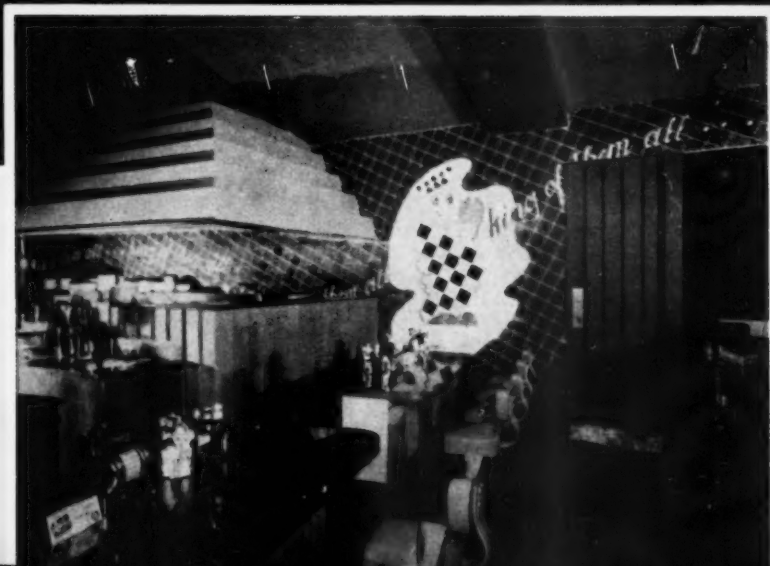
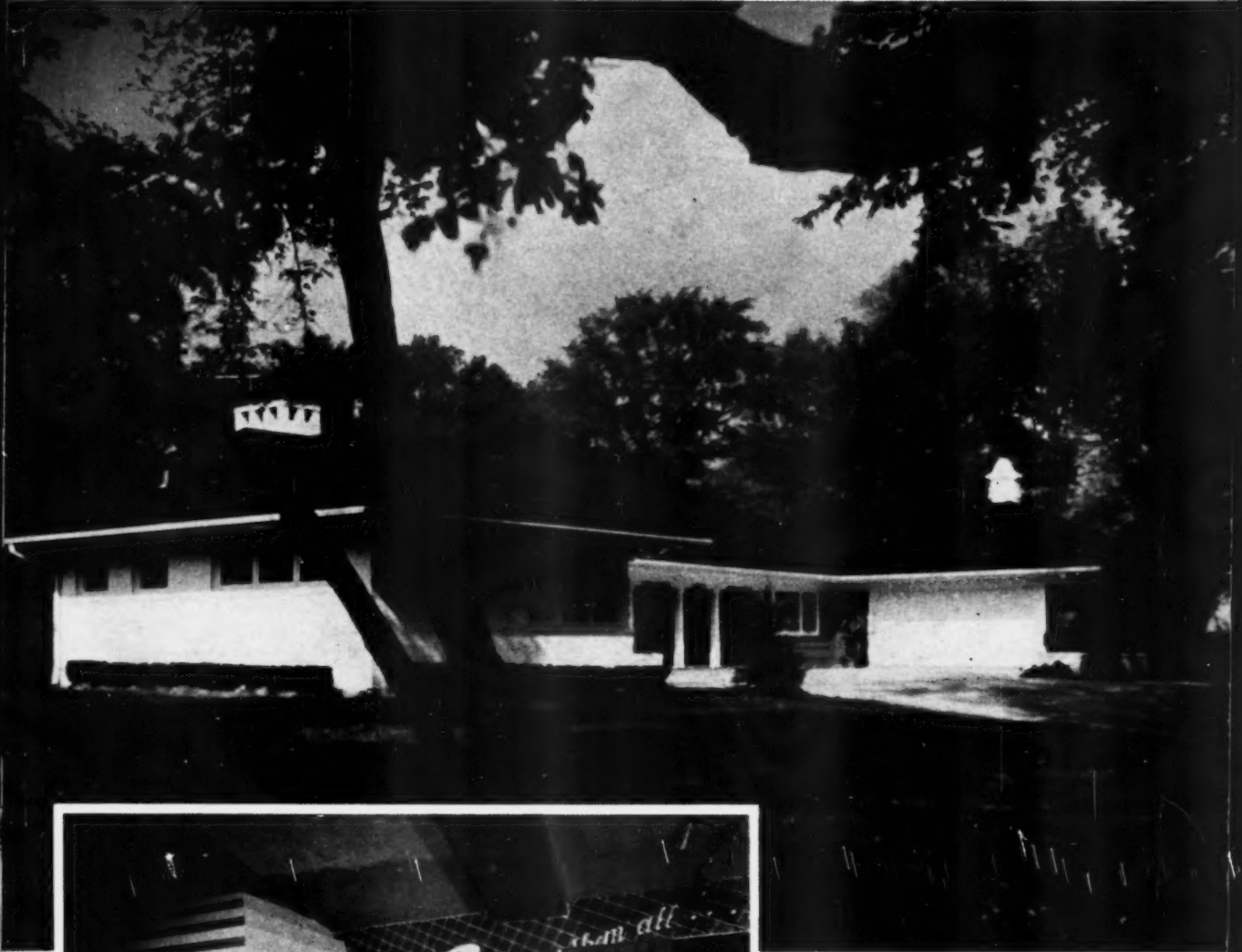


AMERICAN BUILDER

THE WORLD'S GREATEST BUILDING PAPER
FEBRUARY 1954
★ PRICE 75 CENTS

Your Building Weather
for February — See Page 13

NEWS REGIONAL and
NATIONAL
Begins on Page 8



▲ This House Has Seven Features
For Your Idea Scrapbook
See Pages 76-83

◀ A Restaurant Designed to
Stop Traffic Page 116



Here's one easy way to "Stop the Shoppers" and get them to look and ask questions



When sales are slow, your one big problem is to get the "shoppers" to stop cruising around, look at your homes and listen to your salesmen. Sometimes that isn't too easy—if you haven't something unusual to make them stop, look and listen. Crawford Customized Garage Doors give you something that is not just unusual but is dramatic, colorful, beautiful and CAN BE SEEN RIGHT FROM THE STREET. There are so many different designs and color schemes that each of your homes can have its own, individual, Customized door, and remember that the garage door is usually the LARGEST SINGLE AREA IN THE ENTIRE FRONTAGE and when you change the looks of the garage door, YOU CHANGE THE LOOKS OF THE HOUSE. And, it's no

trick at all to make the front door and window shutters match up with the Crawford Customized Door and thus produce a stunning "ensemble." As you well know, women go for these striking and colorful custom effects and this is the one that CAN BE SEEN FROM THE STREET. They can see, from their cars, that EVERY FRONT IS CUSTOM DESIGNED. Can you think of a better way to make the "shoppers" STOP, LOOK, LISTEN! Why don't you get in touch with your local Crawford Door Sales Co., listed in your classified phone book under "DOORS" and get them to show you how practical and inexpensive it is to give your homes this very important buying pull? It won't cost you a cent to find out. Or, write us for literature.

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for fine
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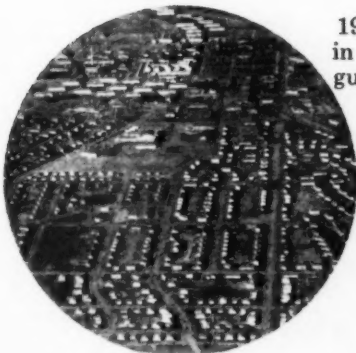
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and finishes for fine
residential and
commercial
building.



THE ECONOMICAL "400" LINE

A quality lock for quantity building

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19,000,000 placed
in unconditionally
guaranteed service
since 1946.



kwikset sales and service company, anaheim, california



**make houses sell faster
because they give visible
evidence of quality
construction!**



Residence of Mr. and Mrs. Eugene Hubbard, Kalamazoo, Michigan.
Builder, John Kaasteker; Ludman supplier, Miller Sash and Door Company.



What a difference Ludman Auto-Lok windows make! Houses equipped with Ludman Auto-Lok windows actually bring a higher price and sell easier — yet cost you no more to build!

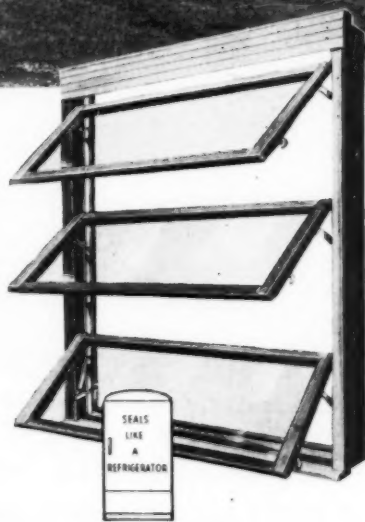
You save both time and money. No costly time consuming installation adjustments are necessary. And costly call-backs are eliminated because Ludman Auto-Lok windows never need adjustment after installation.

Your houses sell faster because Ludman Auto-Lok windows add extra value home-buyers want, and are willing to pay for. Lud-

man Auto-Lok windows feature automatic locking . . . Floating-Seal weatherstripping . . . a self-locking device that automatically seals the window like a refrigerator when it's closed . . . Never sticks, never rattles . . . finger-tip control that's so easy to operate, a child can open or close even the largest windows with ease.

Add your savings to the plus features of Ludman Auto-Lok windows and you'll find they are the most economical windows you can use.

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LUDMAN LEADS THE WORLD IN WINDOW ENGINEERING

CONTENTS

AMERICAN BUILDER

FEBRUARY 1954
Vol. 76 No. 2

EDITORIAL

How to forestall recession 5

TRENDS

How a market revolution affects builders 6

NEWS

News of note from your area 8

Buildercast of regional trends, forecasts 28

News from the national scene 37

Dickerman's Column 40

WEATHER

What has the weatherman in store for builders? An expert predicts 13

HOME DESIGNS

Five pages of houses, plans 20

ON and OFF the RECORD

A commentary on persons, places, problems and events 45

LETTERS

What our readers say 50

MERCHANDISING IDEAS

How one builder creates business 56

POWER TOOLS

How fast is a power tool? Picture study reveals how it saves time and motion 62

BLUEPRINT HOUSE in COLOR

A low-cost modern with luxury features 68

An 1/8-inch scale blueprint 71

Materials list for blueprint 75

DESIGN IDEAS

7 Features for your idea scrapbook 76

How laminated roof trusses effect cost savings in church structures 84

How exposed structural members can be utilized in the design of commercial buildings 120

Idea of the month—A Pullman divan for den 220

BUILDING

Work patterns for mass production 102

Trailer office for builders 110

LAND PLANNING

Land planning is worth it—The story of

The Village in Wichita 125

LEGAL

Housing act limits use of mortgage discount 141

HEATING

"Plus values" possible with hot water heating 142

How perimeter heating fits larger buildings 234

BUSINESS FORMS

A simplified system for controlling day-to-day costs 94

A form to analyze costs by trades 190

NEW PRODUCTS

A pictorial review and preview of building materials and equipment 150

CATALOGS

Review of literature offered by manufacturers 176

TECHNICAL GUIDE

How to install hardboard underlayment panels 196

HOW-TO-DO-ITS

Job shortcuts from men on-the-job 205

ASK THE EXPERTS

Queries from readers on technical problems are analyzed by a board of experts 210

DETAIL PLATES

A fireplace used as a room divider 222

A corner entrance 224

TRADE-INS

Portland builder demonstrates selective trade-in selling 242

ADVERTISING INDEX

244



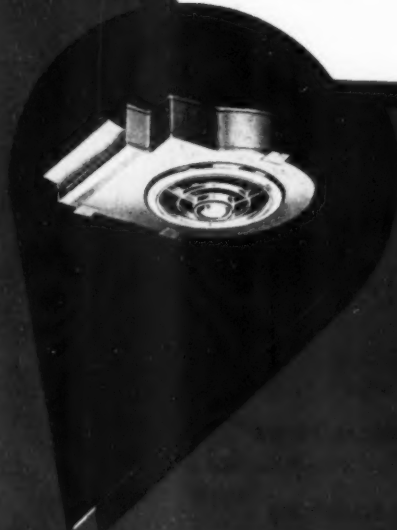
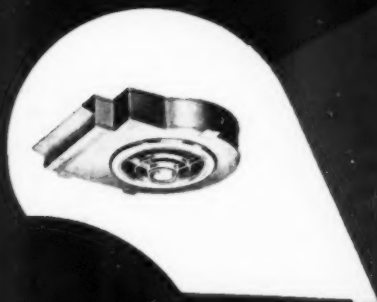
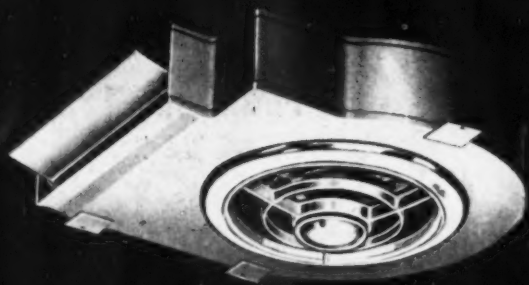
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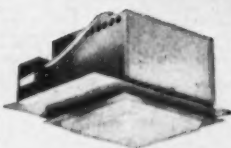
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How to Forestall Recession

WHEN the score for this year is added it will show more than one million new housing units added to the nation's inventory. That is a more optimistic figure than anyone would have predicted 24 months ago, because according to the statistics dealing with net new family formations, the market for new houses was supposed to begin a decline in 1954. The point that the statisticians missed is that, for the first time in the history of home building in this country, there is an organized industry capable of creating demand to sustain a million-house year even when the need measured by net new families is declining.

Added to the merchandising skills developed by individual builders in the past several years is the incalculable but heavy influence of National Home Week. Then, there are numerous home shows, and other local and national promotions headed by NAHB and its chapters. These are the selling tools that have been used successfully.

But, the time will come sometime in the next 24 months when these effective tools will have to be sharpened. They will need cleaner, finer edges, and fortunately the means with which to provide these edges are at hand.

Results of the vast amount of research directed on numerous fronts to develop improved materials, equipment, appliances and construction methods are almost daily being translated into usable realities. All

of them permit refinements in design, and the net result is that each year home builders are able to provide more livability—more house for the buyer's dollar than he ever got before. Up to this time the buyer has needed little more than to be shown, but there is every likelihood that before long some tangible proof will be needed to keep sales apace with production.

So, *American Builder* proposes an adaptation of the phrase which this magazine coined in the dreary thirties as the head for a series of articles generally credited with reviving home building after the depression.

That phrase was "More House for The Money." The articles proved the head, and the industry used them effectively to convince the public that investment in a home was sound. While we have no fear of a grave recession, we see no need for a recession of any kind, provided that the industry forestalls it with convincing proof of the values it has to sell.

We suggest that the industry set itself now to assemble documented proof that the day-to-day advances in materials, construction techniques and design give the home buyer more house for his money than he got last year, the year before last, or at any time in the past. We suggest the phrase, "*You Get More Home for Your Money Today.*" as the tag on which to hang the proof. And we suggest the phrase and the proof as the finer edges for National Home Week and the other selling tools.

Let's not fear a recession. Let's forestall the possibility with National Home Week and the proof that "*You Get More Home for Your Money Today.*"

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TRENDS *in the Building Field*

how a revolution in marketing affects builders

WE HAVE BEEN BUILDING houses in this country for 350 years and yet, of all the houses standing today, one out of six has been built since the end of World War II—a short span of eight years. In 1940 there were 132 million people in this country and 37 million dwelling units. Today there are 160 million people living in 48 million houses and apartments.

NEWER HOUSES CONTAIN more mechanical appliances of all kinds so that today's house is more and more a "living machine" what with modern refrigerators, deep freezers, dishwashers, heating and air conditioning machines, cooking stoves, garbage disposals, automatic hot water heaters and automatic laundries. The housing industry is one of the main supports of the American economy.

OBSERVERS OF THE ECONOMY predict that the 20th Century will go into history as the period of the marketing revolution. They say that it is and will be the time when finally we learned to market as skillfully and efficiently as, years earlier, we had learned to manufacture. All this is the cumulative sign of a healthy, dynamic economy—one in which both business and consumer will continue to benefit.

THE MARKETING REVOLUTION is still the biggest factor in the economy, and its scope, future and power-for-good are only now beginning to be realized or appreciated by business leaders.

Important cogs in this marketing revolution are the tens of thousands of builders and about 25,000 lumber dealers who are building and selling new houses at the rate of a million a year.

ONLY A FEW BUSINESSMEN, relatively speaking, are aware of the changed rate of population increase in the United States. The rate is actually more than twice the rate

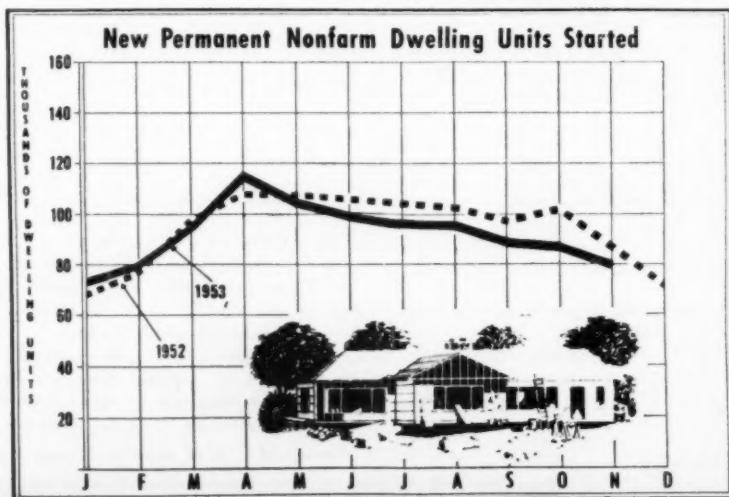
of 1941, when only 1,280,000 were added to the census rolls. During the last fiscal year, the population increased 2,709,000. Since the last census, in 1950, the country's labor force has grown by about 2,000,000; the number of children in the elementary schools (5 to 13 years), by about 3,000,000. Skipping back to an earlier census, there are now 65 per cent more children under five years of age than there were in 1940.

