business center.

The garage shelters for the apartments, in turn, form a buffer strip between the apartments and the rear of the shopping center which is adjacent to them.

The center occupies a 3-acre tract which fronts on a main highway. Later, an equal tract on the opposite side of the highway will be available for additional commercial facilities under another developer. That portion is part of San Jose Estates which is developing 2,000 homesites on 160







THREE floor plans are used in apartments



BASIC floor plan is used, with five variations of front elevation

THIS model home at Lakewood, exhibited during National Home Week, sold for \$14,750. It has 11.000 square feet, excluding porch and garage, and is fully equipped on 80x125 foot landscaped lot. Architect was C. F. Irish

acres adjacent to Crabtree's development.

There are now two lakes on the Lakewood development, in addition to the lagoon which extends from the St. Johns' River. To form them and the lagoon, about 100,000 cubic yards of muck was removed from the lagoon and creek. This muck, after being dried and allowed to decay, furnishes an excellent foundation for topsoil to support the landscaping around the apartments and individual homes.

All streets are paved with blacktop, Miami type, paving, with roll curb and gutter. A complete artesian well system furnishes water to the development through 6-inch mains. Storm water drainage is provided to give immediate runoff from all lots after showers.

Some of the single family homes in Lakewood were designed by Bernard Wells Close, Jacksonville architect. Others are by the architectural associates, C. F. Irish, Glen D. Moore and W. H. Marshall. Engineering on the apartments was done by Roy Croasdell of Jacksonville.

The single family houses in Lakewood are both two and three-bedroom types, with the three-bedroom predominating. Prices range from \$9,000 to \$13,500. The majority are of masonry, although there are a few of frame construction. Most have only one bath. All have attached garages and upward acting doors.

Wolmanized pressure-treated lumber is used for all sills and masonry furring strips to prevent decay. All baths are tile and tile drainboards are used in the kitchens.

In some of the homes, metal casements are used; in others, wood awning-type windows are employed, Copper screens are provided for the windows and venetian blinds for interiors.

Ornamental iron is used both for structural strength and decoration at the entrances of some of the homes and all of the apartments. It adds distinctive touches in keeping with the characteristic southern climate architecture.

Many of the homes have completely equipped kitchens with electric range, dishwasher, garbage disposal unit and water heater. Some have automatic washers. Attic fans, for summer cooling, are provided in most cases.

The garden-type rental apartments are arranged in attractive groupings. There are one, two and three-bedroom apartments renting respectively at \$74, \$84 and \$91 per month. The rental includes garage, yard and hall service, garbage collection and access to playground facilities for children. Each apartment has an electric range, refrigerator and an oil-burning hot water heater with outside reservoir. Space heaters provide heat in cool weather and attic fans, with automatic louvres, cool the units in hot weather. Duct fans exhaust odors through outside wall of kitchen.

Apartment windows are steel casement and provided with copper screens and venetian blinds. A 24-inch reinforced concrete canopy runs around each apartment structure at the second story beam level as protection against sun and rain. Ceilings are insulated with mineral wool. Flush doors are used inside with rubbed natural finish which reduces maintenance cost.

Automobiles of apartment tenants are kept in roofed shelters, paved with concrete, instead of in closed garages which are not needed in the Florida climate. Locker space along the back wall is provided for storage of auto equipment, car polish, and so forth. Drives and parkways are paved with reinforced concrete.

A great deal of thought went into the plan for the shopping center. It was developed by C. F. Irish and W., H. Marshall, Jacksonville architects.

The center is a commercial type not the garden type often used with residential district centers—because it is on a main highway which is likely to develop traffic congestion in the future. Parking space is provided for 500 cars.

The grade influences the location of various stores. Those needing high ceilings are placed at the low point so that bulkheads can be kept uniform.

Shops will be of the neighborhood type until the second half of the development gets under way on the tract opposite. Present plans call for a laundry, a grocery of 3,200 square feet, a bakery and delicatessen, dry cleaner, ladies wear shop, bar and cocktail lounge, drug store, beauty parlor and barber shop.

Built on a modular plan of trussed steel and masonry construction, the center permits great flexibility in the arrangement of partitions. An 18 foot module is used, but subdivision can be made on the basis of a 6-foot module. Partitions are not load-bearing. Toilets are provided in every 18 feet of space.

Outside the structures, a canopy will run around the buildings over the sidewalk so that cars can be parked within 8 feet of shelter. An aluminum face will surmount this canopy, and full-length glass windows will be used below. The barber shop and beauty parlor will have double glazed insulating windows. Glass block will be used to admit light in the rear of the stores.

Heating will be from unit heaters supplied with steam from a central heating plant. Louvre type fluorescents will light the show windows of each store.

one, to

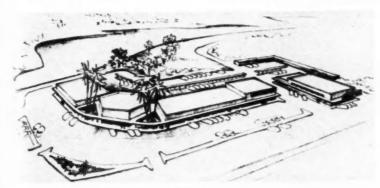
ONE, two, and three-bedroom garden-type apartments are arranged in attractive groupings, with garages and playgrounds provided

LAKEWOOD GARDEN APARTMENTS

LAKE GERALDINE

DRIAG

PARKING



SHOPPING center is a commercial type, and is adjacent to a main highway. Parking space provisions in the center will accommodate 500 cars. Built on a modular plan, the center permits great flexibility in arrangements of partitions, another evidence of careful thought in planning

MATERIALS USED IN LAKEWOOD HOUSES AND APARTMENTS

Readymix concrete
U. S. Gypsum Rocklath and plaster
U. S. Gypsum Rockwool
Certainteed White Asphalt roofing
Wolmanized pressure treated lumber
Shewin-Williams and H. B. Davis paints
Crane plumbing fixtures
Truscon steel casements
Gate City Sash & Door awning windows
Huttig Sash & Door wood sash and millwork
Coffman metal grillwork
Lockwood hardware
Coolaire attic fans
American Blower kitchen ventilator fans
Mengel and General Plywood flush doors
Cavalier bathroom cabinets
Hotpaint ranges, refrigerators, water heaters

1948.

r. It d d ot h

er. It ad W., itects. ype—with use it likely a the d for

ation high nt so m. hood e detract or a juare dry and

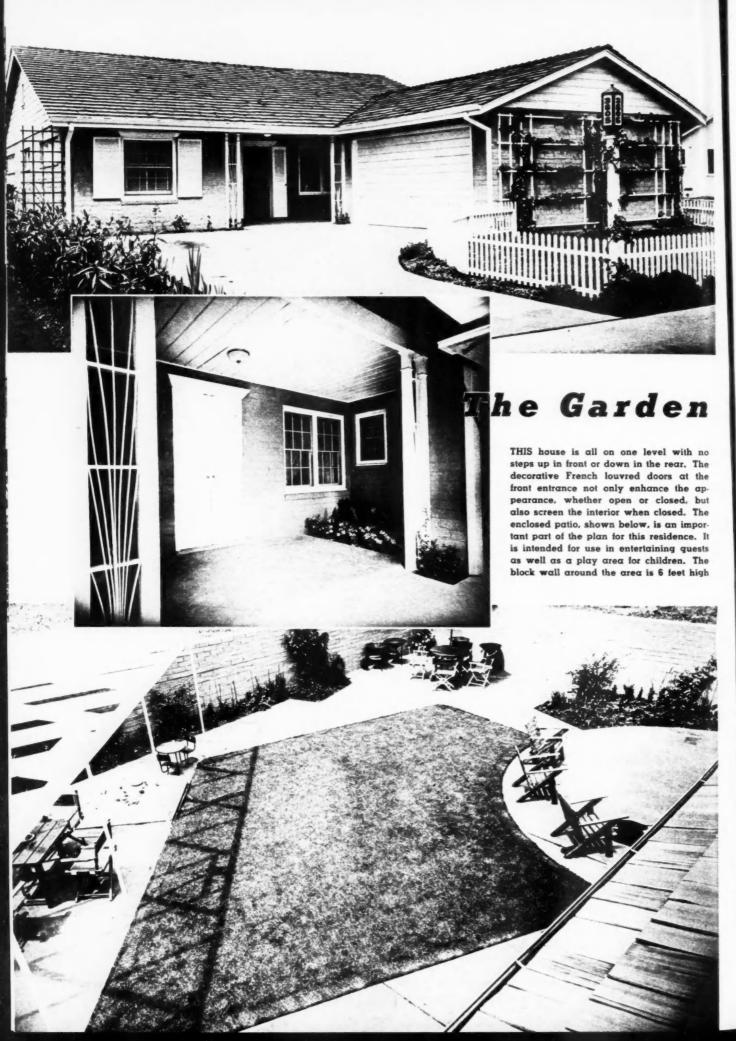
the the foot can foot ear-

the ked num and be and

y 18

will r of ters

tral iorows



climati in south permit blocks in walls to interior is supp

Is

THIS how moda built of dation layer with inche concrare relient.

THE PARTY OF THE P



CLIMATIC conditions in southern California permit the concrete blocks in the exterior walls to be used as interior finish. Ceiling is supported by 4x8-inch wooden beams

The

the

ap-

but

The

-100

. It

ests

The

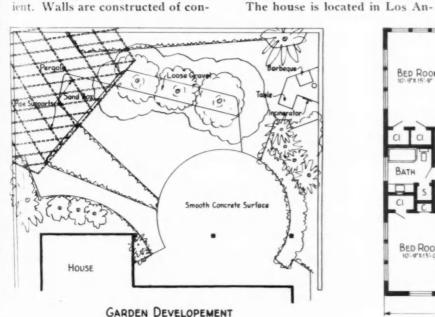
igh

Is Part of the House

THIS three-bedroom, one-story house, with its excellent accommodations for outdoor living, is built on a lot 50x120 feet. The foundation slab is built up of a 3-inch layer of standard concrete, sealed with asphalt and covered with 2 inches of light-weight aggregate concrete to form the floors, which are not only waterproof but resilient. Walls are constructed of con-

crete blocks made with light-weight pumice aggregate. The roof is frame covered with hand-split shakes. Location permits a service entrance at the side, assuring maximum privacy in the outdoor living quarters at the rear. Large plate glass windows in the living room minimize the division between the house and the outdoor living room.

geles, Calif. It was designed by Architects Wurdeman & Becket and built by Peter J. Schulte for his son, Joseph Schulte, associated with the Fritz Burns home building organization. Landscaping was by Garret Eckbo, who designed the outdoor living room, which is surrounded by a six-foot high block wall. The price of the house, without the lot, is about \$18,000.





THE bedroom windows are high enough to assure privacy and also to permit furniture to be placed under them. All rooms, except the kitchen and bath, have individual Panelray heaters to give zone control of heat. The built-in table adjacent to the kitchen will seat a maximum of 11 persons

America

An Engineered Housing Project

Aurora Heights, a complete site fabricated subdivision planned to meet present day needs, now in process of construction

WHEN THE first house was ready to be set up, I invited all the interested citizens to come out, watch the process and inspect the construction." Thus J. Buford Jenkins, Chief Engineer for the Newton Emergency Housing, Inc., silenced the rumors that had been floating around with respect to the soundness of his building methods.

The Aurora Heights housing development project at Newton, Iowa, was launched this spring by a non-profit organization of that city's business men for the purpose of alleviating the acute housing shortage. A capital stock of \$200,-000 was set up and 140 acres of land was purchased just outside the city limits. Jenkins who was given complete charge of all work, is a man with an extensive background in handling large construction projects. Being an expert in the field of site fabrication, this engineer immediately set about establishing the foundation for this operation.

FHA approval for the initial group of 15 houses was received on June 7, and Jenkins started to break ground that afternoon. Within 65 days all of the 15 houses were under roof with seven completed, ready for the new owners to occupy. Since the initial grant, the FHA has given approval for construction of three additional groups of 15 houses, making a total of 60 now underway, with 18 houses

completed. In addition 12 basements are complete, ready to receive the super-structure.

As the workmen adapt themselves to the new construction methods, the schedule of production has been accelerated. This indicates that a trifle less than one house per week has been completed since the start of the operations. The progress that has been made is all the more remarkable when it is considered that the entire organization has been built up since the original FHA grant.

Skilled and unskilled workmen, accustomed to build in the conventional manner, had to be trained in the mass production methods employed by Jenkins. This involved setting up a cutting shed, where all members were pre-cut from a chart. A series of semipermanent "jigs" were built around the cutting shed. Electric outlets with underground conduits running to the source of supply are placed on each corner of the "jig" for the use of power equipment. A sufficient number of "jigs" is built to care for every unit of the house, namely; main floor panel with joists and steel beams intact, each exterior wall including the gable end, interior partitions, and roof assembly complete with

The houses are developed around seven basic floor plans with a "jig"



ABOVE: EASELS on which concrete forms are completely assembled



TWO FLOOR panel "jigs", one empty, the other with floor joists and bridging



SIDEWALL and gable end of one-story house in process of construction on "jig"



J. BUFORD JENKINS, engineer in charge of construction. Right: Overall view of project in early stages of development

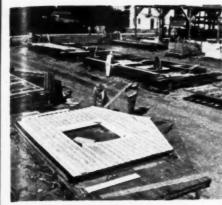


r 1948

bled

mpıy, dging

"jig"



COMPLETED sidewall panel on "jig" ready to be moved by crane to house



COMPLETED floor panel with steel beam being placed in position



LARGE crane with special hook rigging placing wall section in position



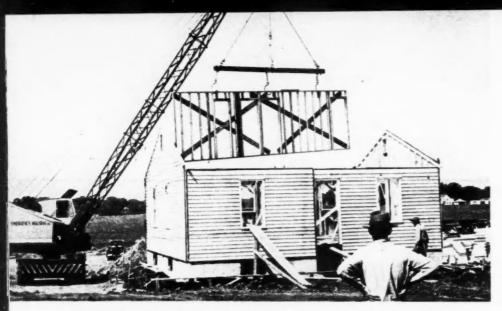
DETAIL view of corner post of "jig" showing electric outlet for power equipment



CLOSE UP view of bucket showing concrete released into forms. Plot plan below







AFTER side and end walls are placed in position on house, then interior partitions, which are also built on a "jig", are installed. Sections are tightly secured

arranged for each plan. Four of the "jigs" can be adjusted to conform to variations in the basic plans. These "jigs" can be filled and completed in three hours, using common laborers after they have become acquainted with the method used by Jenkins. The foundation work is controlled in much the same manner. Form panels are as-

| Ref | B B R | 12:0726:0" | B B B R | 12:0726:

PLAN of typical one-story house

sembled on easels placed near the excavation. The panels are then removed from the easels with a large crane, and placed in position in the ground ready for concrete pouring.

The entire jig assembly operation centers around the use of a mammoth crane with special hoists patented by the engineer. Crane is operated from the rear seat, allowing the operator to drive the equipment and move the crane at the same time. The entire building operation centers around this crane. A heavy cable extends along the boom and down to point where a special six-point rigging is attached. Hooks, clevises or bolts are attached to the end of the braided cable of the rigging, depending on the type of section to be moved. These, in turn, are secured to extended points on the completed floor, roof, and wall panels, and carried by the crane over to the house that is in process of assembly. The use of a braided cable in rigging, first employed by Jenkins, is a safety feature that eliminates the whipping action 50 prevalent in solid cables.

The one-story houses are entirely fabricated on "jigs", taken to building site by the large crane, and completely assembled by seven men in 55 minutes, including interior partitions, after foundation walls are in place. The two-story houses are fabricated in the same manner with the exception of the second floor panel and the roof construction. In this case, the roof trusses are fabricated separately on "jigs". The correct number required are hoisted on the house structure by the crane. They are then placed in position, together with roof sheathing, by hand labor. The construction of the second floor joists and floor is accomplished in the same manner. The end wall panels on the two-story houses are made in one length on the "jig", and then cut in half at the second floor line. This assures a tight fit when the two panels are assembled on the site. A total of 155 men are now employed on the site. Thirty of these are skilled mechanics and 125 are laborers.

COMPLE

site by

panel

ease o

saving

The sa

and re

is acco

ging (

that p

of par

Heigh

aroun

Each

in its

viding

This

tually

dwell

uled

vear

up i

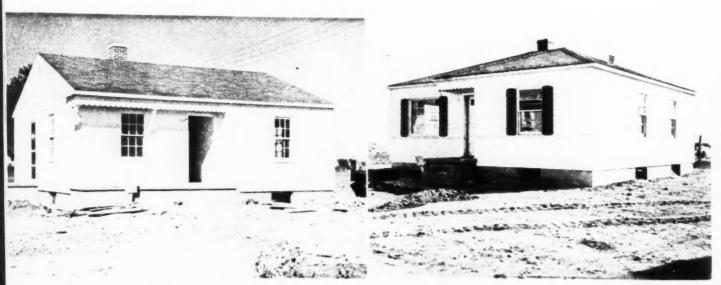
this

appl

hous

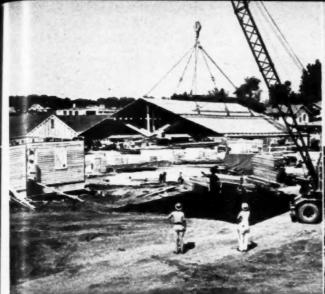
The

The question is often asked, "Doesn't this method produce a house that is structurally inferior to the conventional method?" This builder contends that the results are just the opposite. Nailing of structural members are more positive. The application of diagonal sheathing, building paper, and exterior finish, applied when the wall



TWO-BEDROOM one-story house with facing of bevelled siding, typical of this mass housing project, is pictured above

ANOTHER version of the typical one-story house, employing a skirting of bonded plywood on the house exterior



COMPLETED roof section being carried from "jig to building site by crane. Note special rigging with 6 point suspension



ROOF section being lowered in position on the house. All wall and roof sections fit properly and are quickly assembled

panel is on the "jig", makes for ease of working conditions and a saving of time in the operation. The safe handling of the wall, floor and roof panels from "jig" to site, is accomplished by the special rigging device attached to the cable that prevents buckling or breaking of panels while in transit.

crane rocess raided ed by that on so

taken crane, seven inteation story same f the roof y on

ouse are ther

thor.

cond

om-

The

tory

no n

fat

ures

are

l of

the

me-

ked,

e a

rior

his

ults

of

si-

nal

ex-

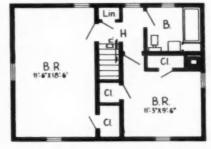
rall

The houses in the Aurora Heights subdivision are developed around seven basic floor plans. Each plan varies at least five times in its exterior treatment, thus providing 35 different arrangements. This subdivision is planned eventually to contain 800 individual dwelling units. The work is scheduled to be completed in a three year period. The operation is set up in units of 30 houses. When this number has been completed, application for an additional 30 houses is then made to FHA. The

price range of the houses, containing 727 up to 888 square feet, vary from \$8,200 to \$9,200. Houses, containing 1,021 to 1,127 square feet, vary in cost from \$10,200 to \$11,200. The cost per lot is estimated at

\$1,200. This includes the land purchase price, cost of grading, the installation of utilities, concrete curbs and walks, and black top streets. The average size of a lot is 60x120 feet.





SECOND FLOOR PLAN

PLAN of typical two-story house. A number of variations spring from basic plan



A SLIGHT variation to the typical two-bedroom plan is used in this house. Wood shingles used as exterior facing



A TYPICAL two-bedroom, two-story house. A combination of wood shingles and bevelled siding used on the exterior



This builder achieves both economy and good appearance by erecting

Low-Cost Houses with All-Aluminum



SMOOTH aluminum siding job is demonstrated by this picture



HERE the aluminum siding was first applied on the gable end and then started from the bottom to be joined with that above

ALUMINUM HAS arrived as a building material on a 52-house project in Muncie, Ind. All exteriors of these houses, including windows and combination doors, are aluminum with the exception of the roofs, trim and window surrounds.

C. L. Bartel, head of the Bartel Co., who has been building low-cost homes in Muncie, has been constantly on the alert for ways in which to cut costs. Careful buying of materials is one of the prime requisites in achieving economy and when Bartel was offered a substantial amount of aluminum siding at a special price, he decided to try it. Because he is a tradesman himself, Bartel was able to work closely with his men in perfecting an application method which not only assures tight, neat appearing jobs with aluminum siding, but also permits a 25 per cent saving in cost as compared with wood bevel siding over conventional sheathing.

The material being used is a product of the American Aluminum Corp., and has 5%-inch insulating board backing, which permits its application without sheathing. All joints are covered with a spline which is held rigidly in place by tension. Aluminum corner pieces, which do not require nailing, assure a tight fit at that point. Special right and left hand end covers are used where all siding abuts windows, doors or other openings. The siding is allowed to weather for about 30 days before it is painted. One painter and a helper, using a DeVilbiss sprayer, paint four houses a day.

The Sterling sliding sash aluminum windows, in an aluminum frame, are installed in wood surrounds. These are 2x3's, rabbetted on the exterior to take the aluminum frame, assuring a neat appearance and a weather-tight fit. The aluminum combination doors, made by Ronor Building Products Manufacturing Co., are shipped to Muncie knocked down. Regular construction crew workmen assemble the doors on the job. Aluminum screens and storm sash are also provided for each house.

The houses are built on a concrete slab. Return air ducts for the furnace are provided in the slab by laying 8 and 10-inch clay tile. Interior floor finish is asphalt tile. Walls are gypsum board over conventional studs. Interior trim is all natural finish. Ceilings are insulated with mineral wool and heat is provided by Bard oil-fired forced warm

America

air f the k Al

foot

\$6.7

proj and doir com gall laur or t eac 1948.

m

on a s of

tion

trim

ild-

the

of

on-

t of

it.

to

tion

obs

ing en-

can

ck-

All

111

not

ial

ng is ed.

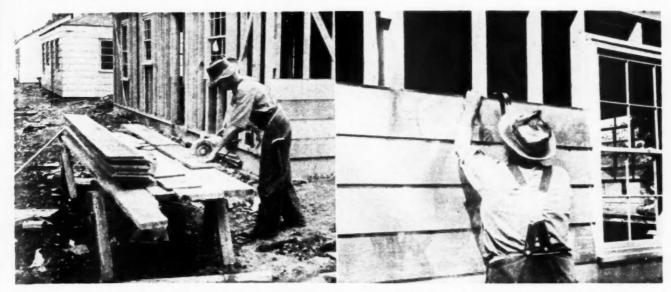
int

an se in it. die nsh

ιcĺ

1

11



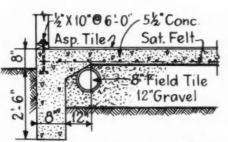
POWERED hand saw with special blade is used to cut aluminum

SIDING with insulation board backing is applied to stude

Exteriors

air furnaces. All plumbing is of top quality. Cabinets in the kitchens are Kitchen Maid.

Although one basic floor plan is being used, no two houses have the same exterior. They are located on 50x125-foot lots. Although the houses are being built to sell for \$6,750, the Bartel Co. will retain the 52 houses in this project as rental property. Tenants will pay \$50 per month and take care of all interior maintenance, with the builder doing all exterior maintenance. The rental price includes a completely equipped utility room with laundry sink, 30-gallon Crane automatic hot water heater and a Bendix laundry. The houses are being completed at the rate of two or three a week, with about 40 to 50 days required work on each house from start to completion.



SECTION AT EDGE OF SLAB



SECTION showing slab construction. Note 8 · in c h field tile laid around edge to serve as cold air return for warm air furnace



ALL THE houses shown here are finished with aluminum siding



ALTHOUGH one floor plan is used, no two elevations are alike



TWO-BEDROOM houses, which could be sold for \$6.750, are rented for \$50 a month. Maintenance of interiors is done by tenant, exteriors by home builder

Engineered House

The current rush for housing should not cause builders to lower their standards of good plumbing. Dollar for dollar, no single feature of a home serves a more useful purpose to the owner

DRAINAGE

DOLLAR for dollar, no single feature of a home serves a more useful purpose or receives greater use than a plumbing system. The water lines bring into the house one of the most important, if not THE most important item in our daily diet—WATER. The sewers and drainage systems carry away the waste products. Good plumbing is essential to healthful community living. Let us be sure that our current rush for housing does not lower our standards.

Drainage, in the broad sense, means the removal of all wastes that may enter the plumbing system through a system of piping within and outside a building in a manner to prevent the entrance of foul odors and gases getting back into the building.

A general idea of the relation of a sewer to a building, may be gained by referring to Figure 1 (Drawing of sectional view of building). Here is shown the main sewer in the street, the house sewer, the house drain, soil and waste stack, catch basin, downspouts and plumbing fixtures.

This illustration shows what is known as a combined sewer system.

Where the storm water and sewage from building enter the same pipeline and are carried out to the main sewer in the street through one pipeline.

A separate system is where the sanitary sewer and the storm water sewer are carried to the street sewer separately.

The depth of house sewers and drains is dependent upon the depth of the main sewer in the street.

The considerations required in the laying of sewers below the basement floors are the following factors:

1. The depth of the upper end necessary to afford a good outlet for the sewage.

2. The grade necessary to give a good velocity, the depth necessary to prevent injurious heaving of the sewer foundations by frost.

No danger need be anticipated of the sewer itself freezing for a stream of warm, flowing sewage will not freeze. Generally there will be no danger of trouble from heaving if the sewer foundations are 4 feet underground.

One of the most essential needs of a community is a safe and adequate

disposal system including the necessary piping to deliver the sewage to the disposal plant or other place of sewage disposal.

if the s

has the

stable.

pipe c

joints.

attract

shrubl

moist

page.

Ne:

drain

the h

the d

stack

have

the v

drait

hous

outs

a bu

exti

lead

iron

gro

1

ing

dra "su dra he

H

The ideal sewage system for a community is to have a storm sewer and also a sanitary sewer. The storm sewer can be used to take care of the surface water, down-spouts and the like, and without treatment, can be disposed of in some convenient river or lake without becoming a nuisance. Where you have two separate systems, it is possible to have much smaller disposal plants and the flow is much more constant as well as avoiding the peak loads during storms. These sewers in the streets or alleys are called main sewers.

The house sewer is that part of the horizontal piping of a plumbing or drainage system extending from the house drain to the main sewer. The material used to construct the house sewer is usually extra heavy cast-iron soil pipe, vitrified clay pipe, concrete sewer pipe, reinforced concrete sewer pipe, or brick.

Cast iron sewers have a definite advantage over tile sewers, especially

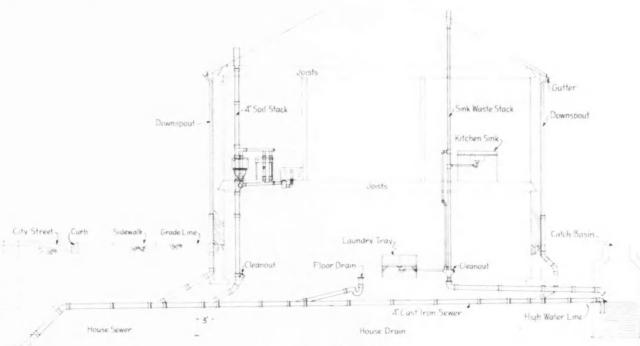


FIGURE # I

Construction Part III—Plumbing

if the soil in which the sewer is laid has the slightest tendency to be unstable. Settling of tile or concrete pipe causes cracking of the cement joints, thus permitting the sewer to attract roots from trees and other shrubbery to enter the sewer seeking moisture and cause a serious stop-

e to

of

m

and

rm

the

the be

er

ce

VS-

ch

W

ng

ts

1e

ie

n

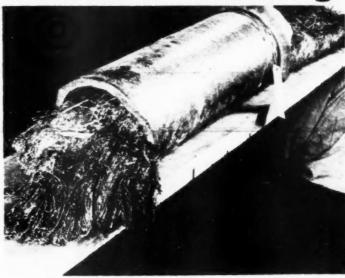
Next to be considered is the house drain. It is defined as that part of the horizontal piping which receives the discharge from soil stacks, waste stacks and down-spouts (where you have no separate storm sewer) inside the walls of the building. The house drain conveys the discharge to the house sewer and terminates three feet outside of the building walls.

House drains, when exposed within a building, should be constructed of extra heavy cast iron soil pipe with leaded joints, galvanized wrought iron, steel or brass pipe. Underground, it can be constructed of the same material as the house sewer.

It is necessary to keep the house drain above the ground in the buildings where the house sewer is above the basement floor. These house drains are then called "hanging" or "suspended" sewers. Where there are suspended sewers and fixtures, floor drains or other appurtenances are to be installed below the level of the suspended sewer, it is necessary to construct or install a sump or ejector

Tee connections, 90-degree Y connections or 90-degree turns should never be used unless there is an accessible clean-out at that point. A 90-degree turn, using a 45-degree Y and a 1/8th bend, is much superior. In the event of a stoppage, the plumber's sewer rod can go around the 45-degree Y and 1/8th bend connection easily, while if there is a tee connection, he is very likely to pound the back out of it with his sewer rod and, of course, there is less likelihood of stoppage where there is a wider

The size of the sewer is based upon the number of fixture units discharging into it and the slope of the sewer. For instance, a sewer with a 1/2-inch per foot pitch can handle more fixture units than a sewer with a 1/4-inch



EXAMPLE shows how cracked cement joints in sewer attract roots

per foot pitch can possibly handle.

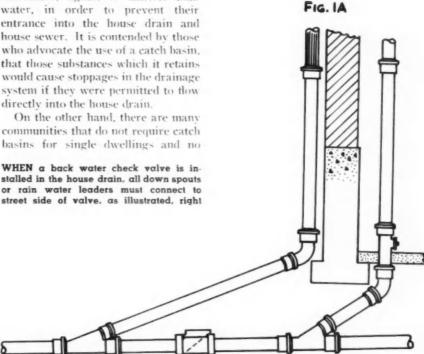
Where there is danger of the sewer backing up into the basement, it is advisable to install a back-water valve near the point of entrance of the house drain into the building.

Where this back-water valve is used, it is essential that the downspouts enter the sewer on the street side of the valve. The objection to some types of valves is that they cause a stoppage by the accumulation of solids at that point, therefore, they must be provided with a clean-out.

A catch basin is defined as a receptacle which separates and retains greases, oil, dirt, gravel and all other substances, lighter or heavier than water, in order to prevent their entrance into the house drain and house sewer. It is contended by those who advocate the use of a catch basin. that those substances which it retains would cause stoppages in the drainage system if they were permitted to flow directly into the house drain.

On the other hand, there are many communities that do not require catch appreciable amount of obstruction has been found in sewers when the sewers were properly installed.

Grease interceptors are designed to perform the same function as the catch basin. They do not cost as much to install, they are not as large, so consequently they must be cleaned more frequently. They are generally located in the building immediately under the kitchen sink. An unpleasant odor permeates the room during the cleaning process and occasionally the covers are not replaced



properly causing a definite nuisance due to the leakage of sewer air and obnoxious odors.

The simplest construction of interceptors has proved best from a standpoint of efficient operation, economical manufacture, and good appearance. The unit should be so designed as to allow for maximum distance of travel of the water from the time it enters the interceptor to the time it reaches the outlet, and for minimum turbulence of the water while it travels through the interceptor. Some types of grease traps or interceptors employ

house sewer without first going building.

Some cities advocate running the down-spouts from gravel roofs into the catch basin. The objection to that method is that during a down-pour the water breaks up the crust that forms in the catch basin sending it into the house drain, thereby defeat-

through the gravel basin, much of the gravel will be retained in the horizontal piping and cause a great deal of trouble. Most gravel basins are constructed of cast iron or steel, and are generally located inside of the

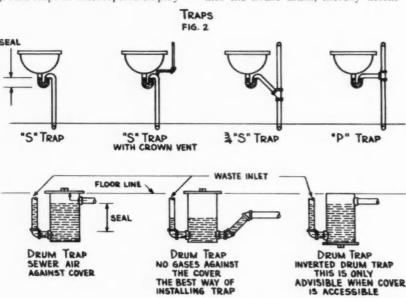
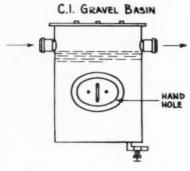


FIGURE 2 shows gravel basin and traps



a cooling device such as a water chamber or jacket through which the building water supply ordinarily runs. Inasmuch as most cooling chambers are subject to flaw holes or breaks in the castings, they become potential water pollution hazards. Besides, it has been proved that the water jacket does not increase the efficiency of interceptors. Therefore, there is no reason why it should be included in the construction of any such units.

Rain Water Leaders

Where there is a gravel roof, it is necessary to run the down-spouts into a gravel basin. This basin is a receptacle designed to retain sediment. If down-spouts from gravel roofs are run directly to the house drain or ing the very purpose of the catch

In most cities it is necessary to have the down-spouts drained to the sewer where there is a public sewer available and where the roof area is over a given number of square feet, usually about 500 square feet. Where the head of a sewer connected downspout is located within ten or twelve feet of a window or air shaft, it should contain a trap so as to prevent the sewer gas from entering the window or air shaft. The trap should be located in a place that can be readily cleaned, as leaves and other debris frequently cause a stoppage at that point.

When down-spouts are placed within buildings they should be constructed of cast iron, galvanized wrought iron or galvanized steel pipe. The size of down-spouts is determined by the area in horizontal projection of the roof to be drained. That area is usually based upon the amount and severity of rain-fall in that section of the country. Ordinarily a 4-inch down-spout will handle up to 1,300 square feet of roof area. While a 4-inch down-spout with a 5-inch increaser will handle 2,400 square feet.

This is computed with a rainfall rate of 4 inches per hour.

Soil and Waste Lines

In order to discuss soil and waste lines, the difference between them must first be clarified.

A soil line is one which receives the discharge from one or more water closets or bed pan sterilizers with or without the discharges from other fixtures. While a waste pipe receives the discharge from any fixture or group of fixtures except water closets or bed pan sterilizers.

Generally speaking, any building containing plumbing fixtures, must have at least one stack. A stack is defined as a pipe extending from the house drain, or a branch from the house drain, up through and above the roof. Where there are water closets in the building, they must discharge into a soil stack.

Most large cities require that the soil stack be no less than 4 inches in internal diameter, although the Federal Government on many of its housing jobs has used 3-inch pipe for soil stacks. The government engineers claim that there is a greater scouring action when a smaller pipe than 4 inches is used.

The diameter of the stacks, soil lines, waste lines and vents is based on three conditions: First, the kind of fixtures discharging into them or being vented by them. This is essential because fixtures such as closets need larger piping than wash basins would. Consequently, that piping would be known as soil. Secondly, the total number of fixture units discharging into that stack or waste line or being vented by that pipe should be known. Thirdly, the length of the stack or other piping must be taken into consideration, particularly in taller buildings, due to a friction loss both in liquid and air.

Soil, waste and vent pipes within a building should be constructed of such materials as cast iron, galvanized steel, galvanized wrought iron, lead, brass or copper.

In climates where freezing temperatures occur, it is necessary to increase the diameter of the stack by at least 1 inch at the roof. (Note Figure 1) The reason for increasing the cross section area of the stack at the roof is to prevent it from being sealed by what is known as hoar frost during the freezing weather. The stack being sealed would have the same effect on the drainage system as when the stack is not carried through and above the roof. Namely, the loss of seal in the traps throughout the building by means of back pressure and syphonage.

pheric venting while cause atmos the tra or bac

Imeric

The r part of t

scal. (

principa

ing is t

order t

keep th

side of

let side

Trap At vice s

passa

or fix Th traps No. sibly was so it large

TI

crow crow the s syst it ha ing clog soa the to 1 for COL

> tur 113 con as an

The most important and particular part of the drainage system is the trap seal. (Refer to Figure No. 2) The principal function of the entire venting is to maintain the trap seal. In order to do that, it is necessary to keep the same pressure on the outlet side of the trap as there is on the inlet side, which is, of course, atmospheric pressure. Where there is faulty venting, other fixtures in the system while being discharged, can and do cause pressures greater or less than atmospheric, causing the breaking of the trap seal by aspiration, syphonage or back pressure.

Traps

19:18.

l rate

vaste

them

eives

vater

h or

ther

rives

e or

sets

ding

nust k is

the

the

ove

ater

dis-

the

in

ed-

us-

soil

ers

ing

4

oil

ed

nd

or

n-

15

ns

10

d

11

11

5

A trap is defined as a fitting or device so constructed as to prevent the passage of gas or air through a pipe or fixture by means of a water seal.

There are many different types of traps on the market. (See Figure No. 2) The full "S" trap was possibly the first trap in general use. It was found to create a perfect siphon so it has been discontinued in most large cities.

Then came the "S" trap with the crown vent which admitted air to the crown of the trap, thereby breaking the siphon. On a new installation this system works satisfactorily but after it has been in use for a time, the opening on the crown of the trap becomes clogged up owing to the fact that the soaps and greases float on the top of the waste liquids. Another objection to this installation is the rust pocket formed by the vent pipe where it comes down and out from the wall.

The "3/4 S" trap has the same features as the full "S" trap except that in appearance it resembles an incorrect installation of the "P" trap as shown in Figure No. 3.

The "P" trap with proper venting and correctly installed is as good a trap as is made today. As long as the vent remains open there is no danger of trap siphonage or back pressure effecting the seal in that trap.

Another good trap is the drum trap. This trap is very difficult to siphon when properly installed. However, many times this trap is installed in such a way that the cover is on the sewer side of the seal and, if after removing the cover, it is replaced incorrectly, or if for any other reason the cover is not air tight, the drum trap could leak sewer gas for some time without being detected. This, of course, could not occur where the drum trap is inverted and the cover is on the bottom. (All traps, incidently, should have their clean-outs below the water seal.)

The maximum distance that the trap should be located from its vent

connection is very important and most plumbing codes limit this distance between the trap seal and its vent connection to 5 feet.

The fittings used for drainage work should be, for soil pipe work, sweep or sanitary fittings and where screw pipe is used, the fittings should be the recessed and threaded type, with the tappings on the branch openings pitched 1/4-inch to the foot. If reference is made to Figure 3, it will be noted that where the waste opening in the vertical pipe to which the trap is connected, is below the "dip" of the trap, it will siphon itself, even though the waste is properly vented. Therefore, there is a definite relationship between the pitch on the outlet arm on the trap and the length of that same

Vents and Venting

This phase of plumbing is the least understood and requires the greatest amount of study. The lay person or amateur not understanding the fundamentals of venting usually neglects that end of the system and, although the fixtures, traps and other exposed plumbing may appear satisfactory, and, although the job may perform reasonably well for a short period of time, many things occur that prevent the system from operating satisfactorily later on. The amateur's main concern is to see that the supply pipes do not leak and that the waste pipes run off. These things are important, but in the overall picture they are not nearly as important as proper venting. Leaky supply pipes, or a stopped up waste pipe, can be readily observed and corrected. Whereas, sewer gas coming into the house through traps with broken seals or leaky vent pipes inside or outside of the partitions are seldom observed and can cause much illness to the occupants.

If the occupant of a building thought there was a small leak or a chance of a small leak in the domestic gas lines in his building, and he was subjecting himself and his family to them, and even though the doses were too small to kill outright and without the hazard of fire, he would do everything in his power to have those leaks corrected.

It can be proved and it has been proved that sewer gas like domestic gas does lower the resistance of humans and animals alike so that they do succumb to common diseases if subjected to the gas even in small doses over a period of time. The only difference is that the law compels us to put something into the domestic gas to give it an odor that makes it recognizable.

The best venting job is done with

the minimum amount of horizontal vent pipes. The objection to horizontal vents is that rust may accumulate in them and build up, forming a partial stoppage, whereas, vertical vents or those on a 45 degree angle would permit the rust to fall down the vent pipe, and unless there was a rust pocket below that point it would reach a waste line and be washed away by the waste from the everyday use of the fixtures.

There are several different systems of venting, such as "continuous", "loop" or "circuit". Continuous venting is defined as the continuation of a vertical soil or waste pipe above the point of entrance of the pipe from a fixture trap. This type of venting offers the most resistance to vent stoppage. Any rust forming in the vent line falls down into the waste pipe and in turn is washed down into the sewer. (See Figure No. 3) Loop or circuit venting is employed for the venting of batteries of closets, where instead of providing an individual vent for each fixture, the end of the horizontal waste or soil line is carried up vertically and connected to the main vent or independently carried through the roof of the building. Circuit or loop venting should not be used for wall outlet fixtures.

It is never advantageous to furnish or recommend cheap labor or material, since the health of the occupants depend upon good plumbing and

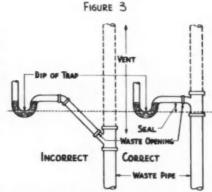


FIGURE 3 illustrates proper vent openings

drainage which can be accomplished only by using the best the market can supply.

In conclusion, all those entering upon or actually engaged in the plumbing field should realize the magnitude and importance of the work, their responsibilities to the community, and the necessity for continual study of these most important subjects.

Harry B. Griesbach, author of this article, is a member of the American Society of Sanitary Engineering, and the Chicago Washburne Trade school faculty

The Lengthening Battle Lines

by R. E. Saberson

America

\s to of the h to say.

much c machine is certa houses.

It is sa

will car

market.

the other

ket is s

fever he

end res

ishingly

interes

pening

ing ma

how it

ods u

Counc

nois "

A t

Unde

TWO YEARS have passed since we really began to take a bite in the great housing shortage. We are rapidly approaching the time when two million residential units will have been constructed during the hectic period when it was impossible to keep the supply of certain critical materials in the balance with the prodigious demand which has applied, not only to homes, but to practically everything else in common use by American families.

We have not yet solved the housing shortage or caught up with the pent up demand for automobiles and a great many other things too numerous to mention.

This inability to suddenly supply everybody with whatever they need, as a result of the several years stoppage of the civilian production lines, is frequently pointed to as a glaring defect in our way of doing things. Actually it should be regarded as a great blessing. One cannot help but wonder what would be happening today if every family had everything needed in the way of new homes, automobiles, television sets, automatic washers and the innumerable other things that wore out during the war or have come into the picture since it ended. If it had been that easy to catch up with the greatest pent up demand in history the bread lines would now be stretching across the country and back again.

Two million homes ain't hav although they may now seem not to have been more than a drop or two in the bucket in many localities. On the other hand, in certain areas the picture already has begun to take on an old familiar hue. Nevertheless, it is exceedingly difficult for many to believe that the situation is becoming anything but WOISC.

Be that as it may, we are frank to admit we still have a big job ahead of us if we are to construct enough residential units to end the housing shortage within the next few months, or years, or whatever period is required to do the job.

Lest there be those who fear that it will not be done we hasten to affirm not only that it will be accomplished but that we are headed hell bent for the time when houses, like automobiles and everything else, will be running out of our ears. Right now we are gearing up for the greatest orgy of overproduction the world has ever seen.

How come?

The answer is simple. The market is so huge and the rewards. temporarily at least, so great that the lure is irresistible for the great and small and the vast number of in-betweens. Never was there anything like such a market in the memory of man. Whipped up by the incessant beating of the demagogic drums the "housing situation" has likewise been featured as a great national calamity in the minds of many . . . including our ever-increasing army of earnest individuals with a political ax to grind.

And so at the close of one of the greatest home construction years in our history we pause for station announcement as we look over the great American scene via magazines, newspapers and trade publications and become eyewitness, as it were, to the formation of the lengthening battle lines.

It is all pretty stupendous and breath taking since far more than the construction of a certain number of residential units is involved. It concerns construction methods which are completely revolutionary in scope. It includes a socialistic approach to the whole subject. It even threatens to exclude entire industries from the picture and set up new ones to take over. It contemplates new methods of financing so free and easy on the draw that none shall be without a "home of his own" in which to lay his weary head.

No one will disagree with the worthiness of the ultimate objective . . . so far as it concerns the need for adequate shelter. That is not the point. The only question is can it be attained as quickly as it is being promised without our becoming involved in economic entanglements that may prove eventually to be our undoing.

Big things are happening in the home construction field. There can be no doubt about that. To obtain a bird's-eye view of what is taking place, it merely is necessary to pick up almost any publication. In practically every issue there will be found plenty of news, authentic

or otherwise, concerning the battle lines that are forming to wit:

Traditional, "conventional construction versus modern on-site plant prefabrication versus factory

Each group has its enthusiastic proponents. Each is heralding the achievements and making glowing promises for the future.

Those three classifications pertain principally to single houses. They do not involve the construction of apartment buildings which do not lend themselves to revolutionary changes in construction to the same degree as individual units.

Over and against this entire field are the plans of the public housers which include both single family and multi-family units in the scope of their hoped-for activities.

buildin lahor The Natio tion b As to who will come out on top of the heap we are not prepared to say. We only know that this much competition between men, machines, methods and materials is certainly going to produce houses.

son

attle

con-

site

tory

stic

the

ing

er-

ses.

uc-

ich

lu-

to

its.

eld

ers

ily

pe

It is safe to say that no one group will capture the entire housing market. That is not the point. On the other hand, the size of the market is sufficient to keep the race at fever heat between groups with the end result adding up to an astonishingly large number of homes.

Under such circumstances it is interesting to read what is happening and the claims that are being made for the various methods.

A trade publication describes how improved construction methods used by the Small Homes Council at the University of Illinois "cut one-tenth off the cost of building a house" . . . a saving in labor and materials.

The Producers Council and the National Retail Lumber Association have gone far in the direction of interesting manufacturers of building materials in adopting modular measurements and in designing houses "to take advantage of savings possible under engineered construction methods to reduce man hours of labor and wastage of materials."

In addition, traditional construction has likewise profited greatly by the extensive use of portable equipment, electric saws, drills, sanders, pipe cutters, threaders, concrete mixers, paint sprayers, power shovels, dump trucks, lift trucks and a long list of modern labor saving devices. Traditional, conventional construction has not been asleep and doesn't propose to be left in the lurch.

Then, of course, the huge projects of the mass builders in the metropolitan areas are too well known to need more than passing mention . . . projects which measure up to the highest standards achieved by any industry . . . where modern homes are constructed almost while you wait . . . where

every economy in the use of manpower and materials has been employed to produce the maximum for the lowest possible price.

Next come the proponents of factory prefabrication with full page advertisements in the Saturday Evening Post, mile-long factories, presses that rival the automobile industry in size, specially designed delivery equipment, new materials, new methods, new everything!

Finally come the public housers who are still undaunted. Their zeal has not diminished. It matters little that past achievements have not measured up to their promises. What they will be able to accomplish in the future remains to be seen but based upon what is now taking place in the great housing industry you may be sure they will have plenty of competition. That, of course, is exactly what it takes to produce the greatest values for the least cost on houses or anything else and that is where we are headed today as the battle lines keep getting longer and longer.



250"

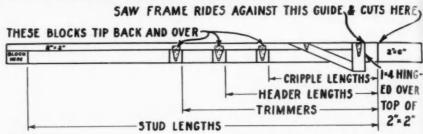
ED OVER

TOP OF

2". 2"

American

NO.



Pointers

How-

How to Find Number Of Joists in Given Span

QUICK and practical way to find A the number of joists in a given span is suggested by L. C. MILLER, building contractor of Hot Springs, Ark.

"Take the length of your building, deduct one fourth, and add one joist,' Miller writes. This method will work on floor joists, ceiling joists and rafters when spaced 16 inches on center. It will also work on studding, except that corners and double studs must be added. Example: If the building is 32 feet long, deduct one fourth, or eight, leaving 24. Now add one, and the total is 25 joists.

How to Prevent Doors from Rattling

CIMPLE, but effective, is this sug-J gestion from JOHN MENK-VELD, of Grand Rapids, Mich.

Instead of cutting out a clean and square hole for the latch in the strike plate, cut the hole at a slant. The slant should correspond to the slant of the latch, so that the latch will rest flush against the wood when the door is closed.

THE JIG, an idea submitted by CLIFFORD R. MALLORY, Owego, N. Y., may be used for framing studding, cripples, or headers. Mallory uses a portable saw with the jig. Similar jigs can be made for cutting overlays, rafters or any framing members where lengths and cuts are the same. Since the blocks are on hinges, as indicated on the drawing, they tip back and over so that they are completely out of the way until

How Old Auto Spring Can Be Used as Valuable Tool

THE LAYING of the last few flooring boards next to the wall is usually difficult. This method, submitted by A. MOLLENHOUR, Elkhart, Ind., simplifies the job:

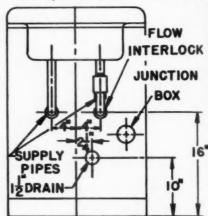
"I struck on the idea of using a leaf from an old auto spring," said, "instead of a wrecking bar." When prying boards into place this way, the wide flat spring will not break into the plaster. By applying the necessary tension, and a few light taps with the hammer on the flooring, the pieces will slip easily into place.

The auto spring may also be used to hold a door rigid while mortising locks. Place spring under door with bow up; flatten spring downward with foot, then pull door to center of spring and release spring.

How to Provide for Future Installation of Disposal

WITH THE current demand for W waste disposal units—in both high and low cost homes-provision for installation of these units should be made at the time of construction.

Such provision costs little more,



and the added sales appeal that results is well worth the small extra cost. If provision for waste disposal units are made during construction of the building, economies in both plumbing and wiring costs can be made than, if a unit is installed later.

Building codes in the area should be checked, to make sure there is no ban on waste disposal in the kitchen drain.

Small Details Make the Difference

By R. J. Alexander

THE DIFFERENCE between good construction and poor construction is usually a matter of small details; extra care in the selection of the proper materials, adequate size and spacing of framing members, and proper nailing and bracing.

This month's detail sheet illustrates several instances in residential construction where good building can be achieved without great additional cost.

Joists under all main bearing partitions should be doubled. The two joists under a partition carrying the soil stack should be set far enough apart to allow the stack to pass between them without any cutting of the joists. The detail sheet shows where joists and headers should be doubled around stair, fireplace and chimney openings.

An important detail, that adds nothing to the cost of

construction, is care in the cutting of framing members. If the ridge and plate cuts of rafters and the end cuts of studs and plates are square and true, considerable strength will be added to the finished structure.

Adequate nailing with nails of the proper size is also important. Suggested reading: "Technique of House Nailing," published by Housing and Home Finance Agency, Washington, D.C.

Footings are the main support of any building and should be of ample size and of good materials. Tiling and damp-proofing merit particular attention, if a builder wishes to build a good house.

Proper flashing over door and window frames, around chimneys and fireplaces and in valleys is an item that is sure to indicate the quality of a builder's work.

1948.

ERE,

ING-

VER OF

2"

ure

for

nigh

for

be

ore.

CK

N

16"

e-

ra

al

n

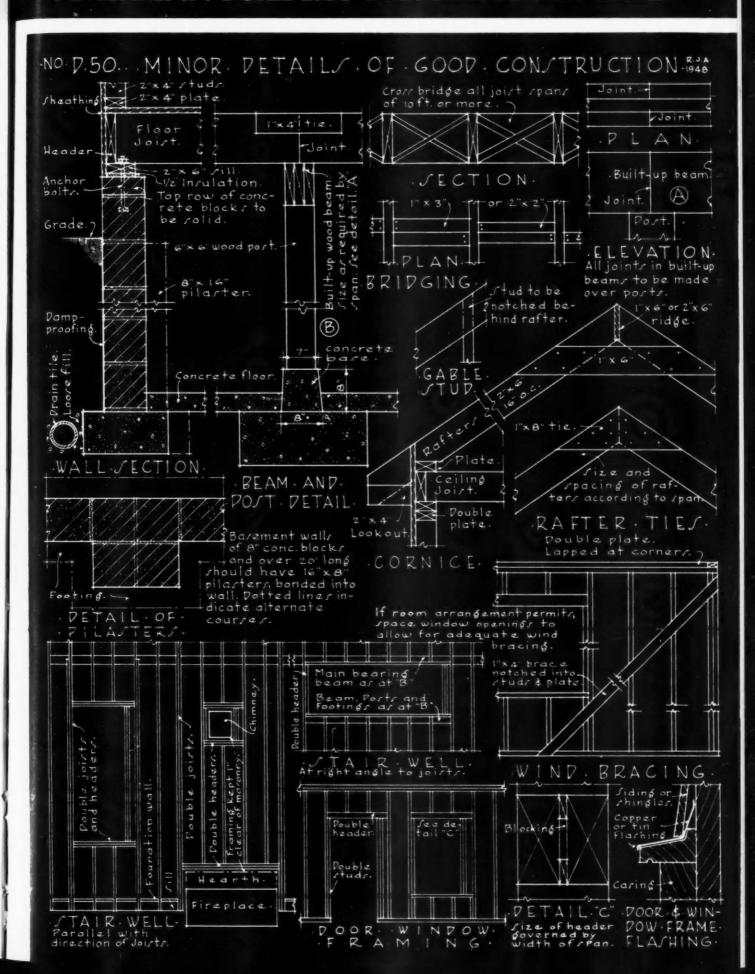
th

96

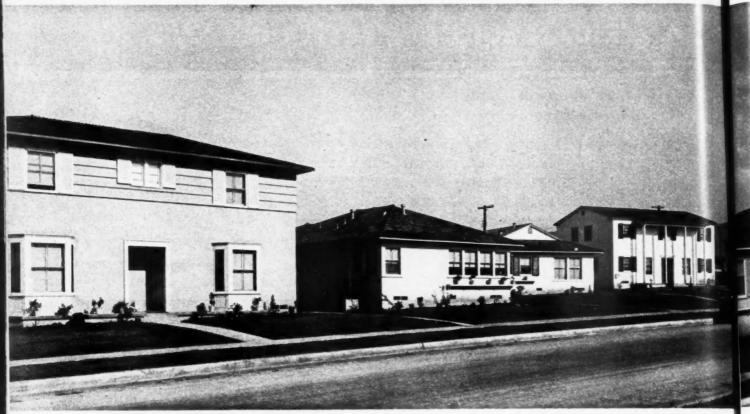
d

o

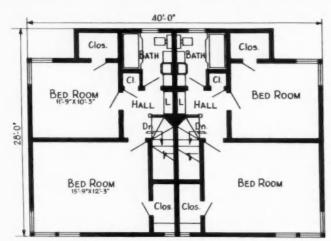
AMERICAN BUILDER'S BETTER DETAIL PLATE

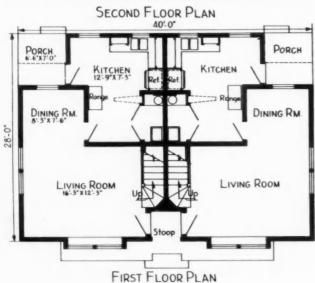






ONE AND TWO-STORY buildings are staggered on lots in such a way that wide spaces result between the buildings





Varied Designs

Two-story alternated with onestory duplexes in this subdivision resulted in a ready consumer acceptance. Builder made a complete sell-out of 91 houses before he had finished first ten in the group

GOOD PLANNING, original design plus sound values, resulted in a sell-out of 91 houses before the first ten were finished in a subdivision in the east side area of Los Angeles, Calif. The buildings were constructed by the Angelus Building Co.

George Dorner Riddle, A.I.A., president of the company, worked out an idea of introducing two-story units into the subdivision, in conjunction with single story, in order to avoid monotonous rows of one basic building design. He also devised an ingenious plot-plan wherein the one and two-story buildings are staggered in such a way that wide spaces are opened between buildings either at the front or at the rear, thus greatly improving the appearance of the subdivision and providing privacy to occupants of the buildings.

There are 36 two-story buildings in the group with living rooms, dining alcoves and kitchens downstairs and two bedrooms and baths upstairs. The remaining 55 buildings in the subdivision are one story, two-bed-

_

provious lots min an a

for ings feet sole mer pay int

co ce in to in

are

k a o e a

a li F



TWO-STORY buildings in this subdivision sold for \$17,250. One-story dwellings, 1,800 square feet area, sold for \$16,250

Increase Sales Appeal

room units. Two-car garages are provided for each building. The lots vary in shape, but each has a minimum frontage of 52 feet and an area of 6,000 square feet.

The two-story buildings, with a total area of 2,100 square feet, sold for \$17,250. The one-story buildings, with an area of 1,800 square feet, sold for \$16,250. They were sold on contract, with down payment of \$3,500 to \$5,000. The monthly payments run \$90 to \$95, including interest and taxes. The apartments are renting for \$90 to \$100.

Construction of the buildings is conventional frame and stucco with cedar shingle roofs. Redwood siding, brick and flagstone are used to obtain a variety of appearance in the two-story buildings. Oak flooring is used in all rooms except kitchens and baths. Linoleum is applied over kitchen floors; tile over bathroom floors. Baths are equipped with showers over tubs, and are equipped with Pullman lavatories with tile tops. Kitchens are large enough for breakfast nooks. Kitchen sinks have tile drain and splash.

In all of these units, laundry fa-

SPACIOUS living rooms, like one above, are provided in two-story houses in group. Stairs are made of plastic. Floors of all rooms except kitchen and bath are oak





American

Large st inches of center or mass

BATHROOMS in all the houses are equipped with Pullman lavatories with tile tops. Showers are installed over tubs. Without overcrowded appearance, compactness is achieved, and these bathrooms become another strong selling asset of houses

cilities have been incorporated in an area enclosed in a closet in the corner of the kitchen. In this area, laundry tray, space for washing machine and shelving for storage of laundry materials is provided. This space serves the full function normally provided in a service porch or utility room. In this case the floor area used is only about 15 square feet. The closet or cabinet is shut off from the kitchen by a large pair of doors which open flat against the wall when the laundry facilities are being used. This provides a spacious area on wash day, while occupying very little room during the week. Moreover, this arrangement utilizes interior space and only requires ventilation to the attic. In the two-story dwellings, the water heater is also housed in the same area. This feature has met with good acceptance on the part of buyers.

It is not surprising that Riddle was able to design and build buildings which met with such instant approval on the part of the public—because no one could have been in a better position than he to know what had been offered and what had pleased Los Angeles homeseekers in the past. For almost 11 years, Riddle was Chief Architect for FHA in Los Angeles, and he played an important part in developing standards for that area.





ONE of 55 one-story buildings in group. With area of 1,800 square feet, these buildings readily sold for \$16,250 rolled lion I Scree turer wans

> roll "Ro ers, war in whi



NEW PRODUCTS

Offered by Manufacturers

COMMERICAL WINDOW AB12823
Large steel window measures 641/2x63 5/16
inches overall, and features twin vents at
center panel. May be installed in frame
or masonry. Constructed of heavy, hot-

s are tories

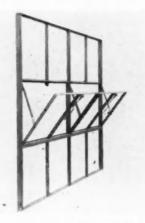
alled

d ap.

wed.

qn.

uses



rolled sections, arc-welded. Vertical mullion bars available for group combinations. Screens available for twin-vents. Manufacturer: Kewanee Manufacturing Co., Kewanee, III.

ROTATING CLOSET AB12832

"Rotacloset" consists of a chest of drawers, drop-front dressing shelf and complete wardrobe hanging facilities. Unit rotates in self-contained cylindrical container which fits into closet space. Made of



hardwood. Available in mahogany, walnut, maple and blonde finishes. Installation time required is approximately two hours for journeyman and helper. Manufacturer: Zibell Industries, 1734 Candler Building, Atlanta 3, Ga.

AUTOMATIC DOOR OPENER AB12816

Avco automatic door operator is electronic device which opens or closes garage doors by remote control from either car or house. It is adaptable to any standard garage door. When a button is pushed,

garage door starts to open, light in garage automatically turns on, and if desired, flood lights will light up yard and a light will turn on inside the home. Minmium of 6 inches clearance is required between high point of travel of door and garage ceiling for installation; and minimum of 10 feet, 4 inches, must be allowed between outer face of door and extreme opposite end of operator. Manufacturer: Robot Appliances, Inc., 13165 Prospect Ave., Dearborn, Mich.

WALL HEATER AB12810

"Pion-Aire," radiating-type vented heater, may be installed in wall of standard 2x4-inch stud construction. Fits flat against wall and requires no cutting of floors or floor covering. Operates on natural or manufactured gas, and is equipped with automatic safety pilot. Provided in No. 10



model, 10,000 B.T.U. input, for bath or small rooms, and No. 20 model, 20,000 B.T.U. input, for bedrooms and living rooms. Manufacturer: Pioneer Water Heater Corp., Los Angeles, Calif.

ASBESTOS SHINGLE FINISH AB12815

"Shingle-Seal," developed as decorative, weatherproof finish for asbestos siding and shingles, is available in three colors: bright white, oyster white, and stone gray. May be applied by brush or spray. One gallon covers 450 square feet. No priming or sealing is needed. For old and new siding or shingles, exterior and interior. Manufacturer: Dewatex Manufacturing Corp., 42nd St. and Dyer Ave., New York 18, N. Y.

VERSATILE HAND TOOL AB12833
Primary use of "Tempotool" is in attaching

steel to steel or steel to concrete, brick or mortar. Efficient in installation of electrical conduits and junction boxes, and in affixing sprinkler systems to steel or concrete surfaces. Source of power provided by exploding of cartridge enclosed in chamber or breach of unit. Explosion



drives pin or stud through short barrel into steel. Male and female threaded studs available to accommodate nuts or threaded rods. Available in model "22" for light fastening operations; in "38" for heavier jobs. Manufacturer: Tempo Products Co., 1900 Euclid Ave., Cleveland 15, Ohio.

ELECTRIC WATER HEATER AB12801

Compact heater: 24 inches wide, 251/g inches deep, and 36 inches high. Capacity: 40 gallons. Cylindrical water tank enclosed in insulated outer steel shell. Finish: Baked white enamel. Top finished in acid-resisting, white porcelain. Panel on front facilitates servicing of thermostats and Calrod heating bands. Heating action employs pressurized, stainless-steel bands which encircle galvanized steel tank. Available with single or double heating unit. Manufacturer: Hotpoint, Inc., 5600 W. Taylor St., Chicago 44, Ill.

STEEL LADDER SCAFFOLD AB12818



"Trouble Saver" sectional steel ladder scaffolds are 24 inches wide. Made in four heights: 3 feet; 5 feet; 6 feet, 6 inches; and 10 feet. May be used for painting, plastering and general maintenance, or may be incorporated in scaf-

folding set-up for hard-to-get-at places. Manufacturer: The Patent Scaffolding Co., Inc., 38-21 12th St., Long Island City I, N. Y.

WINTER AIR CONDITIONERS AB12813

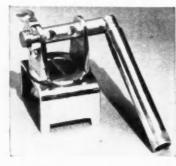
Janitrol, FEC series, is adaptable to radiant heating applications. Six sizes range from 60,000 B.T.U. input rating to 180,000



B.T.U. Four smaller sizes are completely factory assembled. Cabinet fronts contain two horizontal ventilating scoops. Convex surfaces inside recesses direct ventilating air over all controls. Steel chassis is removable, and both burner ribbons and burner runner-ribbons can be removed from chassis. Each ribbon releases as complete unit. Each burner has its own non-linting primary air shutter adjustment. Manufacturer: Surface Combustion Corp., Columbus, Ohio.

FORM SECURING DEVICE AB12829

"Piper Form Tie" will tighten and tie any size wire up to and including No. 7. Tool may be removed from the form within 30 seconds. No twisting of wires between



forms. Ties may be made on 2x4's, 4x4's, and studs. Weight, approximately three pounds. Made of cast bronze, it is guaranteed to withstand all wire form-tying requirements. Manufacturer: Piper Form Tie, 2219 N. Vancouver Ave., Portland 12. Ore.

CORNER LEVEL AB12820

"Ken Corner Level" will square two faces and top of brick in one operation. Can be provided with adjustment of one of the glass vials for plumbing a batter or



incline and tapering surface. Made of aluminum in four sizes to fit into the tool kit. Manufacturer: Singer-Kennedy Corp., 21 E. Van Buren St., Chicago 5, III.

BATHROOM ACCESSORIES AB12811

This line of bathroom accessories features tumbler holders, towel bars, grab rails, and related-recessed fixtures. Characterized by a distinctive "morning glory" motif, all are triple-plated in chrome. All projected fixtures, furnished with concealed back plate and screws. Manufacturer: Bluejay Chrome Products, Inc., Pittsburgh 17, Pa.

REFRIGERATOR AB12805

Model M-848, "Hold-Mor" contains 8.37 cubic feet storage space. Cabinet width, 293/4 inches; height, 597/8 inches; depth,



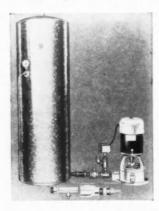
overall, 25 7/16 inches. Four shelves occupy space of 14.53 square feet. Ice capacity, 60 cubes. Sealed freezer compartment holds 24 pounds of frozen food. "Coldpack" storage space holds up to 12 pounds of uncooked meat. Manufacturer: Norge Div'n, Borg-Warner Corp., Detroit 26, Mich.

VERSATILE PAINT AB12803

RMS Perma-Dri may be used for acoustical treatment, anti-sweat protection, and insulation. Contains heat-processed minerals and waterproof adhesive binder. Can be applied to thickness of 1/4-inch, 3/8-inch, or to 1/2-inch or more by use of proper paint spray equipment. Perlite granules, insulating component part of Perma-Dri, are applied over Perma-Dri. For acoustical treatment, a light final coat of Perma-Dri is applied. Manufacturer: Stephenson Air Brush Paint Co., 190 MacArthur Blvd., Oakland 10, Calif.

HOT WATER SYSTEM AB12809

Designed to fill farm and rural requirements, automatic system contains single moving part; voluted streamlined castings, bronze case ring, stuffing box bearings, and stainless steel shaft. Automatic pressure switch maintains set pressure; air volume control maintains correct quantity of air in tank. Units equipped with foot valve and strainer. Standard size tanks with 42, 82, and 120 gallon capacities can be



used with any unit. Manufacturer: Foster Manufacturing Co., One Kinsey Ave., Buffalo 17, N. Y.

HARDBOARD PRODUCTS AB12827

"Patterned Presdwood" is made by embossing fine-grained leather design on face of tempered hardboard 1/g-inch thick. The other side is smooth. Standard available sizes are 4x6, 4x8, and 4x12 feet. Takes wide range of finishes, but two-tone treatment is recommended as most effective, since contrast values obtained in this manner bring grain of simulated Spanish leather into relief. Manufacturer: Masonite Corp., III W. Washington St., Chicago, III.

STAIN WITH WAX FINISH AB12826 Cabot's stain wax sets up quickly, gives soft wax finish in one application. Stain penetrates and provides wear-resistant finish. Available in several shades, including white, ivory, and two gray colors. Manufacturer: Samuel Cabot, Inc., 21 Oliver Building, Boston 9, Mass.

FLOOR SANDER

American tilt-type floor sander, weighing 89 pounds, operates with 8-inch drum, and



heavy duty G.E. capacitor type I h.p. motor. "Package unit construction" of machine is designed for quick motor and fan package unit replacement. Sander completely enclosed. Vacuum cleaner type bag. Manufacturer: The American Floor Surfacing Machine Co., Toledo, Ohio.

KITCHEN VENTILATOR AB12804

Emerson Junior, built-in kitchen ventilator for ceiling mounting, contains 10-inch fan. unit, ceil
Ceiling s
may be
walls are
baked wil
match c
with shut
on, close
is rectal
brick or
justable
sleeve e
rectangl
turer: E

American

Unit con

Partitio system used i

St. Loui

ceilinfloor metal erect attac for c rolled In e runnnails tach Man

Two

form strip or i from App of air valve with

ster

ve.

327

em-

ace

The

ble

kes

eat-

ve,

an-

her

p.,

26

res

nie

in-

ng

u-

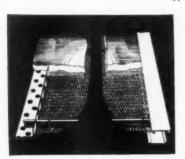
er

14

1748

Unit consists of ceiling grille and fan unit, ceiling housing and outside grille. Ceiling grille and fan unit in one section may be installed in ceiling housing after walls are plastered. Grille, finished in baked white enamel, may be repainted to match ceiling. Ceiling housing equipped with shutter that opens when fan is turned on, closes when fan stops. Outside grille is rectangular. Unit may be installed in brick or frame construction. Sleeves adjustable from 183/4-inch to 223/4-inch. If sleeve extension is necessary, 33/4x10-inch rectangular duct may be used. Manufacturer: Emerson Electric Manufacturing Co., St. Louis, Mo.