ONE UNEXPECTED FACTOR, upsetting predictions, is the increase in the size of a large segment of families. Instead of raising one or two children only, married couples are raising three or four. This fact alone is causing some families to look for larger houses and to leave the cities for suburban areas. Today's favorable economic conditions are underwriting the increased number of marriages and the larger family units. It would appear that young families have confidence in the nation's economic future and are not afraid to assume heavier obligations. The Department of Commerce estimates that by July, 1955, the number of households in the nation will have grown to 47,701,000.

ADDED POPULATION does not tell the whole story of mounting sales opportunities for builders. There is a trend for family units to exceed the rate of population growth because the average size of families is decreasing. There are now more one, two and three person families who require separate living units. At the other end there is a large number of young families with three, four, five or more children.

Furthermore, our market will grow not only in numbers but in buying power. As each person increases his production, he increases his income and ability to buy. Over the last half century, the productivity per man hour of work has increased on the average of two per cent to three per cent each year. This means that every 10 years the average worker increases his real wages or buying power by about 25 per cent, regardless of price levels.

THESE FACTS—increased population, an ever greater increase in family units and a mounting buying power for each family—cumulate to unleash tremendous demands for which builders can build better and more completely equipped houses.



United States Dept. of Labor
Bureau of Labor Statistics

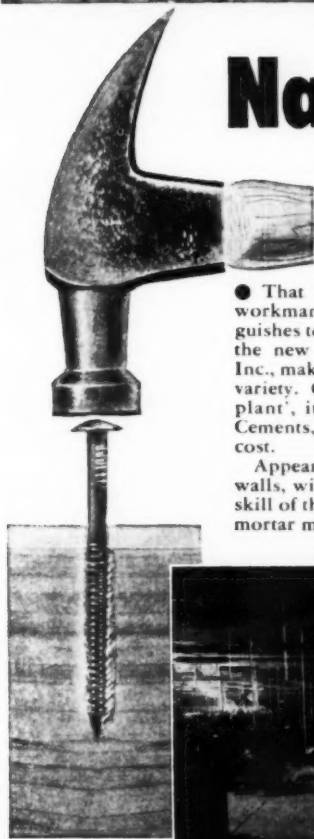
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Easy-Working LONE STAR MASONRY MORTAR Pluses Appearance and Durability of 'World's Most Modern Nail Plant'



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Mortar that works faster and easier . . . sticks to brick or block, saving labor . . . easier to tool, doesn't gum up the trowel . . . makes a neater job that costs less to clean down.

With utmost durability, due to low absorption, high water repellency . . . sound mortar, no delayed expansion.

Mortar that builds good-will and repeat business—for the Masons who use it . . . and for the Building Material Dealers who supply it.

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Model Home City, Six-year Program, Begun in Columbus

Two miles west of Columbus, Ohio, 1,170 acres of raw land are being transformed into a complete model city planned especially to emphasize proper home surroundings and safety.

Within three years, the Peoples Development Company plans to build 900 homes ranging from \$9,500 to \$2,000, garden apartment buildings to house 750 families, a 60-store shopping center and numerous public and religious buildings. Hundreds of additional homes are planned for a second three-year program beginning in 1957.

Lincoln Village, as the project will be known, is said to represent a long-time dream of Murray D. Lincoln, president of the sponsor's parent organization, the Farm Bureau Insurance Companies.

Among the planning features embodied in Lincoln Village are park and playground areas surrounded by houses; residential areas situated some distance from industrial zones but near enough for workers to walk to work; "king-size" blocks to reduce intersections; curved streets to discourage speeding; and varying lot sizes with special attention to eliminate blind intersections.

Site Plan of Insurance Executive's Dream City



First phase of construction at Lincoln Village near Columbus, Ohio, includes 900 homes, 750 apartments, shopping center, school, three churches, playgrounds, library and fire station. Second phase, with hundreds more homes, is to start in 1957. Entire planned community is scheduled for completion in 1959

Des Moines Builders Launch Co-op Listing of New Homes

Designed to serve home-seekers as well as builders, an unprecedented co-operative program for monthly listing of new homes for sale has been launched by the Home Builders Association of Des Moines. President Ernest L. Canine said the new program will:

1. Make it easier for prospective buyers to find a new house suiting their requirements.
2. Give builders an accurate method of referral to other builders.
3. Provide a continuing inventory of new homes for sale to help the industry avoid "over-building" in any one size of price category.
4. Gain for builders a larger share of the total housing market and thus help prevent any serious letdown in new home building and sales.

Developed by a committee headed by E. T. McMurray, the plan calls for participating builders to submit a monthly list of houses they have for sale. A master list is sent to each builder. When a builder cannot meet requirements of a prospect, he refers to the complete list and gives him locations of available homes in his size and price range.

Campaign Enthusiasm Rides High at Buffalo



Christmas party—annual election attended by 400 climaxed 30-day campaign of Niagara Frontier Builders Association to choose six directors from 12 candidates. Latter tried everything from pretty girls to Dixieland bands for votes. The winners: Vic Heaps, B. G. King, Walter Skillicorn, John Swerdloff, Al Bagley, Holly Jewett

King Played an Ace



Buffalo's Mayor Pankow (center), himself a recent victor at the polls, successfully campaigned for B. G. King (left) as retiring president William R. Doll looked on

Arquilla Installed In Chicago Post

Chicago Metropolitan Home Builders Association seated George Arquilla as president at an installation dinner Jan. 14 in the Conrad Hilton Hotel attended by several hundred members and friends. President of the Burnside



George Arquilla

Construction Co., he has been building South Side homes for 41 years.

Arquilla succeeded Laurance H. Mills as president. Other officers are Irvin A. Blietz, H. Morton Robbins, C. E. Blomgren and Roy Barry, vice presidents; Martin H. Braun, secretary, Joseph E. Valenti, treasurer.

Early in December, CMHBA observed its annual Christmas party in the Hotel Sherman with a record turnout of nearly 1,000 members and guests.

Indiana Dealers Meet Mar. 2-4

The Indiana Lumber and Builders' Supply Association will hold its 70th annual convention March 2-4 in Indianapolis. John C. Hilker Jr., of Fort Wayne is chairman of the committee.

From Grateful Buyers



Builders Joseph Shapiro and Martin Buxbaum, on hand to install officers of Joseph-Martin Civic Association, were surprised with this "symbol of appreciation" from the 360 members who acquired East Meadow, L. I. N. Y., homes from them. Shapiro (right) is accepting plaque from Milton Cohen, retiring association head

Buckeye Choice



A. B. Stanbery of Toledo, named head of Ohio Home Builders Association at its Akron convention, announced he would push slum rehabilitation plans in 1954

Northern News continues on page 12-N

They'll Handle Northern New Jersey Affairs in '54



Lewis Epstein, renamed president of Home Builders Association of Northern New Jersey, joins officers and directors at end of annual meeting in Teaneck, N. J. From left: John J. Durante, Gerrard Berman, George Marcus, Vincent Cucchiara Jr., Ralph Carletta, Epstein, Edward Dowling Jr., Russell Willis, Albert Stier, Fred Brunetti, Patsy De Andrea, Joseph Goldman, George Poydinez, John O'Hara

THE NEW
calder
OVERHEAD
GARAGE DOOR
LINE
has a style and size
for every need



CALDER "STURDY" DOOR



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CALDER "FLUSH" DOOR



CALDER COMMERCIAL DOOR

Here's a brand new line of doors that has *everything*. Made by a manufacturer with over half a century of designing and engineering experience, the new Calder doors are available in every conceivable size and style for every conceivable need. Special designs and sizes to order and for extra appeal to the customer and extra profit for you—all Calder doors can be equipped with radio controlled electric operators.

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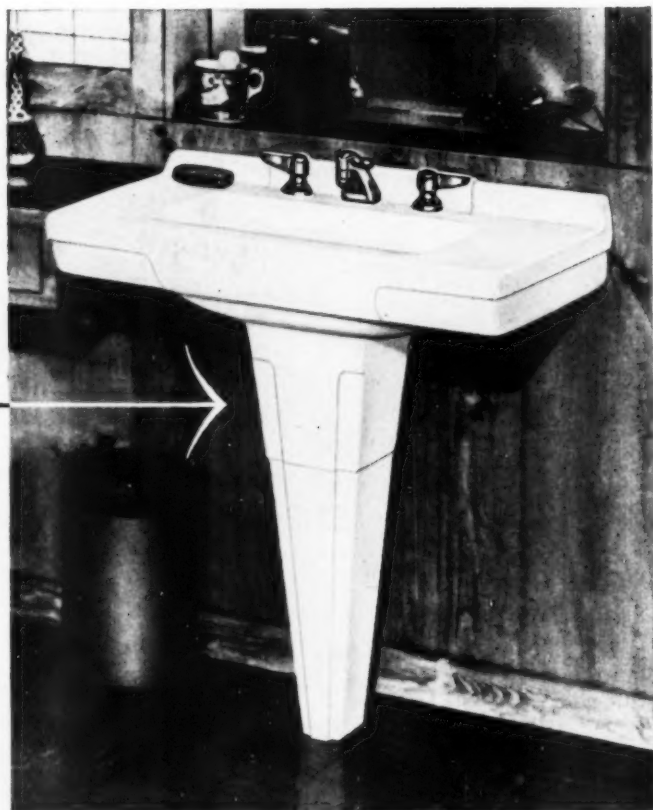
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LANCASTER 12, PENNA.

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And when you offer Universal-Rundle fixtures, your prospect recognizes a familiar name—nationally advertised in leading magazines as the world's finest bathroom fixtures.



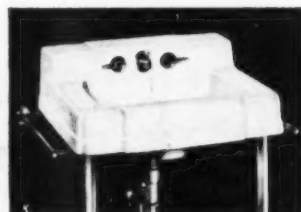
Chateau . . . No. 4585 . . . 27" x 21"



Carlton . . . No. 4579 . . . 27" x 21"



Cathleen . . . No. 4576 . . . 21" x 18"



Ledgemaster . . . No. 2201 . . . 22" x 19", No. 2200 . . . 19" x 17"



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Patented one-piece hanger gives easier, faster, more sure installation of china lavatories! A U/R exclusive!

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FREE
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The World's Finest Bathroom Fixtures

by **Universal-Rundle**

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*Your key sales feature
for 1954*



® Janitrol Win-Sum Twins

**ALL SEASON COMFORT NOW PRACTICAL FOR
AVERAGE HOME OWNERS**

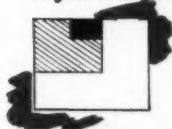
Year 'round conditioning, the Janitrol way, need not be confined to the so-called luxury custom-built home. This year, Janitrol twin installations will be the key sales feature for many alert builders.

The addition of summer cooling will increase your home's market values far more than the cost of the unit . . . this is important to you and your prospect. Janitrol cooling is

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You can depend on well engineered installations of Janitrol year 'round conditioning ideally suited for your house plans.

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SPACE SAVING

You need only a 27" square for the 2 or 3-ton Janitrol conditioners. They are out of the way in the utility or recreation room.



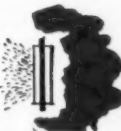
5-YEAR WARRANTY

The Janitrol unit is factory sealed. Maintenance is minimized. This cooling system is fully covered by a 5-year warranty.



WHISPER QUIET

Janitrol is the quietest unit made. Rubber mountings and thick insulating blanket lining efficiently absorb operating sounds.



FILTERED COOLING

Over 5 square feet of filters removes the dust, dirt and pollen from Janitrol cooled air for a healthier, cleaner home.

WRITE TODAY FOR COMPLETE SPECIFICATIONS



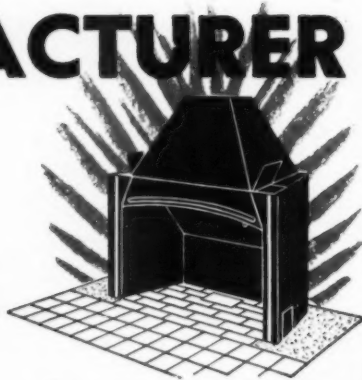
**DIVISION • SURFACE COMBUSTION CORP.
400 DUBLIN AVE., COLUMBUS 16, OHIO**

★ Offer the Win-Sum Twins in your model homes.

LET JANITROL ENGINEERS LAY OUT YEAR 'ROUND CONDITIONING TO FIT YOUR PLANS . . . LEAVE COOLING OPTIONAL.

Buy Direct from MANUFACTURER

Save
25%



on your purchases of FIREPLACE FORMS (Heat Circulating)

GUARANTEED Highest Quality

The Price Fireplace Heater & Tank Corp. gives you its guarantee that Price Fireplace Units are of highest obtainable quality of materials and workmanship.

EXTRA BENEFITS At No Extra Cost

Features available on no other fireplace form:

1. Ductmakers save hours of masons time.
2. Expansion channels eliminate troublesome mortar joints.
3. Improved design provides increased heat output



Gentlemen:

Please rush the following information to me:

- Send specifications and price list with builders discounts.
- Send 8½ x 11 book of "100 Fireplace Ideas".
- Send prices on septic tanks.

Name.....

Street.....

City.....

Number of fireplaces used in one year.....

Number of septic tanks used in one year.....

PRICE FIREPLACE HEATER & TANK CORP. 193 W. Jackson St., Buffalo, N. Y.

NORTHERN NEWS

(Continued from page 9-N)

Roamin' the North—

A dozen NAHB officials headed by "Manny" Spiegel and John Dickerman remained in New York an extra day after the December convention committee meeting to take in the Long Island Home Builders Institute annual meeting. They saw Walter G. Stackler re-elected president, also the consolidation of the Queens Home Builders Assn. with the institute. Lester Tobin, who headed the former Queens group, was elected LI vice president representing the Queens-Brooklyn Division



R. A. Drennan

Edward A. Lashins, himself just renamed president of the Home Builders Assn. of Westchester (N. Y.), announced the appointment of Robert A. Drennan as executive director . . . HBA

of Rhode Island has a new address. It's the Warner Building, 433 Westminster St., Providence. President Anthony Viola says it will provide greater public access to the association's information center . . . Omaha Builders Exchange has moved to its new building at 2565 St. Marys Ave.

Construction volume topped \$20 million last year in Winnipeg, Canada, upsetting a mark fixed in 1912 . . . Something unique in home show presentation will be attempted Feb. 6-14 at the Arena, St. Louis, when Bildor members of the HBA of Greater St. Louis will display both an "X-ray" house and an "avenue of homes" ap-



A. H. Falace



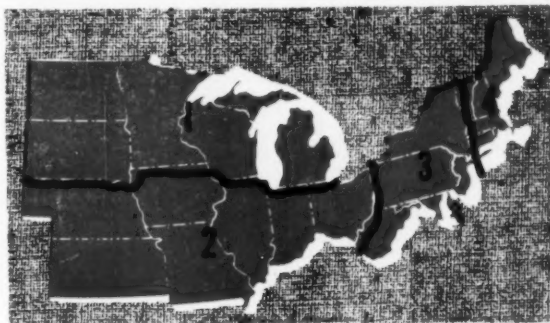
C. M. St. Clair

proximating a small subdivision. C. S. "Todd" Upson heads the committee . . . Art Falace, Cleveland's new exec. VP, is an antique car hobbyist. His successor at Ohio HBA, Clifford M. St. Clair, earned degrees at Penn State and Duke . . .

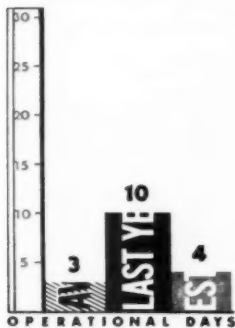
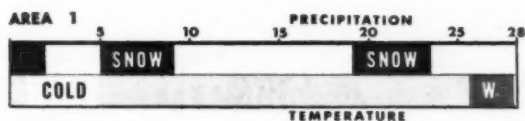
First formal annual meeting of HBA of Indiana elected Gale C. Corley, Valparaiso, president; Ralph L. Shirmeyer, Fort Wayne, vice president; L. M. Hershberger, Crawfordsville, treasurer; W. H. Highsmith, Anderson, secretary.

An exclusive American Builder service
prepared by Irving P. Krick, Ph.D., and Staff

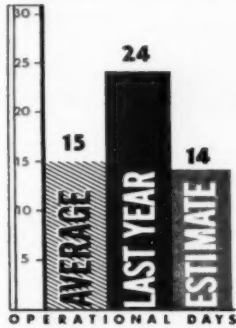
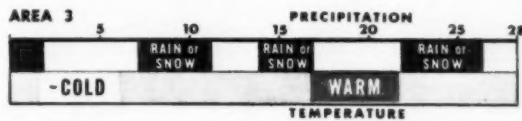
NORTH: For February, 1954, the North areas generally may anticipate less favorable working weather than that of last year. Only in Area 4 are comparable conditions in prospect. The number of days free of restrictive weather elements, therefore, should be less than that observed last February.



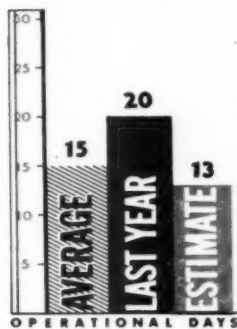
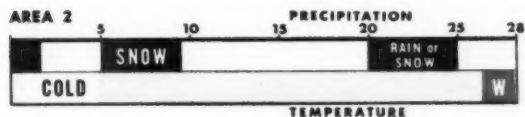
Timing of weather events is indicative of trends. Don't expect precipitation on every day of the period indicated



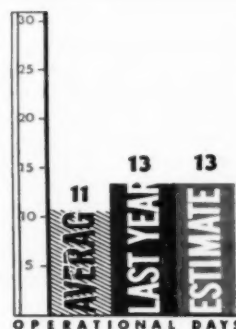
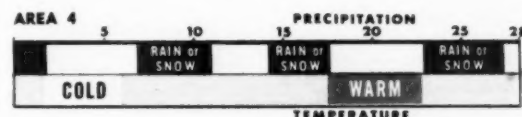
Colder than usual weather in the western portion and near to slightly warmer than normal temperatures in the eastern portion should characterize the February, 1954 weather picture here in Area 1. Rainfall and snowfall amounts are not expected to be excessive with the region generally recording deficient totals at the month's end. Last February's weather was warm as compared to normal with only North Dakota and northern Minnesota receiving less than the usual precipitation.