SOLID PARTITION SYSTEM AB12807
Partition members of Milcor solid partition
system are so designed that they can be
used in different combinations. Z-type



ceiling runner can be used with Z-type floor runner or with metal base clips and metal base. Where partitions are to be erected along beams, L-type beam runner, attached to side of beam, is substituted for ceiling runner. Three-fourth-inch, cold rolled steel channels are used as studs. In erection of 2-inch partitions, ceiling runner is attached to ceiling with stub nails or rawl drives. Floor runner is attached to floor with same type fasteners. Manufacturer: Inland Steel Products Co., Milwaukee, Wis.

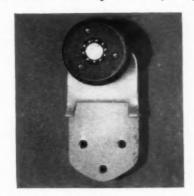
INTERLOCKING WEATHERSTRIP AB12821

Two 9-gauge zinc members, interlocking, form the "E-Z-On" draft control. Weather-strip may be used for either prefabricated or job-finished windows. Prevents moisture from seeping in between sash and casing. Applied by nailing to inside or outside of window. After it is applied, sash can be removed without disturbing installation.



Double-member, interlocked weather-stripping is perforated for nailing. Ready cut to optional lengths up to 12 feet. Manufacturer: Robert N. Baltz & Co., 6200 Sheridan Road, Chicago 40, Ill.

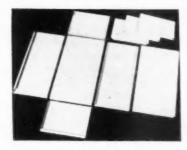
ROLLING DOOR HANGER AB12824
The "Har-Vey" plywood hanger is designed for %4-inch and %e-inch size doors, for which no mortising is necessary. May



be used on thicker doors by mortising for proper alignment. Installation consists of settling three brass screws, after which the door can be mounted on Har-Vey's extruded aluminum track, affixed to door frame. Made of bronze, with rollers of phenolite fiber and ball-bearing. Manufacturer: Metal Products Corp., 807 N. W. 20th St., Miami, Fla.

ALUMINUM KITCHEN CABINETS AB12812

"Olympia Kitchen Kabinets" are finished in satin-white baked enamel by means of "etching" process. Can be assembled quickly by use of a screwdriver. In un-



assembled form, cabinets make compact packages for shipping. Manufacturer: Western Metalcraft, Inc., Olympia, Wash.

DRY WALL JOINT SEALER AB12825

"Plastape" seals cracks and joints in dry wall installations in one operation. Applied in paste form with a putty knife, it dries quickly, leaving an even wall surface. Has sufficient elasticity to provide necessary expansion and contraction to prevent cracks and seams from showing later. Manufacturer: Lowebco, Inc., 1525 E. 53rd St., Chicago, III.

PORTABLE COMPRESSOR AB12814

"Pac-Air" portable compressor is self-contained, air-cooled, gasoline-engine driven. Intended for use by small building contractors, plumbing and electrical contractors, cemeteries and farms, or as utility compressor for large contractors. Two cylinder, single-stage compressor unit



equipped with automatic unloader. Compressor and gasoline-engine driver are mounted on air receiver which forms integral part of running gear. May be towed behind truck or passenger vehicle. Manufacturer: Ingersoll-Rand Co., II Broadway, New York 4, N. Y.

LIGHTWEIGHT LADDER AB12808

"Featherweight" all-aluminum ladder is available in sizes 6, 8, 10, 12 and 14 feet. Also available are six extensions: 12, 16,



20, 24, 26, and 28 feet. Manufactured from 2-inch O.D. by .058-inch wall 61-ST aluminum alloy tubing for side rails. Rungs (Continued to page 126)

CHECK NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 105 West Adams Street, Chicago 3, Illinois

NAME......ADDRESS.....

AB12802 AB12808 AB12814 AB12820 AB12826 AB12832 AB12803 AB12809 AB12815 AB12821 AB12827 AB12833 **AB12804** AB12810 AB12816 AB12822 AR12828 AR12834 AB12805 AB12811 AB12817 AB12823 AB12829 **AB12835** AB12806 AB12812 AB12818 AB12824 AB12830 AB12836

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.

DEALER REVIEW



NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

NRLDA Honors Dealers Who Did Outstanding Public Relations Work

EXCEEDING even the hope of its sponsors, the public relations program award competition of the National Retail Lumber Dealers Association brought a response that won awards for seven winners and revealed a variety of techniques by which retail lumber dealers are helping their communities, their employees and their businesses.

The entries were from dealers in towns and cities of all sizes. They fulfilled the initial purpose of the NRL-DA program, which was supported actively by federated associations and the trade press, of focusing attention on what dealers are doing for their communities to attract public attention through public relations programs.

The annual award program will be continued to focus the attention, also, of allied building industry groups upon the practical public relations being performed by local distributors.

Presentation of the Annual Awards for Outstanding Service to the Community and the Industry in the Field of Public Relations were presented during the national annual meeting of NRLDA at the Roney-Plaza Hotel in Miami on November 11, to the following 1948 company and organization winners:

Class 1: (For lumber and building materials yards operating in towns of under 1,000 population) F. S. Pendleton Lumber Co., McComb, Ohio. (Population 987)

Class 2: (Firms operating in towns of 1,000 to 5,000) Sterner Coal and Lumber Co., Belmar, N.J. (population 3,435)

Class 3: (Firms operating in towns of 5,000 to 50,000) Richards and Krueger Co., New Braunfels, Texas (population 6,900)

Class 4: (Firms operating in communities with populations from 50,000 to 100,000) L. Grossman and Sons Inc., Quincy, Mass. (population 75,000)

Class 5: (Firms in communities of more than 100,000 population) A. W. Buritt Co., Bridgeport, Conn. (population 147,000) Class 6: (Dealer group public relations programs) Tulsa Lumberman's Association.

A special award for an Industry Engineered Homes program went to the Edward Hines Lumber Co. of Chicago. The award was presented to Phil Creden who prefaced his presentation with the vital statement that "the whole building industry has been on the defensive before the bar of public opinion since the close of the war. Our company felt the only answer to a better public attitude was the production of homes . . . When the Industry Engineered Homes program was announced, we knew we had a dramatic way of bringing our story home to the public."

Judging of some of the groups was a difficult matter because of the excellence of the programs. The awards finally were arrived at after close balloting, solely on the number of points covered by the winning programs. Because of the closeness of the votes, a runner-up was selected in several classes by the judges to receive honorable mention. These are:

Class 2: Diamond Lumber and Hardware Co., Lovell, Wyo.

Class 3: Peek-Hightower Lumber and Supply Co., Cedartown, Ga.

Class 4: Peterson Lumber Co., El Paso, Texas.

Class 5: Ruffin and Payne, Inc., Richmond, Va.

The entries received in this initial contest, which were judged by a panel of trade publication editors, reveal that programs already exist which range in scope from the limited advertising program to a complete plan which embodies all phases of good public relations—a program such as could qualify under all the points used in the judging.

These points included the following purposes:

- 1. To develop prestige.
- 2. To promote sales and products.
- 3. To build employee good will.4. To prevent and/or solve labor
- problems.

 5. To foster community good will.

 (Continued to page 118)

As the Retailers See It

By N. P. MASON



It is the holiday season. The family feast of THANKSGIV-ING is behind us, and plans for CHRISTMAS are in the air. At no other time of the year does home-and the family life in the home - mean quite so much to Americans. Lighted Christmas trees will soon be twinkling through our windows from coast to coast. Holly and mistletoe and Christmas greens will do their part to spread the festive spirit. All of us in the construction industry should feel a thrill of pride for the part we have played in helping our neighbors have these homes which they so cherish.

In England, building is still a privilege to be bestowed or withheld by bureaucratic government. The "Daily Graphic," a London newspaper, recounts how Mr. R. Dunn of Prudhoe in Durram built a workshop before the Prudhoe Urban Council had received a reply to his request for a permit from the county planning officer. (Don't laugh-Only two years ago our own CPA permit system was in effect-Remember!) He was ordered to pull it down. He refused. At just that time the authorization came through from the county planning officer but the Prudhoe Urban Council would not pass Mr. the authorization on to Dunn, They re-affirmed their order that the building must be pulled down first.

I hope it was only a coincidence that the newspaper clipping with the above story arrived from a friend in England on the very day I returned home from Washington after an off-the-rec-

(Continued to page 116)

or ir.

d



From Millwork to Hardware every inch a Ro-Way!

- When Ro-Way Overhead Type Doors leave our plant, they're Ro-Way built in every detail—from millwork to hardware and springs.
- Ro-Way Door sections are made of first-class, kiln-dried lumber. Millwork is done by skilled craftsmen using the most modern production machinery and methods to give you better-looking, better-fitting, longer-lasting doors.
- Hardware, too, is made entirely in our own plant from selected tested steels. Hinges, track and ball-bearing rollers are Ro-Way designed—then Ro-Way built for perfect fit. And one secret of Ro-Way's easier operation is Ro-Way-built power springs—each power-metered to the weight of the door it will lift.
- Remember all this next time you specify doors of the overhead type. A Ro-Way Overhead Type Door is every inch a Ro-Way. Not an assembly of parts from various sources. That's your assurance that no matter where a Ro-Way Door is installed, it's sure to be a Ro-Way product from start to finish.

Dependable Ro-Way sales and installation service is available nationwide. Consult your classified telephone directory, or write for distributor's name.



ROWE MANUFACTURING COMPANY

744 Holton Street

Galesburg, Illinois, U. S. A.

AMAZING NEW RO-WAY DOOR REQUIRES ONLY 2½ INCHES OF HEADROOM!
Ro-Way's latest achievement—the new Model 21, 4-section overhead type door.
Now in production. Write for details.

There's a Rollay for every Doorway!





(Continued from page 114)

ord look at, and discussion of, the planning being done by the National Security Resources Board to develop a method of controlling the economy of our country in case of another war. Probably you and I could do no better, but it is alarming to see new hands who are completely ignorant of the faults and fallacies of our World War II regulations setting up regulations and orders which are largely copies of the old ones. And if you want to lose a night's sleep, as I did, you should get a bit of the atmosphere in which these folk with crusaders' zeal talk about the early re-imposition of controls because of shortages in our productive capacity.

I can't help wondering if the city politicians, particularly those who are asking so vociferously for federal funds with which to build and subsidize more apartments and row houses will pay any attention to the real desires of the homefolk of America as indicated in recently released statistics which show that nearly half of the record breaking number of homes built in 1948 were located outside the nation's cities. Data collected by the Bureau of Labor Statistics shows that the trend towards building in the rural areas which was interrupted temporarily by the war with its derangement of materials for water and electricity extensions, and its shortening of transportation lines, has definitely been resumed. In 1944 only 33 per cent of the new privately financed non-farm dwellings were built outside of the urban areas. In 1946, it had grown to 40 per cent. In 1947, it was 44 per cent, and the percentage for 1948 is running around 50 per cent

apparent in the matter of the basing point method of pricing. The President of the U.S. will have two vacancies to fill in the Federal Trade Commission next January, Chairman Freer resigned in October and Garland S. Ferguson is an interim appointee who has not been confirmed. Both of these men approved of outlawing the basing point method of pricing. Should two men be appointed who agree with the reasoning of Lowell Mason (no relative of mine, but I am proud of him) the line-up of the commission would present a 3 to 2 reversal. Lowell Mason was the lone supporter of delivered pricing

Interesting possibilities are

just as he has been a lone campaigner (Continued to page 118)



e 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.

PAINE LUMBER CO., Ltd. Oshkosh Wisconsin

ESTABLISHED 1853

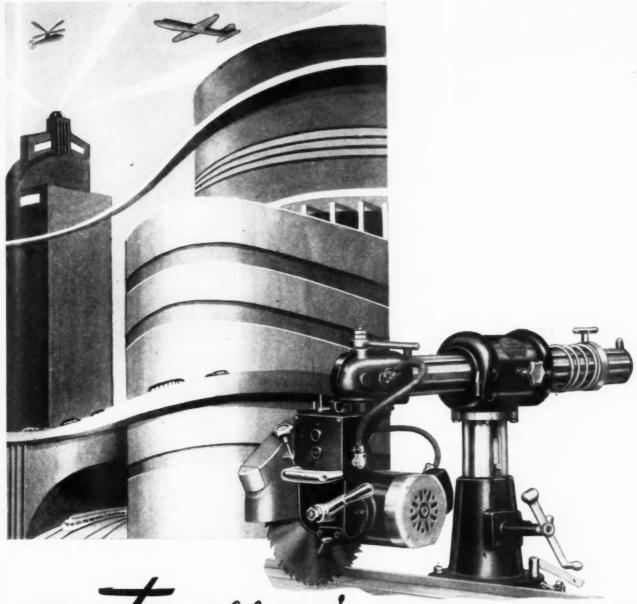
1048.

11e onal elip con-311-1 I ing tely s of ting are d if is I atvith rly of ity,

city are eral

eal ica taof 1es the he iat he ed lend rtfi-33 ed de ad as or nt

·e



USE Tomorrow's SAWS TODAY

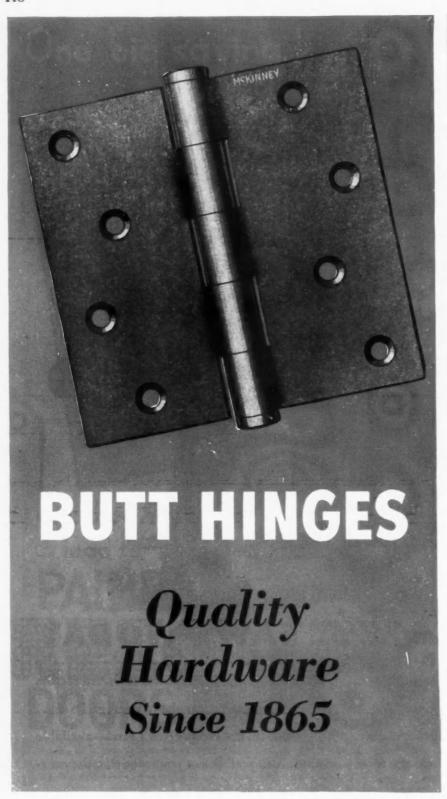
Stay ahead with Comets! Superior in design, engineering, production, smoothly versatile in operation, they are soaring high in popularity. Refinements in operation, features exclusive with Comets, have earned a distinct apprecia-

tion for these fine radial power saws. All factors combine to place them above average level... to present them as tomorrow's saws—available today... to you! Select your model at the nearest Comet dealer or write direct.

Distributors of Davis and Wells Woodworking Machines

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







Dealer Review

(Continued from page 116)

for understandable language and a more equitable and businesslike conduct of the affairs of the F.T.C. Yes, the situation has interesting possibilities.

You never can tell where a good idea will develop. One evening through chance a woodworking machine operator had his thumbnail painted with an exotic bright red nail polish. The next day he found it so much easier to see where his thumb was in relation to the buzz saw that he has been continuing the applications. Simple but effective and I don't think it is patented as yet.

NRLDA's Dealer Awards

(Continued from page 114)

6. To build good will of stockholders.

7. To overcome misconceptions and prejudices against the company.

8. To promote government under-

standing and good will.

9. To build good will among other industry elements.

10. To educate the public in the use of special products and services.

11. To educate the public to a particular viewpoint.

12. To promote good will among customers and consumers.

The actual judging of entries took place at the Shoreham-Hotel in Washington, D.C. on October 22. Association executives and the judges all were impressed by the abundance of entries for this first contest, and by the amount of material that can be used in good newspaper publicity and other public relations work. There was a great deal of material that can be particularly effective if used in connection with any legislation concerning retail lumber and building materials dealers and their field of endeavor.

The success of this year's program made it apparent that it will be continued as an annual affair. To enable every dealer to get off to a head start, the deadline date for the submission of next year's entries has been set as September 23, 1949. Material submitted by dealers should cover activities engaged in between September 10, 1948, and September 10, 1949. In January, a 4-page folder will be sent in bulk shipments through the federated associations to all dealers interested in public relations programs. The folders will give all rules and information for those wishing to participate next year.

(Continued to page 120)

a

od ng

ail

50

nb

at n't

ld-

nd

erer he

es. ar-

ng

ok

hiaall of nd an ity

ere an

in 11-

ng

of

1111 111-

ble rt,

on as

ıb-

vi-10,

ınin ed

ed

he

in-

ar-

SKIL Saw—The original portable electric saw. 9 models with cutting capacities to 4½ inches in wood. They also cut metal, asbestos cement, wall board and compositions... cut and score stone and cement save on countless building jobs. ... save on countless building jobs.

> SKIL Drill-Lightweight, compact for fast drilling and easy handling even in close quarters. Extra powerful for heavy-duty work. 26 fast-cutting models with capacities to 3/8 inch in steel.

2-Z-Zip through your jobs with ese_speedy SKILTools

SKIL Belt Sonder - Beats hand-sanding 10

to 1. Sands, buffs, and polishes on all materials-wood, metal, stone and compositions. Perfectly balanced for easy, ripple-free finishing.

Chances are you're already using SKIL Saws to cut time off every cutting operation.

But that's not enough today! You need the same kind of savings on all your jobs . . . and you can get them with these other fast-working SKIL Tools to speed all drilling, sanding and sawing.

SKIL Tools are light, compact, powerful. Designed to do more jobs . . . engineered to do them faster ... built to serve you longer. Ask your Distributor to demonstrate SKIL Tools today!

SKILSAW, INC. 5033 Elston Avenue, Chicago 30, IIL Factory Branches in Principal Cities
In Canada: SKILTOOLS, LTD., 66 Portland St. Toronto, Ont.



Radial SKIL Saw Exclusive design retractable arm permits finger-tip control . . perfect alignment for the life of the machine! Speed alignment for the life of the machine! Speed gang cutting with this amazing new Radial SKIL Saw. Adjusts easier and faster than any other saw in the field . . . turns hours of fussing into hours of production.

Dealer Review

(Continued from page 118)

From the judges' study of the entries, it is apparent that many of the programs can be strengthened by being broadened to pay more attention to the employee and recognize his individual importance to the company and to the community.

An excellent example of such a fa :tor was a part of the A. W. Burrit program which won an award. This firm sends a monthly house organ to all employees with factual messages on timely industry subjects. It furnishes employees with all available data that will encourage attendance at night schools for instruction on various industry subjects. Employees are given "length of service" pins and hold annual Burritt Family Gatherings to foster good employee relations. There is a management safety council and advisory council to work with employees.

During the judging, it was brought out that some of the entries were examples of very fine advertising programs, but that product advertising alone is not a strong public relations program. Some excellent presentations included either a single phase of the public relations program or failed to round out the program with evidence of the tangible success of the effort. Therefore, some beautifully presented programs were rated lower than others which may not have appeared so elaborate, but which were

of broader scope.

The judges strongly recommended that the awards be continued as an annual activity and expressed admiration for the high quality of all entries. They included: C. T. (Bill) Parsons, Southern Lumber Journal; Robert Kerr, American Lumberman; Jack Parshall, Building Supply News; Stanley Horn, Southern Lumberman; W. G. Grinols, Mississippi Valley Lumberman; Newell Clark, American Builder; Dexter Johnson, Western Building: Charles Hestwood, Retail Lumberman; Donald Moore, Southern Building Supplies.

Red Cedar Shingle Bureau Annual Meeting Dec. 10

RED CEDAR shingle manufacturers and distributors will gather in Seattle, Wash., Friday, December 10, for the 32nd annual meeting of the Red Cedar Shingle Bureau, announces W. W. Woodbridge, the secretary-manager.

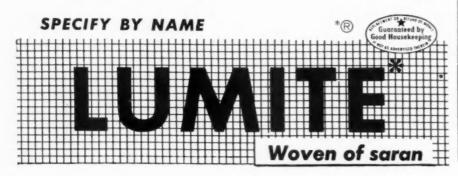
Prominent lumbermen and merchandisers are scheduled to address the assembled shingle producers

What every builder should know about LUMITE

RUSTPROOF!

LUMITE brings big savings to builders because it's rustproof screening at amazing low cost. It saves money through the years because it can never rust, rot, or corrode. It never needs painting. It can't stain paint under windows. It's unaffected by wind, rain or snow. It's non-inflammable.

Sold through Hardware, Lumber and Building Supply Dealers and Screen Manufacturers. Widths to fit all doors, windows and porches. For more complete information, consult Sweet's File or write LUMITE DIVISION, Chicopee Manufacturing Corporation, 47 Worth Street, New York 13, N. Y.



W

American

give di only ex Bondex ticularly

The replished.

1 48.

tie ty

facfactriu This

thie

ces

MILS

th-

elaety ork

ght exro-

ing

ta-

ase

ith

ıtı-

ted ive

led

an

of

T.

er

ď-

11,

1-

rn til

u





COLOR INTEREST

to masonry

with low-cost



Every day sees new examples of Bondex colors used to give distinction to masonry walls. The trend covers not only exteriors and basements but interior walls as well. Bondex Cement Paint with its wide range of shades is par-

ticularly suitable for masonry applications for 3 reasons:

- Bondex and masonry naturally go together because the basic ingredients of both are compatible
- Bondex shields masonry against destructive dampness
- Bondex protects masonry against surface disintegration

The reputation and dependability of Bondex is well-established. Use Bondex in colors or white—on concrete and cinder block—on stucco and stone—on new or used brick.

FULL RANGE OF BONDEX COLORS TO CHOOSE FROM

Dutch White • Oyster Shell • Old Spanish White
Antique Ivory • Carthage Cream • Adobe
Tropical Coral • Spanish Buff • Monastery Gray
Grotto Blue • Ivy Green • Brick Red • Pure White

THE REARDON COMPANY . ST. LOUIS 6

Chicago 9 • Los Angeles 21 • Bayonne, N. J.

Montreal 1



THE FATENTED CEMENT PAINT

that outsells all other cement paints combined



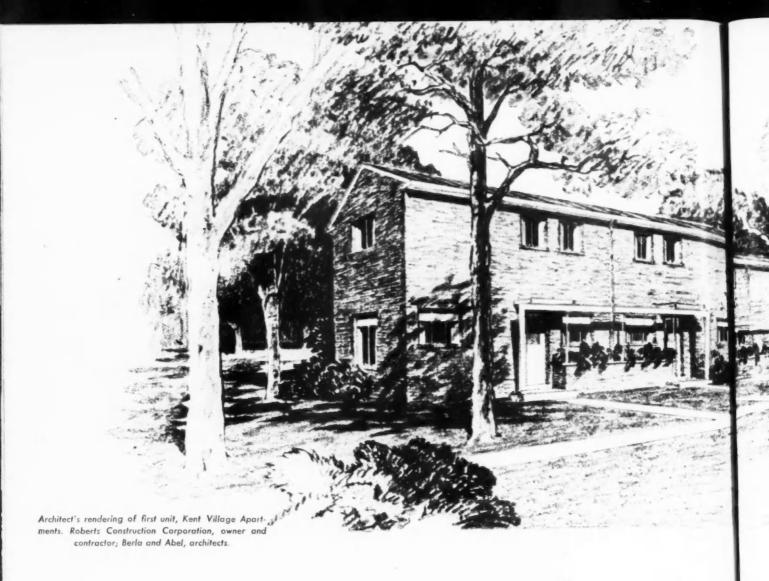
Here Bondex color adds the decorative touch to a game room in the basement.



Bondax color gives this low-priced home personality, making it more desirable.



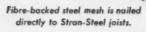
a concrete block garage encourages neatness.

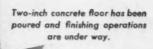


Kent Village moveme



First stage of framing construction. Stran-Steel floor joists are placed in position.







Accurately-sized Stran-Steel studs are now assembled into wall sections.







Construction is proceeding without a hitch on the first two blocks of the \$14,000,000 Kent Village garden-type apartment project now being erected in Prince Georges County, Maryland, near Washington, D. C.

Roberts Construction Corporation, owner and contractor, ascribes much of this gratifying progress to Stran-Steel framing. This precision framing is providing greater speed, economy and ease of construction than would have been possible with any other framing material.

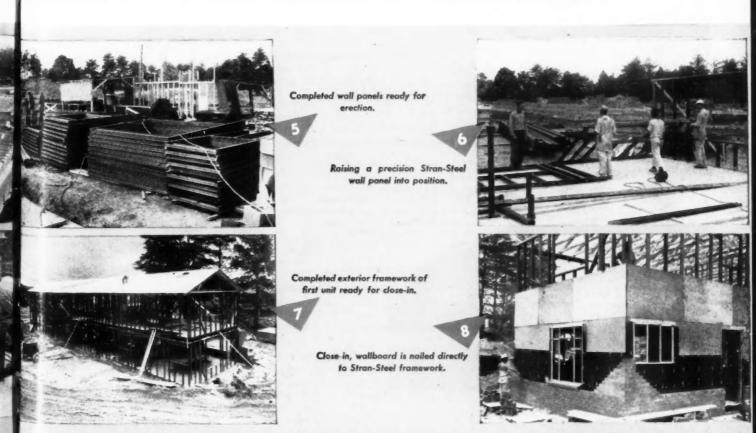
Nailable Stran-Steel framing permits economical dry-wall construction with plaster board. Its permanent rigidity eliminates the possibility of subsequent wall movement from warping and shrinking. And an incombustible Stran-Steel framework adds substantially to the fire-safety of the completed building.

If you're planning a building of any type—residential, commercial or industrial—it will pay you to investigate the advantages of Stran-Steel framing. Ask your local Stran-Steel dealer for full information, or write for his name and address.

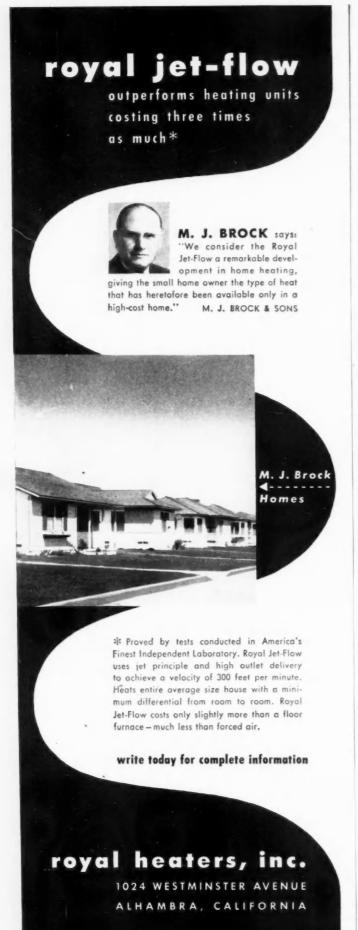
GREAT LAKES STEEL CORPORATION

Stran-Steel Division • Dept. 30 • Penobscot Bldg. • Detroit 26, Mich.
UNIT OF NATIONAL STEEL CORPORATION

verhead with STRAN-STEEL FRAMING







Catalogs and

481—SYSTEM OF LIGHT STEEL FRAMING—is discussed in a 24-page catalog issued by Stran-Steel Div., Great Lakes Steel Corp., Penobscot Bldg., Detroit *26*, Mich. Erection methods, typical examples, specifications, and engineering data concerning Stran-Steel are illustrated and described in detail.

482—UNIVERSAL KNOCK DOWN HOUSING FRAMES—are described in Service Sheet No. R8, issued by The Richmond Fireproof Door Co., N.W. Fourth St., Richmond, Va. The eight-page service sheet includes architectural details; assembly and typical anchor details. Specifications and diagrams are included.

483—WEATHER CONTROL—for hot water and radiant heating systems is the subject of an 18-page catalog by Sarcothern Controls, Inc., Empire State Building, New York 1, N.Y. Typical Sarcothern hook-ups, installation details, description of accessories, specifications, illustrations and diagrams are included.

484—GAS UNIT HEATERS—"Pittsburgh" gas unit heaters, Series "C," featuring cast iron heat exchangers, are illustrated and described in a folder published by Automatic Gas Equipment Co., 301 Brushton Ave., Pittsburgh 21, Pa. Specifications for six sizes, with output ranging from 68,000 to 172,000 AGA B.T.U. per hour, are included.

485—LINOLEUM AND TILE—"Armstrong's Floors and Walls," A.I.A. File No. 23, a new 35-page booklet, describes products and recommended uses of various floor and wall coverings manufactured by the Armstrong Cork Co., Lancaster, Pa. Detailed drawings of installation procedures are shown with illustrations and also with eight pages of Armstrong's specifications.

486—COPPER CONVECTORS—Descriptions of use, construction, and C.M.C. ratings of "Streamaire" copper convectors manufactured by Young Radiator Co., Racine, Wis., are given in a new 10-page catalog issued by that company. The catalog is well illustrated, containing numerous charts and diagrams.

487—BUILDER'S HARDWARE—Packaged push and pull bar sets are the subject of a pamphlet published by the City Plating & Manufacturing Co., 22nd and Cole St., St. Louis 6, Mo. The modern styling and quality fabrication of this hardware are described and illustrated with pictures of the different styles of bars available.

SERVICE COUPON-CLIP and MAIL to CHICAGO

Readers Service Department American Builder, 105 W. Adams St., Chicago 3, Ill. (December, 1948)

Please send me additional information on the following product items, or the catalogs, listed in this department:

umbers

Name

Street

City

State.

OCCUPATION*

*Please note that occupation must be stated if full service is to be given.

1948.

N

in a akes tion ring ibed

de-

ond Va. ils: und

atarork ils, nd

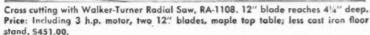
rs, 15ic a. 111

d

d

t

HERES WHY ... WALKER-TURNER RADIAL SAW GIVES 5 H.P. PERFORMANCE WITH 3 H.P. MOTOR



Incorporating the newest type smooth running, precision-mated gears, this exclusive geared motor drive brings blade teeth closer to the drive shaft for greater driving power . . . smoother, cleaner cuts . . . delivers 5 H.P. blade performance with 3 H.P. constant-speed motor. Increased blade-reach beyond motor housing makes deeper, more powerful cuts possible with smaller blades. End results are savings on blade costs, saving on power costs, and faster, cleaner cutting.

> Three more reasons why it pays to choose the Walker-Turner Radial Saw:

- Gliding ram provides full work visibility. freedom from obstruction...accuracy. Eight ball bearings act over ram travel of 21½".
- Two positive anti-kick-backs hold the work on both sides of the cutting tool ... for double safety in every operation.
- Universal head swings, tilts, locks . . . in any position for all woodworking operations possible with rotating cutting tool - cross cuts, compound miters, rips, dadoes, routs, shapes, tenons, etc.

MAKE EXTRA PROFITS WITH THESE, TOO.

Before selecting any woodworking equipment, consider the possibilities of the Walker-Turner Band Saw, and the Bench Model Drill Press. They're fast, safe, sure and SAVING ... in a few months extra profits mark off initial costs.

For complete catalog, write to Walker-Turner Division, Kearney & Trecker Corporation, Plainfield, New Jersey.



2" LUMBER

15" Drill Prass, Bench Model D-950. Capacity: Chuck, to table 12"... to base 17½"... drills to center of 15" circle . . . 4¼" spindle travel. Price: Less motor and belt guard, \$73.25,



14" Band Saw, BN-905. Weight, less base and motor, 350 lbs. Blade ½" x 96%". Price: Including blade guides, belt, mater pulley and guard; less base and mater, \$146.60.



SOLD ONLY BY TRIAR AUTHORIZED INDUSTRIBUTORS

Anterican

(Continued from page 113)

are made from same alloy. Tested and approved by Detroit Testing Laboratory it requires 1,250 pounds to pull the 1/8-inch rung out of 2-inch side rail. Rubber boots attached at ends of side rails. Manufacturer: Chesley Industries, Inc., Detroit Mich.

DOMESTIC EXHAUST FANS AB12830 "Kitchen-Aire" domestic exhaust fans have

stamped aluminum impeller, motor mounted on neoprene grommets, and new style



blade. Angle mounting post is incorporated, as well as counter-balanced backdraft damper of stamped aluminum. Size of sleeve and damper permit eliminating adaptors. Manufacturer: Stewart Manufacturing Co., 3205 E. Washington St., Indianapolis, Ind.

PORTABLE HEATER

The Age oil-fired temporary heater has capacity of 100,000 B.T.U.'s. Used on construction jobs, in warehouses, on farms, and for industrial applications. Uses from 1/20 up to 2/3 gallons of kerosene, No. 1



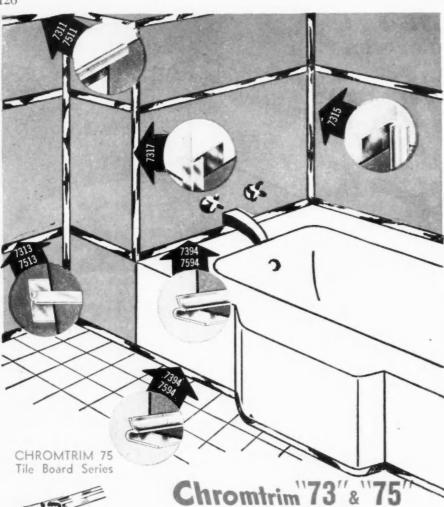
or No. 2 fuel oil per hour. Manual control. No attendant required. Weight, less than 75 pounds. Manufacturer: All-Gas Equipment Co., Milwaukee, Wis.

HEAVY DUTY WATER SYSTEM

Automatic and self-priming water system is fitted with Roth turbine type pump. Unit is adaptable to shallow well installations in home, farms, summer cottages, of tourist courts. Available in a number of styles and sizes, each unit includes a high pressure pump, single-phase electric motor, heavy galvanized-steel tank of size specified, combustion check valve and strainer, pressure switch, air valve, automatic air volume control, heavy galvanized steel base and pressure gauge. Manufacturer: Roy E. Roth Co., Rock Island, Ill.

LX

(Continued to page 128)



7511 cap trim









7594 cove section

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.

VERNER COMPANY, INC. 295 Fifth Avenue, New York City 16, N. Y. IN CANADA: R. D. WERNER COMPANY, LTD. • PORT DALHOUSIE, ONT. R. D. WERNER COMPANY, INC.