Area 3 may expect less favorable working conditions this February. Principal weather restricting factor should be precipitation amounts in excess of the critical value as rainfall and snowfall totals are expected to be above normal. Temperatures also are likely to be above normal for the month. Last February, warm and mostly dry conditions prevailed here.



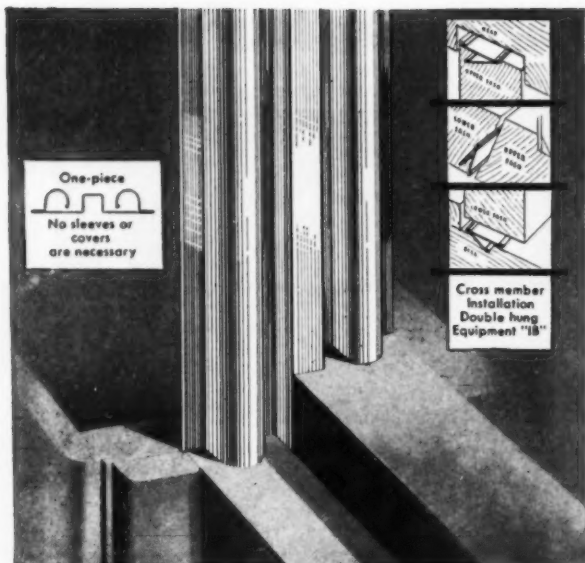
Warm, wet weather was observed in Nebraska, Iowa, northern Missouri and northern Illinois last February with the balance of Area 2 experiencing warm, dry conditions. For this coming February, the entire region may anticipate above normal precipitation totals. Temperatures, however, are expected to vary considerably. Colder than usual weather is in prospect for Nebraska and northwestern Iowa with Ohio and southern Missouri experiencing generally warmer conditions. Elsewhere, about average temperatures are in prospect.



Both temperatures and precipitation totals are expected to average slightly above normal in Area 4 during February, 1954. Last year in February, similar weather conditions occurred although temperatures generally were much warmer than those anticipated for the coming month. Nevertheless, the number of days suitable for carrying on outdoor construction activities appears likely to equal that of last February.

CRITERIA

Special climatic studies were made for selected cities in each area to determine AVERAGE and LAST YEAR Operational Days. ESTIMATES are generally applicable to each area. Precipitation and temperatures extreme enough to stop outside work have been forecast as number of NON-operational days. Naturally, inside work (plastering, wiring, finishing, etc.) may on occasion proceed without interruption even through the cold and wet spells shown on the month's timing bar.



ALLWEATHER FULL JAMB BALANCE STRIP

Weatherstrip and Sash Balance Combination

for quick, efficient Sash Mill INSTALLATIONS

ADJUSTABILITY IS BUILT-IN — Balance tube with semi-cantilever action insures weatherstrip contact in all kinds of weather. The base of section is always in close contact with jamb insuring stability.

BEAUTY OF DESIGN . . . sets off the pleasing quality of fine wood sash and frames. Counter-balance springs are concealed by a functional part of the strip itself.

COLD AIR AND DUSTY DRAFTS CONTROLLED . . . by generous area of contact between strip and sash. Tests made by the University of Minnesota Institute of Technology Testing Laboratory in cooperation with the Weatherstrip Research Institute, show that double-hung wood windows, when weatherstripped show an infiltration ratio 6 TIMES LESS than non-weatherstripped windows.

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MEMBER "ALLIANCE OF" REGISTERED U. S. PATENT OFFICE
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Please send information and prices

- Allweather Balance Strip
 Thresholds and Weatherstrip for Doors
 Metal Trim for Asbestos Siding

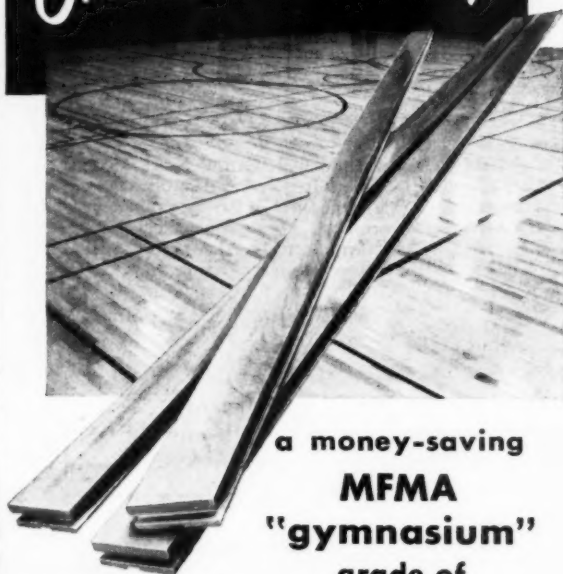
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City _____ Zone _____ State _____



Growing in Popularity



a money-saving
MFMA
"gymnasium"
grade of

NORTHERN HARD MAPLE



• Approved by architects and school authorities in leading cities for gymnasium floors, this fine (and relatively new) "combination grade," officially known as Second and Better, is fast becoming a favorite school specification. It matches MFMA First Grade in every performance attribute, yet sells for less—actually consists of 50% or better of First Grade, blended in the strip with the Second Grade areas. Stock and sell Second and Better, the ideal "gymnasium" grade, with fullest confidence. It makes a splendid floor of enduring beauty—competitive on EVERY basis!



WRITE for copy of MFMA grading rules and new MFMA - approved list of floor finishes.

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Suite 596, Pure Oil Building, 35 E. Wacker Drive
CHICAGO 1, ILLINOIS

FLOOR WITH **NORTHERN** HARD MAPLE
BEECH AND BIRCH

Build NEW light into modern homes with...



MALT-A-Glide

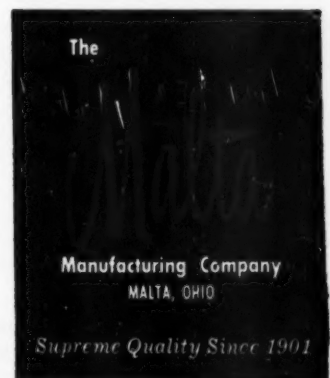
**HORIZONTAL SLIDING!
FULLY WEATHERSTRIPPED!
EASILY-REMOVED SASH!
NEW, UNIQUE SILL SEAL!**

Wide, wide expanses of glass—for that wall to wall window treatment so greatly admired! Today's architecture demands that exterior walls have that simple, uncluttered look, yet provide adequate light and ventilation. MALT-A-GLIDE Horizontal Sliding Wood Window Units are ideal for every room . . . serving handsomely as "light-walls" for living areas, or as high "ribbon windows" where privacy is wanted.

MALT-A-GLIDE Horizontal Sliding Wood Windows—newest in the time-proven line of MALTA wood window units—are chemically treated for long life, fully weatherstripped and feature a positive water-tight sill that also eliminates uncomfortable drafts and expensive heat loss. As in all other MALTA units, sash is easily removable for cleaning or painting.

SEE YOUR NEAREST DEALER OR WRITE FOR LITERATURE

MEMBER PONDORUSA PINE WOODWORK ASSN. . AND N. W. H. A. . N. A. R. O.



CONSTRUCTION INSURANCE!



Whether you are a speculative builder or a custom builder, your '54 homes should include the features which provide construction insurance at no extra cost. Homes with R·O·W lift-out windows sell faster—stay sold longer. Patented R·O·W spring-cushion construction permits sash removal and also provides a year-round snug fit. No other window excels the R·O·W removable window in appearance, convenience or weather-protection.

See your local lumber dealer or write

R·O·W. SALES CO. 1324-66 ACADEMY AVENUE • FERNDALE 20, MICHIGAN

R·O·W is the registered trade mark of the R·O·W. Sales Co.

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Merrill, Wisconsin

CANADA
D. PORTER & SON
Stellarton, Nova Scotia, Canada



**LOOK FOR
THE CUPS!**



The recessed cups in R-O-W sash guides identify America's most popular window. These cups house the tension-adjustment screws. It is easy to adjust R-O-W removable windows for snug operation and year-around weather protection. Many competitors have tried to imitate patented R-O-W window construction. None have approached R-O-W window quality.

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KOHLER

Enameled Iron Sinks



WILSHIRE sink with cabinet.
Sizes 60 x 25", 72 x 25".

Specific advantages important to the housewife are offered by these Kohler enameled iron sinks.

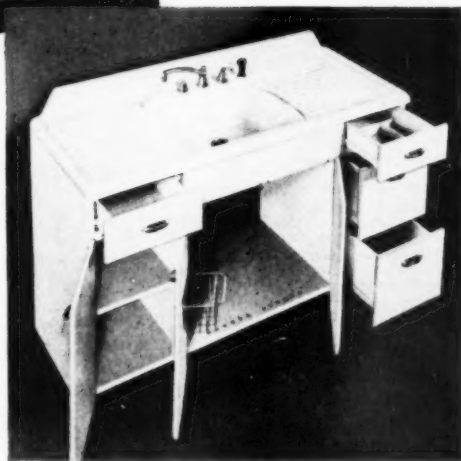
Maximum convenience is afforded by the twin drainboards which provide sanitary, self-draining work surfaces. The fixtures are in one-piece, without joints.

Durability is assured by a strong, rigid base of iron, which safeguards the Kohler enamel from strain. This superior enamel is acid-resisting clear through, has a sparkling, smiling hue and finish, easy to clean and clean looking, no orange peel texture.

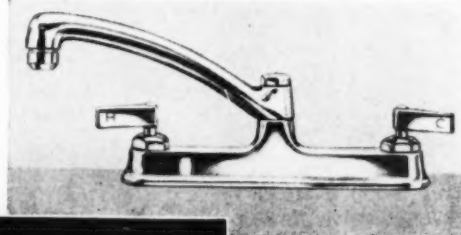
Other advantages of Kohler sinks include a full-length ledge; Duostrainers that make the deep basins water-retaining, collect solid waste and drain freely; a high-arched spout which simplifies filling bottles and vases; and a lever control sprayer for rinsing.

Kohler chromium-plated fittings match the sinks in style and quality.

A full line of undersink cabinets is available—simple to install and easy to keep clean throughout.



CAMBERLEY sink with cabinet. Sizes 54 x 25", 60 x 25".



ROCKFORD sink fitting.
Simplifies installation.
Available with or without hose sprayer.

Kohler Co., Kohler, Wisconsin. Established 1873

KOHLER OF KOHLER

PLUMBING FIXTURES • HEATING EQUIPMENT • ELECTRIC PLANTS
AIR-COOLED ENGINES • PRECISION CONTROLS

here are 10 reasons



is better for you

**BETTER
SLIDING DOOR
HARDWARE
THRU
BETTER DESIGN**

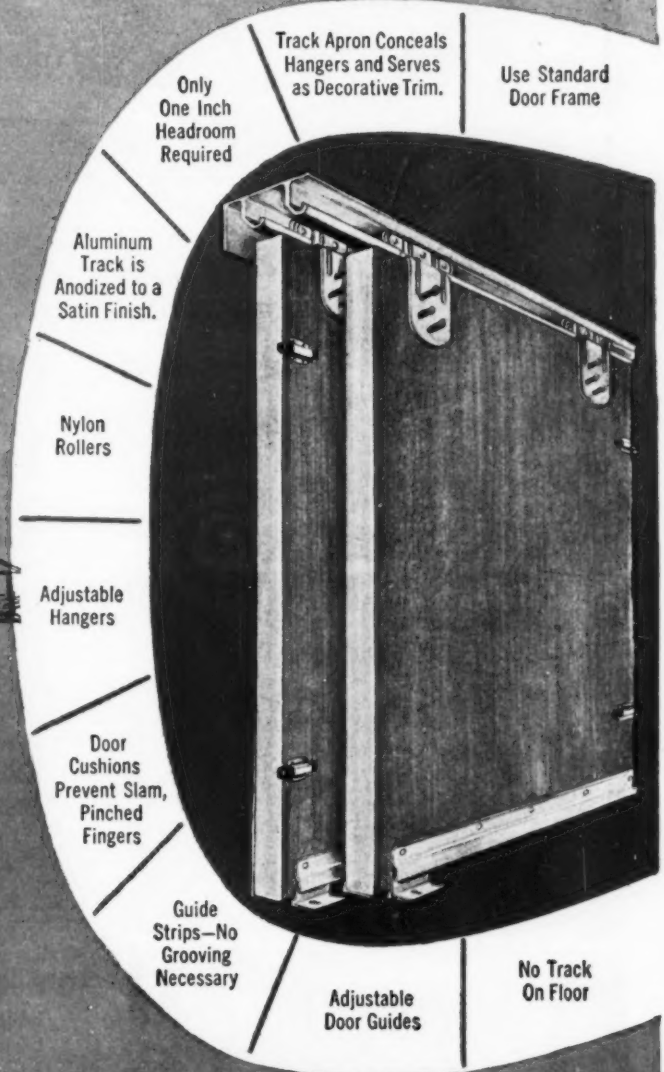


Sterling Hardware saves time and money through simple installation and adjustment. No expensive callbacks.

Your customers prefer Sterling Sliding Door Hardware because Sterling means longer, quieter service and trouble-free operation.

Available in complete packaged sets for most door openings.

STERLING HARDWARE MFG. CO.
2343 WEST NELSON STREET • CHICAGO 18, ILLINOIS



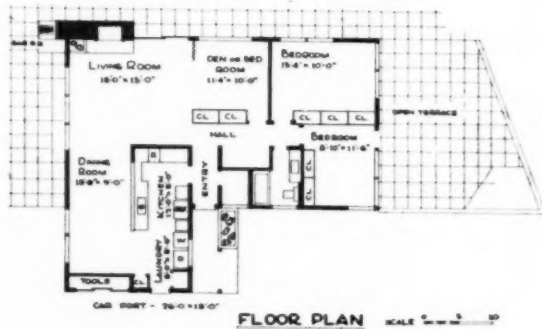
Sterling means Quality



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Indianapolis builders offer a contemporary



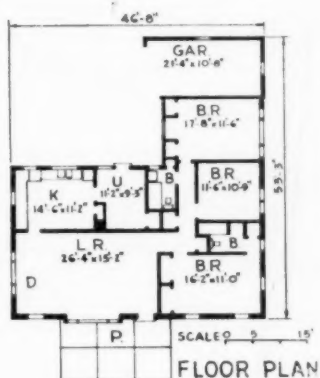
Glass walls in living room are Panaview sliding doors. Fireplace is of slump brick. Kitchen is open to dining area, has white metal cabinets by Crane, birch cabinets by Miller

THIS \$32,000 house of 1,340 square feet was built cooperatively for sale by members of Marion County Residential Builders, Inc., as the focal event of National Home Week in Indianapolis. Carl L. Sanders supervised construction. Consulting architect was Edward D. James. The design combines Rainbow Range slump brick from Miami, Florida, with vertical redwood siding. The slump, brick is used also for the carport wall, planter boxes, patio wall and fireplace. The house has all-year air conditioning by units from Peerless Furnace & Foundry Co., storage walls by Fabricon, Mohawk birch doors, Crane plumbing fixtures. All interior walls except those in bathrooms were finished with Maas-Waldstein Company's Plextone, a lacquer coating which is sprayed on and dries with a speckled finish.

building in brick for the Northern market

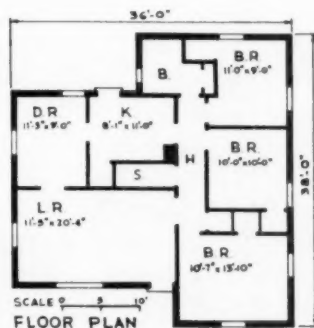
\$23,950 in suburban Philadelphia

An all-brick ranch-type built in Colwick, New Jersey, by the Collingswood Construction Corporation. Price includes G-E dishwasher, range and Disposal. Heating system is G-E's Air-Wall. The house has plastered walls (covered with linoleum in kitchen), full ceramic tile bathrooms.



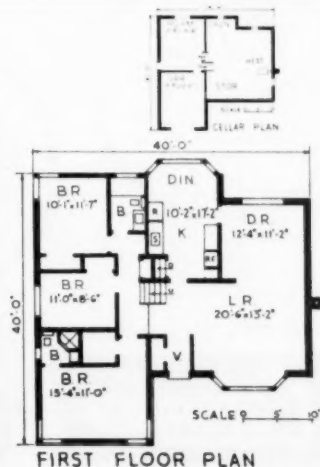
\$15,450 in metropolitan Pittsburgh

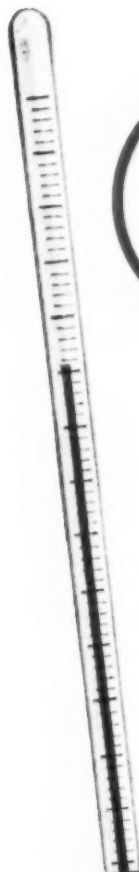
Brown and Vaughn Development Company is the builder of this brick bungalow in McCandless Township, Pennsylvania. The use of natural stone and knotty pine trim brightens the exterior. The house requires a down payment of \$3,150, monthly payments of \$97.



Long Island split-level at \$16,990

FLORGATE Park Homes, a 106-unit project by Sam and Julius Guterman and Jack Friedman at Bethpage, New York, features this all-brick model, from plans by John Burton.





\$1,000⁰⁰ Coleman Blend-Air heated

The only heating comfort guarantee your customers can find.

Add summer cooling at any time without costly alteration

The Coleman Comfort Bond builds buyer confidence to sell homes faster. Your buyer knows that there is no gamble when he purchases a Blend-Air heated home. He has a \$1,000.00 guarantee that means "warm home" to him—in every room.

Magic Blenders are the source of Coleman's unusually good results. They deliver greater circulation control, prevent heat from packing uselessly at the ceiling while floors freeze. Every cubic

foot of air is constantly circulated and evenly heated to provide uniform comfort—in every room.

The coupon below, or a post card mailed to us today, will bring you detailed information on Blend-Air costs—for heating or for year-round air conditioning. You'll find this system ideal for low-cost specification housing where quick sales are necessary for profit in building. The Coleman Company, Inc., Dept. 750-AB, Wichita 1, Kansas.



NO OTHER SYSTEM OFFERS YOU AND THE OWNER ALL THESE ADVANTAGES

1 INSTALLATION FASTER
with 3½-inch air tubes prefabricated to fit any construction. A complete package.

2 SPACE IS SAVED
with compact furnace taking as little as 6 square feet of floor space. Cooling equipment fits alongside, snugly.

3 COST IS SAVED
with fuel-burning efficiency. In cooling, 97% of water costs can be saved with Water Miser.

5 OPERATION IS AUTOMATIC
Over-all temperature control by thermostat with control in each room independently.

4 TWICE SUMMER COMFORT
with twice the moisture wrung from hot, wet air by super-cooling beforehand—a Coleman development.

6 COOLING COMES LATER
if desired. Pre-engineered to use same system, same tubes, same Magic Blenders. Low monthly payments.

COMFORT COSTS SO LITTLE WITH



Blend-Air®

CENTRAL HEATING AND

AMERICAN BUILDER

Comfort Bond gives your homes a selling edge

OWNERS AND BUILDERS SING THE PRAISES OF THIS DEPENDABLE LOW-COST SYSTEM



"Far above our expectations—We are very much pleased . . . our home could not be more comfortably heated."
Robert Gasson, Owner, Woodland, Calif.



"Satisfaction to our house buyers—I have installed about forty of these units during the past two years."
Wayne L. Garceau Co., Builder, Spokane, Wash.



"More reasonable than any other furnace—gives an even heat and is very economical to operate."
Walter N. Mees, Owner, Zanesville, Ohio



"Has done an outstanding job for us—most satisfactory in its performance . . . worked wonderfully well."
Harold Chapman & Son, Builder, Kalamazoo, Mich.



"Count us among your satisfied customers—We don't have cold floors any more . . . it was installed with a minimum of mess and confusion."
Dale M. Bronson, Owner, Fremont, Ohio



"A heating marvel—noiseless, economical, dependable and safe . . . permits us to go about the house in summer sport clothing."
Morris G. Bechel, Owner, Ama, La.



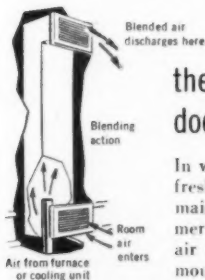
"As a contractor I am more than pleased—an excellent heating system . . . one of the most economical to install."
Edward L. Bolding, Contractor, Tampa, Fla.



"Even heat distribution in every room—when the warm air floods my home in the early morning, I know I have the 'modern' heating system."
Milton J. Gale, Owner, Keyport, N. J.



"We install Blend-Air exclusively—in all our ranch type homes. We strive to give the utmost in value in a low-priced home."
Lewis Cook, Paradise Homes, Inc., Builder, Mahopac, N. Y.



the Magic Blender does the job better

In winter it blends room air with freshly heated furnace air to maintain constant comfort. In summer it blends and recirculates cool air the same way, providing dry mountain-air coolness.

OIL GAS LP-GAS

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OR LISTED WITH
UNDERWRITERS' LABORATORIES

THE COLEMAN COMPANY, INC. Dept. 750-AB
Wichita 1, Kansas

Please send me all the facts on the Coleman Blend-Air heating and air conditioning system.

Name _____

Firm _____

Street _____

City _____ Zone _____ State _____

AIR CONDITIONING SYSTEM

FEBRUARY 1954



in Ohio, ultra modern



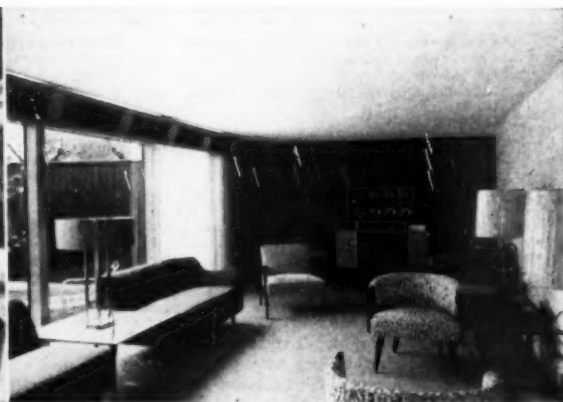
E. J. PLOTT has caught public attention in Canton, Ohio, with houses like this one, styled as an ultra contemporary and built with full basement, plastered walls and ceilings. This house sold for \$23,000, including \$3,000 landscaped lot, to the first visitor who came to its opening. An unusual feature is the heating, which is by Glasheat electric panels, with Minneapolis-Honeywell thermostats in each room. Plott reports that cost of installation of this system in a 1600-square-foot house is about \$350 more than for gas-fired forced air. Biggest factor in satisfactory operation is a good insulation job. Other electric helpers included are touchplate light switches, General Electric dishwasher, National garbage disposal unit, built-in Thermador range and oven, generous wall plugs—including television and telephone outlets, flush lighting fixtures and indirect lighting. Siding is California redwood finished with Redwood Rez. Walls and ceilings have Fiberglas insulation. The house uses the Ludman Auto-lok awning-type windows.



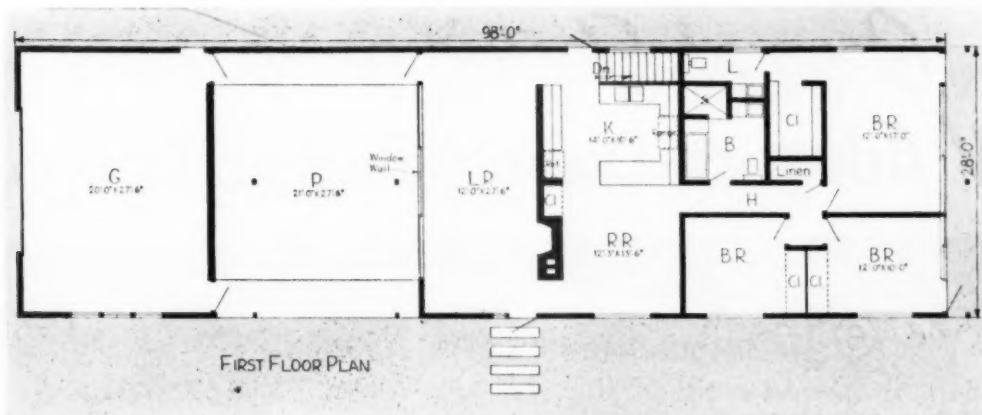
Twin bathrooms share shower room



Entrance to living room. Thermopane in window wall



Glasheat electric panels above window wall heat room



catches on

General activity or television room has Celotex acoustic ceiling and Armstrong cork floor to eliminate excessive noise. Kitchen, too, has cork floor. Note use of cork to face work base. Hanging cabinet is covered with acoustical tile



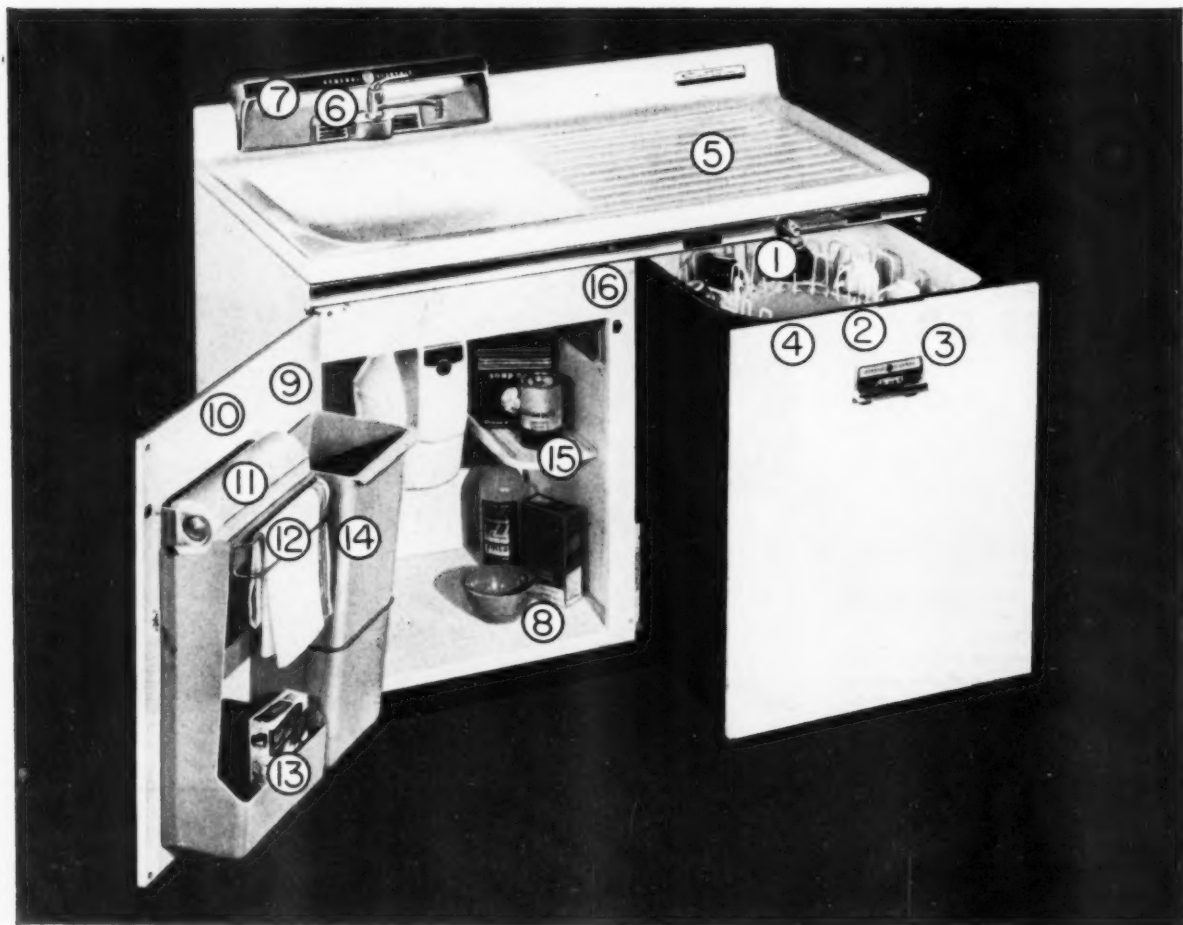
N. J. takes to a convertible



SAMUEL and Guy Padula are building 40 of these houses, with variations, in a tract in New Milford, in northern New Jersey. All are priced at \$17,990 and all have full basements. The 30-foot living room has a sliding partition which makes possible a third bedroom. Padula reports strong buyer interest in this convertible feature, in the T-plan of the hall, and in the amount and arrangement of closet space.



General Electric announces NEW Advance-Design Electric Sink...



All-Electric, 48" Dishwasher Sink

General Electric's new custom model Electric Dishwasher Sink changes the sink area in new homes from a work center to the glamour spot of the kitchen.

Let this feature-packed new appliance add the customer-appeal you need for quick sales of your new homes.

1. New improved dishwasher racks. Amazing capacity! Easiest to load. No racks to lift or shift!
2. New improved dishwasher detergent cup—optional second wash. Cleanest, most sanitary dishwashing possible.
3. Selective control with Tel-a-Wash lights shows stages of cycle. Control provides completely automatic or manual operation as desired. Drying cycle can be used as *plate warmer!*
4. New silverware basket. Greater capacity. Holds full day's load. Silver loaded "points down" for safety and convenience.
5. New sink top—specially designed "no-drip" edge.
6. New single-control faucet, back-mounted for easy cleaning.
7. New built-in fluorescent light over sink bowl.
8. New and bigger under-sink storage.
9. Under-sink lighting—automatic, door operated.
10. Utility door—holds many accessories.
11. Convenient paper towel dispenser.
12. Special rack for hand towels.
13. Special racks for soaps and detergents.
14. Convenient, easily removable trash basket.
15. Extra intermediate shelf—specially for scouring materials.
16. Automatic touch latch on the door.

NEW Big-Capacity Dishwasher... NEW Low-Price Disposall®

New 1954 style-line of General Electric Dishwashers.
Even one with a wood front!



Special wood fronts for custom installations! Wood-front dishwasher dramatizes style-variety and beauty of the new 1954 General Electric line! Wood fronts are G-E extra features! Available in knotty pine, birch, mahogany and oak.

Under-counter dishwasher models. Every model is an *under-counter* model. Installation *under* kitchen counters saves work space. Gives kitchen clean, functional lines. Free-standing model, with separate top is also available.

Standard cabinet widths. Under-counter dishwasher is 24" wide. Takes only the space of a standard-size 24" base cabinet. Electric sink models are standard 48" width.

Maximum flexibility. Fits to the right or left of sink, wherever most convenient.

And remember, G-E Dishwashers are pre-plumbed . . . Easy and economical to install.



New low-cost "Standard Model" G-E Disposall!

Brand-new, standard model FC-20 Disposall—at a price you, as a builder, can't afford to overlook!

The low-cost FC-20 has top-quality G-E engineering inside and out. Big capacity. Continuous feed. Specially designed for quick, easy installation. Removable plug for dishwasher drain connection.

The FC-20 joins the famous General Electric de luxe Disposall models FA-4 and FA-45. G-E de luxe models have the famous G-E safety Twistop control, and are covered by a written, 5-year protection plan!

ARCHITECTS! Write G-E electric sinks and Disposalls into your specifications. For more details, see G-E catalogue in Sweet's file.

BUILDERS! Before you buy, see *G.E.* You'll get the economy you want, and the brand your customers want!

Architects and Builders: For detailed information, see your General Electric distributor, or send this coupon direct to General Electric Company, Appliance Park, Louisville, Ky.

General Electric Company
Electric Sink & Cabinet Department
Appliance Park, Louisville, Ky.

Please send me
..... detailed information on Disposalls
..... detailed information on Dishwashers
..... name of my nearest General Electric distributor

Name

Street

City

State

GENERAL  ELECTRIC

Buildercast

- LOCAL NEWS
- FORECASTS
- NEW TRENDS

NORTHERN area



CONSULTANT SERVICE established for members of HBA of Metropolitan Pittsburgh by A. M. Rearick, president, has quickly proved its worth.

Any builder troubled with some financial, labor situation or similar problem is encouraged to refer it to the president or executive director. In complete confidence, four or five members with experience in the particular situation will be called to advise the builder. Pittsburgh credits the recently adopted procedure with saving one member from a grave situation.

FIRST AID FOR AILING BUILDERS is a valuable service provided by the HBA of Greater Cincinnati. A "sick committee" stands in readiness to take over the work of any builder member who becomes incapacitated. Thus, customers get the homes they contracted for and the builder is saved a severe financial loss.

EXCESSIVE LAND COSTS may force some builders to price themselves out of the home market, believes Frederick W. Jackson Jr., assistant vice president, Dime Savings Bank of Brooklyn.

Citing the Long Island story of 200,000 homes, nearly 1,000 factories and many scores of shopping centers built in five years, Jackson said it appears demand is increasing. With less land available on one hand and more people wanting it on the other, he reasoned, prices are bid up.

Costs of finished building plots have increased greatly due to local zoning requirements pertaining to acreage development, he pointed out.

Rising land price and development trends were said to be forcing many builders to jump from the \$14,000 bracket to \$16,000 or more.

EARLY-YEAR HOUSING SURVEYS in many areas find the building industry exud-

ing confidence the new year will maintain a high degree of activity.

A Milwaukee Journal survey said all builders checked had met their 1953 goals and none expected any weakening of the market this year.

Chicago's First Savings & Loan Association predicted home starts in the area will exceed the 1953 volume of about 40,000 units.

Checking brokers in its area, the Indianapolis Times said housing demand would remain strong, reflecting continuance of a slow but steady growth in population.

A late 1953 spot check of its metropolitan area by the HBA of Greater Kansas City showed 2,000 homes under construction, more than two-thirds sold. Another 2,800 units were expected to start soon.

LOWERED DOWN PAYMENTS and longer terms have long been called a key to increased markets but Irving Rose, president of Edward Rose & Sons, Detroit, has raised a vigorous dissent.

A year ago, he said the Rose firm was unable to build as many homes as it could have sold due to labor shortages. Charging that availability of men and materials governs the number of houses that can be built in a year, Rose declared there is no point to easier financing if it won't result in more houses.

A CLEARING CENTER for information on construction bids is said to be aiding both builders and architects.

Operated by the Wisconsin chapter, Associated General Contractors of America, the center informs architects if any bid openings conflict with a time they intend to call for bids. By spreading out their bid openings, the opportunity is improved for a larger number of builders to submit bids in each case.

ALBERT BALCH, Leading Northwest Home Builder



"LET PEOPLE SELL THEMSELVES. Talk quality and value all you want. What really counts is when a prospect sees for himself and sells himself. That's why we use so many nationally advertised materials and appliances. In fact, 13 that we use are advertised in The Saturday Evening Post. They not only help build good houses, but help build a good reputation, too." *(Manufacturers of building materials, equipment and fixtures place more advertising dollars in the Post than in any other consumer magazine.)*

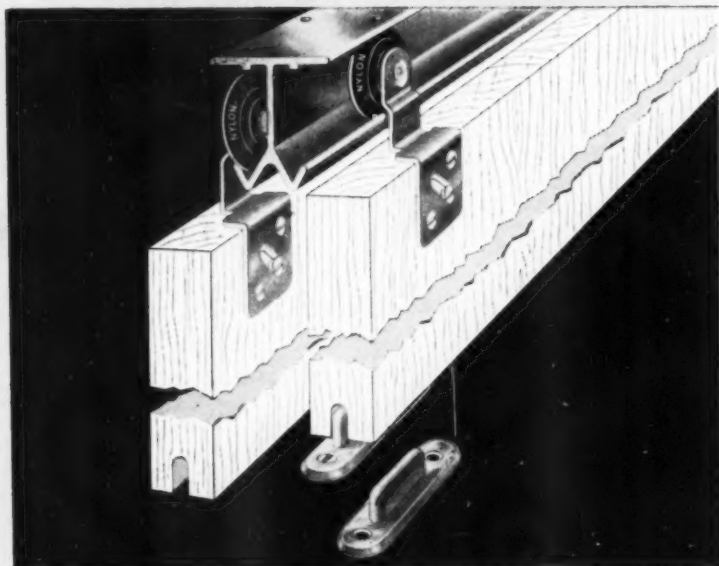
FEBRUARY 1954

The Saturday Evening
POST
-gets to the heart of America

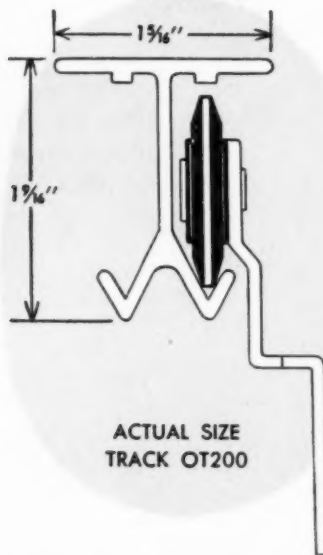
HERE IT IS!