Please send descriptive literature, catalog and prices on Chromtrim's 7.75 Series of metal mouldings.	
73 Series of metal movidings.	AB-12
NAME	
FIRM	
ADDRESS.	
CITY	

3)

boratory

Manufaction Detroit

312830 ans have mounted w style

corpo-

back-Size nating Manu-

n St.,

2819

r has

farms,

from

No. I

less

Gas

328 tem

mp.

Ila-

of igh

air

Write for this Catalog today

on the NEW

Multi-Outlet Wired Strip that gives you a

> S-P-R-E-A-D of outlets

You'll find in this booklet:

- 1. How PLUG-IN STRIP fits into architectural design.
- 2. How easily PLUG-IN STRIP is installed.
- 3. A complete illustrated catalogchart of all the parts and fittings required for any job.
- 4. Instructions on the use of LOPO-TRIM—the metal quarter-round for housing telephone and other lowpotential wiring.

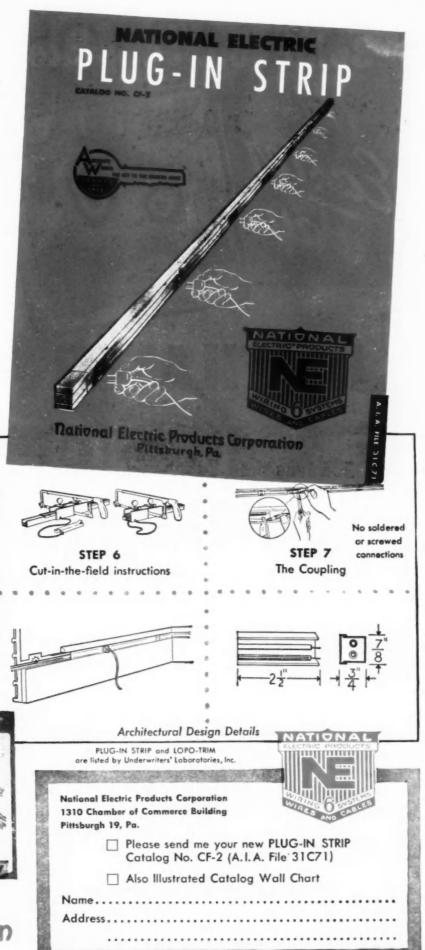
And for-

ARCHITECTS, CONTRACTORS WHOLESALERS

A handy 161/2" x 10" Catalog Wall Chart



National Electric Products Corporation Pittsburgh 30, Pa.





(Continued from page 126)

meric

PLATFORM FOR LADDER AB12831
"Safety Tread Ladderstep," made to fit
any standard rung ladder, has 10 \(\frac{3}{4} \text{sinch hardwood.} \) Platinch platform of \(\frac{3}{4} \text{-inch hardwood.} \) Plat-



form is bolted to brackets of cast aluminum with tensile strength of 21,000 pounds per square inch. Platform is equipped with 5x8-inch "Safety Walk" tread material to prevent foot slippage, is designed to lessen fatigue caused by standing on ladder rungs, and to permit worker freedom to use both hands at work. Manufacturer: Saginaw Bearing Co., Saginaw, Mich.

BATHROOM FIXTURES AB12822 Chrome-Tex towel bars are available in 30-inch, 24-inch, 18-inch and 12-inch sizes, with streamlined multiple rack. Tissue



holders redesigned, and improvements added to line. Manufacturer: Chrome-Tex., Inc., 2187 E. Second St., Cleveland, Ohio.

ROOFING AND SIDING MATERIAL AB12806

Corrugated aluminum sheet, .032-inch thick, weighs 56 pounds per 100 square feet. For industrial construction, it may



be used for both roofing and siding. Produced with corrugation depth of 7/8-inch; pitch of .666 inches. Several sheet sizes available. Manufacturer: Reynolds Metal Co., 2500 S. Third St., Louisville, Ky.

(Continued to page 130)



HEATILATOR

1. Complete form for the masonry

2. Saves time, labor and materials

The Heatilator comes to you as a complete steel unit. The smoke dome, throat, downdraft shelf and damper are all built right in. You simply set the Heatilator unit in position, then lay your masonry around it. You don't have to figure out the proper size and proportions of your fireplace. When you use the Heatilator unit, your fireplace is bound to be right!

Heatilator Fireplace Circulates Heat

Will Not Smoke

These two features alone, even if there were no others, make the Heatilator Fireplace outstanding. This is why more builders and home owners prefer the Heatilator

Fireplace. It's been proved for more than 21 years in thousands of homes, cottages and camps.

You save money on your fireplace with Heatilator

HEATILATOR, INC. 8112 E. Brighton Ave., Syracuse, N. Y.

Heatilator is the registered trademark of Heatilator, Inc.

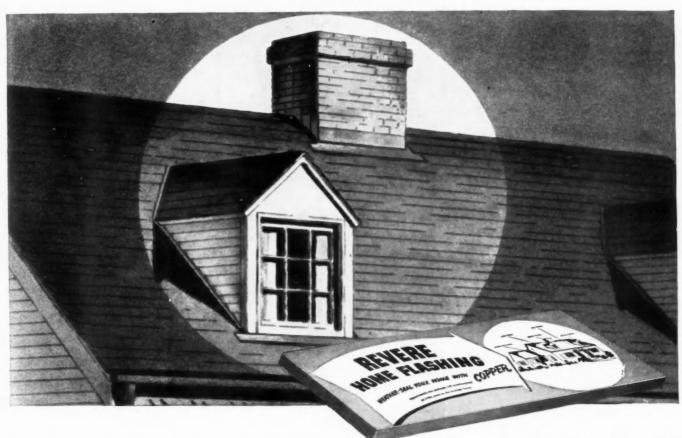
Heatilator
Fireplace

Accept no imitation. Look for the
Heatilator name
on the dome.

HEATILATOR FIREPLACE

FOR VALLEYS AND FLASHING

THIS SPECIAL LOW-COST SHEET COPPER



• REVERE HOME FLASHING is a new type of sheet copper—in a special gauge, size and temper—designed for use in valleys and flashing on residential construction including low-cost houses. And it is priced much lower than you'd expect! Unlike other metals used for valleys and flashing, copper does not require painting. It can never rust nor rot. And the new Revere Home Flashing is so thrifty to buy and install that you can use it for valleys and flashing on even the most moderately-priced houses.

PACKAGED FOR EASY HANDLING! — Revere Home Flashing is packaged for your convenience. Each package contains 10 sheets of this special sheet copper cut to 18" x 48", a generous supply of hardware bronze nails, and an illustrated instruction book that clearly shows how to install copper in valleys, around chimneys, doors, windows and other wall and roof joints.

Revere Home Flashing provides more than economical weather-proofing. It adds an important selling 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 away.

ASK 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.

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.

OF COURSE, QUALITY CONSTRUCTION CALLS FOR COPPER GUTTERS, DOWNSPOUTS AND PLUMBING LINES, TOO.

AB12831 de to fit 103/4x8/2od. Plat.

er 1948.

st alumiped with
terial to
to lessen
ladder
dom to
iacturer:
tich.

able in ch sizes, Tissue

ements hromereland,

2806 2-inch square may

Proinch: sizes

America



(Continued from page 128)

WINTER AIR CONDITIONER AB12817 Model 70 Williams Oil-o-Matic winter air conditioner, 70,000 B.T.U. capacity, is 58 inches long, 22 inches wide, and 45 inches high. Low pressure principle permits low firing rate. Stainless steel "Glo-Quick" combustion chamber is employed. Unit, factory assembled and wired, is constructed



of heavy gauge, all-welded angle panel with full steel base. Chrome trimmed, baked-enamel hammerloid finish. Manufacturer: Williams Oil-O-Matic Div., Eureka Williams Corp., Bloomington, Ill.

PLASTERER'S TOOL AB12802

Safe-Edge Cornerite, a fabricated product, made from copper-bearing steel, painted black. Used to reinforce and prevent plaster cracks in internal corners. Smooth edged, it is designed to speed plastering. Manufacturer: National Gypsum Co., 325 Delaware Ave., Buffalo, N. Y.

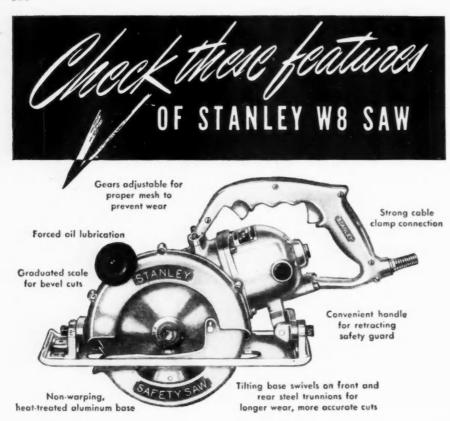
WOOD PANELING
AB12835
Amerwood paneling is designed for rustic,
rugged outdoors appearance. It is made
by etching away soft fibres of boards to

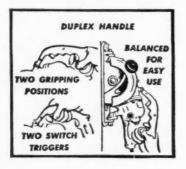


accent grain and knots. Panels are factoryfinished with dry-pigment stain, lacquer and wax, and are ship-lapped ready for installation. Produced in even widths from 6 inches to 12 inches, and even lengths of 8 feet to 16 feet for wide choice of pattern. Manufacturer: Lehwood Corp., 1703 Ironwood Drive, South Bend, Ind.

AUTOMATIC WASHING MACHINE AB12836

Fully automatic washer, medium priced, will reach market early in 1949. Washing machine, incorporating new technical developments, will be produced with Hotpoint's Chicago facilities, which formerly were used to manufacture electric ranges. Manufacturer: Hotpoint, Inc., 5600 W. Taylor St., Chicago, Ill.





usefulness.
See Stanley W8 Saw or W7 and W9
models at your dealer's, or write for
circular. Stanley Electric Tools,
492 Myrtle St., New Britain, Conn.

work in this portable electric saw

... more jobs you can use it on, more

power on every job, more years of

These important features plus plenty of power and rugged construction make Stanley Saws a practical choice for on-the-job cutting. W8 Saw cuts any depth from 0 to 23/4", operating from any A.C.-D.C. outlet. Round arbor shaft permits using any standard saw blade. Each Saw is furnished with ripping gauge and packed in Stanley metal carrying case. More hours of profitable



Saw Track No. 158 changes the Stanley Saw into a bench saw for production work.

The greatest name in tools

STANLEY

Reg. U.S. Pat. Off.

HARDWARE . HAND TOOLS . ELECTRIC TOOLS

1943.

12817 nter air

, is 58 inches its low Quick" Unit. ructed

panel med, Aanu-Eu-

2802 prodteel. preners. peed Эур-1. Ү.

835 stic. ade

to i

POOLUBIEE POUTYY SULITE



remember when buying insulation for your jobs are these two moneysaving facts: INSULITE builds -INSULITE insulates at the same time. Two things for the cost of one! A double-duty building material that helps you build better competitive houses - so you can sell them faster-make more profits

INSULATES AS IT BUILDS IT A S

The GENUINE

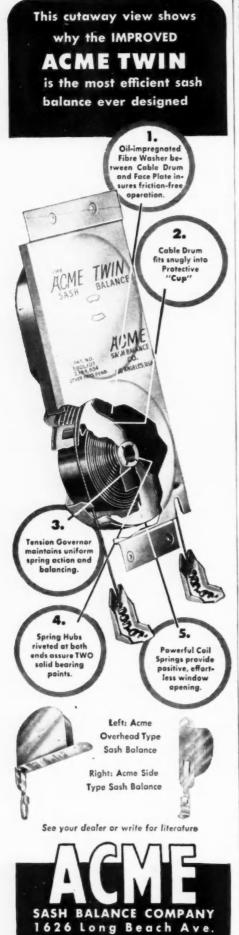
BUILDS

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



INSULITE DIVISION MINNESOTA & ONTARIO COMPANY
MINNEAPOLIS 2. MINNESOTA

ıt-



Los Angeles 21, Calif.

Federal Judge Rules That Glaziers Cannot Refuse to Work with Pre-Glazed Sash

A PRELIMINARY injunction, of nation-wide significance to the building industry, was issued November 10 against the AFL Chicago Glaziers union, Local 27, in Federal District court, which enjoined the union and its officials from withholding glaziers from Joliet, Ill., contractors who use pre-glazed sash.

The injunction, based on charges filed by 66 members of the Joliet Contractors association, held the local guilty of unfair labor practices under the Taft-Hartley law. One Joliet contractor testified in the trial that the ban on the use of pre-glazed sash had increased the cost of a home 60 to 80 dollars. The national labor relations board brought the suit against Local 27 to force the union to provide glaziers to contractors who use pre-glazed materials.

The court instructed Walter L. Moldawer, NLRB attorney, to draw up the injunction. It will enjoin the union from inducing glaziers to refuse to work on sites where preglazed sash is installed, and refusing to furnish glaziers on request to glazing subcontractors who do work for contractors using pre-glazed sash.

Judge Walter J. LaBuy, who issued the injunction, said "The evidence clearly establishes violations of the act, and the responsibility of all defendants. There is no doubt of that, so the injunction will issue."

Daniel D. Carmell, attorney for the union, attempted to show during the trial that individual glaziers had refused to work where pre-glazed sash was used, and not on instructions from union officials. Carmell indicated he might appeal the case.

Sloane-Blabon Wins Award For Tile Flooring

C.J. CHRISTOVERSON, contract manager of Sloane-Blabon Corp., received an "Oscar" for his company's prize winning Koroseal floor tile entry.

Hiram McCann, editor of Modern Plastics' magazine, presented the award at the publication's Competition Award luncheon at the Hotel Plaza, New York City.

Sloane-Blabon's entry of Koroseal floor tile won an award for meritorious application of plastics in the building materials classification of the Seventh Modern Plastics competition, more than 1,300 entries, comprising more than 7,000 products, were judged.

Sloane-Blabon Corp. has offices at Fifth Ave. and 47th St., New York 16, N.Y.



First with patented REVERSING ACTION

The superiority of IN - SINK - ERATOR'S patented two directional shredding action has been proved by over ten years of consumer use. This and other features



and other features listed assure long and trouble-free operation.

- TWO DIRECTIONAL SHREDDING . . . doubles the life of the shredding elements . . . adds self-sharpening feature.
- SELF CLEANSING because of its unique reversing feature the In-Sink-Erator has a double cleansing action which is positive and complete.
- CONTINUOUS FEEDING . . . food waste can be fed continuously while unit is in operation giving unlimited capacity for domestic use.
- COMPACT, PRACTICAL DESIGN . . .
 In-Sink-Erator was first to have the shredder mounted directly to motor shaft . . .
 providing first practical disposer design.
- GLEAMING WHITE FINISH
 plus streamlined design make In-SinkErator a point of pride in any kitchen.

NATIONALLY ADVERTISED

This year the IN-SINK-ERATOR story will be repeated 23,000,000 times in leading national magazines such as BETTER HOMES & GARDENS, AMERICAN HOME, HOUSE BEAUTIFUL, HOUSE AND GARDEN and SMALL HOMES GUIDE.

SOLD BY PLUMBER DEALERS ONLY DISTRIBUTED THROUGH RECOGNIZED PLUMBING JOBBERS.

N.SINKERATOR Mfg. Co., Racine, Wisconsin

Specializing Exclusively in the Manufacture of Food Waste Disposers Since 1938

Must Owners of your new houses

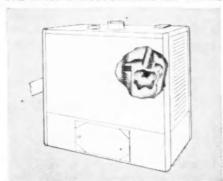
POLICE
THE THERMOSTAT?



Experts predict shortages of some fuels for 3 to 5 more years!

There are no Ifs, Ands or Buts when you specify Automatic Anthracite Heating

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.

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 any heating requirement.

A whole winter's supply of anthracite can be stored easily in advance. Everyone wants this kind of security and convenience. They have just that when you specify automatic anthracite equipment.

Look over the two types of domestic anthracite equipment shown here. They burn the cheaper sizes of economical hard coal... completely automatic from bin feed to ash removal.

Write to us for more detailed information on all types of anthracite heating equipment—domestic and commercial.



ANTHRACITE INSTITUTE

101 Park Avenue

New York 17, New York





RIGHT FOR general building use and job protection. CREPED, saturated kraft. A waterproof asphalt satu-

W. RALSTON & CO., INC.

Sales Office: 220 E. 42nd St., New York 17, N.Y.

Plant: Old Bridge, New Jersey

WRITE FOR Raltex Price Schedule and samples.

up to 9 feet.

rated creped sheet.

Prefit Fir Door Dimensions Changed

MEMBER companies of the Fir Door Institute have decided to change the dimensions of "prefit" doors. The new doors will go into production as soon as individual mills have completed their change-over requirements.

For the past two years, the Douglas Fir Door Industry has manufactured prefit doors in sizes 2 feet, 5 13/16 inches by 6 feet, 7% inches, or 3/16-inch less in width and ½-inch less in height than the nominal book size.

Prefit doors, manufactured by member mills of the Fir Door Institute, and mills inspected by FDI, will conform to these new dimensions:

"Prefit doors shall be manufactured to actual book size at the factory. Thus, a nominal 2 feet, 6 inch by 6 feet, 8 inch door shall now prefit to that same net size... A tolerance of 1/32 inch plus or minus is permissible. Scuff strips shall be securely attached to the bottom of each stile for protection in handling."

Masonite to Acquire Marsh Wall Products, Inc.

MASONITE CORP. plans to acquire ownership of at least 80 per cent of the stock of Marsh Wall Products, Inc., Dover, Ohio. Among the many hardboard processors in the country, Marsh is one of the largest.

Eugene Holland, president of Masonite, said the completion of the proposed transaction will mark Masonite's entrance into the business of applying decorative finishes to the hardboard it manufactures.

Masonite filed a registration statement covering 81,250 common shares with the Securities and Exchange commission. The company has 700,000 shares of authorized stock, of which 600,000 shares are outstanding.

Holland said Masonite intends to operate the Marsh company as a subsidiary, utilizing its large modern plant and the successful production methods it has developed. He added that the Marsh plant will be operated with the present personnel.

Reynolds Reorganizes Products Sales Setup

THE OUTCOME of a recent meeting of sales managers of Reynolds Metals Building Products division, Louisville, Ky., was the formulation and adoption of plans to decentralize sales operations of that division, breaking it down into four sections geographically.

Each sales territory will comprise an area in itself, and each will operate as a separate unit, responsible to its individual district sales manager. djustable Supply Tee

FOR BALANCED ONE

lable in BRONZE

NOW YOU can give your customers the finest one-pipe Thrush

Ajustaflo Hot Water Heating with forced circulation and year 'round

H. A. THRUSH & CO. · PERU, INDIANA

or address Department G-12.

domestic water supply, using either iron or copper piping. The fa-

mous Thrush Adjustable Supply Tee permits accurate adjustment

of heat from each radiator. Better heating increases customer satisfaction, builds your reputation. See our catalog in Sweet's

BRANCH HALF OPEN

135

BRONZE

THRUSH

WATER CIRCULATOR

BRANCH CLOSED



r reiglas ured 3/16 /16ss in e. iem-

conired ory. y 6 t to mce perrely

c. ac 80 Vall mg the est. Iathe

the tees. ge 0,of ıg. 10 hrn

n. 11

18 e 0





1948.

laof

011 ed ed





tute

CAST

IRON

Bronze Sizes

3/4" × 3/4" × 1/2"

SOLDER

CONNECTIONS

how avai

BRANCH OPEN

Patent Applied For

1" x 1" x 1/2" 11/4" x 11/4" x 1/2" 11/2" x 11/2" x 1/2"

stile











Imer

EASY TO INSTALL! EASY TO REGULATE!

Two More Reasons Why **Building Professionals** Welcome the New EAGLE UNIVERSAL DOOR CLOSER



Installation is simplified by mounting template which shows exact positioning of closer for openings from 90° to 120° and for hold-open or nonhold-open operation.



Mounting plate is screwed into position indicated by template, eliminating need for holding closer during installation.



Closer is easily inserted into mounting plate and locked into position by one set screw. Adjustment of leverage can be made by sliding closer in mounting plate.

Never before . . . a door closer so easy to regulate. The field

swing is automatic and the latching speed is regulated through a single screw as illustrated. Turning the screw to the right decreases latch speed; turning to the left, increases latch speed.



Write for illustrated brochure describing these and other advantages of the Eagle Universal Hydraulic Door Closer.



The EAGLE LOCK Company

Eagle Industries, Inc. National Sales Representative 110 North Franklin St., Chicago 6, Illinois

Changes In Sales Staff Announced By Norge Division of Borg-Warner

NCLUDED in sales staff changes in the Norge division of Borg-Warner Corp. were the appointments of three product managers: R. C. Connell, gas range sales manager; M. B. Robb, home heater sales manager, and J. Edward Wyatt, Jr., contract sales manager.

Connell replaces W. M. Davis, who has resigned. He was formerly Norge product sales manager of Ludwig Hommel & Co., Pittsburgh Norge distributor, and is also experienced in retail sales and sales management.

Robb is widely known in the heating field and, among other positions, held that of sales manager of Evans Products Co.

Wyatt was formerly executive vice president of the Dearborn Stove Co., and has had wide merchandising experience, in addition.

Avco Announces Results of American Kitchens Survey

THE MAJORITY of persons interested in obtaining new kitchen equipment own their own homes; are married, and under 34 years of age, according to a recent survey made by American Central division, Avco Manufacturing Corp. The survey, designed to find the number of possible users of American kitchens, revealed that almost 50 per cent of those who responded intended to build their own homes. Of this per cent, the majority said they would build in 1949. The average expected expenditure was \$10,000.

Of those responding to the survey. about 40 per cent said they would remodel their present dwellings. Thirty-one per cent of this total said they had already started the work.

The survey was conducted by enclosing a post card with each catalogue sent out by Avco, starting in September. The cards were staggered so that every magazine on the schedule would gain equal weight in the mailing.

New Trane Company Plant Now in Production

THE Trane Co. has opened the nations first factory devoted exclusively to mass production of a standard convector-radiator in Scranton,

R. James Trane, vice president of The Trane Co. and son of the president, is the general manager. Myles Erickson is office manager and purchasing agent for the eastern division. Louis Antol, formerly an assistant superintendent at Trane's La Crosse factory, is the superintendent.

Automatic



December outside but June inside

Because Reznor units have proved to automatically and effortlessly provide June's tempera-tures in December's cold, more Reznor heaters have been sold than any of similar type. SELL REZNOR—the leader. Installs easily and quickly. Brings top quality prices and profits. Write today for catalog.



NU BUILERS . NO FIRE TENDING

- FULLY AUTOMATIC
- . EXTRA LARGE FAN
- entires . STRONGER CONSTRUCTION

 - . LOW COST INSTALLATION
 - . ALUMINIZED STEEL INTERIOR UNIT

REZNOR MANUFACTURING COMPANY 17 UNION ST., MERCER, PENNA.

Gas Heaters Since 1888

Write for Catalog

HERE'S WHY THE American Home METAL CASEMENT IS OUTSIDE STORM-SASHED!

Here are some of the reasons dealers give us for insisting on Outside Storm Sash for Metal Casements...and why we think you will want to sell "American Home" Casements to your builders and contractors:

- Outside storm sash is the only kind that provides the ideal 2-inches of dead-air insulating space between glass panes.
- Outside storm sash is the only kind that protects the entire window and glass from cold, dirt, snow, rain, corrosion, condensation and frosting.
- Outside storm sash is quicker and easier to handle. Only one sash is needed for each window instead of two or three of the "inside" type.
- Outside storm sash eliminates the necessity of taking down screens, winter storing and putting them up again in the spring.
- Outside storm sash costs only one-third as much as the less efficient inside-attached type.



le

ve

ef-

ore old

Ills

op

rite

We asked 4,500 dealers what they wanted in a residential metal casement. More than 4,000 specified OUTSIDE STORM SASH. The "American Home" Window is the only metal casement designed and built to meet this dealer specification.



THAT MEANS MORE PROFITS FOR DEALERS

Dealers know outside storm sash is the only kind fully protective and efficient on any type of window. But only Mesker has solved the problem of making its application practical on metal casements. Only "American Home" Residential Casements in either steel or aluminum are built with exclusive Mesker close-set expansion hinges which allow storm sash to be mounted within one inch of the window, thus providing two inches of dead-air insulating space. Dealers everywhere are quick to recognize this new window development offers them a new profit opportunity. If you are not already carrying this new triple-profit specialty, see your distributor about it now, or write for descriptive folder. Mesker Brothers, Sales Div. AB107, 4342 Geraldine, St. Louis 15, Mo.

Mesker-first to say: "Here it is!"

Time-Saving "TROUBLE SAVERS"

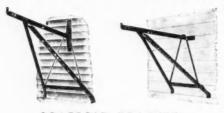


The rapidly increasing use of "Trouble Saver" equipment for all types of building and construction work is practical proof of their value to contractors. "Trouble Savers" provide maximum safety, convenience and economy.



LADDER JACKS

ONE-MAN Ladder Jacks adjust to any pitch on either side of the ladder. Weight is distributed on three rungs. Indispensable for carpentry, painting, cornice work, etc. They're instantly adjustable . . . and absolutely safet



SCAFFOLD BRACKETS

Simplify the installation of safe working platforms for many types of side wall work. Scaffold Brackets, made of rail steel, are light, easy to handle and extra safe. Made in nail-attached, studding and boltattached types.

Write for new Catalag M and complete information on all types of "TROUBLE SAVERS" equipment

THE STEEL SCAFFOLDING COMPANY, Inc.

856 Humboldt Street Brooklyn 22, New York Telephone: EVergreen 3-5510

W. B. "Bill" Turner Joins Metal Lath Association

W. B. "BILL" TURNER has accepted an appointment as commissioner of the Metal Lath Manufacturers Association, Cleveland, Ohio. He assumed his new duties



W. B. "BILL" TURNER

October 15 when he retired from his position as manager of sales of the Fireproof Materials division of Inland Steel Products Co. H. B. Brown, who recently joined Inland Steel Products Co. after many years of experience in the manufacture and



H. B. BROWN

distribution of fireproof building materials, has succeeded Turner as manager of sales of the Fireproof Materials division.

"Bill" Turner can well be termed the "Dean" of the metal lath industry. He has more years of service than any other active member of the association, is president of that organization at present, and has held the office on several previous occasions.

Perfection Stove Plant Nears Completion

THE REBUILT Ivanhoe Road plant of Perfection Stove Co., Cleveland, Ohio, is nearing completion. The modern structure will provide the existing plant with an additional half-million square feet of manufacturing space.

ENTRANCE OR STOOP RAILS

... In 5 Stock Sizes

INEXPENSIVE—distinctive entrance rails, ideal for front and rear doorway platforms. Available in a stock sizes, at low cost, from building supply dealers. They are decorative, practical, and an investment in safety.





Americ

So Easy to Install!

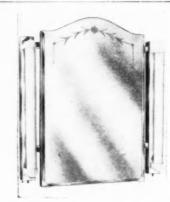
Illustration shows extended newel post and conventional attachment knee on top and bottom rail for easy installation. Rugged, solid construction, with distinctive Coffman hand-wrought inside scroll at newel post,

All types "custom" railings made to your dimensions. Have your local BUILDING SUPPLY DEALER secure our "Blue Print Service" and quotation on your current jobs.

Write Dept. AB, P. O. Box 259, for free catalog of designs, sizes and prices.

Manufacturers of the Original "Complete Builders Line" of Hand-wrought Ornamental Iron

The R. J. Coffman Co. Inc.
ORLANDO, FLORIDA
ESTABLISHED 1923



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

Manufactured by

FLUORESCENT LIGHTING CO.
MONTICELLO, N. Y.

948.

R

S

alers nt in

log



Windows bearing this "Quality-Approved" Seal are today's big building value for two important reasons:

First, they help you build better and at less cost. Second, they give your houses a big "plus" in sales appeal.

The quality seal on your windows means best materials, sound design and strong construction. Only manufacturers who meet these rigid standards may use this "Quality-Approved" Seal on their windows.

Quality-approved aluminum windows—double hung, casement and projected—give your prospects window advantages they are looking for: good looks, easy cleaning and lifelong freedom from painting, periodic replacements and repairs.

You'll need no "extra" window parts or accessories when your windows bear the "Quality-Approved" Seal. They come ready to be installed, with no finish to apply.

Write for information and names of manufacturers who can supply you. Address Dept. A.

Aluminum Window Manufacturers Association

209 CEDAR AVE., TAKOMA PARK, WASHINGTON 12, D. C.

1meri



. . . the only one that includes every essential feature of larger, more expensive planers—\$50.00 to \$100.00 under what you would expect to pay.

POWERED FOR OUTPUT

OF 14 FEET PER MINUTE

Thousands of successful installations, dating back ten, fifteen, and more years. (Machine serial No. 1 still operates daily in New England, having planed millions of feet of hard wood.)

Better than a large planer on extremely short, narrow, or thin stock. In fact it will do some jobs no large planer can even attempt—such as planing material as short as 6 ½"; planing hard "; planing hard woods down to 16" thick, smooth as silk and to a thousandth of an inch precision without tearing. Piles up big money savings by salvaging short and thin scrap. Saves you the expense of having certain small jobs run outside, which is necessary if you have only a large planer.

Massive, one-piece main frame. Has the extra weight others lack for real commercial hard use. Powerful, grooved steel infeed roll. Two table idler rolls-often omitted in inferior machines. Power driven rolls in bronze-bushed self-aligning journals—also automatically adjust when work thickness varies—an exclusive feature.

A FINER FEED MECHANISM

No troublesome clutch. Quieter. Instant power feed con-trol, without stopping the motor, engine or lineshaft power.

121/4" x 20" TABLE

Thick walls and exceptionally well ribbed, normalized table casting stays flat and true. Choice of 1½ and 2 H.P. direct to cutterhead, or v-belt motor drive. Bench or complete floor type units. Also drives from lineshaft or gasoline engine.

Boice-Crane, with its complete line of power tools, can, at minimum cost, completely equip contractors to be prac-tically independent of the mill.

WRITE FOR FREE LITERATURE.

BOICE-CRANE COMPANY

966 Central Avenue . Toledo 6, Ohio

BAND SAWS + JIG SAWS + SAW JOINTERS + BELT SANDERS SPINOLE SANDERS + LATHES + THICKNESS PLANERS SPINOLE SHAPERS + DRILL PRESSES + JOINTERS

The World's Largest Builder of 12" Planers.

Interest Grows In Heating-**Ventilating Exposition**

NTEREST in the Ninth International Heating and Ventilating Exposition, to be held in the International Amphitheater, Chicago, Ill., January 24 to 28, 1948, continues to increase with the closing of the few remaining gaps in available display space. Information drawn from specifications filed by exhibitors indicates that practically every type of equipment employed in the varied uses of heating, ventilating, and air conditioning will be represented. Many new products will be on display for the first time.

The exposition is under the auspices of the A.S.H.V.E. in conjunction with its 55th annual meeting. G. L. Tuve, president, has been appointed chairman of the advisory committee for the exposition. The newly appointed advisory committee of 33 members includes representation of 17 associations in such allied fields as acoustics, architecture, air filtration, insulation, and fuel.

Clark Equipment Wins Legion Citation

THE Clark Equipment Co. has been selected by the National Executive Committee of the American Legion to receive its annual citation as the outstanding employer in Michigan for giving "exceptional service in the employment of veterans, both physically able and disabled or handicapped." All four of the Clark, Mich., plants-Battle Creek, Buchanan, Berrien Springs and Jackson-are covered by the award. A program of awards, national in scope, was inaugurated last year, when the Ford Motor Co. was the honored concern in Michigan.

Laboratory Tests Douglas **Fir Plywood Panels**

ACILITIES for testing Douglas fir plywood in the panel-making industry's quality control program will be expanded with the erection of a laboratory at Eugene, Ore.

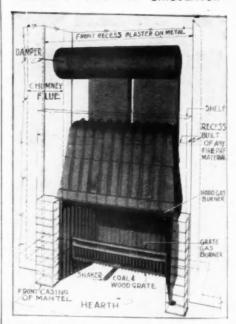
This new branch testing laboratory of the Douglas Fir Plywood Association is designed to offer more rapid service to Oregon and California factories which are now sending plywood specimens to the main laboratory at Tacoma, Wash.

The new laboratory will test samples of the different types of panels, produced by Oregon and northern California factories, to maintain standards set up by the plywood industry in cooperation with the U.S. Department of Commerce.

Robert H. Ripley will be local head of the new laboratory.



FIREPLACE CAST IRON



HEARTH — AIRE -- PLACE

Heats 6 rooms in zero weather from any fireplace

COAL_GAS_WOOD H. A. Furnace & Bldr's Supply DISTRIBUTORS WANTED

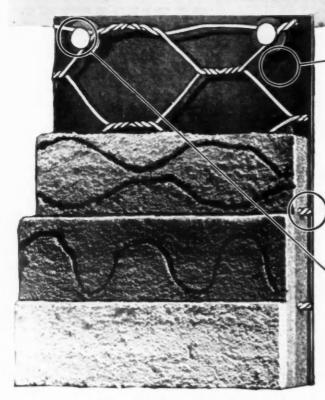
HEARTH-AIRE COMPANY

3126 Scarborough Rd. Cleveland (18) Ohio

WHY Keymesh

HICEST REINFORCING FOR STUCCO OVERCOATING & PLASTER

Insures a Stronger, More Durable Wall



Actual section of finished wall reinforced with Keymesh. Note the protruding ends which show how Keymesh becomes deeply embedded in the scratch coat.



Keymesh being applied—note how it unrolls flat without bulging or sagging.



Keymesh easily forms around corners and curved surfaces without buckling.

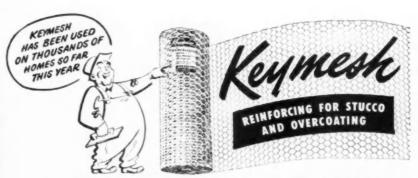
Provides stronger reinforcement— Keymesh is made of strong, copper-bearing steel wire. It's specially woven with a reverse twist— Keymesh lays flat when unrolled. No bumps or bulges to cause uneven thickness of the "scratch" coat. Keymesh is heavily galvanized for protection against corrosion.