M-D
MACKLANBURG-DUNCAN CO.

NOISELESS



- ★ Extra-heavy extruded aluminum track
- ★ Heavy gauge Cadmium plated steel hangers with adjustable slot
- ★ Noiseless, Lifetime Nylon wheels
- ★ Silent, Solid Brass Wheel Bearing
- ★ Positive, no-jump track feature
- ★ Smoothest, quietest operating

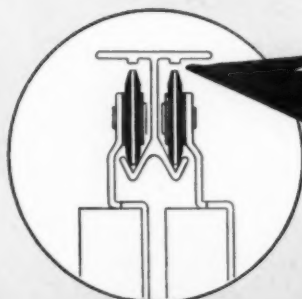


NOISELESS, FREE-WHEELING TRACK AND WHEEL

This track and wheel are made for each other! See how the wheel rolls on the sides of the track - not the bottom! This not only centers the wheel, but keeps it riding above dust and lint that may accumulate in the groove. Rustproof aluminum track, plus the lifetime nylon wheel and solid brass wheel bearing, guarantees you quiet, smooth, trouble-free operation.



Hanger enters track easily



Bumper ridge keeps wheel from jumping track

Built-in Protection

AGAINST TRACK JUMPING!

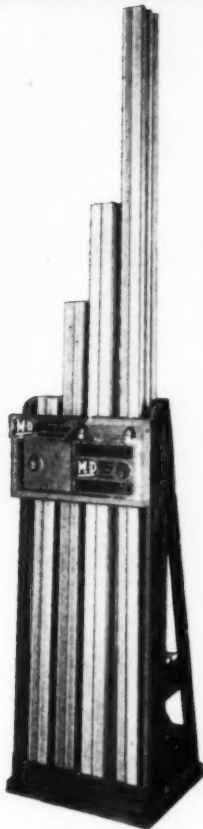
At last—sliding door hardware with built-in, positive protection against track jumping! And there's no extra work, nothing for you to do—because this exclusive M-D design stops track jumping with a built-in bumper ridge that makes it impossible for the wheel to lift out of the track once the door is in place over the floor guide. It's simple, sure, foolproof!



Another Quality Product from
MACKLANBURG-DUNCAN CO.

OKLAHOMA CITY, OKLAHOMA

Sliding Door HARDWARE



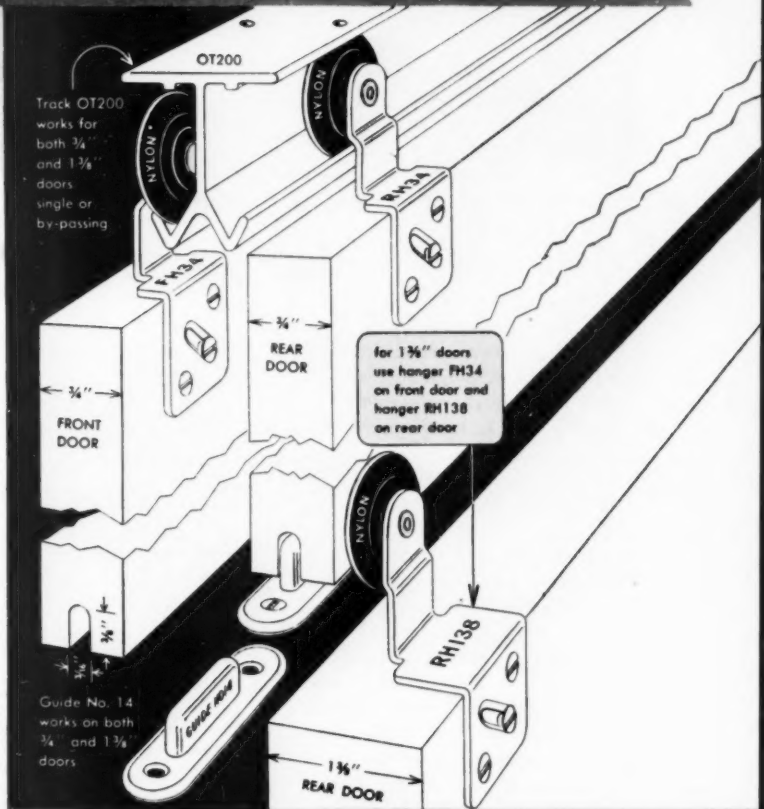
ATTENTION DEALERS!

STOCK-DISPLAY CASE & ACTUAL WORKING MODEL FREE WITH THIS ASSORTMENT!

TRACK
 10 PIECES - 4' EACH
 10 PIECES - 5' EACH
 10 PIECES - 6' EACH
 10 PIECES - 8' EACH
TOTAL TRACK - 230'

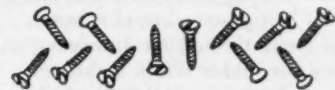
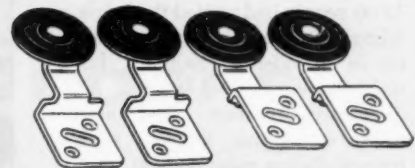
40 boxes of complete hardware for 3/4" doors.
 10 boxes of complete hardware for 1 3/8" doors.

- ★ ATTRACTIVELY DISPLAYED
- ★ INCREASES IMPULSE PURCHASES
- ★ TAKES SMALL SPACE



COMPLETE HARDWARE FOR DOORS 3/4" TO 3/4" OR DOORS 1" TO 1 3/8"

Hardware comes completely packaged for a pair of 3/4" doors, or for a pair of 1 3/8" doors. Each package contains 2 front door hangers and screws, 2 rear door hangers and screws, 2 door guides and screws, as well as sufficient screws for mounting track. Cartons are clearly marked for 3/4" doors or for 1 3/8" doors.



DOOR GUIDES AND SCREWS

HANGERS AND SCREWS

SCREWS FOR TRACK

BUILDERS

look to Macklanburg-Duncan for products of quality—always dependable. Sold at all Hardware, Lumber and Building Supply Dealers!

DEALERS

Order now! Your order will be shipped the same day it is received. Macklanburg-Duncan products are fast sellers, nationally advertised.





Redwood boards and battens, coated with natural redwood stain, combined with sections of exterior Weldtex paneling painted white

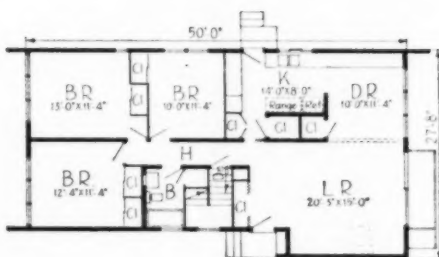
this contemporary was a business getter

NEW ATHENS, Illinois, (pop. 1,500) had never seen anything like it before, although accustomed to the progressive policies of the builder, Louis E. Lauerman of the New Athens Lumber Company. Lauerman furnished the house to style and promoted it as a National Home Week venture, winning a prize in *American Builder's* NHW contest for lumber dealers. Howard Bollmeier was general contractor; Charles E. King, architect.

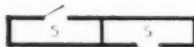
Lauerman found enthusiastic acceptance of the interior but definite resistance to the exterior styling. However, this grass roots reaction simply increased the pitch of general interest in the house throughout the county. In a week, 4,000 people had visited the house, filling out cards indicating interest in remodeling, building, furnishings, etc.

Features visitors liked most were: step-saving kitchen, steel-framed sliding glass door at south end of living room, use of easy-to-keep floors throughout (linoleum, except for rubber tile in bathroom and cork tile in children's bedroom), folding slat doors for guest closet and between kitchen and living room, sloping ceilings with exposed center beam. Price of the house, including draperies, was \$17,500.

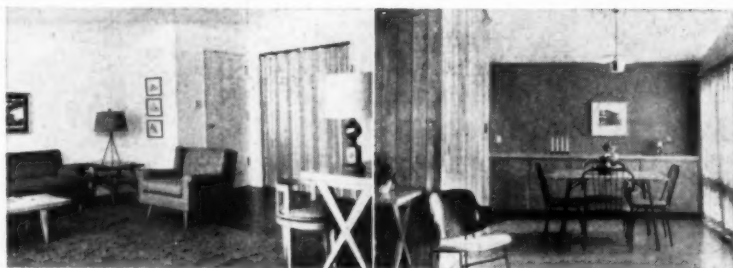
Immediate results from the showing of this house included the sale of 10 Novoply sliding door closets, one sliding glass door unit, four folding doors, two built-in stove units, and one complete kitchen remodeling job.



C.P.



House has 1,264 square feet of living area, a full basement, plastered walls, an oil-fired perimeter heating system



Entrance to living room. Folding slat door in natural finish for guest closet

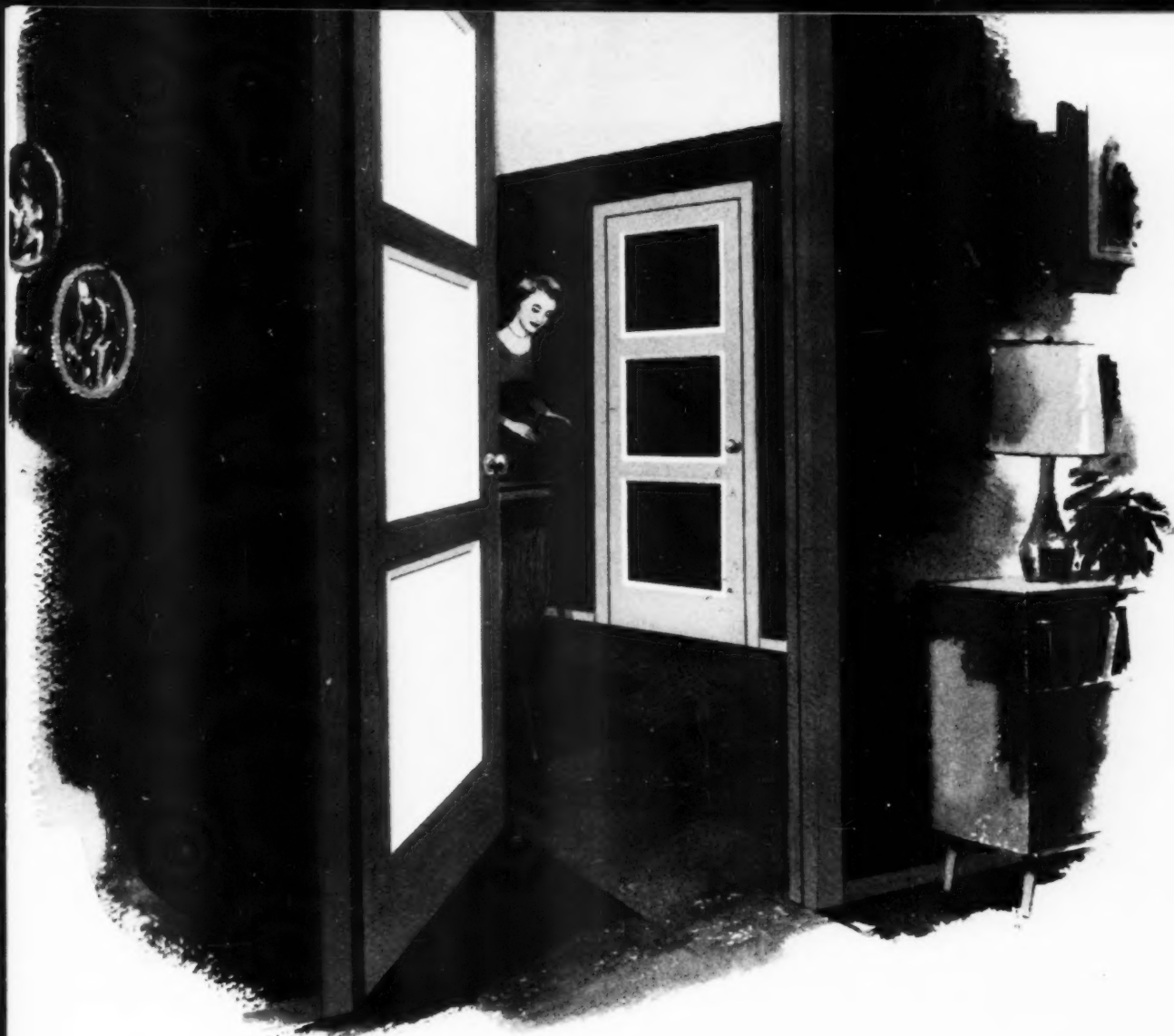
Dining area from living room. Wall paneling is natural birch, to match cabinets



Birch cabinets in kitchen, too



South (living end) faces rear of lot



Look what you get in newly styled

FIR PANEL DOORS

style . . . Today's trend toward dramatic use of color and texture provides an important role for panel doors. Newly styled fir panel doors offer refreshing relief from the monotony of flat surfaces. The new wide molding becomes a frame for exciting decorative treatments that add colorful deep-shadow accents—a definite sales feature in any home you build.

dependability . . . Fir panel doors are made to last—a fact attested by over one hundred million installations. When you specify this hallmark **FDI*** you get doors that are strong, stable, structurally sound; built to meet exacting U. S. Commercial Standards. Fir panel doors won't warp, won't come apart. Cabinetmakers working with straight grain, old growth Western fir detail each door meticulously, carefully sand, trim edges square and true. No shortcuts, no shoddy materials—to West Coast fir door craftsmen, dependability is a word with real meaning.

economy . . . New fir panel doors offer custom features at competitive prices. Compare them for style . . . compare quality . . . compare dollar for dollar price—then specify new fir panel doors. Call your regular supplier, or write Fir Door Institute, Tacoma 2, Washington.

... get all this in **FDI*** hallmarked **FIR PANEL DOORS**

*Industry grade-trademark signifying independent inspection assuring manufacture and quality called for in U. S. Commercial Standards.

NEW BEAUTY IN GAS BOILERS...



NEW SPENCER RANCHER



1G Series: 6 Models—40 to 128,000 BTU output
W—13½", L—25¼" to 43¾", H—42¾"
2G Series: 6 Models—80 to 232,000 BTU output
W—18½", L—28½" to 47", H—49¼"

NEW PRODUCT

OUTSTANDING NEW GAS UNIT

COMPACT...
EASY TO INSTALL...
EFFICIENT

New beauty, compactness and rapid-heating qualities make Spencer's new ready-to-install gas boiler an outstanding choice for either large or space-budgeted homes.

Easily installed anywhere in any home, the new Spencer Rancher adds attractiveness to a kitchen, utility room or finished basement. It is completely enclosed in a compact gleaming white jacket—even the flue diverter is out of sight. The door is designed to be hinged on either left- or right-hand side. The walls and base are water-cooled, so it can be set directly on a wooden floor.

Easy to service. Controls and burner are readily accessible through the front of the boiler. Cleaning may be accomplished without disturbing controls or piping.

A code boiler, built to ASME and IBR regulations, AGA approved for manufactured, mixed, or natural gases. Other features—self-cleaning boiler, rapid heat transfer, compact design.

*This is only one of
Spencer's Complete Line.*



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Spencer Heaters, Dept. AB-2-4
Lycoming Division
AVCO Manufacturing Corp.
Williamsport, Pennsylvania

Please send complete information and specifications on the new Spencer Rancher to:

Name _____

Position _____

Company _____

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City _____ Zone _____ State _____

•••••

AMERICAN BUILDER

THIS MATERIAL MAKES NEW HOMES *More Enticing to Buyers* IN SO MANY WAYS!



**Never
needs
waxing!**

THE pay-off is in added sales appeal and customer satisfaction—and more!

For beautiful Goodyear VINYL-TILE, in tiles and full 45"-wide rolls, is adaptable to so many practical applications — floors, walls and counter tops—and looks AND SERVES so well!

SAVES, TOO! Installation is easy, and — because it covers so perfectly—it eliminates costly metal trim on counters, does away with baseboards and dirt-catching "hard" corners.

Beauty and style are paramount, for

Goodyear VINYL-TILE comes in a rainbow range of sun-drenched colors — no wonder leading decorators call it "The World's Most Beautiful Flooring!"

The fact that it never needs waxing—*is factory pre-polished to a lasting, natural luster that withstands practically every known household hazard* — makes it doubly appreciated by mortgage people and homeowners alike.



WRITE FOR CATALOG S-8315 at no obligation. Get the facts on why Goodyear VINYL-TILE is such a boon to modern builders! Simply write a postcard request to Goodyear, Flooring Dept. N-8321, Akron 16, Ohio.

GOOD YEAR Vinyl-Tile

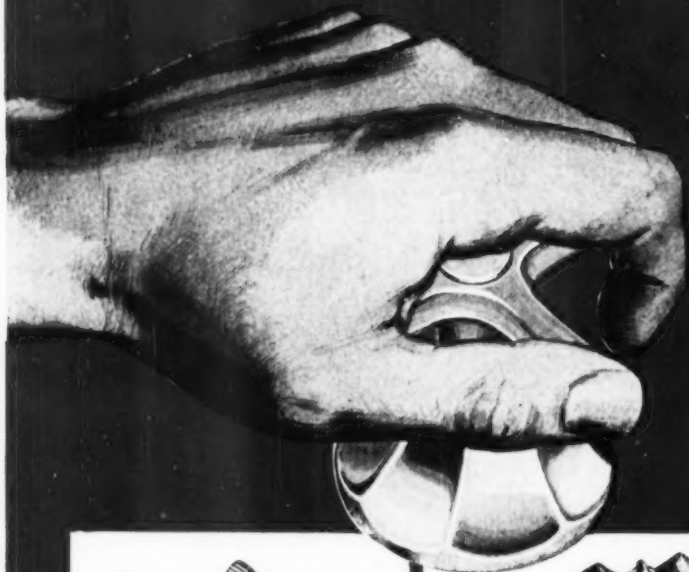
FLOORS, WALLS, COUNTER TOPS — IN TILES AND 45"-WIDE ROLLS

We think you'll like "THE GREATEST STORY EVER TOLD" — every Sunday — ABC Radio Network — THE GOODYEAR TELEVISION PLAYHOUSE — every other Sunday — NBC TV Network

FEBRUARY 1954

35

REMEMBER you stake your reputation on the twist of a customer's wrist!

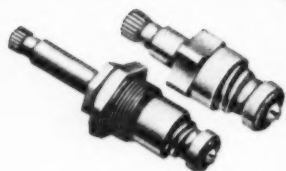


When a customer of yours turns a faucet, flushes a toilet, adjusts a shower, your reputation is in his hands.

He won't blame the fitting itself if it drips or bangs or sticks. The plumber, or builder, unfortunately, gets the blame every time!

That makes it important to you, as a businessman, to use only the finest of fittings. With Eljer brass you have complete assurance of quality—as every unit is carefully inspected and tested!

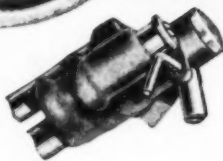
Here are a few typical examples of Eljer advantages. There are many others for you and your customers. For complete information, see your Eljer distributor or write Eljer Co., Box 122, Ford City, Pa.



RENEWABLE UNITS

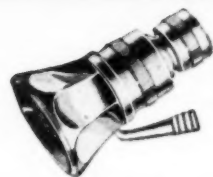
Two basic units fit most Eljer faucets and fittings. They are interchangeable, easily replaceable. Eljer's patented Swivel Disc virtually eliminates dripping by preventing wear and tear on seat and washer.

- No. 1 unit for concealed fittings
- No. 2 unit for exposed fittings



ELJER BALL COCKS

New Balanced-Construction Ball Cock is typical of Eljer's extra quality. Available in either regular or anti-siphon units. Operates quietly and efficiently under extremes of pressure. Snap-Action Shutoff provides instantaneous closing without water hammer, assures longer seat life, maintains constant water level.



ELJER SHOWER HEAD

A short turn of the easy-action lever on the Vari-Spray Ball Joint Shower Head adjusts spray to suit individual preference. Molded rubber core can't corrode, and normal use prevents lime deposit build-up. Easy-action, leak-free ball joint has special seal and packing; allows smooth adjustment, insures against leaks.

*ELJER—the only name
you need to know in plumbing fixtures*

ELJER

A DIVISION OF THE MURRAY CORPORATION OF AMERICA

CAST IRON—STEEL—VITREOUS CHINA—BRASS—FOR EVERY HOME, COMMERCIAL AND INSTITUTIONAL USE

President Gets A Housing Program

Advisory committee proposes general overhaul of government's housing policies in a 375-page report

A comprehensive report on the nation's housing problems, and what to do about them, went to President Eisenhower late in 1953. The report, while not binding on the President—and certainly not on Congress—is expected to have considerable influence on housing legislation in 1954.

The more than 60 major recommendations in the report are aimed at one thing: Development of a "new and revitalized" housing program. This program calls for the wiping out of slums, a continued large volume of new home construction, and housing for low-income and minority groups.

The 375-page report is the work of the President's Advisory Committee on Government Housing Policies and Programs. The 22-man committee, appointed in September 1953, was headed by HHFA Administrator Albert M. Cole.

(As this issue of American Builder went to press, the White House announced that President Eisenhower was planning to send a special message to Congress on housing. This message will no doubt be influenced by recommendations contained in the report of the advisory committee.)

With one principal exception—the elimination of FNMA—the advisory committee recommended no drastic change in the government's present role in housing.

The concept of insured mortgage financing would, if anything, be expanded. Federal assistance in clearing slums would be increased. Even the public housing program established in 1949 would be continued, while a substitute "private enterprise" system is studied.

Industry reaction to this housing report has been generally favorable. For example, a spokesman for the National Association of Home Builders declared that the committee program "can put a new face on America." NAHB's only major criticism had to do with the form of secondary mortgage market facility which would replace FNMA.

HHFA Administrator Cole is himself "very enthusiastic" about the over-all report. He admits he doesn't agree with all conclusions reached by the committee; but he has declined to

elaborate until the President takes his housing message to Congress.

The committee report recommended action in five areas: A "vigorous" attack on slums; effective maintenance and utilization of existing houses; a steady increase in the volume of building of new houses; special as-

FHA-VA Interest Rates

Interest rates on FHA-insured and VA-guaranteed loans should be permitted to rise and fall to meet changes that occur in the investment market, according to the report handed down by the President's Advisory Committee on Housing.

The report said the way to obtain this "flexible interest rate" would be to set up a committee of government officials to study the money market continually. This group would have to have authority to change FHA and VA interest rates so as to make home mortgages attractive to investors.

Legislation should be enacted, the report said, to create this government committee. The group, by majority vote, could change interest rates. In no case, however, could interest rates be higher than 2½ percentage points above the current average yield on long-term (15 year) government bonds.

The committee would also have authority to determine permissible charges for originating FHA and VA mortgages, and to establish the FHA debenture rate.

sistance for families of low income, and reorganization of the Housing Agency for greater efficiency and economy.

"To wipe out existing slums and to check the spread of blight is a major goal of our housing program," the

committee said. Among other things, the committee recommended that the present Urban Redevelopment Program be broadened to help communities rehabilitate and conserve areas.

Also recommended was the establishment of a new Urban Renewal Administration as part of HHFA. FHA

New Home Warranties

Should a mandatory warranty be adopted in connection with government-insured or guaranteed home mortgage financing?

Not so, says the President's Advisory Committee on Housing. For one thing, complaints by home owners have fallen off "very substantially" in recent months, according to the subcommittee which studied FHA and VA programs.

"The subcommittee is in general agreement with the objective to be achieved by the proposal for a mandatory builder's warranty. It is our judgment, however, that the imposition of such a warranty would do more harm than good. The proposal . . . would be unworkable."

This idea did get a favorable comment: Let FHA and VA set up some way to compare notes on builders who fail to do a satisfactory job in meeting home-owner complaints.

would get into this picture, too, via a new mortgage insurance provision. Title II would be amended and FHA would be permitted to insure loans "on liberal terms," both for rehabilitation and for construction of new dwellings in renewal areas.

In order to maintain and improve the existing housing supply, the committee proposed legislative changes for FHA.

Title I would be amended to increase the loan maximum to \$3,000 for repair and modernization of a single-family dwelling. The term would be increased from three to five years. For multi-family structures, loan terms would also be extended.

Elsewhere, FHA would be given authority to equalize down-payment and amortization terms for existing housing with those on new construction;

(Continued on page 39)

STOPPERS FOR STORE SALES

FROM Rheem Coppermatic



Rheem Coppermatic makes NEWS—and news makes SALES! Here is the lowest cost copper-tank water heater, different from all others, with every sales advantage—

And so your whole new Rheem Coppermatic sales story is a "stopper"—from the sensational 4-color national advertising in top magazines to your local displays, mailings and newspaper advertisements!

Use the big 3-dimensional copper foil cutaway display shown below on the right—actual size, 5-ft. high. Use the presentation book to sell prospects and train salesmen. Use the hard-selling envelope stuffers to tell the Coppermatic news for little more than the cost of mailing! And choose from a big selection of newspaper ads—proved successful in every test!



RUST PROOF

Rheem Coppermatic

AUTOMATIC STORAGE GAS WATER HEATER



A COMPLETE COPPER TANK
Outlasts ordinary heaters in corrosion areas many times over. Can't rust—anywhere!



INSIDE A COMPLETE STEEL TANK
Both tanks have super-strong capsule shapes. Pressure-Proved at double the normal pressure!



HEATS QUICKER
Recovers faster! Delivers practically a continuous supply of hot water. Handsome, white steel cabinet fits kitchens, basements, closets.

You can rely on



CASH IN—Send coupon below!

AB-2

Send your request to nearest Sales Office, addresses of which are listed at right.

Please send full information on Rheem Coppermatic profits, advertising and promotion.

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ADDRESS.....
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RHEEM MANUFACTURING COMPANY

World's largest manufacturer of automatic storage water heaters

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7600 S. Kedzie Ave., Chicago 29, Ill.
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4361 Firestone Blvd., South Gate, Calif.
800 Chesley Ave., Richmond, Calif.
3693 E. Marginal Way Seattle, Wash.

Spiegel Predicts 1954 Starts Will Run 'Very Close' to 1953

The home building industry looks forward confidently to another banner year in 1954, when new home production should run "very close" to the 1953 level, E. M. Spiegel, 1953 president of the National Association of Home Builders, declared in a year-end statement.

Building material prices seem to have stabilized in recent months, Spiegel said. Labor and land development costs continue to exert upward pressure on new home prices, but the 1954 home buyer will benefit from improvements in design and construction methods.

"The 10,000,000 visitors who thronged into the best new homes of 1953 during National Home Week last fall are proof that there still exists a tremendous demand for and interest in new housing," Spiegel added.

Millions of American families still need and want good homes and have the steady incomes to carry them, Spiegel declared. Given the right kind of financing, fitted to the needs of the mass housing market, there can be no doubt that at least 1,000,000 new homes will find ready buyers in 1954.

The NAHB president expressed hope that legislation now under preliminary discussion in Washington "will strengthen our existing mortgage finance machinery and provide the additional mass market financing tools that are needed."

Spiegel said the "acute and prolonged shortage of mortgage money" was one of the gravest handicaps faced by home builders in 1953. He pointed out, however, that there were "definite signs" of improvement late in the year, and "good grounds to hope" that mortgage money will be more readily available during 1954.

Housing Program

(Continued from page 37)

and there would be a provision authorizing FHA to include an open-end clause in insurance contracts.

The job of encouraging a continuing high level of private home building would be undertaken by liberalization of FHA terms under Title II, Section 203 (one-to-four family dwellings) would be made more attractive by increasing maximum terms to 30 years and by increasing maximum amounts.

As noted elsewhere in this issue, the committee recommended the elimination of the Federal National Mortgage Association, and proposed a substantial change for fixing FHA and VA interest rates.

Low-income families would be affected by a two-year "experiment"

recommended by the committee. This proposal calls for 40-year, 100 per cent FHA-insured loans on houses costing up to \$7,600 (\$8,600 in high

Secondary Mortgage Market

One of the more controversial recommendations in the report of the President's Advisory Committee on Housing is this: **Abolish the government-owned Fannie Mae (Federal National Mortgage Association) and replace it with a privately-financed National Mortgage Marketing Corporation.**

The new corporation would be set up to provide a secondary mortgage market facility for FHA and VA loans. It would have an initial authorized capital of \$50,000,000. Additional funds would be raised by the sale of debentures, not guaranteed by the government.

Management of the corporation would be vested in a five-man Federal Home Loan Board. A chief executive officer would be appointed by the President, with the consent of the Senate. The corporation would be exempt from federal and state taxation.

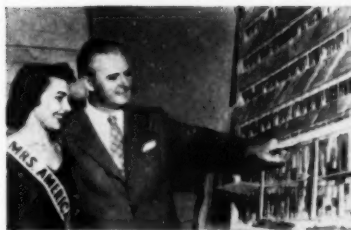
"The corporation would be empowered to purchase mortgages in its discretion and at such price, in each instance, as it deems appropriate and to sell mortgages owned by it in its discretion and at such price, in each instance, as it deems appropriate."

Richard G. Hughes, a home-builder member of the Advisory Committee, filed a dissent in which he criticized the "exceedingly restricted viewpoint" of the majority. He suggested conversion of FNMA into a central mortgage bank which could extend financing into areas far removed from mortgage capital sources.

Hughes said the objective of this secondary mortgage facility should not be merely the accumulation of maximum profit, but the provision of an "adequate and stabilized" mortgage market so that homes may be built.

cost areas). Occupants of such houses would rent under a lease-purchase contract and would be encouraged to acquire ownership.

Meanwhile, pending demonstrated progress of this experiment, the low-



"Mrs. America of 1954," Mrs. Erna Snyder of Pennsylvania, and John M. Dickerman, NAHB executive director, looking over a photo blow-up of the new National Housing Center to be built in Washington in 1954

rent public housing program would be continued. The Administration and Congress would determine its size, and the committee made no recommendation in this respect.

The Advisory committee recommended no change in the single-agency concept for handling the government's role in housing. It did suggest that the Office of the Adminis-

Trade-In Houses

Can the trade-in house program become a significant economic force in this country?

The President's Advisory Committee on Housing believes it can. The committee has recommended that the FHA Commissioner take "appropriate steps" to encourage more trade-ins.

"There is a growing awareness on the part of both builders and lenders of the good that an effective program of this kind would achieve in upgrading the nation's existing housing supply," the committee report said. The program will help families bring their housing in line with changes in size and economic status.

The committee suggested that no action by Congress is needed to get this program moving. FHA has all the authority needed to set up regulations and make the program work.

trator be stripped of "operating functions," leaving the administrator free to exercise "clear supervisory authority."

Proposed changes in the HHFA structure included the establishment of a five-man Federal Home Loan Board to replace the existing three-man Home Loan Bank Board. As noted earlier, an Urban Renewal Administration would be created.

Another recommendation called upon the HHFA administrator, the VA administrator and the FHA commissioner to work out an inter-agency agreement under which FHA would perform on behalf of VA some of the technical functions of processing veterans home loan applications.

Dealers Widen Scope of '54 Contest

The National Retail Lumber Dealers Association has announced a new type of contest this year for the members of its federated associations. Successful contests sponsored by the group during the past two years were restricted to entries describing public relations activities alone. Now the scope of the contest is broadened to include awards for entries which describe either a public relations activity or a combination of good public relations and good merchandising.

Entry blanks and contest rules may be secured from NRIIDA headquarters, 302 Ring Building, Washington 6, D. C. Entries must be submitted by March 31, 1954.

New '54 Construction To Reach \$34 Billion

Expenditures for new construction are expected to total about \$34 billion in 1954, only two per cent less than the record volume of nearly \$34½ billion estimated for 1953, according to outlook figures prepared jointly by the U. S. Department of Commerce's Building Materials and Construction Division and the U. S. Labor Department's Bureau of Labor Statistics.

A mild decline in private construction was forecast for 1954, but indications are that publicly financed activity will about equal 1953 volume. It is estimated that private expenditures in 1954 will total \$22.8 billion, and public outlays, \$11.2 billion.

Private housing and industrial plants may decline somewhat, along with farm construction and defense facilities, according to the report. These decreases will be largely offset, it was believed, by extensive backlogs and constant pressures for the kinds of construction needed to serve the mobile population and the suburban communities which have grown up since the war, such as utilities, stores, schools, churches, etc.

The joint report assumed no significant change in the international situation and a continuing high level of employment and personal income. It was further anticipated that about one million new non-farm dwelling units will be started, that mortgage funds will be adequate and that building costs will vary little from current levels.



Dickerman's Column

John M. Dickerman, Executive Director, National Association of Home Builders of the United States

NAHB's Fight for New Housing Legislation and Slum Clearance

The vital importance of the home building industry to the stability of the entire American economic system has been demonstrated graphically by the severe mortgage crisis that gripped the housing market during much of 1953. The inability of builders and prospective home buyers to obtain adequate mortgage credit caused a midsummer letdown in residential construction that threatened for a time to touch off a general business recession. Fortunately, the Government's so-called "hard money" policy, which was a major cause of the mortgage drought, has now been relaxed and we look forward with confidence to an improved situation in 1954.

We are hopeful that the lessons of 1953 will not be lost on members of Congress and the Government officials responsible for developing a new housing program next year. Far-reaching changes in the mortgage machinery upon which housing depends have long been overdue. The housing credit facilities of the Federal Government must be modernized and strengthened to meet the needs of today's mass market, and a workable central mortgage reserve system must be devised to prevent a recurrence of the 1953 crisis. With the new awareness of home building problems that now exists in official Washington, there are good grounds for confidence that those necessary changes will be made promptly and effectively.

We feel that the National Association of Home Builders has contributed toward creating this improved Washington climate for the building industry. The Association was prominently represented on President Eisenhower's Housing Advisory Committee which helped prepare legislative recommendations for the next session of Congress, and it is accepted in Washington and across the country as the responsible voice of the home building industry.

NAHB, however, is much more than a "voice" for its 28,000 members. Through the NAHB Research Institute, the Association is actively promoting the development and use of improved housing design, construction methods, and new materials to provide better homes at the lowest possible cost.

One of the most important undertakings of the Association is its nationwide campaign to halt and reverse the spread of slum blight which for decades has been eating at the hearts of our cities. Recognizing that not even the United States is wealthy enough to destroy all its blighted housing and rebuild from the ground up, NAHB has launched a realistic program to rehabilitate the millions of run-down older houses which are structurally sound and can be restored to useful life at a minimum of expense to the taxpayer.

Law enforcement is the big weapon in this attack on slums. The health, safety and sanitation codes that govern the use of housing in every American community should be strengthened and vigorously enforced.

The lessons learned in organizing the New Orleans program can be of invaluable help to Washington and other cities confronted with a slum problem. One of the most essential steps taken in New Orleans was the creation of a separate City Department to administer the program on a unified, efficient basis, rather than assigning it to an existing department already heavily burdened with its regular municipal duties. The task of cleaning up big city slums cannot be handled on a part-time basis. Official neglect and indifference are among the root causes of slums, and municipal authorities everywhere must recognize that nothing short of an all-out, intelligently planned attack can cure them.

New BILT-WELL AWNING WINDOWS

Awning, Hopper and Stationary Units for Multiple Use

EASY TO CLEAN—With Bilt-Well Awning Windows there's no use for ladders, no troublesome hardware to remove—everything done exclusively from inside your home! That's the smart way today!



WEATHERTIGHT—Fully equipped with anodized aluminum weatherstrip. Rigid laboratory tests prove the Bilt-Well Awning Window extremely weathertight—will efficiently withstand infiltration of rain, air, dust and dirt.