Embeds thoroughly—The special open mesh design of Keymesh allows each steel strand to be completely embedded by the "mud", insuring lasting strength of the wall. Keymesh is the right size for easy troweling, and the right size for holding the scratch coat firmly while setting. Joins easily with compact, smooth laps. No bumps or high spots in the first or following coats.

Keeps distance from wall — Keymesh is easily furred out with special Keymesh furring nails to keep it at a uniform and proper distance from the wall—to insure full thickness of the scratch coat.

Contractors and builders—Try Keymesh on your next stucco job. It's easy to handle, doesn't cut hands—saves lather's time. Plasterers prefer Keymesh because it lays flat, trowels easily. Find out for yourself why Keymesh can help reduce your costs. And write for new Contractors Data Book on Keymesh Reinforcing.

Shipped in handy sized rolls, 150 feet x 3 feet. For EXTERIOR Stucco or Overcoating, use: Keymesh — $1\frac{1}{2}$ " 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.



KEYSTONE STEEL & WIRE COMPANY
PEORIA 7, ILLINOIS

American

Sile

are

Cut 7 to 10 times
FASTER—
ON THE JOB





Blue Streak

MOST POWERFUL PORTABLE
ELECTRIC GUIDED SAW



CUT WET OR <u>DRY</u>

using Diamond or Abrasive Wheels

BRICK • TILE • TERRAZZO

MARBLE • SLATE • GRANITE

ASBESTOS PRODUCTS • REFRACTORIES

CONCRETE and CONCRETE PRODUCTS

LIGHT STRUCTURAL STEEL and PIPE

WEIGHING ONLY 78 LBS...

The Stone Blue Streak is rated $2\frac{1}{2}$ H.P. -110 universal or 220 single phase. Will cut 5-inch depth of cut and up to 10 feet in length with a 14-inch wheel.

Write us today for further information

STONE MACHINERY CO., INC.

Dept. A-12 Box 1363 Syracuse, N.Y.



HIGH SPEED CUTTING MACHINERY

Plywood Association Announces Winter Meeting Schedule

THE National Plywood Distributors Association has announced the following winter schedule of meetings:

Midwest meeting, January 10-11, will be held in the Edgewater Beach hotel, Chicago, Ill.; northeast meeting, January 13-14, will be held in the Commodore hotel, New York, N. Y.; the southern meeting, slated for January 17-18, will be in the Atlanta Biltmore hotel, Atlanta, Ga., and the western meeting, January 26-27, will be held in the Ambassador hotel, Los Angeles, Calif.

The date for the national convention is June 13, 14 and 15; to be held in the Edgewater Beach hotel, Chicago, Ill.

Sterling Tool Products Name New Sales Manager

D. A. HUTCHINSON has been named general sales manager of Sterling Tool Products Co., Chicago, Ill., it was announced by S. A. Crosby, president.

Hutchinson, formerly assistant



D. A. HUTCHINSON

sales manager, succeeds J. A. Proven who recently resigned.

H. P. Gangwer, comptroller, has been named vice president.

Autzen on Board of M & M Wood Working Co.

HERBERT MALARKEY, president of the M and M Wood Working Co., has announced that a vacancy on his company's Board of Directors has been filled by Thomas Autzen, president of the Portland Manufacturing Co., Portland.

Autzen, a member of a prominent pioneer lumber family and with wide interests in the lumber industry and other enterprises in Oregon and Washington, has been an associate of the M and M Wood Working Co. in a number of its operations for the past seventeen years.

FOURTH EDITION

SIMPLIFIED CARPENTRY ESTIMATING

By J. DOUGLAS WILSON

Coordinator, Apprentice Education, Carpentry and Cabinet Making Los Angeles City Schools Los Angeles, California

and CLELL M. ROGERS

Mathematics Instructor, Venice High School, Venice, California

A practical text on carpentry estimating, covering rough lumber, finish lumber and hardware, in which the parts of a house are analyzed under six main divisions. Material



lists, short cut rules and tables supplement the text and guard against anything being overlooked in making up the final estimate. Valuable information is given for making labor time estimates.

While designed as a beginner's text the Fourth Edition is complete enough for the use of builders and lumber dealers. Simple arithmetical methods for accurate estimating, are given. Helpful tables that save much time in figuring and a full index make the book suitable for quick reference in the shop or on the job.

Contents

Estimating Fundamentals. Foundation Material. Framing. Exterior Finish. Interior Finish. Hardware. Building Information. Estimating Short Cuts. Labor Hours per Unit of Work. Carpentry mensuration, Mathmatical Reference Tables. Stair Estimating. Index. 1948. 4th. 288 pages. 123 illustrations, 60 tables, 5x7, \$3.00.

Book Department

AMERICAN BUILDER and BUILDING AGE

Simmons-Boardman Publishing Corporation
30 Church Street New York 7. N. Y.

"Duty-Designed" means these
completely new Timken
Silent Automatic heating units



are designed right, built right, priced right to give small

homes the finest in quiet, dependable, economical heat.

Right for the architect!

Right for the builder!

Right for the home owner!

Where every foot of cubage counts—and where quietness plus reliability count most of all—that's the place for Timken Silent Automatic "Duty-Designed" oil heating equipment for small homes!

It's made specifically to fit the job in every way—ultra-compact for vital space conservation; supremely quiet for utility room installations; completely dependable for long-lasting, trouble-free service; competitively priced to provide top-quality equipment at budget cost.

Operating economy is also in keeping with small home needs. This Timken Silent Automatic "Duty-Designed" equipment is fired by the same wall-flame type of burner that has a 20-year record for thrifty efficiency. Fuel oil savings up to 25% or more are commonplace.

For full details, write the factory or phone your local Timken Silent Automatic Authorized Dealer! He's listed in the "yellow pages."



and automatic humidifier (extra optional equipment).



HERE IS THE FAMOUS WALL-FLAME OIL BURNER — HEART OF EVERY TIMKEN SILENT AUTOMATIC "DUTY-DESIGNED" UNIT!

The Timken Silent Automatic Wall-Flame Oil Burner is the only type of power burner capable of operating at continued bigb efficiency at the low oil rates demanded by small homes. And it's whisperquiet, too—as proved by decibel meter tests.

Other "Duty-Designed" units include Lo-Boilers, Hi-Boilers, Coil and Tank Type Water Heaters, and Standard Oil Furnaces.

TIMKEN
Silent Automatic
OIL HEAT

TIMKEN SILENT AUTOMATIC DIVISION





America



WE SAVE TIME WITH FYRO-PLACE **FORMS**

YES, JOHN, YOUR GOOD WORK IS BEING SPREAD **OVER MORE JOBS BECAUSE** YOUR HELPERS CAN HANDLE MORE OF THE WORK



AND BOY! HOW EASY IT IS TO SELL HOUSES WITH CIRCULATING FIREPLACES, WITH GAS AND OIL SUPPLIES UNCERTAIN

• The New Scientific Steel Form costs as little as \$33, but saves as much as 16 hours of labor, as well as cost of firebrick and damper.

Avoid errors and costly repairs or rebuilding. Fireplaces built around the Fyro-Place are bound to function perfectly.

- 1. Perfected by pioneers in the field.
- 2. Thousands in successful use.
- 3. Nationally advertised.

Write for all the Facts and the large edition of our FREE BOOK, "100 Fireplace Ideas."

FIREPLACE HEATER & TANK CORPORATION

53 Austin Street, Buffalo 7, New York

Upson Salesmen Taught Application Methods 'Refresher Course"



SALESMEN prepare to install wall panels

WHEN a man sells laminated fibre wall and ceiling panels, he should be able to put on a carpenter's apron, get himself a hammer and a rule, and put those panels on a wall or ceiling the way they should be applied.

Such is the theory behind a series of sales training classes under way at the headquarters plant of The Upson Co., Lockport, N. Y.

District sales managers and sales representatives have been coming into Lockport to take a "refresher course" in wall and ceiling panel application, directed by L. E. Keller, Upson technical sales manager.

When the class of salesmen-carpenters assembles in the company's sales experimental building, the program is outlined to them and "Professor" Keeler puts them to work. They unload full-wall panels from a truck, fasten U-clamps to them, and ease them into the building through a door



FULL-WALL panel is taken into building

opening. The particular application problem is explained to them, and it is up to them to work it out.

Floating fasteners hold the panels (Continued to page 146)



Time proven operator for heavy duty. smooth, trouble-free operation. For right or left hand. Sturdy flanges . . . deep drawn and hardened housing . . . selflubricating worm . . . full length bearing surfaces . . . sash track slide assembled with phosphor bronze, non-rusting spring, takes up wear and eliminates rattle.

See Your Jobber

E H. B. IVES CO NEW HAVEN, CONN. Quality Hardware

INCE 1876

"USE YOUR ATTIC" For free information, see your building material dealer or write-

Our emp vine, I j hours. I in a cont and ugl deaden i a place

> You be prou mod Wallbo

right deep selfaring bled sting nates

"



rest in building and remodeling products, see your local Gold Band Dealer first

Why girls leave home...

Our employee morale was low. But through the grape-Our employee morale was low. But through the grape-vine, I found the answer. It wasn't the pay or the hours. It was our dingy, noisy old office! So I called in a contractor and he suggested, "Hide the old walls and ugly pipes with Gold Bond Gypsum Wallboard, deaden the noise with acoustical tile, and you'll have a place that girls will love to leave home for!"

You can have a happier office, and one you can be proud of, with the improved materials created by modern research. Take Gold Bond Gypsum Wallboard for example. It's fireproof. And the big durable panels transform shabby old rooms into modern interiors like magic.

To smother noise, call your Gold Bond Acoustical Applicator, in the phone directory under "Acoustical Contractors." He'll cover the ceilings with sound absorbing Gold Bond Acoustical Tile.

Whether it's an office or a home, you'll build or remodel better with trademarked Gold Bond Products made by National Gypsum, and priced the same as unknown brands. For fireproof insulation that keeps furnace heat in and summer heat out, use full thick Gold Bond Rock Wool Batts.
Cuts heating costs up to 40%. For existing homes, call your Gold Bond Rock Wool Applicator and have him "blow" Gold Bond Rock Wool into the outer walls and top floor ceilings. You'll find his name in the phone directory under "Insulation."

For stronger, more weatherproof outside walls with lower cost, use fireproof Gold Bond Gypsum Sheathing under the exterior finish. And for charming rooms of long-lasting beauty, use fireproof Gold Bond Gypsum Lath and Plaster.

Over 150 Gold Bond building products, each guaranteed to do a specific job better, are available through your local Gold Bond lumber and building material dealer. See him first!

NATIONAL GYPSUM COMPANY BUFFALO 2. NEW YORK

Gold Bond Building Products add greater fire protection, permanency, and beauty at no extra cost. These include fireproof wallboard, lath, plaster, lime, sheathing, wall paint, insulation, metal lath and sound control products.









THIS AD IS SELLING OFFICE REMODELING FOR YOU!

Something new has been added to the Gold Bond series in the POST. With this ad we break away from home remodeling to show businessmen what a little modernizing can do for them. Plenty of offices and stores are begging for smart, low cost remodeling, and this ad will start the ball rolling for future jobs for you. When they come in, don't forget us—always ask your dealer for Gold Bond Building Products.

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.

(Appeared in full color in the Saturday Evening Post November 20th)



Quality STEEL CASEMENT WINDOWS

Buy Steel Casement Windows for less than Wood Frames . . . save Installation Time.

When you install steel casement windows you save on the initial cost compared with wood frames, and you save on installation time and labor cost, as well.

With VENTO Steel Casement Windows you get these cost-saving features plus the long, satisfactory wear that Vento Quality Windows provide. Made of heavy-section steel and carefully fitted, Vento Quality Steel Windows stand firm and swing true - a winning combination of sturdy wearing quality and trouble-free operation.

You get prompt delivery when you order Vento Quality windows. Your order will be delivered within a week, if necessary, preventing possible costly delay at the job site.

Don't forget - the finest houses contain Vento Quality steel casement windows.

Builders, wholesale distributors, dealers - write for catalog -

STEEL PRODUCTS

(Continued from page 144)

to studs. Salesmen clinch fasteners from the rear of the panels so no holes will appear on the surface. They are taught how to make cutouts around bathtubs, making the junction between tub and wall watertight and waterproof.

They lift ceiling panels into place with the aid of T-props or T-sticks. The panels are held firmly while being attached to the fasteners on the joists.

In the classes, each salesman learns how to apply panels to walls and ceilings in new construction, how to locate and cut out openings in panels



PANEL is applied in sales-training school

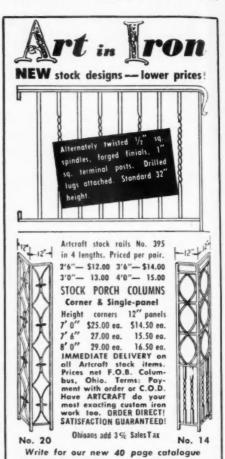
for doors and windows after panels are on the wall; how to apply panels over cracked plaster and old walls in remodeling work; how to apply Upson Dubl-Thik Fibre-Tile on bathroom and kitchen walls, and how to apply mouldings and copings after panels have been applied.

College Scholarships For Employees' Children

DIRECTORS of Masonite Corp., have established five annual competitive college scholarships, each worth \$750 a year, for children of employees in its hardboard plant at Laurel, Miss., as a memorial to William H. Mason, founder of the com-

Eugene Holland, president, in announcing the board's action, said a total of 20 students will receive substantial aid each year after the program has been in effect three years. The company's principal objective, Holland said, is to help promising high school graduates.

Winners of the annual competition will be chosen by an impartial committee on the basis of scholastic accomplishment, leadership ability, personality, and financial need.





ARTCRAFT Ornamental Iron Co.

Columbus 11, Ohio

724 E. Hudson St.

- Mounts in ceiling directly above stove—in-stantly catches heat, grease and odors as they rise.
- Only an inconspicuous "dripless" ceiling grille is visible, yet unit easily installed.
- Powerful squirrel-cage blower (not a fan!) creates fast-moving stream of air to do job efficiently.
- Because of patented construction which isolates motor from greasy air stream, unit guaranteed 5 years.
- Available everywhere. Stocked by dealers coast to coast.

Ask your Electrical Dealer or mail coupon.

Trade-Win	nd Motorfans, Inc.
5705 S. M	ain St., Los Angeles 37, Calif.
Name	

15 48.

S!



EASY TO SEE WHY
IT'S EASY TO SELL THIS



New

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
If you lead the way in your community. Fair-traded,
with full markup for dealers.

\$39.50

LIFETIME CHROME
by

GETITLE



Charge the suds unit with 1 or 2 tablespoonfuls of Vel, Dreft, Chat, Tide or other well-known household detergents



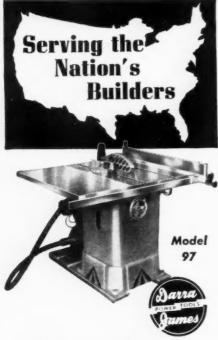
Fingertip control. Lift the diverter valve for clean spray. Push the button on sprayer handle to add suds as needed. **Gerity-Michigan**

CORPORATION

Adrian Michigan

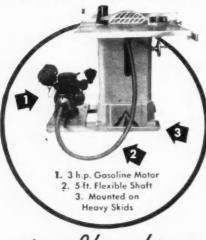
"Trade cost registered, Polosis pending.

An erican



JJarra-Yames GASOLINE POWERED 12" Tilting Arbor Saw

Power is no problem with the '97' it carries its own 3 h.p. gasoline motor and a 5-foot (1/2" diam. core) flexible shaft. Saw and motor are mounted on tough timber skids. May be converted for use with standard electric motor. A 'must' for every builder . . . Mail coupon below now!



,	0	1		
too	Li	Kr	aft	CORP.
WATE	RBU	RY 9	oi, coi	NN.
Ple	ase	send	literatur	е
NAME				
ADDRESS				
CITY				
STATE				
				AB.397

Philip Carey Company **Appoints New Advertising** Sales Promotion Manager

APPOINTMENT of Frank J. Smith as advertising and sales promotion manager of the Philip Carey Manufacturing Co., Cincinnati, Ohio, was recently announced by E. W. Smith, vice president in charge of sales. Frank Smith suc-



FRANK J. SMITH

ceeds Harold D. Bates, who was recently promoted to general merchandise manager.

Mr. Smith joined the Carey Co. in January, 1948, after several years in the sales and advertising departments of Owens-Corning Fiberglas Corp. He is a graduate of Ohio State University, and a veteran of World War II, serving three years as a naval officer.

Aluminum Approved For Duct Installations

THE National Board of Fire Underwriters has approved aluminum for use in the installation of ducts for air conditioning, warm air heating, air cooling, and ventilating systems. The approval was granted on the recommendation from the Committee on Air Conditioning of the National Fire Prevention Association. The Committee's recommendation is based on a careful study of aluminum's satisfactory performance in a large number of duct work applications.

Hotpoint Sets 1949 Goal

HOTPOINT, INC., has established 40 per cent increase in dealer sales of major electric appliances for kitchens and home laundries as its sales goal for 1949. The new marketing program for attaining this sales objective will be based on strengthening and refining rather than by further expanding the company's present dealer organization.

Leonard C. Truesdell, vice president of marketing, a two-day sales conference stressed the 1949 program.

Of All Heat Transfer Through Wall Spaces, 65% to 80% is Radiant

Infra Insulation Reflects 97% of **Radiant Heat**

Infra Accordion Multiple Alumi num Insulation absorbs and emits only 3% of Radiant Heat. Infra forms a series of low-conductive air compartments as well as 4 radiantbeat-rejecting aluminum surfaces. It blocks vapor and convection currents,

Infra weighs 1 oz. per sq. ft., occupies 1 cu. in. of space. Ordinary insulation which weighs 32 oz. per sq. ft., occupies 18 cu. in. Installed, Infra's mass has a ratio of 1 to 431 of low-conductive air against 1 to 23 for ordinary insulation.

Infra insulates against heat, condensation, vapor, vermin, mold and

Thermal Factors Stamped on Every Infra Carton

Infra C Factors and Rockwool Equivalents

C.052 Heat Flow Down, equals 6" Rockwool.

C.083 Heat Flow Up, equals 3.97" Rockwool.

C.10 Lateral Heat, equals 31/3" Rockwool.

WRITE FOR FREE 32-Page BOOKLET "Simplified Physics of Thermal Insulation."

Architects and engineers use it as a handbook, and colleges as a text, on heat transfer, condensation, vapor, mold, radiant heating, etc. Contains master chart of k, C, R and U factors of all insulations, of all thicknesses, weights, densities, etc. Address Dept. AMB.



1948.

umi-

mits

nfra

air

iant-

s. It

ents.

ccu-

in-

sq. led,

1 of

for

on.

and

ifra

ents

6"

7"

3"

T

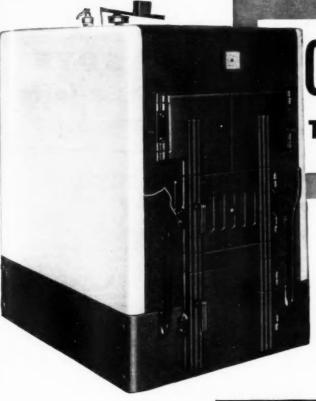
a

n r,

15

rs

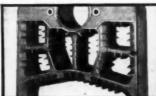
s,



CONVERTIBLE TO ANY TYPE OF FUEL

Adaptable to any firing method, the "300" Series National Heat Extractor Boiler, for steam or hot water, assures continuous heating comfort. It can be installed as a hand-fired unit and later converted to automatic firing to take advantage of changing fuel supplies. The "300" Series is particularly suited to larger homes, small apartments and commercial buildings. Radiators, convectors, unit heaters, baseboard heating units or radiant panels can be used with the "300" Series to form a complete and modern heating system.





Finger-like projections form extra heating surfaces to capture and hold extra heat, reduce stack losses and fuel bills.

Durable cast iron construction, multiple-flue sections, extended heating surface, extra thick insulation, special baffles (for oil and gas firing) and an attractive jacket are some of its unique features that add up to heating satisfaction.

Domestic hot water, year 'round, is another convenience of the "300" Series, offered by the easy addition of an integral tankless type or storage type National Water Heater.





GAS-FIRED

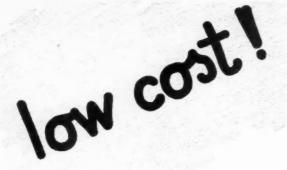


For complete information on the "300" Series Heat Extractor—or the similarly designed "100" and "200" Series for smaller installations or the "400" and "500" Series for larger installations—phone our nearest office or write to us at Johnstown.

THE NATIONAL RADIATOR COMPANY

JOHNSTOWN, PENNSYLVANIA

American





ALUMINUM WINDOWS

Checkyour full window costs including all material, weatherstripping, field hanging, fitting, adjusting, prime and finish painting

... then compare ...

the cost of the Thorn completely assembled aluminum windows, either Double hung or casements, with built-in weathering features.

You will probably find you are paying more for much less window value.

J. S. THORN COMPANY



HOMASOTE gets a letter

Long Branch, New Jersey October 22, 1947.

President Homasote Company Fernwood Road Trenton, New Jersey Dear Sir: —

I am one of 56 men who constructed and then lived in the Byrd Expedition buildings (at Little America, Antarctica for over a year in 1934-35) which were assembled from Homasote lined sections left over from the establishment of the first Little America in 1929. These sections were already the veterans of five years' storage in damp New Zealand warehouses, but were still so strong and easy to saw, fit, and assemble that we were considerably surprised. But when we had dug down to the old camp and found also that the Homasote in the original buildings was in perfect condition after one year of soaking in melted snow (1929-30) and five years under the tribic pressure of 20 feet of ice, we were completely sold. When other wallboards would have pulped, cracked or dissolved, Homasote remained firm and trustworthy insulation against blizzards and temperatures to minus 75!

I am not in the habit of using my few leisure hours to throw bouquets, I have too much to do, but I feel that merit deserves reward, so here goes — believe it or not, the above remarks are paled into obscurity by my present opinion of your fine product. When, as a technical observer, on the recently concluded Navy "Operation Highjump", I was one of the few who were privileged to dig down 12 feet to our old home 10 miles from the newest camp-site. I found the 18 year old Homasote in the walls and ceilings of the "Messhall' and "Science Lab" (the only buildings we could reach) absolutely unharmed by time, water, or cold. Hundreds of tons of ice had forced up the wood floors and pushed down the ceilings until they met in the center of the rooms, and puddles of ice everywhere evidenced the repeated freezing and thawing of the many seasons, but the walls were straight, unbuckled and scarcely stained.

Later, when our Expedition was leaving for its return to the States (February, 1947) and I had occasion to make one last run to the old camp to mark the entrances against the future, I hacked out a piece of the messhall wall to send to you for analysis. I am mailing it to you for whatever purpose you may wish to use it, and if you ever want me to convince some doubting customer of yours, just lead me to him. At least I can assure you that when at last I build the home I've been planning throughout several years of roaming the world, the insulation will emphatically be Homasote.

Yours sincerely,

amongstheategr

Amory H. Waite, Jr. Radio Engineer BAE II 1934-35 and 1946-47

P.5. I forgot one item. When I was carrying your specimen up the rope ladder from the whaleboat to the ship, it fell out of my pack and drifted away to sea. To my amazement its generation-old water-proofing qualities were still intact for it kept floating! Another boat speared it with a boat hook an hour later and returned it to me, punctured, but still definitely useable wallboard. The hole, therefore, is a badge of honor rather than a defect.



HOMASOTE COMPANY, Trenton 3, N. J.

in eft 29.

to en ote of fic er

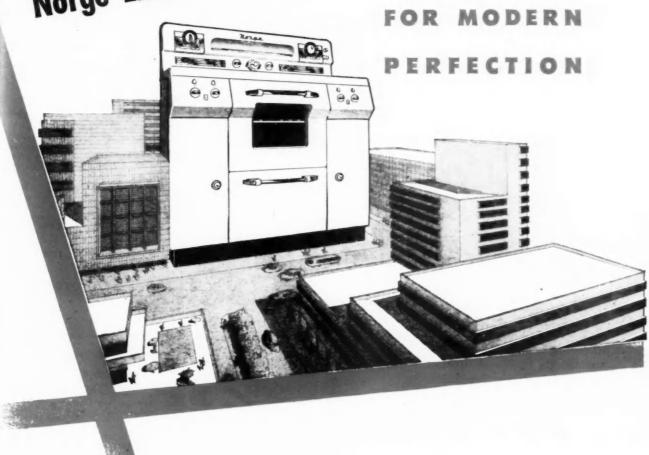
en-

we-das

y dy . c

eotg

Norge Electric Ranges fulfill your specifications



Modern apartment buildings are designed for utmost utility...for greater comfort and convenience...for new beauty. So, too, are Norge appliances! Norge products provide maximum comfort and satisfying economy. For Norge engineers are fulfilling the pattern for modern living with appliances styled to complement good room design, and constructed for functional efficiency. Norge Division, Borg-Warner Corp., Detroit 26, Mich. In Canada: Addison Industries, Ltd., Toronto, Ontario.

A BORG-WARNER INDUSTRY

Refrigerators • Electric Ranges • Water Coolers

Washers • Electric Water Heaters • Home Heaters

Gas Ranges • Home Freezers



American



OAK FLOORS HARMONIZE WITH Any COLOR FURNISHINGS

That's one advantage of oak floors that is becoming increasingly important. With new trends in home furniture and furnishings, it is imperative, for most buyers, that they don't need to change floors or floor coverings every time they buy a new chair or change the colors and pattern of wallpapers, drapes or paint.

You'll find this point useful when you are selling homes with oak floors, to add to their long established values in beauty, durability and economy. Point out, that present furniture can be used with oak floors with all its attractiveness . . . and that these floors will form perfect settings for new purchases.

Get the attractive, free booklet Oak Floors for Long-time Beauty from your lumber dealer. It details all these values of oak floors. Ask also for the new Builders' Data Book, giving specifications for planning, laying and finishing oak floors. Get these two helpful books today.

For long range sales and profits . . . sell the value of oak floors.

Copyright 1948 . . National Oak Flooring Manufacturers' Association, Memphis, Tenn.

OAK FLOORS

BEAUTY . DURABILITY



It does not rattle . . .

It does not buckle . . .

It does not come in modular sizes . . .

You don't nail it, screw it, suspend it. You don't fasten it TO your walls or ceilings . . . because it is PART of those walls and ceilings, an integral, monolithic part of the entire building.

To the DESIGNER, it fits willingly his every form of expression. The flat surfaces, the angular; the inside, the outside curves. And any decorative treatment may be achieved, to become an integral part of the whole.

To the OWNER it provides the satisfaction of a smooth, clean, joint-free job, that is vermin-proof, rodent-proof, fire safe and acoustically right. More economical in first cost than any "Substitutes", it is its long life that affords real life-long economy.

And for the best in fine finishing lime, remember Ohio Hydrate's brands:

"Ohio White Finish" and "Hawk Spread".

They are identical.

They have no equal.



why have a question... when you can have

CRANE '

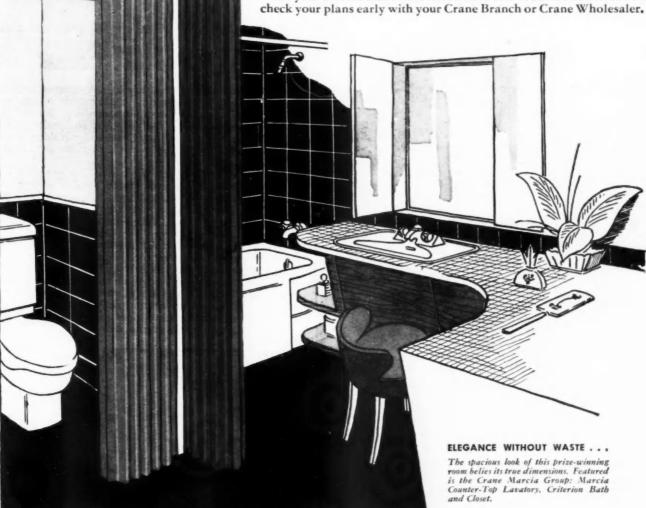
• Why have owners wonder, "Is this the best?" When it's Crane, they know it's best! They themselves have chosen Crane in national surveys... year after year... above all other plumbing brands.

And you know it's best for them! The broad Crane line includes a style for every taste-a price for every building budget.

You can offer them Crane quality not only in bathroom fixtures, but in kitchen sinks and laundry tubs ... each with the most popular development in years-Crane Dial-ese controls!

You can offer Crane quality in heating . . . complete systems for hot water, warm air, or steam . . . for coal, coke, oil, or gas.

See your Sweet's Builders' File for selections from the Crane line or



CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5

PLUMBING AND HEATING VALVES . FITTINGS . PIPE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS

Modern Functional Design for the Most Discriminating Taste in Interior Decoration

General Controls new, compact, snap action, T-70 Metrotherm Thermostat sets a new standard of functional beauty and accuracy in room temperature control. The harmonizing, lustrous stainless steel cover is connected directly to the thermally responsive element so that the entire cover, sensitive to air temperature and radiant heat, immediately transmits temperature changes to the control mechanism. Its remarkable sensitivity insures constant heating comfort. It is truly a thermostat that lives thermally in the room.

The T-70 Metrotherm Thermostat extends only 1/8" from the wall. Its ivory plastic base acts as a blanket to thermally isolate the thermostat from the wall. From every point of view-both appearance and performance-this thermostat typifies the ultimate in modern engineering design.



THE T-70 SERIES Metrotherm Thermostats are available individually or in General Controls broad line of heating control packaged sets. For complete specifications covering the T-70 Metrotherm Thermostat and General Controls Automatic Pressure, Temperature and Flow Controls for Domestic, Commercial and Industrial applications, request new Catalog



Automatically yours for Better Heating

GENERAL CONTROLS

FACTORY BRANCHES: Birmingham (3), Boston (16), Chicago (5), Cleveland (15), Dallas (2), Denver (10), Detroit (8), Glendale (1), Houston (2), Kansas City (2),

New York (17), Philadelphia (40), Pittsburgh (22), San Francisco (7), Seattle (1), Oklahoma City (1) . DISTRIBUTORS IN PRINCIPAL CITIES

American Builder, December 1948,

The leader always has something extra!



Metal Trims

• Contenders can qualify in any competitive field simply by meeting basic requirements. But only a leader has that something "extra" that gives him the "edge" over competition. In the metal trims field, Chromedge holds the lead with "extras" you can turn to profitable advantage.

For example, you can match any need for metal mouldings with the unmatched variety and number of trims in the Chromedge line. You have a wider choice of types and sizes. Chromedge Metal Trims hold their richer, lustrous beauty longer. You can be sure of that because only specially selected, high-grade aluminum alloys go into them. Top quality is controlled, too, since B & T manufactures Chromedge from rough metal ingots to finished trims. Insist on genuine Chromedge Metal Trims-distributed only through B & T's authorized wholesalers and dealers. For complete up-to-date facts, write today.



Comp

American

1. EAS Strand A chile rolls si 2. STI constru

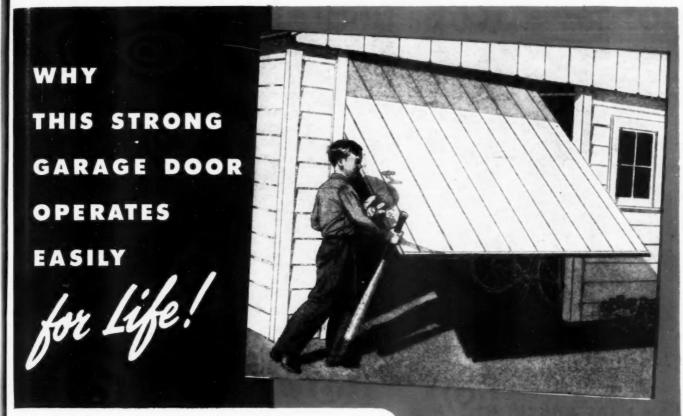
a lifeti zinc co base fo 3. SM appea

enduri 4. IN: Reced move: comes made

5. LC centra Stranc

Order

1948.

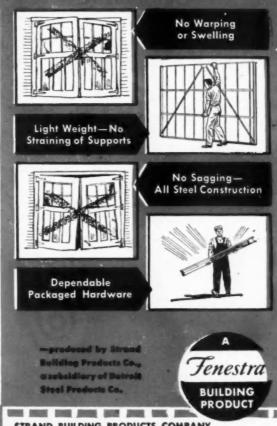


Compare Strand's Outstanding Features:

- 1. EASY OPERATION—Built for troublefree performance, Strand All-Steel Garage Doors won't warp, sag, swell or rot. A child can lift the Canopy Door; the Receding (track) Type rolls smoothly out of sight on ball bearing rollers.
- 2. STRONG AND DURABLE—All-steel, electrically welded construction provides outstanding strength and durability for a lifetime of service. Galvannealing affords a hot galvanized zinc coat for rust protection, oven baked to provide a clinging base for paint.
- 3. SMART, conservative design gives lasting attractive appearance. Galvannealed steel makes its good looks enduring.
- 4. INSTALLED QUICKER—the strong Strand Canopy and Receding (track-type) Door comes with less crating to remove; it is already assembled in one piece; hardware also comes assembled; and installation is quickly and correctly made with ordinary tools.
- 5. LOW IN COST-The result of volume production concentrated in one plant - standardization on two models. Strand is America's greatest garage door value.

You can get Strand Doors without waiting and without limit. Order today from your dealer-or mail the coupon, mentioning your dealer's name.





STRAND BUILDING PRODUCTS COMPANY Dept. AB12, 1710 Buhl Bldg., Detroit 26, Mich.

Please rush literature with detailed descriptions of Strand all-steel Garage Doors.

1 am a () Builder, () Dealer, () Prospective Owner, () Other_

Address_

City_ State.