VERSATILE—The Bilt-Well Awning Window may be installed as a "swing out" awning window, a "swing in" hopper window, or as a casement. It may be used in ribbons, stacked in various heights or widths, or in combination with picture windows.

EASY TO OPERATE—The Bar Operator and friction slide hinge permits homeowners easy opening, smooth closing and positive locking. Hardware comes completely installed to save time and to assure perfect placement of all parts.

ECONOMICAL—Standardized for utmost economy. Precision made from kiln-dried clear Ponderosa Pine. Water repellent preservative treated. Here is indeed a low cost, simple to install, easily operated window—the latest in window designing.



OFFERING THE UTMOST IN LIGHT AND VENTILATION...
essential features in today's homes. No other window has so many outstanding features... that operates with such unexcelled performance.

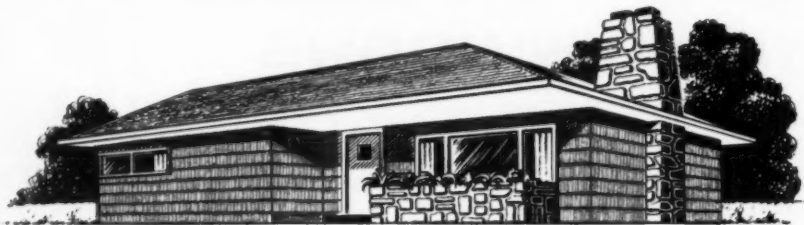


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We are manufacturers of the complete line of Bilt-Well Woodwork: Unit Windows, Casements, Unit Kitchen Cabinets, Unit Multiple-use Cabinets, Overhead Garage Doors, Combination Doors, Storm & Screen Units, Basement Windows, Shutters, Exterior and Interior Doors, Entrances, Gable Sash, Louvers, Corner China Cabinets, Mantels, Telephone Cabinets and Stair Parts.

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**Give your homes
extra sales appeal**

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"Century" NU-GRAIN asbestos-cement siding

Colorful, attractive NU-GRAIN siding gives any type home a decided "plus" in the minds of prospective buyers. For here is a siding material that offers beauty, durability, and economy!

These remarkable shingles are made from asbestos fiber and portland cement—which makes them as permanent as stone itself. They won't burn, rot, or corrode; they can't be damaged by vermin; they are completely weather resistant.

And here's a feature really worth noting: To make the attractive NU-GRAIN shades as long-lasting as possible, K&M embeds colored ceramic granules into the shingles under hydraulic pressure. *There's no paint or protective coating to peel or wash off—and no such finish need ever be applied.* Both the color and the distinctive wood-grain pattern are designed for a lifetime!

What's more, because they are low in cost and easy to install, NU-GRAIN shingles help you hold down the prices of your homes, thus broadening your potential number of buyers!

Ask your K&M distributor to tell you more about these nationally-advertised, widely-known shingles. Or, write directly to us for complete information.



These attractive shingles are made in four distinctive colors:
NU-GRAIN brown, gray, whitetone, and green (illustrated).

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America's first maker of asbestos-cement shingles.

Distributors Urged To Emphasize Services

Building material distributors must emphasize their services and benefits they offer both retailer and manufacturer to save space, time and money in order to meet the challenge to their business, declared John P. Ashton, retiring president of the National Building Material Distributors Association, at its recent Chicago convention.

Praising members for their support, he indicated group's membership would double in 1954 if present



H. M. Dooley, newly elected president of National Building Material Distributors Association (left), and retiring president J. P. Ashton, who was presented with a testimonial plaque for his services

rate of growth was maintained. More than 250 persons attended the meeting, at which Senator Everett M. Dirksen of Illinois discussed "Washington Today" and Phil H. Hanna, Chicago Daily News financial editor, reviewed "The Building Outlook for 1954."

Officers elected for 1954 include H. M. Dooley, Dooley Distributing Co., Saginaw, Mich., president; R. R. Maylone, Saltpoint Supply Corp., Syracuse, N. Y., vice president; W. L. Shea, Building Material Wholesalers, Charlestown, Mass., treasurer.

Low Down Payment Loans Prove Sound Credit Risks

A new survey of the delinquency rate of residential mortgages made by the Mortgage Bankers Association of America would appear to belie an old banking maxim that a high percentage home loan—one which permits a low down payment—is a comparatively poor risk.

The study, based on investigation of about 70 per cent of the mortgages which members of the MBA have on their books, shows that the so-called poor risks compare favorably with

But the Biggest, of Course, Got Away!

Al Balch of Seattle, who boated the largest fish at the Acapulco Derby, lost an even heavier one (he says) when his steel line broke



Twenty Acapulco Derby winners have returned home with fond memories of a fabulous nine-day Mexican holiday. From successful deep sea fishing excursions to bullfights, historical sightseeing tours to midnight deep sea diving exhibitions, builders adjudged to have best promoted National Home Week in areas from New England to the West Coast were treated like visiting royalty. Contest sponsor Minneapolis-Honeywell Regulator Company picked up the tab.

As its reporter for the trip, *American Builder* happened to select the one among the group who walked off with the trophy for landing the biggest fish—Albert Balch of Seattle.

Each of the builders flew to Dallas on Saturday, Nov. 28. M-H representatives met them at the airport, whisked them to the Adolphus Hotel for cocktails and steak dinners. The group flew to Mexico City (7,500 feet above sea level) the next day and spent the evening hours in relaxation at the Hotel Del Prado.

An extensive sightseeing trip of the city on Monday, included the National

borrowers considered as excellent risks. VA home loans were found to have a low rate of delinquency—only .41 of one per cent were two months behind in payments; .19 of one per cent were three months in arrears.

Delinquent borrowers with FHA mortgages amounted to only three-tenths one per cent for two months' arrears and .12 of one per cent were three months overdue.

The association claims these figures indicate that the easier credit pattern followed under the VA and FHA programs has been quite sound.

Palace, University City, Chapultepec Castle and Park, Tuesday, the party planed to Acapulco, spent the rest of the day swimming and loafing and the evening at the La Perla night club where divers performed thrilling leaps into the sea at midnight.

On Wednesday and Thursday, the builders teamed up as partners and spent eight hours each day fishing; two teams to a boat. Friday featured a sightseeing tour via sailboat to Puerto Marquez and by native dugouts to Revolcadero Beach after relaxing during the day, a gala farewell dinner was held Saturday evening in La Bocana night club, where fishing rodeo trophies and diplomas were awarded.

On returning to Mexico City Sunday, the group attended the bullfights at Plaza Mexico, billed as the world's largest bull ring. Later, they were guests of Virgil Hiermeier, general manager of the M-H Mexican subsidiary. The next day, the party flew back to Dallas and disbanded.

Minneapolis-Honeywell men who conceived and carried out the Acapulco Derby, all vice presidents, included Walter Bask, Eldon Richardson, Kent Wilson, Chet Lyford and Hiermeier.



only the *Amazing New*
PER-FIT SLIDER
 ALUMINUM

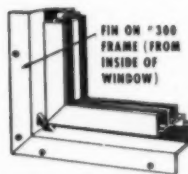
gives you all these features!

Mr. Builder: PRICE? You will be astounded at the low cost of this window when your dealer quotes you.

Acclaimed by everyone as the window they have been waiting for. Its new

advanced design results in amazing quality at surprising low cost. Study each of these important features. You too will say "This is the window I've been waiting for".

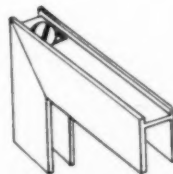
Screw-lock smooth, mitted frame corners factory sealed. Rock-free rigidity. Close fitted joints—wind, water and dust tight forever. Factory located hardware assures perfect fit of storm sash and screens. ● All frames have continuous perimeter installation fins. ● Semi-pneumatic Ventséal weather stripping inside jambs. The most advanced weathering system, plus a sash cushion. ● Continuous zinc weathering strip in frame head; smooth operation and full length weather seal. ● Rubbing black on zinc weather strip in head assures perfect closure and seal of meeting rails. ● Scientifically designed weep holes in sill frame for immediate drainage under all conditions. ● Weep holes in sill frame protected from weather by continuous beaded flange which is an integral part of the removable cover plate. ● All weathering is built into the window frame where it belongs; out of harm's way and thoroughly protected by the frame. ● Screw-lock mitted sash corners permit easy job re-glazing. Lifetime Ventséal glazing. ● Sash siderails have two-point contact with semi-pneumatic jamb weather strip for double weather protection. ● Nylon pressure buttons in sash head rail, actuated by stainless steel springs, eliminate wind rattles in any sash position; constantly push sash firmly against the zinc weather strip. Nylon-aluminum, aluminum-zinc contact provides natural lubrication for permanent, easy, fingertip operation. ● Full-length self-sealing action provided between sash and sill cover-plate. ● Forged and machined cam action lock forces sash against the semi-pneumatic weather seal 4 in side jambs; seals meeting-rails air-tight, dust-tight; maximum weather seal. ● Top to bottom finger rail for quick, easy opening; prevents pinched fingers; adds beauty—and rigidity—at a critical point. ● No sharp, easily damaged weather strip exposed when sash is out; no home-owner injury hazard.



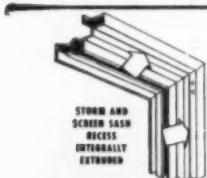
Continuous perimeter fins permit the cheapest, most inexperienced help to install PER-FIT sliders accurately!



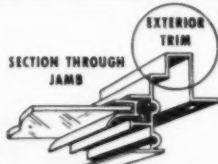
No more dirt or bug trash—for you or the owner. The sash track is protected with a removable zinc cover plate.



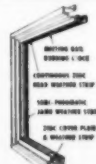
Screw-lock mitted sash corners permit easy re-glazing. ANYBODY can re-glass a PER-FIT slider sash—in minutes.



Storm sash and screen hardware are factory located—the actual recess is designed into the frame—no difficult job-condition decisions to make.



Exterior trim is part of the window—no special wood work needed. When the PER-FIT slider is in—you're done!



No dust, wind, air or water leakage—weather-stripped better than double hung. Eliminates owner-complaints.

ON and OFF the RECORD

WITH THE TEMPERATURE standing at two below zero who would be thinking of electric fans?

NOBODY, you say? Well, practically nobody, and certainly not the guards at the Superior Sugar Refining Company in Menominee, Michigan, where 14 packaged electric fans of the Signal Electric Manufacturing Company were stored.

BUT SMART THIEVES are different. Probably reasoning that nobody in the warehouse would get within fanning distance of the wind-jammers on a subzero day, they got away with the whole lot!

CAN A DEALER make an easy profit on a proposition represented to enable him to compete with hardware jobber distributors? Here's the way one dealer sizes up the proposition:

SAYS HE—A hardware salesman calls on us with a proposition to enable us to compete with jobber distributors in this area. If we stock enough hardware for 15 houses at a cost to us of \$50 a house, or a total of \$750, we can get a special price which will allow us to gross 14 per cent on sales.

NOW LET'S LOOK AT IT on my chart. With hardware a sideline to our business I think \$1,000 a year gross profit is not too much to set as our goal. To gross 14 per cent on each sale, our selling price will be \$58.14, and our gross profit \$8.14. So, to gross \$1,000 a year we will have to make sales of \$7,143 with cost of sales not to exceed \$6,143. And to do this we will have to sell 123 houses of this hardware, and turn our inventory over a little more than eight times a year. For us to promote the hardware through advertising and pay a salesman five per cent commission or \$5,000 plus expenses of \$3,000, where do we come out? We don't.

WELL SUPPOSE we decide we want to gross \$15,000 a year on this line, continued the dealer. Let's try that. We will now have to sell \$107,143 worth of hardware with sales

costs not to exceed \$92,143. We will then have to sell 1,843 houses of hardware, and turn our inventory over 123 times.

CONCLUDED THE DEALER—It's a nice guaranteed way to go broke fast, no matter where you set your gross.

WENT TO Colorado Springs recently and was met and toured by the three amiable Coloradans in the photo. Note that they are placed on the sharp mountain slope to adjust for size. Actually there is about a foot difference in the heights of the two wingmen. Left to right they are Arlie Moore, Jim Snyder and Dave Duell.



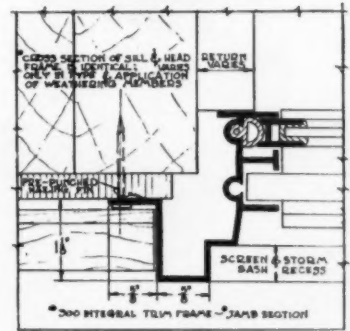
COLORADO SPRINGS will forever conjure up a memory of Tod Sloan selling his city to NAHB as a site for a semi-annual meeting. With what obviously was a carefully rehearsed speech to accompany a set of what were among the most beautiful scenic slides ever shown, Tod was so overwhelmed by the grandeur of what he was showing that he became totally mute. Managed to sputter about ten words, but after that could say nothing until the last slide had been shown.

HIS WHOLE SALES talk consisted of "Well, for Pete's sake, if what I showed you doesn't sell you, nobody can talk you into it." And he couldn't have done better if he had rehearsed it just that way.

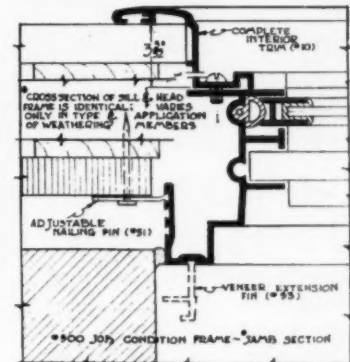
PRESENTATION was notable for three reasons—breath-taking beauty of the pictures, best sales talk of the

(Continued on page 48)

NEW SLIDER SOLVES ALL INSTALLATION PROBLEMS



1 1/8" deep by 1/2" wide exterior trim (casing) and 5/8" wide pre-punched full perimeter nailing fin is integral part of window frame. Installed over sheathing in framed rough opening in less than five minutes. Almost impossible to rack. Easily milled. May be used for masonry block construction; however, Job Condition Frame recommended.



100% versatile. Exterior trim (casing) is integral with window frame; contains continuous perimeter dovetails to accept simple installation fins (#51, #52 or #53) for wood frame or masonry construction. Simple vertical mulls. Jamb pre-drilled for positive screwing to rabbeted wood bucks. #51 Nailing Fin (pre-punched) provides six adjustments; one of three side dovetails chosen; offset in fin leg reversible before sliding fin into dovetail. #52 Masonry Block Fin (not shown) centers window frame in block slots. #53 Veneer Extension Fin provides wide brick mould when greater than 1" finger space required. #10 Interior Complete Trim used in wood frame construction in conjunction with #51 Nailing Fin; a complete package fitting any through-wall thickness from 4 3/8" to 5 3/8" regardless of thickness of exterior sheathing and thickness of interior wall materials. Infinite adjustment. #20 Interior Cove Trim (not shown) used when frame is installed in block construction with #52 Masonry Block Fin and interior masonry left exposed; #20 Trim also applicable for other types of wall construction.

PER-FIT DOUBLE HUNG • BEST-VENT DOUBLE HUNG • PER-FIT SLIDER • PER-FIT GLASS BLOCK VENTILATOR

The
PER-FIT
Line

PER-FIT PRODUCTS CORP.

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A... **Clipper** ... WILL CUT THE HARDEST **BRICK-STONE-TILE!***

*and at the lowest cost per cut



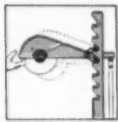
LOOK FOR THE BRIGHT ORANGE COLOR AND THE TRADE-MARK CLIPPER!



Only with These Patented Clipper Features is Masonry Cutting Economical ...



PRESSURE EQUALIZER



SELECT-A-NOTCH



WET OR DRY PUMP

TODAY!...Try the New—Faster Cutting—Economical CLIPPER SUPERIOR BLADES

... guaranteed to "Consistently Provide the fastest cut...at the lowest cost...with the greatest ease!" Clipper alone can supply all specifications of Abrasive, Diamond and "CBR" (Break-Resistant) Blades to accurately meet your requirements. INVEST IN CLIPPER and YOU'LL GET RESULTS!



AND A...

... will **PAY FOR ITSELF** from the **SAVINGS** in **TIME** and **MATERIAL**

HERE'S WHY!...The DUSTLESS Clipper operates right beside your bricklayers because the Clipper is PORTABLE... easily moved from basement to roof. One Clipper Model HD with a Clipper Diamond Blade will do the cutting of 3 ordinary abrasive saws! This is possible ONLY with such Patented Clipper features as...the Pressure Equalizer Spring, the Famous Select-A-Notch, Water Application System, and Adjust-A-Cut which makes possible One-Spot Operation.

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ORDER TODAY... on FREE TRIAL. Discover for yourself how CLIPPER... will increase your profits by increasing your production at reduced costs. CLIPPER'S "On the Job" FREE TRIAL guarantees you satisfaction at no obligation!

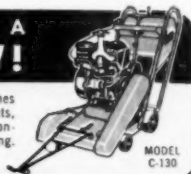
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The unqualified Clipper guarantee of satisfaction is backed by world-wide experience, the ability to select the finest materials, and the "know-how" to put them together.

SAW BEFORE BREAKING WITH A CLIPPER CONSAW!

Save up to 50% in labor and material. Saw repair patches—gas, water, sewer and air line trenches in floors, streets, walks, runways and highways. Save, too, by sawing contraction joints—eliminate costly hand forming and spalling.