Model 60 MallSaw 2" Capacity 6" Blade

You Can Do More WITH A Mall Saw

MallSaw

1-15/16"

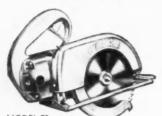
Capacity

Table Stand

- · SAWING
- · SANDING
- WIRE BRUSHING
- · GRINDING
- SHAPING



This one tool with its companion all-metal table stand, complete with miter guide and rip fence, equips you with a hand saw and table saw that will cut everything from wood to steel. Other interchangeable accessories convert the Model 60 Mall-Saw quickly and easily into a shaper... face or drum sander... wire brush... or grinder, thereby giving many-tool efficiency at minimum cost.

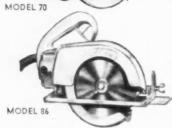


THREE LARGER

Model 70—21/4" capacity 71/4" blade

Model 86—2 7/8" capacity 8 1/2" blade

Model 128—41/2" capacity 12" blade





Ask Your Supplier or Write Power Tool Division for Literature

MALI

TOOL COMPANY

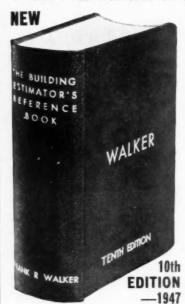
7737 South Chicago Ave., Chicago 19, III.

Preferred by Master Craftsmen

THE BUILDING ESTIMATOR'S REFERENCE BOOK

Will Help You

- Increase Your Profits
- Stop Your Losses
- Prepare More Accurate Estimates
- Save Estimating Time
- Perform Your Work at Lowest Cost



The new edition of this standard handbook on building estimating has been revised in the light of postwar costs and production rates. It contains the information a builder needs to prepare quick and accurate estimates. It gives correct methods of measuring and listing quantities from a set of plans, and figuring material quantities and labor hours necessary to complete any class of work.

Whether you build houses, small apartments, commercial or industrial buildings, or specialize on alteration, remodeling and repair work, you

will find in this new edition the data you need to prepare money-saving estimates with the least time and effort. If you have one of the older editions of Walker's you will find enough new material in the Tenth to make it well worth its price. 1947. 10th, 1,678 pages, 1,000 illus., 1,000 tables, 25-page index, 4½x6½, flexible. \$10.00.

Walker's Vest-Pocket Estimator-FREE



220 pages, 21/2 x 5, tables, flexible

This ever populat little book (not sold separately) contains estimating and cost data in condensed form for ready reference. It fits the vest pocket where it is quickly available on the job or in the office. Worth its weight in gold to contractors and estimators.

FILL OUT THIS GUARANTEED ORDER FORM

American Builder and Building Age 30 Church Street, New York 7, N.Y.

Enclosed find \$10 remittance for which send me a copy of the New Tenth Edition of THE BUILDING ESTIMATOR'S REFERENCE BOOK and a Free copy of The Vest Pocket Estimator. If I do not find the books entirely satisfactory I will return them within five days of receipt and you will refund my \$10.

Name	***************************************
Address	***************************************
City	Zone State A.B. 12-48

ON

American

ind-

es-

It

der

are

of

om

ind a l

ISS

rt-

or

nd

ONLY \$25* per 1000 square feet for both Insulation and Vapor-Barrier





THE FASTEST STEAMING BOILER MADE

WATERFILM and only WATERFILM has the patented zigzag water tube—a special feature scientifically designed to produce quick heat. Just a ¾" film of water in these tubes has to steam in order to start heating any home—before the main body of water in the boiler is even warm! Explain this fast-steaming, fuel-saving principle to your customers—and point out that attractively jacketed WATERFILM BOILERS maintain even temperature in every room and supply aleasy of denperature in every room outlines. m and supply plenty of do-

· Easily Replaced

In models and sizes for small homes, apartment houses and industrial plants. For the large installations, the Sectional Boiler can be taken through a 2-ft. door.

500-17,850 E. D. R.

Write for free literature and newspaper mat service.

NATIONALLY ADVERTISED

WATERFILM BOILERS, Inc.

A Division of L. O. Koven & Bro., Inc. 154 Ogden Ave., Jersey City 7, N. J.

EVEN ROOM TEMPERATURE THROUGHOUT THE HOUSE

FOR AUTOMATIC FIRING WITH OIL, STOKER OR GAS

Invizie says: GRAND RAPIDS INVIZIBLES are easy to sell because.



Most people want windows that can be opened or closed at will, according to the seasonal or individual room requirements. Invizible Sash Balances completely satisfy this

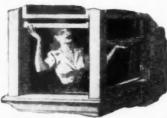


Most people want windows that open smoothly, quietly and with minimum effort. The enclosed mechanism of Invizible Sash Balances provide this kind of window operation at its very



Most housewives prefer windows that are easy to keep clean and neat. With Invizible Sash Balances, there are no

cables, tapes or exposed tubes to catch dust or paint.



Most people want full view windows including multiple and corner installations with modern narrow trim. 'Invizibles' are the most practical balances for double-hung windows of every type."

ADVERTISED TO 134,445,040 READERSHIP IN NATIONAL MAGAZINES



concealed in the sash . . . no tapes . . . no cables.

EASY TO INSTALL . . . just drive in two fasteners . . . screw in one

10 SIZES FIT 95% of all new and old win-dows , . . completely in-terchangeable.





No. 103 face plate, cone bearing type, and Nos. 175, 109, 110-saw-tooth drive type sash pulleys cover 95% of all sash pulley re-quirements.



WRITE

GRAND RAPIDS HARDWARE COMPANY GRAND RAPIDS 2, MICHIGAN Quality leaders in Sash Hardware for over 50 Years Now . voice single

America

attacl views. NAH all Co Home Acco subm

build This

partn

sen'c

Mr. Fr Nation 1028 Washi

Witho

Name.

Street

City !

HOME BUILDERS ...



NAHB'S Legislative Department Helps Show the Way

Now . . . the operative Home Builder makes his voice heard in the halls of Congress. No longer a single business man, defenseless against organized attack, the Home Builder today can express his views. It's the democratic way!

NAHB's Legislative Department carefully examines all Congressional measures which might affect the Home Building Industry and reports to the Directors. According to the needs of the industry it drafts and submits necessary amendments. The Legislative Department serves as liason to government agencies and trade groups, constantly working for home building progress.

This is one of the many services that NAHB offers

you. The Legislative Department works hand in hand with the other operating divisions of NAHB to provide a continuous flow of information and service to Home Builders all over the country.

This strong arm means protection for the individual builder in the nation's capital—service and information for the individual builder in every part of the United States.

Membership in the NAHB brings benefits to every Home Builder regardless of the volume of his activities. Why not send today for the free booklet, "Men, Homes and YOU." Learn for yourself the many ways in which NAHB spells better business for you.

send for your FREE bookl	Y TEN
Mr. Frank W. Cortright, Executive Vice President National Association of Home Builders 1028 Connecticut Avenue, N. W.—Suite 1116 Washington 6, D. C.	Homes World
Without cost or obligation please send me a copy of "MEN, HOMES AND YOU."	
Name(Print)	7
Firm	
Street Address	READ
City & State (Give Postal zone if any)	
Sound this Counan	Today!

The state of

dows lietly enible kind very

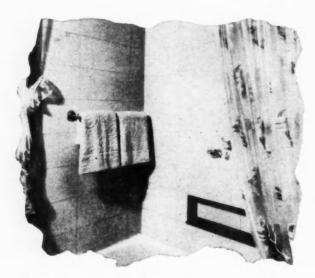
iew iple ith les'

Americ

Your customers like the Modern Look and



People like to make the outdoors a part of their home. Hence the trend toward picture windows. With Twindow — the "Pittsburgh" window that features "built-in" insulation — picture windows are more practical than ever. Twindow greatly reduces heat losses — eliminates downdrafts near windows. Can be set as quickly and easily as a single pane of glass.



It's easy to understand why so many homeowners want Carrara Structural Glass for their bathroom walls and wain-scots. Carrara is easy to keep clean. There are 10 beautiful colors to choose from. And its beauty lasts indefinitely. It's ideal for other rooms, too. Can be used for kitchen walls, behind stove or lavatory—for fireplace surrounds, shelves and window sills,



As important as their clothes and cosmetics—that's how every modern woman feels about full-length door mirrors. And there are many other types of Pittsburgh Mirrors which help make homes more practical, modern and glamorous — and help increase your profits! "Spruce up" mirrors are always appreciated in entrance halls or kitchens. And structural mirrors in living, dining or bedrooms make the rooms seem larger and brighter.

The g steppin front. advan of qua metal

> Here asse thus brea app desi bull inve

FREE! W

Pi

and that means lots of Pittsburgh

9/255

The glamor and beauty of glass work wonders in stepping up the sales appeal of any modern store front. Merchants know this—are anxious to take advantage of it. "Pittsburgh" has a complete line of quality glass products—as well as store front metal and the new Herculite Door Frame Assembly to help store owners and you.



Here is the new Pittco DeLuxe sill and sash assembly. Sill and sash are separate members, thus simplifying installation and reducing glass breakage—yet when used together, they give the appearance of a single moulding. The sill has been designed to recess the Carrara Structural Glass bulkhead, providing toe room and protection. The invertible sill members offer variety in styling.

REE! We will gladly send you free our special "Builders Kit" which includes illustrated literture showing how you can use glass effectively on all types of jobs in which you are interested.

*Build it better with

Pittsburgh Glass

Pittsburgh Plate Glass Company
2355-8 Grant Building, Pittsburgh 19, Pa,
Please send me without obligation your "Builders
Kit" of illustrated literature.

Name

City_____State____



PAINTS . GLASS . CHEMICALS . BRUSHES . PLASTICS

NYPITTSBURGH PLATE GLASS COMPANY





12482 EVERGREEN ROAD . DETROIT 23, MICH.



The tricks of wind and weather often result in annoying grief with old-fashioned swinging garage doors. Now, with R-W 999 Garage Door Hardware, it's easy and economical to use those same doors for the trouble-free convenience of overhead operation. They always open easily, stay "put" and close readily ... weathertight. Garage door grief is eliminated entirely by this modern, new overhead door conveniencethe R-W "nine-ninety-nine" hardware line. Conversion of ordinary doors to the overhead way with R-W 999 Hardware is simple, swift, and inexpensive. Everything needed is delivered, complete, packed to specific order in one convenient carton, ready for installation and operation.

In your plans for building or modernization, specify R-W 999 Hardware and be sure of lasting and complete satisfaction. For detailed information about R-W 999 Garage Door Hardware, simply call or write the nearest Richards-Wilcox office for free folder.



Richards-Wilcox Mfg. Co.

ANADAL TRUNOIS, VI.A.

BRANDA OF THE CHEEP BRAND CONTROL CONTROL DE CONTR

1948.

lt

g-

9

)ie

99

e

S

ABC'S

ERECTING CECO

Steel Casements

EOR

There's a right way to make every steel casement installation job easier and at a saving. But it's all in knowing how. That's why Ceco has prepared a complete and concise Erection Manual for the building industry. Here's a manual containing detailed data on the installation of steel casements. Easy-to-follow directions eliminate guesswork—diagrams show the right way to do the job. Note three examples given here—How to apply a head drip—Testing the fit of ventilators—How to glaze. All the necessary steps for proper installation are covered in Ceco's Manual. It will help you cut costs, do away with window damage, avoid loss of time. Write for free copy 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 Offices, warehouses and fabricating plants in principal cities

HOW TO ERECT



A Before erecting, apply loose head drip by placing it on top edge of casement frame, tapping it lightly to seat in place. No screws or bolts required. Where ventilators do not extend to casement head, no head drip is necessary.

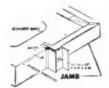


C In glazing, spread steel window putty or compound over glazing rabbets. Push glass firmly into position. Slip glazing clips in place and apply face putty or compound.

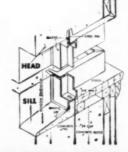


B After erecting, before glazing, test fit of each ventilator by pushing it closed. Ventilator top should touch first while bottom extends about ½" from frame. Later, when hardware is installed, underscreen operator will draw in bottom of ventilator.

ONE OF MANY TYPICAL INSTALLATIONS



Concrete Block
Construction
with
steel fin



CECO STEEL PRODUCTS CORPORATION
5611 West 26th St., CHICAGO 50, ILL.
Please send FREE Manual No. 1014 on how to
install metal casements.

Name Address

State

CECO STEEL

In construction products CECO ENGINEERING makes the big difference

YOUNG BUILDS HEATING EQUIPMENT INDUSTRIAL APPLICATIONS



FOR THE OFFICE

For private and general offices, i.e. Office of T. L. Fawick, President, Fawick Airflex Co., Inc. Cleveland, Ohio, (left), Young Convectors maintain uniformity of temperature so desirable for maximum comfort and human efficiency.



UNIT HEATERS
This view of the Fawick Airflex plant shows typical installations of Young Unit Heaters.
"Vertifiow" Units (center) deliver heat from above craneway. Horizontal Units heat greak with low ceilings.

• Young Heating Equipment is the solution to the space heating problems of today's large, modern offices and multi-windowed, expansive plant interiors. Young Convectors and Unit Heaters furnish an abundance of healthful heat where it's needed. For example: Young Convectors provide a steady flow of clean, warm air . . . circulated by convection, augmented by radiation . . . with quick response to modern thermostatic controls. Likewise, Young Unit Heaters, last word in design, tested in service, deliver large quantities of heat for any industrial application. Write for free catalogs on the complete Young line of heating, cooling and air conditioning equipment and name of nearest engineering representative.

HEAT TRANSFER



YOUNG RADIATOR CO.

Dept. 628-M. General Offices: Racine, Wisconsin, U.S.A.; Plants at Racine, Wisconsin, and Mattoon, Illinois

Sales and Eng. Offices in All Principal Cities

HEATING, COOLING AND AIR CONDITIONING PRODUCTS

Convectors . Unit heaters . Heating Cooling coils Evaporators
 Air conditioning units

AUTOMOTIVE AND INDUSTRIAL PRODUCTS

Gas, gasoline, Diesel engine cooling radiators • Jacket water coolers • Heat exchangers • Intercoolers • Condensers • Evaporative coolers • Oil coolers • Gas coolers . Atmospheric cooling and condensing units • Supercharger inter-coolers • Aircraft heat transfer equipment

Structural. Structural. Reinforcing or Reinforcing Steel other Bilding Steel Shipped from Stock

Joseph T. Ryerson & Son, Inc., Plants at: New York, Boston, Philadelphia, Detroit, Cincinnati, Cleveland, Pittsburgh, Buffalo, Chicago, Milwaukee,

plants.

quick shipment from ten

ERS



Buil its L

Insu

America

Pictur styles emple devise This Leade ing i \$10,0

insula

Newton, Iowa

248.

000

for ten



1000-home project uses
KIMSUL* insulation throughout!







Builders choose KIMSUL for its Low Cost — High Insulating Efficiency

Pictured here are three of the 35 different styles of houses being built at Newton, Iowa, employing streamlined construction methods devised by Chief Engineer J. Buford Jenkins. This is a 100% site-prefabricated project. Leaders of the non-profit organization financing it, say the houses will sell for \$8,000-\$10,000. It is expected that 1000 units will be completed within three years—all of them insulated throughout with KIMSUL.

Whether you're building one house or a thousand, investigate first the many advantages of using KIMSUL insulation. For KIMSUL, with a "k" factor of 0.27, is the only many-layer stitched blanket type of insulation—and that means uniform efficiency over every inch of covered area. No thick spots—no thin spots where heat can leak out. What's more, KIMSUL comes in light, handy, compressed rolls, so it's easier and more profitable to install. No need for skilled workmen or expensive machinery. And KIMSUL is the only insulation with the fire-resistant Pyrogard* cover.

For further information, see your distributor, or write for our free booklet covering the latest techniques in the insulation field.

> KIMBERLY-CLARK CORPORATION Neenah, Wisconsin

And institution

America's Finest New Homes are insulated with Kimsul!

T. M. REG U. S. AND CAN, PAT DEE

A Limited Number of American Builder Subscriptions Are Again Available!

NOW SERVES OVER 80,000 SUBSCRIBERS . . .

It is a pleasure to state that we are again in a position to accept a limited number of new individual subscriptions from those who are connected with the building field.

If you would like to have an up-to-date source of information covering the light construction industry—American Builder will give you the latest information on:

- new and improved products, materials and equipment
 - new and more efficient methods of construction
 - estimating inancing land development
 - and merchandising and selling

Also to be included in future monthly issues are:

- articles, designs and plans of homes, stores, motels, shopping centers, farm buildings, small commercial and industrial structures.
- one complete blueprint in each issue—comprises a series of blueprints of modern homes
- Monthly Review of National Association of Home Builders
- American Builder Better Detail Plates
- Practical "How-To-Do-It" features

Start Your Personal File Now-Mail Your Order Today!

NEW SUBSCRIPTION ORDER

AMERICAN BUILDER, 30 CHURCH STREET, NEW YORK 7, N. Y.

- ☐ Enter my subscription to American Builder for THREE YEARS (36 issues) at your reduced rate of \$5. My remittance of \$5 is enclosed.
- ☐ Enter my subscription to American Builder for ONE YEAR at your regular price of \$3. My remittance for \$3 is enclosed.

Your Name .. State. NAME OF YOUR FIRM. Please indicate your position in the above named firm:

If Owner of Business, please state..

AB 12-48

PLEASE NOTE-

Kindly check your principal activity

Builders and Contractors:

- □ Builders and Contractors specializing in Residential or Light Commercial or Light Industrial Building.
 □ Contractors specializing in Heavy Building

- □ Contractors specializing in Heavy Building Construction.

 □ Builders and Contractors engaged in both Residential or Light Commercial or Light Industrial Building and Heavy Building Construction, not specializing in either.

 □ Contractors specializing in all types of Heavy Construction other than Buildings.

 □ General Contractors engaged in Heavy Construction of both Buildings and other than Buildings, not specializing in either.

 □ Special Trade Contractors, contracting for only such parts of Building Construction as carpentry, masonry, plumbing, roofing, heating, ventilating, electrical, painting, concreting and excavating.

Distributors:

- □ Retail Dealers—lumber, building materials and installed equipment.
 □ Wholesalers, Jobbers and Manufacturers' Agents of lumber, building materials and installed equipment.
 □ Distributors of Construction Equipment.

If none of the foregoing applies, please advise the type of business with which you are affili-ated:

Type of Business ..

NO 9 5 Availa cabine

60", o

Also

Imerican

1948

ONE-PIECE BONDED

What does it mean to you?

ONE-PIECE BONDED means the permanent, approved method of Stainless Steel Sink construction that guarantees leak-proof, trouble free satisfaction always.

ONE-PIECE BONDED means seamless construction of heavier 18 gauge metal that allows all-welded fabrication . . . eliminates joints, crevices and bacteria breeding seams.

ONE-PIECE BONDED means greater beauty. More eye-appeal . . . stronger buy-appeal because the smooth lustrous beauty of ELKAY stainless steel provides a finer sink without a blemish — without a distracting seam or joint.

ONE-PIECE BONDED means increased sanitation — quicker cleaning — easier dishwashing . . . it means the finest in modern sink design and craftsmanship.

NOW STOCKED IN 9 STANDARD SIZES

Available with and without base cabinets: Single Bowl models 54", 60", and 72"; Double Bowl models 66" 72", 84", 96", 108", 120". Also custom-built for any plan.

You're always safe when you specify ELKAY Lustertone because you get one-piece bonded construction which means a better sink ... means customer satisfaction forever. Only Lustertone is one-piece bonded ... guaranteed to outlast the home in which it is installed.

*TRADE MARK

Consult 23a/4 Sweet's Architectural File (1949) or write for detailed information, prices or free

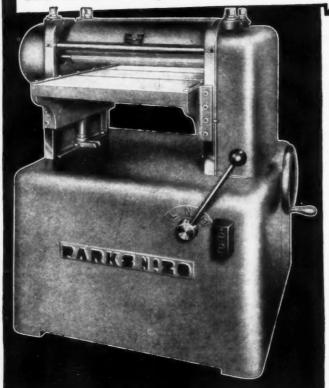
ELKAY MANUFACTURING CO.

America's oldest manufacturer of stainless steel sinks

the finest state money can buy

1872 5. 54th Avenue · Chicago 50, III.

The Sensationally NEW Low-Priced



PARKS No. 20 20" PLANER

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality surfacer. The Parks No. 20 Planer has a four-knife cutterhead with a speed of 3600 R.P.M. and offers two feed speeds — 20 and 40 F.P.M., and 40 and

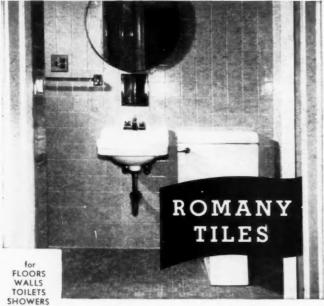
80 F.P.M. Write for complete descriptive literature.

The PARKS Heavy-Duty 12" x 4" Planer

A compact, sturdy, thickness planer that offers mill planer precision and tuggedness at a sensationally low price. Write for descriptive catalog sheet.



The PARKS WOODWORKING MACHINE CO., Dept. 30-L, 1546 Knowlton St., Cincinnati 23, O.



There's no substitute for a good ceramic tile and "Romany" is tops

Let us give you detailed information about these dependable products:

Romany Glazed Wall Tiles

Romany Red Body Glazed Tiles

Romany Romany Tunnel Tiles

KITCHENS

CORRIDORS

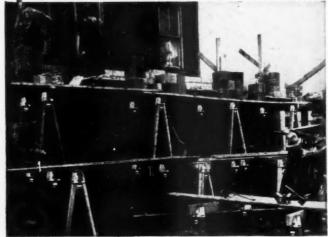
FOYERS HOSPITALS

SOLARIUMS

Write for Free Catalogue

UNITED STATES QUARRY TILE CO. 738 RENKERT BLDG. CANTON 2, OHIO

USE DU-ALL SCAFFOLD BRACKETS TO MAKE SAFE SCAFFOLDS ON JOB - ANY HEIGHT



PATENTED

NO NAILS OR BOLTS needed with DU-ALL

SCAFFOLD BRACKETS

Save time, lumber, labor . . . NO STOCK TRESTLES. Use standard 2" lumber to build safe, sturdy scaffolds on the job — quick, easy with DU-ALL Scaffold Brackets. No damage to lumber. DU-ALL brackets pay for

themselves on first job. Proved on the job by general contractors, masons, plasterers everywhere.

plasterers everywhere.
Write for free information on how
to cut your costs with DU-ALL.
Address Dept. K.

DU-ALL SCAFFOLD BRACKET CO.
44 E. BROAD'ST. COLUMBUS 15, O.



948.

łT



SPECIFY



ATTACH TO FRAME



ATTACH TO SASH

Unique SASH BALANCES

One . . . two . . . three and Unique Sash Balances are installed. And . . . once they are, you need never remove them! Over 67,000,000 Unique Sash Balances in use, is proof of their dependability. Write today for further information.

UNIQUE BALANCE COMPANY, INC.

25 Bruckner Boulevard

New York 54, N. Y.

Unique Sash Balance plants are located in the United States, Canada, Australia, and in England to fill a worldwide demand.



HOPE'S Lok'd Bar FACTORY SASH



Paper Art Company, Indianapolis, Indiana

Allen & Allen, Architects

HOPE'S LOK'D BAR FACTORY SASH has weathering flanges rolled integral with the bar section, doing away entirely with riveted weatheringstrips which, inviting rust and corrosion, are the outstanding weakness in ordinary light factory sash.

The exclusive Lok'd Bar Joint unites vertical and horizontal muntins with twice the strength of common types of sash joints. These features assure lasting weathertightness, protection for workers and lower cost for upkeep for the life of the building.

Write for Hope's Lok'd Bar Factory Sash Catalog

HOPE'S WINDOWS, INC., Jamestown, N. Y.

THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

The white bonded finish on the tape of Brite-Blade protects it against rust and corrosionit's actually a permanent porcelain-like finish that will not crack or peel even when it's bent or folded. Jet black graduations contrast sharply with its white background and make for easy visibility. Case of chrome-plated zinc alloy. Withstands roughest treatment -a favorite among men who are unusually hard on steel tape rules. 6 and 8 ft. lengths.



1 INCH 2 --- 111 3 1400 ---Blades replaceable. See your hardware dealer or use coupon.

REG. U.S. PAT. OFF. WOOD AND STEEL TARE RULES MASTER RULE MFG. CO., INC. 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 **ADDRESS** CITY



All-Purpose

WINDOW MATERIALS

No need to lose expensive man-hours of construction time because of bad weather. An easy-to-set-up R-V-Lite structure keeps out wind, rain and cold. Rugged R-V-Lite is weatherproof and shatterproof . . . has dozens of important uses on every construction job.

3 TYPES - COTTON-, WIREand PLASTIC-REINFORCED

50' and 150' rolls-36" wide

- DURABLE
- TRANSPARENT • FLEXIBLE
- LOW-COST

See Your Local Hardware or Lumber Dealer or WRITE DIRECT TO



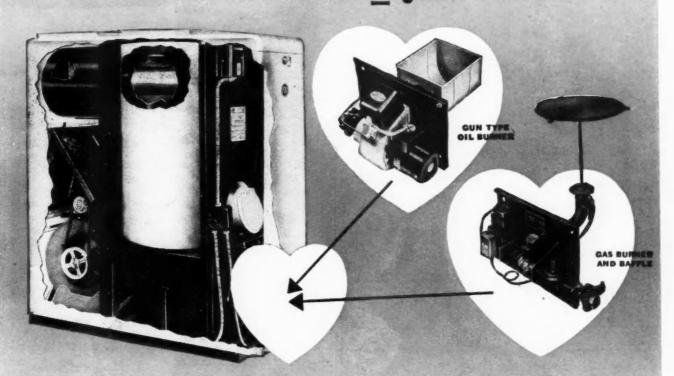
BRICKLAYING ROOFING CEMENTING

INTERIOR FINISHING

For Ga sizes) a installa Denve For O size fu Rich heating

stallati versa) By s condit invent 948.

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.

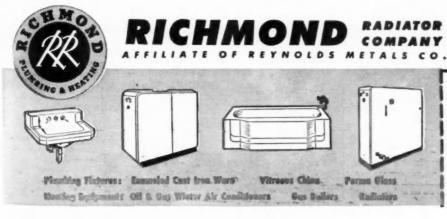
By stocking only two furnaces (AS 12 and AS 23) you have four conditioners—saving you up to 50% on your furnace storage and inventory costs—and you are ready for either oil or gas installa-

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

Because of the easy storage, easy installation and easy changeover, 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—23ⁿ wide x 47ⁿ deep.
Steel base and channels—no "grouting" needed.
*Furnace unit illustrated: #AS 23.



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



CLIP AND MAIL COUPON TODAY

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

AB-12

Gentlemen

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

Company......

Profitable

for Building Jobs of All Sizes . . .



AFFOLDING

- Saves Time and Expense
- Makes Work Easier
- Provides Safer Work Platforms

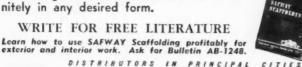
 Versatile, re-usable Safway scaffolding permits more efficient work on every job, large or small, and affords maximum protection for the worker. Once erected, the scaffolding serves carpenters, masons and painters, working either separately or simultaneously on different parts of the building.

Safway structures are rigid and sturdy—distribute loads and strains evenly throughout the entire steel framework. Safway carries the approval of the Underwriters' Laboratories. The all steel construction eliminates fire hazards and other dangers inherent in wood scaffolding, and offers minimum wind resistance.

This tubular steel scaffolding comes in standard units of several types which are quickly assembled to fit the contours of any structure, and may be erected to any height required. Basic units include welded end frames, cross bracing, bridging members, guard rails, ladder sections, etc. No special tools are required—any man can easily handle the job, using the simple coupling pins and studs provided.

Dismantling is equally easy, and storage is simple. The interchangeable units can be re-used indefi-

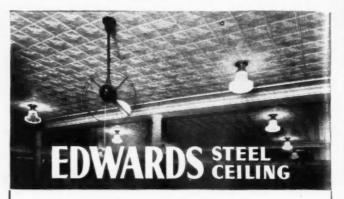
Learn how to use SAFWAY Scaffolding profitably for exterior and interior work. Ask for Bulletin AB-1248.





STEEL PRODUCTS

6221 West State St. MILWAUKEE 13, WIS.



Finish That Job ON TIME

Don't let the weather hold up that important job. Your regular carpenters can install Edwards Steel Ceiling without waiting for plasterers. No muss, no dirt and no delay. Edwards Steel Ceilings are rat-proof, fire-resisting, permanent and as modern as tomorrow. Installation can be made on new construction or over old ceiling without interruption to normal business of your customer. Send us ceiling measurements for estimate.

Prompt shipment guaranteed if you place your order at once.

THE EDWARDS MANUFACTURING CO.

542-562 Eggleston Avenue

Cincinnati 2, Ohio

STEEL CEILINGS AND SIDINGS METAL SPANISH TILE-METAL SHINGLES

THIS A.G.C. RATING PLATE TAKES THE GUESSWORK FROM PUMP BUYING!



CAYSTAL GAZING is eliminated when you buy a pump with an A.G.C. Rating Plate. There is no guesswork about the pump's actual capacity — the work it will do. What is more, new and higher standards for pumping performance have now been by the Contractor's Pump Bureau. For exhibit the contractor of the pumping performance reasonable, pumping formerly, warranged to deliver ample, pumping formerly warranged to deliver ample, pumps formerly warranted to deliver 20, 65, 105 and 325 G.P.M. at static lifts from pump selection. It assures greater out of 10 ft. and heads of 70 ft. are now rate to deliver 85, 110, 160, and 415 G.P.M. at

facturing Companies listed below are m ing these new Higher Head Standards as attested by the A.G.C. rating plate they place on their pumps.

Look for this A.G.C. Rating Plate on the



PUMP USER'S MANUAL

CONTRACTORS PUMP BUREAU

THE ASSOCIATED GENERAL CO

THE CORMAN-RUPP CO., Massfield, Ohio THE JAEGER MACHINE CO., CO MARLOW PUMPS, Bidgewood, H. J. HOTO ENGINE COMPARY, Lansing, Michigan STERLING MACHINERY CORP., Manages City, Mo. WORTHINGTON PUMP & MACHINERY CORP. CARVER PUMP COMPANY, Muncaline, Iowa

C. H. & E. MANUFACTURING CO., MIN

CHAIR BELT COMPANY, Milwaniss, Wil

The New Bilt-Well Line

- Superior Unit Windows
- Exterior and Interior Doors
- Nu-Style Cabinets
- Entrances and Shutters
- Clos-tite Casements
- Carr-dor Garage Doors
- Basement Unit Windows
- Louvers and Gable Sash
- Combination Doors
- Screens and Storm Sash
- Corner (China) Cabinets
- Gli-dor Cabinets
- Ironing Board Cabinets
- Mantels and Telephone Cabinets
- Multiple-Use and Linen Cabinets
- Breakfast Nooks and Stair Parts



on Everything from Basement Windows to Attic Louvers

Every product in the New
Bilt-Well Line bears this
mark of distinction. This famous Bilt-Well Line includes
all of your building woodwork
requirements for apartments,
residences or large scale housing projects. The New Bilt-Well
Line is produced according to
the new modular standards from
clear, kiln-dried Ponderosa
Pine. Savings resulting from efficient volume production go into
making the product better. That is

CARR, ADAMS & COLLIER COMPANY, Dubuque, Iowa

why the New Bilt-Well Line offers

greater value for your building dollar.



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 ef-

1 10 10 10

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.

100			
Soud the	is convenient coupon los	PROMPT A	CTION

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.
	Sand me literature and prices on CRYSTAL

	Send	me	literature	and	prices	on	CRYSTAL.
--	------	----	------------	-----	--------	----	----------

Name								×		*	,								
Firm			۰																

Addiess.	0		0										•								
City								S	to	at	e					Z	C	n	e		

My suppliers name is:

Adduson



SPECIAL" HOIST You need one whether the job is large or small-Me-

chanical hoisting gets things done quickly and efficiently and cuts costs. There is a size to suit your conven-ience. Four models that handle like a bag or barrel truck—2

to 6 H.P.; air-cooled engine; easy on fuel. Easy to move from job to job. Built to stand hard use. Operates smoothly without jerking or jarring. Anyone of your crew can operate it.

TWO NEW MODELS Especially useful when employed in com-on their base and have a large diameter drum for use with wire rope. Com-pact—rugged—easily handled from one job to another. Equipped with wheels and retracting handles.

MODEL 540: Standard Gearing is for 600 lbs. at 150 ft. per minute. Can be geared for greater loads and less speed or vice versa. Single cylinder engine, 4 cycle, air cooled. Bore 25%". develops 4.3 h.p. at 3,200 R.P.M.

MODEL 560: Standard Gearing is for 600 lbs. at 200 ft. per minute. Can be geared for greater loads and less speed or vice versa. Engine has 3'4" bore, develops 7.5 h.p. at 3,200 ft.P.M.

Write for CATALOG material illustrating our Hoists, Hoisting Wheels, and Winches.

KING MANUFACTURING CORPORATION 3146 W. Chicago Avenue Chicago 22, Illinois

Save \$ \$ \$ on Heating Installations

Knowledge of good design and proper installation of heating systems will help you to reduce costs. All the latest types of heating are discussed in "Modern Methods of Home Heating."

Gravity Warm Air Heating - Forced Warm Air Heating—One Pipe Steam Heating-One Pipe Hot Water Heating-Radiant Heating-Heating With Floor Furnaces -Heating Systems Controls

Reprinted from the American Builder Engineered House Construction Series.

66 Pages-111 Illustrations-\$1.00 Per Copy

-MAIL COUPON TODAY---AMERICAN BUILDER

Simmons-Boardman Publishing Corp. 30 Church Street, New York 7, N. Y.

Please send me post	paid	copies	of "Mod	dern M	leth	ods
of Home Heating."	Enclosed is	check [money	order		for
\$						
Name		***************************************	*****************			
Address	***********				*****	
City						

.Imeria





ing through adjoining forms and is drawn tight by wedge. This evice cuts forming labor 50% ife of forms.



1 — No hammering or re-moving of nails to hold adjacent forms together. 7—No measuring, cut-ting, nailing of band iron; no adjusting of washer ties.

7ime. Labor. Materials

When you use the Symons System you eliminate eleven costly steps that now are slowing down and pricing up your wall form construction. Count

2-No drilling for ties. 3—No plugging up of old tie holes.

4—No making, placing or removing of spreaders.

5—No fishing for ties through the forms.

6—No placing of more than one water per wall.

8 - No complicated break-ing uff uf ties.

No measuring nor saring of corners. 10—No forcing-out of forms when stripping against resistance of band iron or washer ties.



these facts:

See Our Booth, NCMA Show, Cleveland, Jan. 31-Feb. 3, NHB Show, Chicago, Feb. 20-24

SYMONS Clamp & Mfg. Co. 261 DIVERSEY AVE. CHICAGO 39, ILL.





FAST, DEPENDABLE PICK-UP

Newest product of Worthington's over 100 years of pump-making, the Blue

Brute Contractor's Portable Centrifugal Pump has builtin self-priming and plenty of reserve power. Pneumatictired, steel wheels, or base mounted, in a complete range of sizes.



Owner: J. J. Romano, Bound Brook, N. J.

QUICK SPOTTING ... MIXING ... DISCHARGING



AT WORK

In Blue Brute Portable Concrete Mixers, many advanced features, including Ransome's famous mixing action, add up to more concrete at lower cost. Sizes: 31/2 (Tilter or Non-Tilter), 6, 11 and 16 cu. ft. Gasoline engine driven or electric power.

Your nearby Worthington-Ransome Distributor (write us for his name) has the complete line of Compressors, Rock Drills and Air Tools, Contractor's Pumps, Portable Mixers, Truck Mixers and Pavers.

Distributors In All Principal Cities



WORTHINGTON PUMP AND MACHINERY CORPORATION

Worthington-Ransome Construction Equipment Division 271 Canal Street, Holyoke, Massachusetts

IF IT'S A CONSTRUCTION JOB, IT'S A BLUE BRUTE JOB





FULLY ENCLOSED

- **Faster Installation**
- **Lower Labor Costs**
- **Greater Protection**

HEN there's a a hard job ahead that presents difficult installation problems, let fully enclosed INSL-COTTON save you time and money—get the job done right! Fully protected because it is fully enclosed, it has a heavy vapor-proof, wax-treated and asphalt coated barrier with tacking flaps on one side and tough paper on the other. It can be jerked, pulled and handled roughly with no danger of the insulation coming loose. Flexible and easy to handle, it goes up fast at low labor cost — gives exceptional efficiency — licks the tough jobs!

FULLY ENCLOSED OR OPEN TYPE. INSL-COTTON IS

Efficient-K factor 0.24 Permanently Flame-proofed Moisture and Insect Repellent Won't Sag or Settle Exceptionally Light Weight Uniformly Thick An Excellent Sound Deadener Harmless to Handle

Insl-Cotton contains no secondhand 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. Exceeds Government requirements for 7d, FHA, FPHA and HH-I-528 specifications.



You'll like Inst-Cotton because it saves you time and money . . . your workmen will like it because it is easy to install, harmless to handle . . . your customers will like it because it is exceptionally efficient.

INSL-COTTON DIVISION TAYLOR BEDDING MFG. CO. TAYLOR, TEXAS . BELTON, TEXAS

ALL COTTON INSULATION IS NOT INSL-COTTON . . . INSIST ON THE ORIGINAL AND GENUINE INSL-COTTON

Originators of Fiame-Proof, Fire Reterding Cotton Insulation

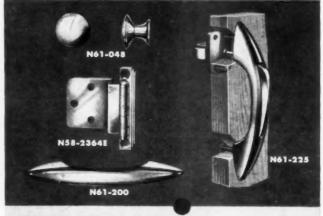
MAIL THIS COUPON TODAY!

INSL-COTTON DIVISION TAYLOR BEDDING MFG. CO., Taylor, Texas Gentlemen Please send specifications and full information on Insl-Cotton Address_ City and State. Check Here. Distributor

Architect

NATIONAL

There's no denying the selling power of beauty. That's why distinctively styled, chromium plated kitchen cabinet hardware by NATIONAL LOCK sells fast...at a good profit. Ask your jobber about the Deluxe set shown below.



MATIONAI LOCK COMPAN



ROCKFORD · ILLINOIS MERCHANT SALES DIVISION

LONG HANDLE CEMENTE and PAVERS' TROWELS



Steel-mounted ash handle 7 feet long.

 Size 18 x 5 inches, Price each.
 \$ 8.00

 Size 24 x 5 inches, Price each.
 9.00

 Size 30 x 5 inches, Price each.
 10.50

 Size 36 x 5 inches, Price each.
 12.50



GOLDBLATT PLASTERING TROWELS

Correctly tempered flexible steel, pre-war quality blade. $10\frac{1}{2}$ or 11 inch lengths.

each \$3.35

No. 2S

CEMENT FINISHERS' TROWELS 12-in. @ \$3.35; 14-in. @ \$3.60; 16-in. @ 18-in. @ \$4.10, each. All prices F.O.B. Kansas City, Mo. @ \$3.85;

A complete line of Cementers' Sidewalk Edgers, Curb Tools, Sidewalk or Pavers' Groovers.

GOLDBLATT TOOL CO. 1515 Walnut Street, Kansas City 8, Missouri



BRAND

Top Quality, Best Known Masons Tools of All Kinds for Over 60 Years. Send Check With Order. Catalog FREE!



Amer

The Choice of the Stars

Sonja Henie* selects

FREMONT RUBBER FLOOR TILE

The perfect floor for

- KITCHEN
- BATHROOM
- SUN ROOM
- RECREATION ROOM

BUSINESS PLACES AND INSTITUTIONS

11 BEAUTIFUL COLORS

plain and marbleized—some bold and gay, some charmingly soft

PERMIT AN ENDLESS VARIETY OF PATTERNS

- ★ COLORS CAN'T SHOW WEAR for they go all the way through.
- * FADE-RESISTANT.
- ★ EASY TO KEEP SPOTLESSLY CLEAN. No dirtor grit-catching pores.
- * CUSHIONS EVERY STEP. Lessens fatigue.
- * SUPPRESSES SOUND of noisy, irritating footsteps.
- * SLIP-RESISTANT.
- ★ GREASE AND FIRE RESISTANT. Even burning cigarettes leave no permanent blemish.
- ★ EXTREMELY LONG WEARING. Affords great resistance to denting, scuffing, acids and oil.
- * EASILY INSTALLED.
- * WATERPROOF.

Write for colorful illustrated folder today. It's free,



INSTALL WINCO VENTILATORS

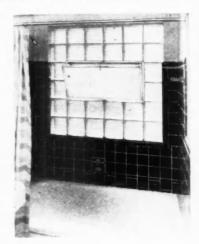
QUICKLY • EASILY
ON GLASS BLOCK CONSTRUCTION

You can add beauty—and ventilation—to glass block windows with quickly-installed Winco Ventilators. They admit light, permit regulation of draftless ventilation—yet keep out rain, snow and insects. Ideal for building or remodeling offices, stores, home baths and kitchens.

EASY TO INSTALL — BUILT TO LAST! Winco Ventilators need no painting — frames are rustproof and corrosion resistant. Tops are reinforced to support glass blocks. Unit is completely assembled.

8 Sizes:

For 6" and 8" glass blocks.

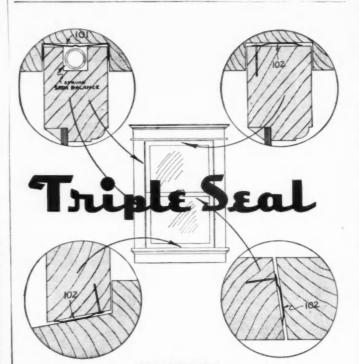


Order from your glass block distributor, or write

Tentilator Coinc.

4725 GOODFELLOW

ST. LOUIS 20, MO.



SASH BALANCES

BRONZE WEATHERSTRIPS
Unit PACKAGED, any size opening \$3.25

THE WEATHERPROOF PRODUCTS CORP.

129 WESTPORT ROAD • KANSAS CITY 2, MO. • WESTPORT 1219



YOU'RE MILES AHEAD of competition when you sell PITTSBURGH INTERLOCK—the solid plastic wall tile that's years ahead in beauty and design. It's the ONLY interlocking plastic wall tile. Its patented concave and convex edge locks each tile on the wall for life! Best of all, this same exclusive feature assures 25% faster installation with self-aligning application . . . eliminates grout trimming and costly clean-up.

A RAINBOW OF COLORS in bright, sparkling pastels, deep tones and marbleized patterns

makes PITTSBURGH INTERLOCK as easy to sell as it is to apply. Hundreds of combinations are possible to beautify bathrooms, laundries, kitchens . . . to satisfy many business establishments.

Mail this coupon TODAY!

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

Yes, I want to make bigger NET profits with PITTSBURGH INTERLOCK. Send me full details.

Name....

Address.....State...

JONES & BROWN, INC.

MORE YARDS PER DAY Concrete or Mortar



NEW 4-POINT SUSPENSION Wider wheel spread, low center of gravity plus two sturdy legs assure stability while mixing . . . no "teetering" and shifting. Tows smoothly, too. 62-inch wheel spread assures a mixer that is tops for towing speed and safety.

EASY SHOVELING



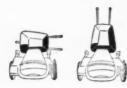
Big 19-inch drum opening is low to the ground for faster, easier shoveling. 3 hoe-type mixing blades give you fast, thorough mixing action.

ONE-MAN SPOTTING



Here's the easiest handling tilter on the market. Rex Tele-pole towing tongue, easy-rolling pneumatic tires mounted with Timken bearings, plus accurate balance and light weight, make it easy for one man to spot the mixer . . . fast.

TWO-POSITION LOADING



You can bring a wheelbarrow straight to the drum, head-on or sideways. Big, easy-acting handwheel tilts the batch into the barrow in a hurry. ADD UP these features and you'll see why Rex gives you more batches per day ... more profit for you.

CHAIN BELT COMPANY



1689 West Bruce St. Milwaukee 4, Wis.

CONSTRUCTION MACHINERY

MONARCH PORTABLE UNI-POINT RADIAL SAW NOW ONLY

BUILDERS! SHOPMEN! WOODWORKERS!

Now you can buy Uni-Point, the world's lightest 12-inch radial saw, at a price lower than that of any other. Makes practically every kind of cut in wood, has a thousand and one uses. Accurate, dependable, built to last for years. Easily carried on the job...plugs in anywhere. Big capacity. Famous Uni-Point cutting is exclusive-guarantees 25% greater production per man hour. Prompt shipment. Send for literature today!

AMERICAN SAW MILL MACHINERY CO. 50 Main Street, Hackettstown, N. J.

Low-cost Garbage and Rubbish Disposal FOR EVERY HOME

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. Heatresisting blue duo-tone enamel finish.

Write for details!

The Majestic Co. 834 Erie Street



Nationally Advertised Home Necessities for Over 40 Years.

320

Net

THERE IS A SIZE AND TYPE For Every Heating Need...

For Every Type Fuel...

700 to 3000



320 to 550

Net Load Steam

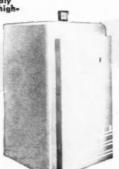
Net Load Steam

A standout in the Spencer line-compact steel fire tube boiler for the small home.

. easy to install with any type oil burner or stoker-quickly converted to hand-fired operation.



An example of out-standing achievement in the low pressure com-mercial boiler field. Espe-cially noted as an efficient, quick-steaming unit. Ruggedly constructed throughout of high-quality materials.



290 to 740 **EDR Steam**

Brings the advantage of auto-matic heat with solid fuel to the small home. Provides safe, trouble-free, economical per-formance with long periods between firings.



Steel and Cast Iron Boilers Built In Accordance With SBI Code & Carry Code Seal



Series A, C, K&R

SBI

FULLY APPROVED



320 to 700 **Net Load Steam**

An all-steel boiler designed especially for automatic firing-includes many features of the larger series boilers.

L 3-1430 to 4510 **EDR Steam**

The most economical auto-matic heat known. Designed for burning small size anthra-cite fuel. Especially suited for churches, schools and apart-ment buildings.



All A, C, K & R Steel **Boilers Inspected and Stamped** By Insurance Inspector



1 2-690 to 1570 **EDR Steam**

Another series of the famous line of Spenier's magazine-feed boilers to meet the capacity requirements of the larger homes and small commercial buildings. Always operates at greatest efficiency.



FULLY



Net Steam Ratings Burns any type of fuel—easily and quickly converted. Year-round service hot water. Attractive jacket . . modern design door assembly featur-ing glass observation ports.

Quality of Material and Workmanship

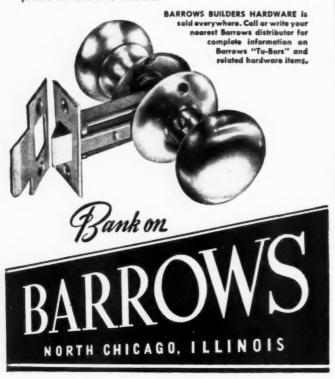
Modern heating specialists are aware of advantages Spencer Boilers offer. No trouble calls—easy to install—Spencer dealers keep their profit . . . make more money. Since 1888 Spencer has made the quality boilers.

IT'S ANOTHER AVCO PRODUCT!

DIVISION-AVCO MANUFACTURING CORP., DEPT. BB-6, WILLIAMSPORT 2. PA.



* Fewer parts in Tubulars mean better performance and longer life. Barrows' new "Tu-Bors" use only five working parts in the standard latch, yet have double compression spring action for smoother, more precise operation. All parts are made of basic materials—latch bolts and hubs of solid bronze, cases and other parts of tough, long-lasting cadmium plated steel. "Tu-Bors" are unbeatable for fast installation, and are available in simplified pushbutton locksets as well as in interior and closet latchsets. All of this plus barrows' beautiful trim designs which are the sales clinchers that move merchandise and pile up profits for Barrows Dealers!





A SPECIALLY DESIGNED FURNACE

FOR ECONOMICAL HEATING
OF 4 OR 5-ROOM HOMES!

Here is the building contractor's answer to the problem of an easy-to-install, economically operated, all-fuels heating unit for modern, small home construction.



This new warm-air furnace is small, yet compact, and can be easily adapted to coal, oil, or gas. Rugged construction with one-piece, all-steel body and attractive, enamel square casing. It releases heat quickly and maintains steady heat for Ionger periods, assuring greater comfort in the coldest weather. Practical and proved as efficient for use in 4 or 5-room homes. Write today for illustrated literature and complete details.



75,000 BTU at bonnet 2'6" front, 36" sides, 60" high.

WHEELING FURNACE CORPORATION Dept. AB MARTINS FERRY, OHIO

Don't take chances
USE THE

PERF-A-TAPE
JOINT SYSTEM

Increase customer confidence
It's the method perfected by the
makers of famous SHEETROCK* gypsum wallboard, thus is backed by
years of dry-wall know-how. So,
play safe—use Perf-A-Tape* rein-

exclusively by . . .
United States Gypsum

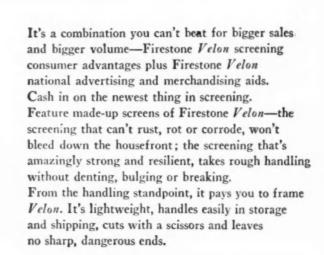
For Building . For Industry

forcement and cement . . . made

Gypsum · Lime · Steel · Insulation · Roofing · Paint

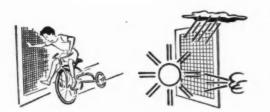


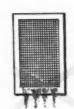
BECAUSE IT DOESN'T BREAK



Cash in on Firestone's national reputation.

Order early—order enough—for a big screen season next Spring! Ask your supplier for free merchandising aids: consumer folders, window streamers, counter cards, newspaper mats and Velon screening samples.







.Americ

ILLINOIS ZINC's



NOW ...

- Corrugated Roofing Siding
- Gutters
- Downspouts
- · Louvres
- Valleys
- Flashings
- · Termite Shields
- Shower Cabinets Mouldings
- Roof Edgings
- · Weatherstrips



MEETS FEDERAL **SPECIFICATIONS**

A PERMANENT ALLOY . Sheet metal you can get Now. High grade zinc alloyed for greater tensile strength. Lower cost than copper. Weather resistant. Won't red rust. Used and lasts for years. Good working properties. EASILY SOLDERED AND FORMED. Write for full details.

ERAYDO ALLOY THE PERMANENT SHEET METAL

ESTABLISHED 1870 2959 W. 47th Street • Chicago 32, Illinois LAFayette 1600

630 Fifth Avenue • New York 20, N.Y. Circle 7-0874



How to handle all kinds of wiring and installation jobs in strict

AN electrical contractor's job-book planned to help electricians understand rulings of the National Elec-trical Code and to do work in accordance with it Razad The electricians understand rulings of the National Elec-trical Code and to do work in accordance with it. Based on the 1946 code, adopted as 1947 code. It restates involved rules in simple terms; provides explanations. rules in simple terms; provides explanations, practical directions; is filled with diagrams that Code rules mean and how to apply them.

NATIONAL ELECTRICAL **CODE HANDBOOK**

633 pages, 5x71/2, 418 illustrations, Sixth Edition, \$4.00 633 pages, 5x7½, 418 illustrations, Sixth Edition, \$4.00.

This handbook is one of the most helpful electrical books published. It gives you a wealth of information from the practical anale of getting jobs done according to code requirements. It saves delay in starting jobs, saves time and money in avoiding talse starts, errors, and violations. At the same time it contains so much clear information it will pay you to use it for general reference on many questions of materials, plans, wiring, and installation.

Once you've looked up a rule in this job-book, you may rest assured you will not find later there was another rule to be considered and that the job will have to be done over. It reduces a maze of scattered rules to a logical and understandable system—shows what the code means and how it applies to commercial buildings, homes, factorics, signal systems, etc.

By ARTHUR L. ABBOTT

accordance with the latest NATIONAL ELECTRICAL CODE



commercial	buildings,	homes, factories,	
-See	it 10	days FRE	E -

McGraw-Hill Book Co., 330 W. 42 St., N.Y.C. 18 Send me Abbott's Electrical Code Handbook for 10 days' examination on approval. In 10 days I will send \$4.00 plus a few cents postage, or return book postpaid.* City.......State......State.....

>ABB-12-48 *SAVE! We pay mailing charges if you send cash with order. Same return privilege,



QUICK DELIVERY ON METAL DOORS

... Complete with frames and hardware already sized to fit!

Nothing else to order ... no waiting for other parts. You get them fast—you install them fast. No mortising, no drilling, no tapping, no prime coating. No wonder they save construction time and money!

LOW COST—standardization of types and sizes results in manufacturing economies. That's why Fenestra can do so much preliminary work on these doors at the factory and still offer them at prices below many doors now on the market. They're quality doors in every respect—worthy of the well-known Fenestra name.

ORDER THESE SIZES TODAY:

2'8" x 6'8" 3'0" x 7'0" 4'0" x 8'0" 2'8" x 7'0" 3'8" x 7'0" 5'0" x 10'0"

Standardization in these sizes enables your dealer to carry ample stocks. He can furnish doors right or left hand, with metal panel or glass, with or without muntin. Above sizes also available in pairs.

UNDERWRITERS' LABEL—Fenestra Fireshield Doors are also available with Underwriters' B Label.

fold

ered

nd

like

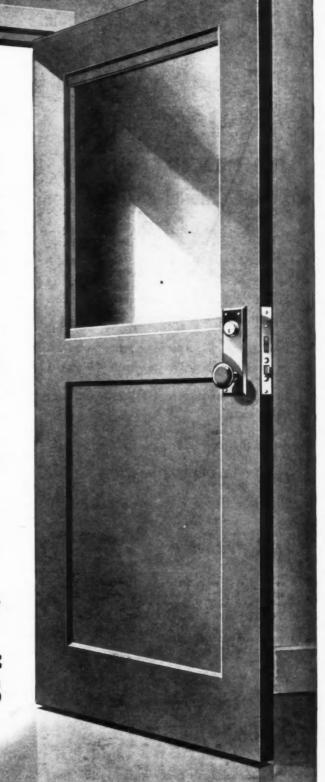
sing

ion.

For further information, call the nearest Fenestra office. Or write to Detroit Steel Products Company, Dept. AB-12, 2260 East Grand Blvd., Detroit 11, Mich.

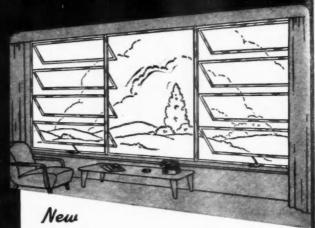
Fenestra

METAL DOORS



Americ

émco PANORAMIC ALUMINUM AWNING WINDOWS



as Tomorrow!

An outstanding development in awning type windows. An entirely new conception which lends itself to the new design in architecture. Combinations of picture windows and perfectly ventilated units can be made using our standard mullions, bays and corner construction. Shipped complete with locked-steel tubular subframe for easy installation in all types of construction.

Write for Latest Catalogs or see 1949 Sweets

CROFT STEEL PRODUCTS, Inc. JAMESTOWN, N.Y.

Here's the Latest in

THE NEW HERMAN NELSON De Luxe Model Portable Heater

- Provides Quick, Clean, Safe Heat without smoke, soot or open flame.
- Abundant fresh, heated air forced to areas where most needed.

Full 250,000 BTU per hour capacity-enough to heat three ordinary 5-room houses!

Burns range oil, kerosene or prime white distillate - costs less than 39c per hour!

Electric motor powered; 115-230 volt, 60 cycle, single phase.

Automatic, constant spark ignition!

Two 12" dia. x 12' long, extendable hot air ducts.

Streamlined appearance. Two-tone finish.

Still Available

The <u>original</u> Herman Nelson, gasoline burning, gasoline engine powered, Portable (Ground) Heaters. For areas lacking electric power. Com-pletely self-powered. Easily portable by one man.

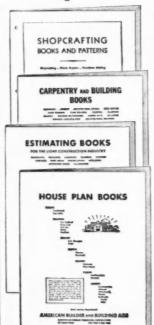


Write for Inferesting Free Booklet on "COST CONTROL"



Since 1906 Manufacturers of Quality Heating and Ventilating Products

Helpful Book Lists



Material Dealers Building Developers Home Builders Shopcrafters

Any of these helpful new lists of books and booklets of all publishers will be sent FREE on request. They are uniform in style and format and can be punched for insertion in a 9 x 12 ring binder or filed for reference. They describe Plan, Estimating, Carpentry and Shopcrafting books and include date of issue as well as price.

We carry most of these books in stock and can fill your orders for any of them without delay.

Book Service Department

AMERICAN BUILDER and BUILDING AGE

30 Church Street

New York 7, N.Y.



REAMER KELLER
FAMOUS SATURDAY EVENING POST
AND COLLIER'S CARTOONIST

"I planned for hungry in-laws when I built my house.

SEE?



Everything Hinges on Hager!"

@ 1948

C. HAGER & SONS HINGE MFG. CO. . St. Louis, Mo.

FOUNDED 1849 - EVERY HAGER HINGE SWINGS ON 100 YEARS OF EXPERIENCE



INSULATING EFFICIENCY EASY, ECONOMICAL INSTALLATION LIGHTWEIGHT FLEXIBILITY MAXIMUM FUEL SAVINGS

W Lighter weight and more flexible than most insulations, Lo-"K" insulation has all the basic, worthwhile and up-to-date advantages home builders and remodelers are looking for ... up to 36% greater efficiency—up to 40% lower installation costs-up to 30% savings in fuel bills.

In addition, Lo-"K" is flameproofed, resists moisture, rot and vermin, does not sag or settle throughout the years, does not irritate the skin.

That's why more and more homeowners are asking for it-why more builders, contractors, architects are recommending it and why more prefabricators are using it.

LOCKPORT COTTON BATTING CO.

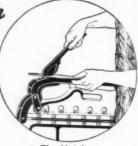


Here's the Cutter

THE ASBESTOS SIDING AND SHINGLE APPLICATORS HAVE BEEN WAITING FOR!

aluminum alloy.

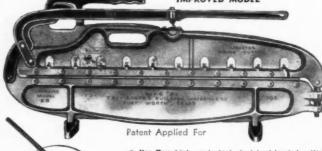
The



Ameri

The Notcher Scientifically engineered

ASBESTOS SIDING AND SHINGLES IMPROVED MODEL



Has Two high grade tool steel heat-treated cutting blades, 32" long, capable of making a single cut up to 30 inches.

DEALER INQUIRIES ANSWERED PROMPTLY

Retail

F.O.B. Fort Worth, Tex.

TRI-STATES BUILDING MATERIALS CO. DEPT. D, P. O. BOX 1476 FORT WORTH, TEXAS



WITH NEW LINE 5-LIP MOULDING CUTTER



sharpen, grind only face

of cutter as in-

dicated above.

The CMC Radial Saw has long been famous among builders because it does everything faster, easier, better! Compound mitering above is just one example. NOW, with the new CMC line of 5-lip moulding cutters the CMC Radial Saw is definitely Here are some of the advantages of these new CMC moulding cutters.

- . FASTER-five cuts per RPM!
- . SIMPLIFIES SHAPING OPERATIONS.
- . ONE-PIECE DESIGN ELIMINATES COMPLI-CATED ADJUSTMENTS.

Write today for full details of this new money-making development in shaping!





USG's new Brace-Tite Lathing System gives you all the advantages of Rocklath plaster base—plus the desirable features of suspended ceiling construction. It is easily adjusted to the contractor's working methods because no special tools are used, and no time-consuming training is required for either lathers or plasterers.

Brace-Tite is adaptable, economical, and easy to install—and the plaster will be stronger, because it's wire-reinforced with Brace-Tite clips that join each other in a lock-like action. Standard channels, hot- or cold-rolled, and con-

ventional 12-inch or 16-inch spacing are used. USG provides all the materials for the complete system... USG has entire product responsibility.

Economical—because material cost is low, and Brace-Tite ceilings go up so rapidly that installation expense can be held to a minimum.

Only ½ inch of plaster required—can be applied in just two coats! You can double back!

Ask your USG representative about the new Brace-Tite Lathing System...and be sure to ask him for a copy of the new Brace-Tite Specification Folder next time you see him.

*T. M. Reg. U. S. Pat. Off. It distinguishes the United States Gypsum Company's plaster base.



utting

CO.

United States Gypsum

For Building . For Industry

Gypsum • Lime • Steel • Insulation • Roofing • Paint



This feather-light aggregate mixes with gypsum to form an insulating, crack-resisting, fire-retarding plaster. Mixes with cement to form a lightweight permanent insulating concrete. As a concrete or plaster, it will never burn, rot or decompose.

For Floors That Insulate Use concrete made of Zonolite Aggregate and Portland Cement where a warm, dry floor is de-manded. Blocks condensation, prevents heat loss. Ideal for radiant heating—it can be poured right on the ground.

•••••••••••



For Plaster That Insulates

Plasterers lift only one-sixth the Plasterers lift only one-sixth the usual poundage when mixing and applying Zonolite Plaster. Up to four times the fire resistance of ordinary plaster. Won't chip, resists cracking. Zonolite Plaster Aggregate packed in big clean bags. No left overs. No wonder builders like to work with it! with it!



*Zonolite is the registered trade-mark of Zonolite Company.

ZONOLITE COMPANY

135 S. LA SALLE ST., CHICAGO 3, ILLINOIS



CONTRACTORS and BUILDERS-

Remember!

every cellar, at one time or another, will spring a leak if it is not properly THORO-SEALED on the inside at points which cannot be reached from the outside

WATERPLUG to stop the leaks THOROSEAL.. to fill & seal the surface QUICKSEAL for a beautiful finish

Will take care of your water problems

Order through your Lumber and Builders' Supply Dealer

WRITE FOR CIRCULAR NO. 144 ON HOW TO KEEP WATER OUT OF YOUR MASONRY WALL

STANDARD DRY WALL PRODUCTS

Box X, New Eagle, Pennsylvania Telephone Monongahela 67

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 pas-

Spring assembly is complete with drums and shaft made up as one unit. Ballbearing guide rolls. Vertical rails have slotted holes to permit 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 51/2 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.

Don't miss this unusual opportunity. Write today for descriptive circular and prices.

BOX 312 AMERICAN BUILDER

105 W. ADAMS STREET, CHICAGO 3, ILL.

Americ

. Ligh

sus · Shi inst

· Inst WII

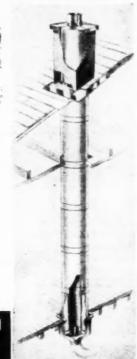
BUILD THRU WINTER with N-PACKER PACKAGED CHIMNEY



- Underwriters and FHA approved. All fuels-for 1 and 2 story houses.
- · Light weight, floor or ceiling suspended, no foundation.
- · Shipped complete. Immediate installation. All parts furnished.
- · Installation time, 4 man hours, winter or summer.
- · Replaces brick chimney. SAFER MORE ECONOMICAL WINTER INSTALLATION IMMEDIATE DELIVERY



136 So. Clark St. Chicago 3, III Phone: RAndolph 6-1840



Get Set Now to S-T-R-E-T-C-H Your Building Season! Temporary HEAT

When and Where You Want It!

For All Types of Construction Work s-Warehouses-Shelters-Farm Buildings



PORTABLE OIL-FIRED

SPACE HEATER

Delivers 100,000 B.T.U.

QUICK—instant heat on lighting! ECONOMICAL—burns low-cost kerosene, No. 1 or No. 2 fuel oil; input from 1/20 to 2/3 gallons per hour. Easy manual control—no attendant required. Conveniently PORTABLE—weighs less than 75 pounds. Immediate delivery.

Write, Phone or Wire Order for Assured Delivery

ALL-GAS EQUIPMENT CO.

3235 North 31st St. Dept. A.B. Milwaukee 10, Wis. Phone Up. 3-3630



Who wouldn't be happy in a home surrounded by the charm and cheer of the radiant Western Pines? Every day in such an environment promotes gladness.

These even-textured woods, so versatile and yet so durable, demonstrate their values and beauty everywhere they are used. They can be finished in dozens of ways to create the effects that are desired. And they are truly economical.

Fortunate indeed is the home owner whose architect specifies, and whose builder uses the Western Pines*.

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

QUALITY CONCRETE MASONRY CONST

QUALITY WALLS DEPEND UPON PROPER PLANNING

QUALITY concrete masonry construction requires thorough planning. That means careful consideration of these factors:

- 1. Strength to carry the expected load by using adequate footings, quality block, good mortar and concrete lintels over openings.
- 2. Watertightness by carefully compacting mortar, using concrete sills and lintels and applying portland cement paint or stucco to exterior walls.
- 3. Expansion and contraction control joints in the wall as well as between wall and floors.
- 4. Nature of occupancy and intended use of building.
- 5. Building site conditions: topographical, geographical and climatic.

Write today for free illustrated literature. Distributed only in the United States and Canada.



PROPER PLANNING THE FIFTH OF **6 IMPORTANT STEPS** IN QUALITY CONCRETE MASONRY CONSTRUCTION



PORTLAND CEMENT ASSOCIATION

Dept. 12-3, 33 W. Grand Ave., Chicago 10, III.

A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work

How to be Sure About Costs When You Estimate a Building Job

THE SIMPLE TAMBLYN SYSTEM OF ESTIMATING REDUCES BUILDING MATERIALS and LABOR COSTS TO EASY-TO-USE FACTORS!

Do you get that creepy feeling about your estimates? Why take a chance when you can be sure! Just multiply by our simple factors to determine your labor and material costs. The Tamblyn System is simple, fast, accurate, complete and dependable!

YOU MAY SAVE MANY TIMES ITS LOW COST IN ONE USE!

In order to get your share of profitable building contracts, you must be able to figure jobs fast and accurately. You must be sure your estimate is just right—low enough to get the job—high enough to give you a reasonable profit.

USED BY SUCCESSFUL CONTRACTORS FOR OVER 40 YEARS!

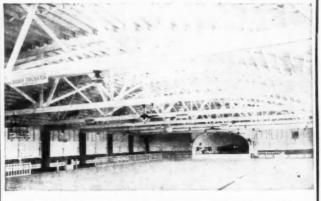
Many of the largest and most successful contractors in the United States and Canada—thousands of them—have used the Tamblyn System of estimating. It is tried and tested—it has been used for more than 25 years. Forty years of experience in construction and building is behind it. And you can study the system for 10 days without cost.

TEST THE TAMBLYN SYSTEM IN YOUR OWN OFFICE WITHOUT OBLIGATION Send the coupon below for your complete Tamblya System. Examine it in the privacy of your own home or office for 10 days. Try it on new -check it against completed jobs. There is no obligation unless

SEND NO MONEY-TRY IT FOR 10 DAYS FREE! THE TAMBLYN SYSTEM, 1115 So. Pearl St., A-24, DENVER, COLO.

THE TAMBLYN SYSTEM, 1115 So. Pearl St., A-24, DENVER, COLO.
Send me the complete Tamblyn System on free 10 days trial! If I like it i will pay \$8.75 when 10 days are up and \$7.50 per month until \$38.75 is paid. Otherwise I will return it.
NAME
ADDRESS
CITY

HERE'S HOW to Cut Your Building Costs



AMERICAN BOWSTRING WOOD TRUSSES

More Economical! They eliminate costly footings, posts and center walls-save on brick work . . . cut labor costs, too. Faster! No delay on deliveries-your trusses are ready when the walls are up.

Reliable! Made by the oldest, largest exclusive manufacturers of timber trusses in America.



Write for free catalog today!

AMERICAN Roof Truss Co.

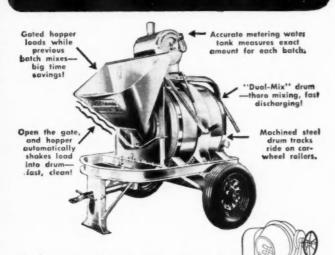
William and Raymond Waddington

6852 Stony Island Ave., Chicago 49, Illinois . . . Plaza 2-1772 ESTABLISHED 1922

Ameri

with that It's plet

Mix 12 to 15 more yards a day with JAEGER 31/25 "AUTO-LOADER"



You cut costs and boost profits when you mix 12 to 15 yards more concrete daily with no more manpower. And, you can do that with the Jaeger 31/25 "Auto-Loader." It's the fastest half-bag mixer made. Catalog M-8 tells why—shows the complete Jaeger line. Write for it.

31/2S End-Discharge iter. Also 6S, 11S and 16S Power Loaders.

THE JAEGER MACHINE COMPANY

Columbus 16, Ohio

1504 Widener Bldg., Philadelphia 7, Pa. 226 N. La Salle St., Chicago 1, III.

235 American Life Bldg., Birmingham 1, Alabama

COMPRESSORS . HOISTS . PAVING EQUIPMENT



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 doublecourse 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.

> Write for the name of your nearest DUO-LAP

THE

STAINED SHINGLE COMPANY

SPRUCE ST. & DENNISON

Two shingles in one.

Stoined No. 1 Red

Cedar top course. Rug-

ged, genuine Red

Cedar undercourse. For double beauty, double

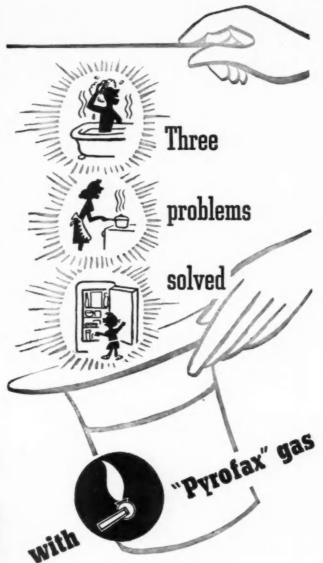
insulation, use DUO-

LAPS

en

ers

COLUMBUS 8, OHIO



WHEN you specify "Pyrofax" gas you solve three important appliance problems for homes beyond the gas mains. Your clients will enjoy the city conveniences of a Magic Chef range, a silent Servel refrigerator, and an automatic water heater-all operated by this economical and dependable gas.

"Pyrofax" gas gives instantaneous heat. The automatic above-ground system provides uninterrupted service. For complete information, see our catalog in Sweet's File, or write to "Pyrofax" Gas Division, Dept. B-3, Carbide and Carbon Chemicals Corporation, 30 East 42nd Street, New York 17, N. Y.





Product of a Unit of Union Carbide and Carbon Corporation



The cleaner home . . . the well-ventilated home ... is the home that sells. The new Westinghouse Poweraire Home Ventilator, with the Air-Injector Grille, will help to keep your home bright and clean. It can completely change the air in an average kitchen every TWO MINUTES.

LOOK AT THESE ADDITIONAL FEATURES!

- Modern, streamlined design
- Insulated outside door
- Easy to install in practically any wall thickness
- White, snap-on, Air-Injector grills
- Easy to clean
- Single pull-chain control
- Economical to operate

FOR ADDITIONAL INFORMATION

REQUEST FOR HOME VENTILATOR INFORMATION-CLIP AND Address_ MAIL THIS WESTINGHOUSE ELECTRIC CORPORATION COUPON Appliance Div., Dept. A, Springfield 2, Mass.

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

WESTINGHOUSE ELECTRIC CORPORATION Electric Appliance Division, Dept. A • Springfield 2, Mass.



PAINE "Sudden Depth" DRILLS CUT HOLES FASTER WITH LESS EFFORT

Paine "Sudden Depth" drills, Carboloy tipped. cut through wood, concrete or any non-metallic material faster, easier than ordinary drills. Be-cause they are "diamond-hard," they last longer

ever. Use in any slow speed Electric Drill.
"Sudden Depth" drills are available in two
styles . . . Fluted Shank for deep holes, and
Round Shank for shallow anchor holes. Extensions can be easily welded to either model for any length drill. Send for descriptive literature.

THE PAINE COMPANY 2959 Carroll Ave. Chicago 12, Illinois

1meri

HOMEBUYERS EVERYWHERE PREFER R-O-W REMOVABLE WOOD WINDOWS CUSHION

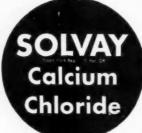
Delivered to the job completely assembled and prefit. See your building materials dealer or write



SPRING

R-O-W SALES COMPANY ROYAL OAK. MICHIGAN

For construction details see our catalog in Sweet's File.



GIVES

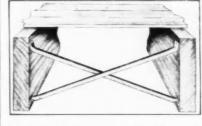
acceleration curing cold weather protection

TO ALL PORTLAND

CEMENT CONCRETE

SOLVAY SALES DIVISION

Allied Chemical & Dye Corporation 40 Rector Street, New York 6, N. Y.



STA-TITE STEEL BRIDGING for WOOD JOISTS

DE

170

is made of half-hardened channel steel with flanged ends that hold firmly so floors can't buckle or

bulge. 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 Some jobber territory still open

BELOIT STEEL INDUSTRIES, Inc.

Rockford, III. 307 City Hall Bldg.

148

.S

RT

d



Here's the most practical contractor's saw on the market today — the Wallace No. 1 Radial Saw. With the exclusive Wallace Angulator, it cuts rafters complete with only ONE handling and without marking.

It's a real money-maker on framing work, saving \$75 to \$200 on average bomes. Handles every kind of sawing operation, and also does first-class shaping, dadoing, ploughing, grooving, fluting, beveling, routing, etc.

We make a complete line of machines, for every woodworking operation. Write today for full information.

J. D. WALLACE & CO.

FORMS I TOOKS SETULIS Invington
FORM & TANK CORP.
IRVINGTON, N. Y.



READYBUILT

(Reg. U. S. Pat. Off.)

FIREPLACES

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.

THE READYBUILT PRODUCTS CO.

1705-23 McHenry St.

E

S

ed

ed

OI

ns

ed

11.

Baltimore 23, Md.



HERE'S YOUR PROFIT LINE FOR '49...

the new HOLT sanders



New, exclusive Holt patented features help you do a faster, smoother, better floor finishing job. A more profitable job. That's why it pays more than ever to use a Holt...a new Holt '49 Sander!

here's where the new HOLT gives you a better run for your money



OAKLAND, CALIFORNIA . NEWARK, NEW JERSEY

Amer

Arch

and





Designs from our illustrations or from Architects' drawings.

Also Iron Fence, Swinging and Folding Gates, Ornamental Columns, Wire and Iron Window Guards, Pipe Railing, Area Gratings, Cellar Doors, etc.

Send measurements and we will sug-gest suitable designs. . . Write for latest Folder

CINCINNATI IRON FENCE CO., Inc.
ORENCE AVE. CINCINNATI 6, OHIO



SINGLE WALL HEATER 25,000 BTU

> MEASURE IT . . . REASURE 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 safely coo from floor.

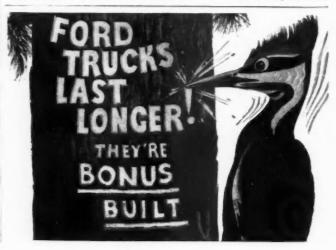
TEST IT rated at a full 25,000 BTU input by A.G.A. — 100% shut-off safety valve is standard.

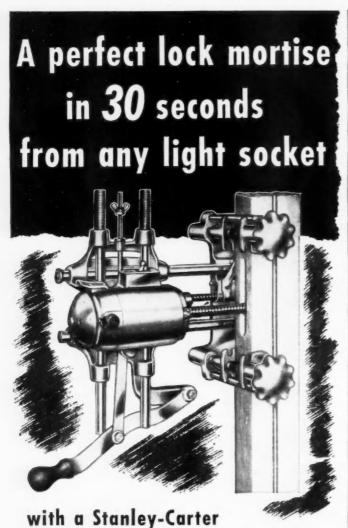
Holly Manufacturing Co., 883 S. Arroyo Parkway, Pasadena 2, Calif.

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 Ib. per M. Limit 10,000 ties per order. No C.O.D., please. Send check or money order payable to

327 South Market . Wichita 2, Kansas





LOCK MORTISER

Machine-perfect lock mortises made as easily and simply as a saw cut. Pick the size cutter for the width you want and set the Stanley-Carter Lock Mortiser for the depth and length. Two self-centering clamps automatically make sure that every mortise will be in the exact center of the door regardless of its thickness. Plug the extension cord into any house-lighting outlet and flip the switch. In 30 seconds the mortise is completed. Less than a minute to change adjustments from one size lock to another. After the first mortise is cut, height rods can be inserted in the machine so that subsequent mortises will be cut at the precise same point ... from the top of the door. Use of heat-treated aluminum alloy makes this the lightest electric lock mortiser on the market ... just 261/2 lbs. Sharpens its own cutters.

Here's a time-saving, money-making machine to help you get the most out of every contract. Write today for complete information. Stanley-Carter Sales Dept., 534 Myrtle Street, New Britain, Connecticut.



HARDWARE . HAND TOOLS . ELECTRIC TOOLS . STEEL STRAPPING

1944

OR ns or

and Coldow Area

suge for

OHIO

R

in in

om ys en

00%

alif.

sas



Architects and Builders of Quality Homes know that

Radiiluxe stainless steel sinks

by Just meet the most exacting requirements of their customers.

Custom built of heavy gauge solid stainless steel and electrically welded throughout, Radiiluxe Sinks

not only add a final touch of charm and beauty to any modern kitchen, but assure the utmost in sanitation, high efficiency and a lifetime of service.

> Write today for Illustrated Literature B-12 and send us your specifications





Atlas Nail Co., Inc.

20 N. Wacker Drive Phone ANDover 3068 Chicago 6, Ill.



YOU MANUFACTURE WINDOW PRE-FIT write for this catalog today!

> WEATHER STRIP EQUIPMENT

This 24-page catalog shows over 50 different weatherstrips that are specially designed for pre-fit window units, doors, casements. Whatever your weatherstrip requirements, we can fill your needs.

Special Weather Strip Division MACKLANBURG • DUNCAN CO. P.O. BOX 1197, OKLAHOMA CITY, OKLA.

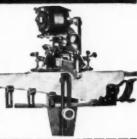
Made \$900 IN SPARE TIME

"I did very well last year with my Foley equip-ment, about 950 saws and 240 lawn mowers, in my spare time. About \$900 for me." L.H.M., New York.

Carpenters make up to \$2 or \$3 an hour in spare Time. With a Foley Automatic Saw Filer you can file hand, band and circular saws better than the most expert hand filer. Cash experience needed.

FREE BOOK-"INDEPENDENCE AFTER 40"

shows just how you can start at home in spare time, with small investment, no overhead—and develop into a full-time repair shop. Send coupon today for this practical plan.



FOLEY MF	G. (CO.	. 12	224	-8	F	ol	er	C	BI	de	te	. !	WI 40	in	n	ea	pe	di	s	18	,	M	lie	ne	1.	_	_		
Name																										. *			 	0
Address							0 8																	5. R					 	

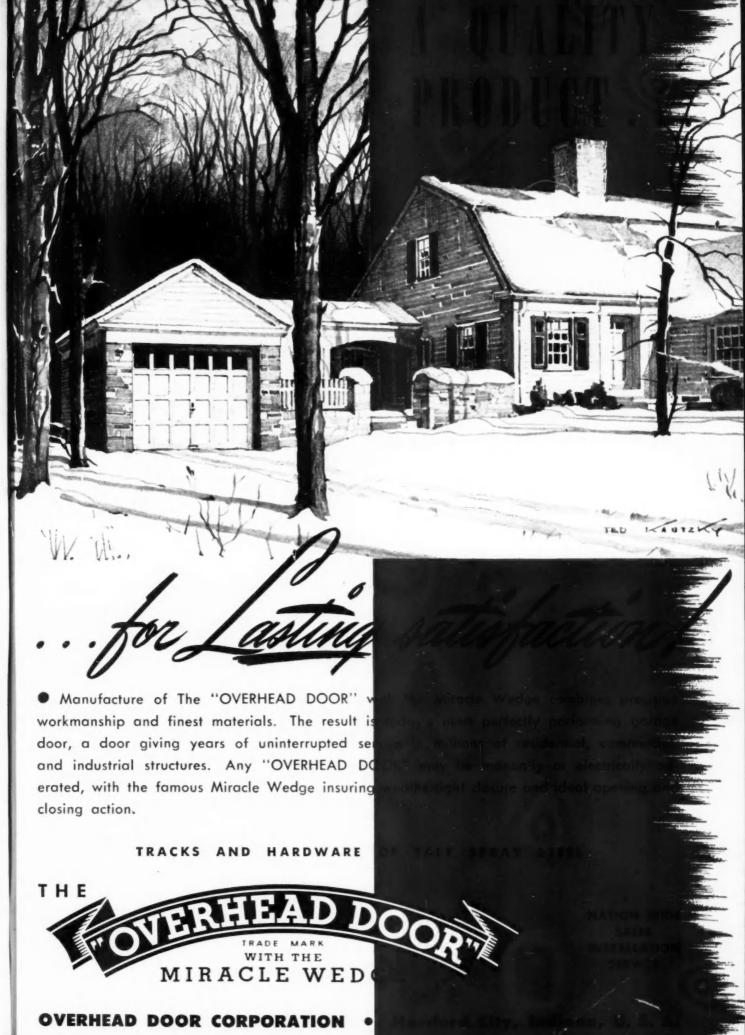
cl

ALPHABETICAL INDEX TO ADVERTISERS, DECEMBER, 1948

		u		D	
Acme Door Company	16-17	Н	**	R	***
Acme Sash Balance Company		Hachmeister, Incorporated Hager & Sons Hinge Mfg. Co., C.,		R-O-W Sales Company Ralston & Co., Inc., W.	
Adam Electric Company, Frank		Hearth-aire Company		Readybuilt Products Co., The	
Airtemp Division of Chrysler Corpor		Heatilator, Inc.		Reardon Company, The	
All-Gas Equipment Co.		Holly Manufacturing Co		Red Devil Tools	
Allied Chemical & Dye Corporation Aluminum Window Manufacturers As		Holt Manufacturing Company		Republic Steel Corporation	
American Builder142-156-		Homasote Company		Revere Copper and Brass Incorporated Reznor Manufacturing Company	
American Floor Surfacing Machine		House & Garden		Richards-Wilcox Mfg. Co.	
American Radiator & Standard Sani	itary Cor-			Richmond Radiator Company	167
poration		I		Robinson Manufacturing Co.	16-17
American Roof Truss Co		Illinois Zinc Company	180	Rockwell Manufacturing Company	173
American Saw Mill Machinery Co American Stained Shingle Company,		Infra Insulation, Inc		Rowe Manufacturing Company	115
Andersen Corporation		Inland Steel Products Company		Royal Heaters, Inc.	124
Anthracite Institute		In-Sink-Erator Mfg. Co. Insl-Cotton Division		Ryerson & Sons, Inc., Joseph T.	162B
Armstrong Cork Company		Insulite Division Minnesota & Ontario Par			
Arteraft Ornamental Iron Co		Company		S	
Arvey Corporation		Irvington Form & Tank Corp.		Safway Steel Products, Incorporated	168
Associated General Contractors of		Ives Co., The H. B.	144	Sargent & Company Servel, Inc.	38.39
Inc., The		I		Sharon Steel Corporation	49
Atlas Nail Co., Inc			1.00	Simpson Logging Company	16-17
Atwater Company, Paul	192	Jaeger Machine Company, The Johns-Manville		Sisalkraft Co., The	119
Aveo Manufacturing Company	177	Jones & Brown, Inc.		Smithway Machine Company	37
В 6		Just Manufacturing Co.		Solvay Sales Division	190
B & T Metals Company, The	154	_		Spencer Heater Division. Standard Dry Wall Products	196
Barrows Lock Works	178	K		Stanley Electric Tool Div.	130
Bell & Gossett Company	25	Kearney & Trecker Corporation		Stanley Works, The	35
Beloit Steel Industries, Inc.		Keasbey & Mattison Company Kelvinator Division		Steel Scaffolding Company, Inc., The Stone Machinery Co., Inc.	1.43
Better Homes and Gardens Bird & Son, Inc	191	Keystone Steel & Wire Company		Stran-Steel Division	22-123
Boice-Crane Company		Kimberly-Clark Corporation		Strand Building Products Company	155
Borg-Warner Corporation		King Manufacturing Corporation		Structural Clay Products Institute	20
Bradley Lumber Company of Arkans		Kresky Mfg, Co., Inc.	30	Compact Mig. Ch.	1/1
Brown Company		L		T	
Bruce Co., E. L.		-		Tamblyn System, The	100
Buffelen Manufacturing Co.	10-17	Libbey-Owens-Ford Glass Company Lockport Cotton Batting Co.		Taylor, Inc., R. L.	162
C		Louisville Cement Company, Incorporated		Taylor Bedding Mfg. Co.	172
Carbide and Chemicals Corporation	189	Lumite Division		Thorn Company, J. S. Thrush & Co., H. A.	150
Carr, Adams & Collier Company				Timely Products	191
Carter, Div., R. L.		M		Timken-Detroit Axle Company, The	143
Celotex Corporation, The		M & M Wood Working Company		Timken Silent Automatic Division. Toolkraft Corporation	143
		Macklanburg-Duncan Co	103	Trade-Wind Motorfans, Inc.	148
Chain Belt Company	176	M. Levis C. Th	170	- control of the cont	146
Chain Belt Company Chase Brass & Copper Co		Majestic Co., The	176	Tri-States Building Materials Co.	146
Chase Brass & Copper Co Chicopee Manufacturing Corporation	34	Majestic Co., The	176	Tri-States Building Materials Co.	184
Chase Brass & Copper Co Chicopee Manufacturing Corporation Chrysler Corporation		Majestic Co., The	176 156	Tri-States Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc	29
Chase Brass & Copper Co Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc	34 120 53 192	Majestic Co., The	176 156 144 24 166	Tri-States Building Materials Co.	29
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The	34 120 53 192 15	Majestic Co., The	176 156 144 24 166 180	Tri-States Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc	29
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The Coffman Co., Inc., R. G.	34 120 53 192 15 138	Majestic Co., The	176 156 144 24 166 180	Tri-States Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U	184 29 21 59
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The Coffman Co., Inc., R. G. Coleman Company, Inc., The Consolidated Machinery & Supply Co	34 120 53 192 15 138 41 41 41, Ltd. 117	Majestic Co., The	176 156 144 24 166 180 118	Tri-States Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc United States Gypsum Company	184 29 21 59
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The Coffman Co., Inc., R. G. Coleman Company, Inc., The Consolidated Machinery & Supply Co Construction Machinery Co's.	34 120 53 192 15 138 41 5, Ltd. 117	Majestic Co., The	176 156 144 24 166 180 118 22 50	Tri-States Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation	184 29 59 59
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The Coffman Co., Inc., R. G. Coleman Company, Inc., The Consolidated Machinery & Supply Co Construction Machinery Co's. Contractors Pump Bureau	34 120 53 192 15 138 41 0, Ltd. 117 184	Majestic Co., The	176 156 144 24 166 180 118 22 50	Tri-States Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Quarry Tile Co.	184 29 59 59
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The Coffman Co., Inc., R. G. Coleman Company, Inc., The Consolidated Machinery & Supply Co Construction Machinery Co's.	34 120 53 192 15 138 41 5, Ltd. 117 184 168 153	Majestic Co., The	176 156 144 24 166 180 118 22 50	Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc. United States Gypsum Company. United States Plywood Corporation United States Plywood Corporation United States Steel Corporation Subsidiary Universal Atlas Cement Company.	184 29 21 59 59 165 50 164 8
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5, Ltd. 117 184 168 153	Majestic Co., The		Tristates Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Quarry Tile Co. United States Steel Corporation Subsidiary	184 29 21 59 59 165 50 164 8
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The Coffman Co., Inc., R. G. Coleman Company, Inc., The Consolidated Machinery & Supply Co Construction Machinery Co's Contractors Pump Bureau Crane Co Croft Steel Products, Inc	34 120 53 192 15 138 41 10. Ltd. 117 184 168 153 182	Majestic Co., The	176 156 144 24 166 180 18 22 50 137 23	Tri-States Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Quarry Tile Co. United States Steel Corporation Subsidiary Universal Atlas Cement Company Upson Company, The	184 29 21 59 59 165 50 164 8
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation Cincinnati Iron Fence Co., Inc. Clipper Manufacturing Co., The Coffman Co., Inc., R. G. Coleman Company, Inc., The Consolidated Machinery & Supply Co Construction Machinery Co's. Contractors Pump Bureau Crane Co. Croft Steel Products, Inc. D Delta Manufacturing Division	34 120 53 192 15 138 41 5, Ltd. 117 184 168 153 182	Majestic Co., The		Tri-States Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Quarry Tile Co. United States Steel Corporation Subsidiary Universal Atlas Cement Company. Upson Company, The V	184 29 59 165 59 164 164 8
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 1, Ltd. 117 184 168 153 182 173 3-181	Majestic Co., The	176 156 144 24 166 180 118 22 50 137 23	Tristates Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Steel Corporation Subsidiary Universal Atlas Cement Company Upson Company, The V Vancouver Door Company	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 1, Ltd. 117 184 168 153 182 173 3-181	Majestic Co., The	176 156 144 24 166 180 118 22 50 137 23	Tri-States Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Quarry Tile Co. United States Steel Corporation Subsidiary Universal Atlas Cement Company. Upson Company, The V	184 29 21 59 165 50 164 8 4
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 1, Ltd. 117 184 168 153 182 173 3-181	Majestic Co., The	176 156 144 24 166 180 118 22 50 137 23	Tristates Building Materials Co. Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Plywood Corporation United States Plywood Corporation United States Corporation Subsidiary Universal Atlas Cement Company V Vancouver Door Company Vancouver Door Company Van-Packer Corporation	184 29 21 59 165 50 164 8 4
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5, Ltd. 117 184 168 153 182 173 3-181 11 164	Majestic Co., The	176 156 144 24 166 180 118 25 50 137 23 66 159 127 100 54-55 145 172 Cover	Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Steel Corporation Subsidiary Universal Atlas Cement Company. Upson Company, The V Vancouver Door Company. Van-Packer Corporation Vento Steel Products Company, Inc W	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 6, Ltd. 117 184 168 153 182 173 3-181 11 164	Majestic Co., The	176 156 144 24 166 180 118 22 50 137 23 06 159 127 1ion 54-55 145 172 Cover cia-	Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Steel Corporation Subsidiary Universal Atlas Cement Company Upson Company, The V Vancouver Door Company. Van-Packer Corporation Vancouver Door Company, Inc W Walker-Turner Division	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5. Ltd. 117 184 168 153 3181 11 164 136 136 136 146 158	Majestic Co., The		Truscon Steel Company Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Quarry Tile Co United States Steel Corporation Subsidiary Universal Atlas Cement Company Upson Company, The V Vancouver Door Company Van-Packer Corporation Vento Steel Products Company, Inc W Walker-Turner Division Wallace & Co., J. D.	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 10, Ltd. 117 184 168 153 3-181 11 164 136 136 136 168 60	Majestic Co., The Mall Tool Company. Marco Stairways. Marsh Wall Products, Inc Master Rule Mfg. Co., Inc McKinney Manufacturing Company. Inc. McKinney Manufacturing Company. Medusa Portland Cement Company. Mengel Company, The. Mesker Brothers Mueller Furnace Co., L. J. N Nash-Kelvinator Corporation. National Association of Home Builders. National Electric Products Corporation. National Electrical Manufacturers Associat National Gypsum Company. National Gypsum Company National Manufacturing Company 4th National Manufacturing Company 4th National Oak Flooring Manufacturers Association National Radiator Company, The National Steel Corporation 1		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Steel Corporation Subsidiary Universal Atlas Cement Company Upson Company, The V Vancouver Door Company. Van-Packer Corporation Vancouver Door Company, Inc W Walker-Turner Division	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 10, Ltd. 117 184 168 153 3-181 11 164 136 136 136 168 60	Majestic Co., The		Truscon Steel Company Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Outer Tile Co. United States Plywood Corporation United States Outer Tile Co. Wancouver Door Company Van-Packer Corporation Vento Steel Products Company, Inc Wallace & Co., J. D Wallace & Co., J. D Wather-Turner Division Wallace & Co., J. D Watherproof Products Corp., The Werner Company, Inc., R. D	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 10, Ltd. 117 184 168 153 3-181 11 164 136 136 136 168 60	Majestic Co., The Mall Tool Company. Marco Stairways. Marsh Wall Products, Inc Master Rule Mfg. Co., Inc McKinney Manufacturing Company. Inc. McKinney Manufacturing Company. Medusa Portland Cement Company. Mengel Company, The. Mesker Brothers Mueller Furnace Co., L. J. N Nash-Kelvinator Corporation. National Association of Home Builders. National Electric Products Corporation. National Electrical Manufacturers Associat National Gypsum Company. National Gypsum Company National Manufacturing Company National Manufacturing Company National Radiator Company, The National Radiator Company, The National Steel Corporation National Steel Corporation Nelson Corporation, The Herman. New Castle Products Nord Company, E. A.		Truscon Steel Company. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Steel Corporation Subsidiary Universal Atlas Cement Company. Upson Company, The V Vancouver Door Company. Van-Packer Corporation Vento Steel Products Company, Inc W Walker-Turner Division Wallace & Co., J. D. Waterfilm Boilers, Inc Weatherproof Products Corp., The Werner Company, Inc., R. D. Western Pine Association.	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5. Ltd. 117 184 168 153 3-181 11 164 136 136 136 60 163	Majestic Co., The		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc	184 29 29 21 59 59 165 165 164 4 4 165 191 158 174 174 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 176 187 187 187 187 187 187 187 187 187 187
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 10, Ltd. 117 184 168 153 3-181 11-164 136 136 168 163 163 163	Majestic Co., The		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc Tylac Company. U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Plywood Corporation United States Corporation United States Steel Corporation Subsidiary Universal Atlas Cement Company Upson Company, The V Vancouver Door Company Van-Packer Corporation Vento Steel Products Company, Inc W Walker-Turner Division Wallace & Co., J. D Waterfilm Boilers, Inc Weatherproof Products Corp., The Werner Company, Inc., R. D. Western Pine Association. Westinghouse Electric Corp ration Wheeling Furnace Corporation.	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5. Ltd. 117 184 168 153 3-181 11 164 136 136 168 60 163 134 1617 179	Majestic Co., The		Truscon Steel Company Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Seel Corporation Subsidiary Universal Atlas Cement Company. Universal Atlas Cement Company. Upson Company, The V Vancouver Door Company Van-Packer Corporation Vento Steel Products Company, Inc Walker-Turner Division Wallace & Co., J. D. Waterfilm Boilers, Inc. Weatherproof Products Corp., The Werner Company, Inc., R. D. Western Pine Association. Westinghouse Electric Corporation Wheeling Furnace Corporation. Wheeling Furnace Corporation. White Company, David.	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 6, Ltd. 117 184 168 153 3-181 11 164 136 136 136 136 136 136 136 136 136 136	Majestic Co., The		Tristates Building Materials Co. Truscon Steel Company Truttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc. United States Gypsum Company United States Plywood Corporation United States Plywood Corporation United States Plywood Corporation United States Company United States Plywood Corporation United States Company V Vancouver Door Company Vancouver Door Company Van-Packer Corporation Vento Steel Products Company, Inc Wallace & Co., J. D. Waterfilm Boilers, Inc Weatherproof Products Corp., The Werner Company, Inc., R. D. Western Pine Association Westinghouse Electric Corporation Wheeling Furnace Corporation White Company, David. Willys-Overland Motors.	184 29 29 21 59 59 165 165 164 4 4 4 16-17 187 146 125 158 158 158 178 171 171 171 171 171 171 171 171 17
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5. Ltd. 117 184 168 153 3-181 11 164 136 136 168 60 163 134 16-17 179 138 193	Majestic Co., The		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc	184 29 29 21 59 59 165 178-185 50 164 88 8 4 4 16-17 146 125 174 126 6-17-45 171 44 174 00 1.71
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5. Ltd. 117 184 168 153 3-181 11 164 136 136 168 60 163 134 16-17 179 138 193	Majestic Co., The Mall Tool Company. Marco Stairways. Marsh Wall Products, Inc Master Rule Mfg. Co., Inc MeGraw-Hill Book Company, Inc McKinney Manufacturing Company. Medusa Portland Cement Company. Mengel Company, The Mesker Brothers Mueller Furnace Co., L. J. N Nash-Kelvinator Corporation National Association of Home Builders. National Electrical Manufacturers Associat National Electrical Manufacturers Associat National Gypsum Company. National Hock Company National Manufacturing Company 4th National Manufacturing Company 4th National Oak Flooring Manufacturers Associat National Radiator Company, The National Steel Corporation 1 Nelson Corporation, The Herman New Castle Products Nord Company, E. A. Norge Division, Borg-Warner Corp.		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc	184 29 29 21 59 59 165 178-185 50 164 88 8 4 4 16-17 146 125 174 126 6-17-45 171 44 174 00 1.71
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 5. Ltd. 117 184 168 153 3-181 11 164 136 136 168 60 163 134 16-17 179 138 193	Majestic Co., The Mall Tool Company. Marco Stairways. Marsh Wall Products, Inc Master Rule Mfg. Co., Inc MeGraw-Hill Book Company, Inc McKinney Manufacturing Company. Medusa Portland Cement Company. Mengel Company, The Mesker Brothers Mueller Furnace Co., L. J. N Nash-Kelvinator Corporation National Association of Home Builders. National Electric Products Corporation. National Electrical Manufacturers Associat National Gypsum Company. National Lock Company. National Manufacturing Company 4th National Manufacturing Company 4th National Oak Flooring Manufacturers Associat National Radiator Company. The National Steel Corporation 1 Nelson Corporation, The Herman. New Castle Products Nord Company, E. A. Norge Division, Borg-Warner Corp. O Ohio Hydrate & Supply Company, The Overhead Door Corporation 3rd		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc	184 29 29 21 59 59 165 178-185 50 164 88 8 4 4 16-17 146 125 174 126 6-17-45 171 44 174 00 1.71
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 10. Ltd. 117 184 168 153 3-181 11 164 136 136 136 136 136 148 136 148 153 182 173 184 173 184 185 187 187 187 187 187 187 187 187 187 187	Majestic Co., The	176 156 114 24 166 180 118 22 50 137 23 66 159 127 ion 54-55 172 Cover cia- 152 180 16-17 151 152 Cover	Truscon Steel Company Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation Vento States Ploed Company Upson Company, The W Vancouver Door Company Van-Packer Corporation Vento Steel Products Company, Inc W Walker-Turner Division Wallace & Co., J. D. Western Pine Association Western Pine Association Westinghouse Electric Corporation Wheeling Furnace Corporation Wheeling Furnace Corporation White Company, David Willys-Overland Motors Winco Ventilator Co., Inc Worthington Pump and Machinery Corporation Wurdack Chemical Co	184 29 29 21 59 59 165 165 178-185 164 125 191 158 174 126 178 179 170 171 170 170 170 170 170 170 170 170
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 10, Ltd. 117 184 168 153 3181 11 164 136 60 163 163 164 164 179 179 138 192 174	Majestic Co., The		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 10. Ltd. 117 184 168 153 3-181 11 164 136 136 136 168 168 169 163 177 179 179 179 179 179 179 179 179 179	Majestic Co., The	176 156 154 166 180 118 22 50 137 23 06 159 127 ion 54-55 172 Cover cia- 152 180 16-17 151 152 Cover	Truscon Steel Company Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation Vento States Ploed Company Upson Company, The W Vancouver Door Company Van-Packer Corporation Vento Steel Products Company, Inc W Walker-Turner Division Wallace & Co., J. D. Western Pine Association Western Pine Association Westinghouse Electric Corporation Wheeling Furnace Corporation Wheeling Furnace Corporation White Company, David Willys-Overland Motors Winco Ventilator Co., Inc Worthington Pump and Machinery Corporation Wurdack Chemical Co	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 16. Ltd. 117 184 168 153 3-181 11 164 136 136 136 136 136 136 148 153 137 147 179 138 193 192 174	Majestic Co., The		Tristates Building Materials Co. Truscon Steel Company. Tuttle & Bailey, Inc	
Chase Brass & Copper Co. Chicopee Manufacturing Corporation Chrysler Corporation	34 120 53 192 15 138 41 1. Ltd. 117 184 168 153 3181 11 164 136 136 168 163 163 1134 16-17 179 138 193 192 174 154 46-47 147 172 158	Majestic Co., The		Truscon Steel Company Truscon Steel Company Tuttle & Bailey, Inc Tylac Company U Unique Balance Company, Inc United States Gypsum Company United States Plywood Corporation United States Seel Corporation Subsidiary Universal Atlas Cement Company. Universal Atlas Cement Company. Upson Company, The W Vancouver Door Company Van-Packer Corporation Walker-Turner Division Wallace & Co., J. D. Waterfilm Boilers, Inc Weatherproof Products Corp., The Werner Company, Inc., R. D. Western Pine Association. Western Pine Association. Westinghouse Electric Corporation Wheeling Furnace Corporation White Company, David. Willys-Overland Motors. Winco Ventilator Co., Inc Worthington Pump and Machinery Corporation Wurdack Chemical Co Y -Yale & Towne Manufacturing Company, The Young Radiator Co	184 29 21 21 59 21 165 178-185 20 164 20 21 16-17 187 146 20 125 174 126 20 174 174 170 170 18 27 170 18 2

948. ..191 .121 ...140 ..129 ...136 ...162167 .16-17173 12115 162B ..168 .16-17 .188 .162 .172 .150 .135 .191 .143 .143 .148 ..164 ... 8 ... 8 ...16-17187 ne.... 27

....186





ds
renen
The
32
ows
door
arm
t pull
acked on the top sidew f 5%-in-pla attached bet 24-