5 MODELS, GAS OR ELECTRIC POWERED



MODEL C-130



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| <input type="checkbox"/> DRY ONLY MODELS | <input type="checkbox"/> DRY |
| <input type="checkbox"/> CLIPPER CONSAWS | <input type="checkbox"/> CLIPPER DIAMOND BLADES |

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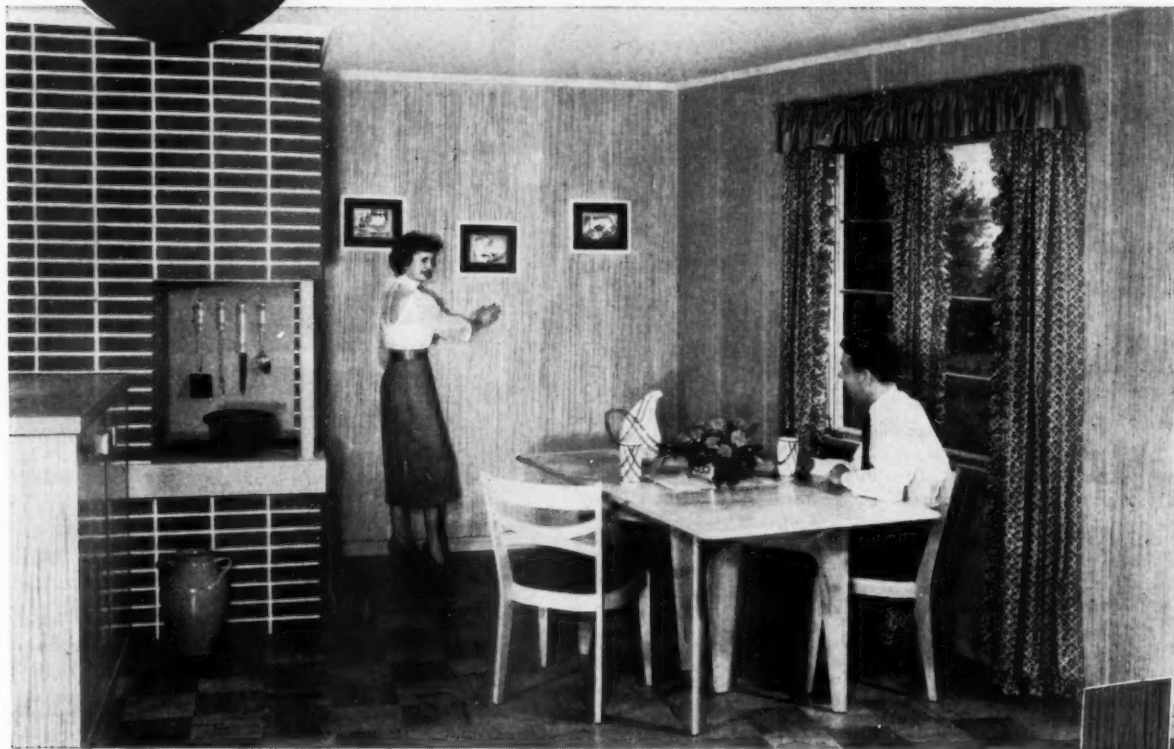
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Exclusive tongue and groove joint eliminates mouldings and adhesive!

Yes, it's easy to install new Marlite Plank and Block! And you offer your building and remodeling clients new beauty, new economy, faster installation . . . plus the same high quality that has made Marlite panels famous.

Easy installation—New Marlite with exclusive tongue and groove joint is installed over old walls or furring strips with concealed nails or clips.

Easy to handle—Planks are 16" x 8'. Blocks are 16" square. Both 3/16" thick. In cartons for convenient handling.

Beautiful new colors—Ten new companion colors styled by Raymond Loewy Associates, plus four distinctive wood patterns, are sure to please every customer.

Baked Marlite finish—Planks and Blocks feature the same durable, easy-to-clean Marlite finish used on all other Marlite panels.

See your building materials dealer for full details on new Marlite Plank and Block, or write Marsh Wall Products, Inc., Dept. 203, Dover, Ohio. Subsidiary of Masonite Corporation.



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PREFINISHED
WALL and CEILING PANELS

MARLITE PLANK AND BLOCK PATENT APPLIED FOR

FEBRUARY 1954

only AIR-JET

PACKAGED CHIMNEYS **UL**

offers you
3 models
sizes

To meet a variety of specifications and needs, AIR JET is available in 3 models and 3 sizes, in a wide range of prices for your customers to choose from

MODEL AA DELUXE has a 17" x 34" top. Ideal for large, ranch style or 'rambling type' homes.

MODEL A STANDARD has a 17" square top. Ideal for average middle prices homes.

MODEL B ECONOMY has a 12½" square top. For economy homes and low cost building projects.

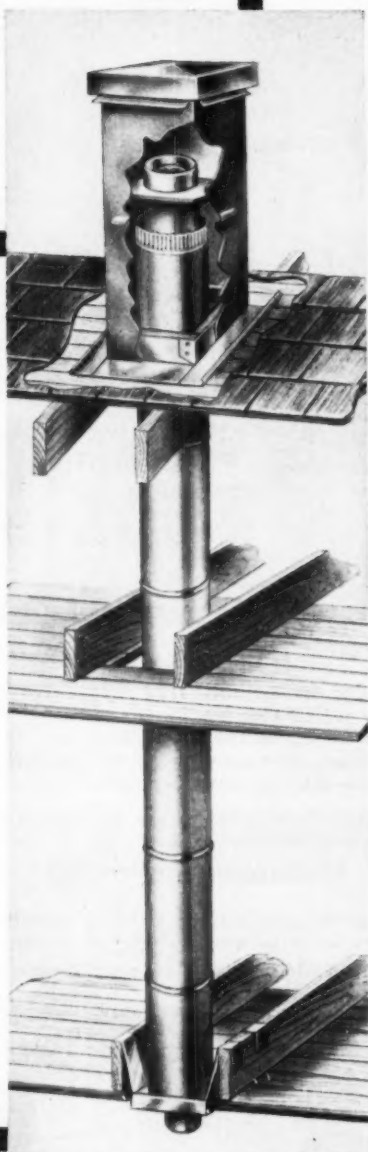
The 3 smoke pipes sizes you can choose from are: 6", 7" or 8"

THE BEST DOLLAR VALUE

Weighing less than 100 pounds, AIR JET requires only one man-hour of labor for installation. Made of light aluminum with high temperature porcelain steel smoke pipe, AIR JET is UL approved for use with coal, oil, wood and gas fuels.

WRITE TODAY...

for complete information. There are several territories for distributors available.



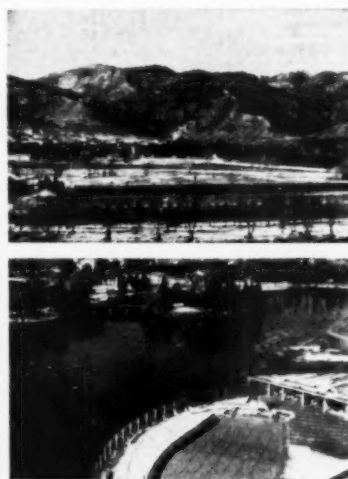
GENERAL PRODUCTS COMPANY
FREDERICKSBURG, VIRGINIA

On and Off the Record

(Continued from page 45)

year, and Sloan mute for the first time in his life, subtracting possibly the first two months of his life.

AND HERE IS a pair of pictures taken from a sixth floor room in the Broadmoor. One overlooks the only outdoor rodeo arena in the world with roofed grandstands. Mountains in background can be reached from hotel in 15 minutes.



THE OTHER overlooks the hotel swimming pool, cabanas and lagoon. Both were taken through a window screen in case the screen shows up here and baffles someone.

ELECTRONICS is a new word as far as the home building industry is concerned. Prior to 1953 it was a word that had something to do with the art of modern war.

NOW IT'S a word that has begun to have an understandable meaning to home builders through development and application on a mass scale of electronics to the scientific control of home temperatures.

AND THAT is only a beginning. It's less than two years ago that air conditioning on a mass scale for medium- and low-price homes was the great new horizon. Now, it's electronics, and probably no one will predict the wonders it will unfold for home builders in the coming five years.

WHICH PROVES that even wars can pay dividends in comforts, although no one in his right mind would accept war for any dividend.

AMERICAN BUILDER

WONDER IF BUSINESS in general is not a little punch drunk? Everyone who can speak with any authority and can find a medium through which to speak predicts a very good year for all business. But few seem to be very happy about the condition. In the twenties it was different. Everybody was happy.

BUT BUSINESSMEN of the twenties had not endured the restrictions imposed in World War II, nor cut their eye teeth in a depression.

MAYBE we have been fighting so hard for so long that we have forgotten how to enjoy the calm. Something like the trench-bound doughboys of 1918 on the morning of November 11. Everybody knew the war was over but it took some time to adjust to a world with no more shooting and killing. Likely it will take some doing and some time to adjust to a business climate that does not daily threaten the existence of private enterprise.

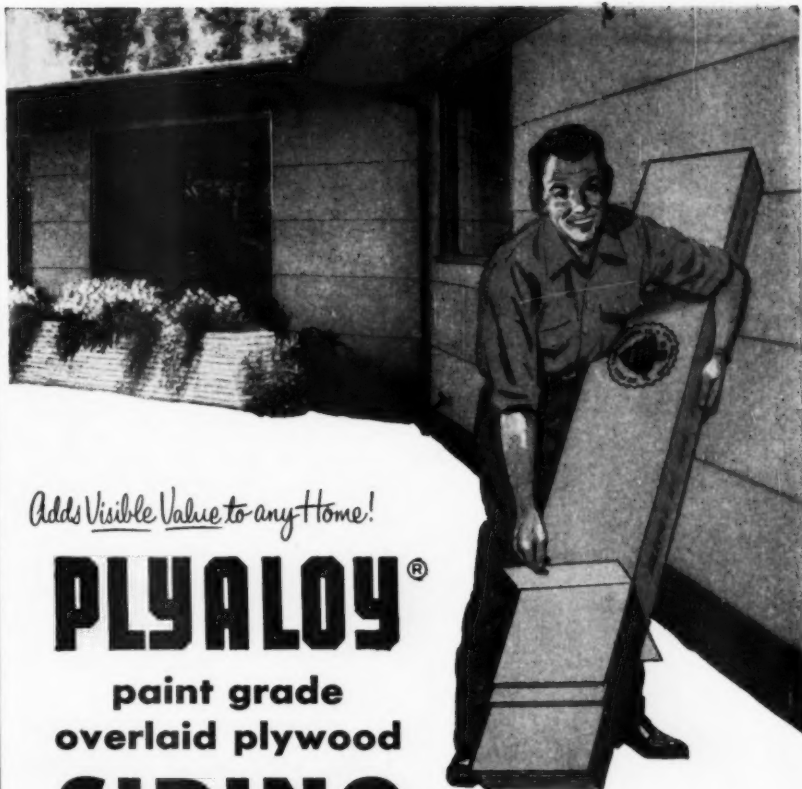
IT'S A YEAR that probably will see some weeding out of misfits, revival of the art of selling, and demand for better all-around merchandising. But, that means a normal year, if there is any such thing. And as such it deserves to be enjoyed. Can't tell how many of the same are left for many of us, so we will do well to cherish it.

NRLDA'S PRESIDENT, Henry Munnerlyn, says that many dealers are complaining about too many variations in the grades of lumber they receive, and that they are forced to buy low grades with the high.

OTHER COMPLAINTS are that customers demand specific sizes and grades, and that because the lumber does not always meet requirements in these respects, returns are running from three to 11 per cent of deliveries.

CRITICISM IS ALSO leveled at car loading practices in many cases. Too expensive, say the dealers. It would help if lengths were loaded together, if widths were placed separately, and if grades were separated in the loads.

THE ANSWER to these complaints and problems, points out Munnerlyn, is full consideration of them between dealers and manufacturers.



Adds Visible Value to any Home!

PLYALOY®

paint grade overlaid plywood SIDING

Pre-cut to 12", 16" and 24" widths; Packaged and Sold
"by the Square" . . . Complete with Wedges and Furring Strips

Perfect for Long-Lasting Check-Free Paint Jobs



Smooth, tough fused resin-fiber surface is perfect base for good-looking finishes. The way Plyaloy keeps its appearance is a continuing credit to your reputation.

Yes—you can buy Plyaloy siding *packaged by the square*. It's easier to order, without complicated figuring . . . easier to apply, because it comes in standard siding widths . . . easier to handle, because it comes in protective packages. *Saves time and labor all along the line!*

Remember: Plyaloy siding has a superior paint surface. Gives maximum protection against grain-raise or checking.

For beauty that attracts buyers . . . durability that *keeps* them sold—specify Plyaloy pre-cut siding.

SPECIFICATION DATA: Plyaloy comes in pre-cut 8' lengths, 12", 16" or 24" wide; 5/16", 3/8" or 1/2" thick. Edges beveled for drip. Packaged for protection; wedges and shadow-line furring strips included. One side surfaced with fused resin-fiber overlay. Base panel is DFPA-inspected Exterior-type fir plywood (EXT-DFPA). Other sizes available. For complete information write St. Paul & Tacoma Lumber Co., Dept. AB, Tacoma, Washington.



ANOTHER MEMBER OF THE FAMOUS TREE LIFE FOREST PRODUCTS FAMILY



BUILT FOR THE FUTURE

The future of America belongs to its school children. Thus, today's efficient modern school buildings are "Built For The Future" in more ways than one.

Increasingly, school boards who look to the future favor schools built with reinforced concrete. Such construction means clean lines and attractive appearance... extra strength and durability... long-lasting weather resistance... utmost protection from fire.

School builders, architects and engineers find it pays to specify CF&I Clinton Welded Wire Fabric for their concrete reinforcing needs. This fabric provides strong steel members closely and uniformly spaced for proper load distribution and added strength. CF&I Clinton Welded Wire Fabric meets all A.S.T.M. requirements; is available in all popular sizes and weights.

THE COLORADO FUEL AND IRON CORPORATION
Denver and Oakland
WICKWIRE SPENCER STEEL DIVISION
New York, New York



2067

50

LETTERS

NAHB mailing list not for private use

Sir: You will recall that you spoke to me about a promotional plan which would involve utilization of our mailing list. I explained that I did not see how it could be done in view of our policy against anyone's using our mailing list, but suggested that if you would state your ideas in a letter, I would take it up with our policy people. Not having heard from you, I assume that you have received my letter in which I stated that NAHB's membership list is not now, nor has it ever been, available to anyone.

John M. Dickerman,
Executive Director,
National Assn. of Home Builders,
Washington 6, D. C.

mortgage for mass market story rings bell at Detroit FHA

Sir: The Detroit Insuring Office appreciates more than we can say, the complete and accurate story on our Title I, Section 8, program (*American Builder*, December, 1953, pp. 88-91). We use the word "accurate" for the reason that another publication recently ran an article and insisted on calling this a "shell" house.

Our business under this Title has jumped rapidly since your article was written. We currently have received 1,647 applications during 1953, and in one week alone we received 124 cases for processing.

Wendell O. Edwards,
Regional Director,
Federal Housing Administration,
Detroit, Mich.

wants cost of building plywood filling station

Sir: While leafing through some back issues of *American Builder*, I came across an article in the April, 1940, number containing a write-up and picture of a gasoline service station, 24x40 feet, built of plywood and covered with porcelain enameled steel. Since we plan to build a station next spring, we would like to explore the possibilities of erecting

one, with plywood, time, material costs, etc., as compared to masonry, labor costs, etc. Is it possible to obtain the blueprints of this building at this late date?

Clyde E. Arnold,
Grand Rapids, Mich.

► *Information on this service station is no longer available, due to obsolete date of magazine. It was suggested to the reader that he seek help for his problem from Douglas Fir Plywood Association, Tacoma, Wash.—The Editor*

National Home Month contest winner pleasantly surprised

Sir: Your telegram advising that our entry had been selected by the judges as the winner in Group II of *American Builder's* National Home Month contest came as a pleasant surprise.

We did not submit the entry with the idea of winning a prize, but with the thought that the details would be helpful to others in the future who are not in a position to feature a "Parade of Homes," or to put on a "Home Show." Of course, we appreciate the honor, and thank all those concerned.

C. I. Cheyney, President,
Bailey Lumber Co., Inc.,
Bluefield, West Va.

sectional news edition meets contractor's approval

Sir: I am happy to note your decision to publish a Western Edition, featuring matters of interest to builders in this part of the country.

Have always felt that features pertaining to construction methods in the East were not of particular value to us out here.

If you could suggest to the smaller custom builder, like myself, ways to compete with the present trend of mass construction in building homes to sell, and how to overcome its competition, you will surely be doing something.

Frederick Hack,
General Contractor,
La Canada, Calif.

(Continued on page 52)

AMERICAN BUILDER

GENERAL MOTORS OFFERS BUILDERS NEW DELCO WINTER-SUMMER CONDITIONAIR

**SIMPLE, COMPACT...
A SINGLE INTEGRATED
UNIT FOR TODAY'S
BUILDING NEEDS!**

**GM ASSEMBLY
LINE METHODS
CUT UNIT COSTS
TO SAVE ON EVERY
HOME YOU BUILD**

**GM BACKING
GIVES YOU A NAME
YOU CAN MERCHANDISE
TO PROSPECTS**

New low-cost way to add extra sales appeal to your homes

Now every builder can answer the rising demand for air conditioned homes at reasonable prices. Here's the sensational new Delco Conditionair that uses either gas or oil for heating and electrical refrigeration for cooling. It provides complete air conditioning, ventilation, filtering and humidity control.

One cabinet houses both heating and cooling mechanisms. Has Delco-Heat Circle-air heat transfer system, centrifugal blower, Multipath Cooling coils, twin filters, and sealed reciprocating compressor. It's low in first cost, low in operating cost, and packaged for easy installation. The cabinet is made of heavy duty furniture steel and is finished in the rich Delco green. In appearance, performance, and cost it's your best answer to adding the magic of year 'round air conditioning to the homes you build.

For detailed information, contact your Delco-Heat Distributor. Or write or wire Delco Appliance Division, General Motors Corp., Dept. ABH, Rochester 1, N.Y. In Canada, Delco-Heat, Toronto 13, Ontario.

... a complete line of automatic oil and gas fired conversion burners; Conditionair forced warm air furnaces, heating, cooling units; boilers; water heaters; electric water systems.



DELCO CONDITIONAIR

For a good deal ... deal with Delco



Everybody knows
where Mount Vernon
can be found... *but*

do people know what services you offer...
where your office is located... what your
telephone number is?

Spread essential information about your business
all over town easily and economically by
advertising in the 'yellow pages' of the
Classified Telephone Directory.

The 'yellow pages' are the most used shopping
guide in the community. You'll find them in
homes, offices, factories and shops. They'll help
direct prospects to you for new homes and
remodeling jobs.

If you're now using the 'yellow pages', make
certain that you're listed under all the appropriate
classifications where future customers are likely
to look for construction services of any sort.

Call the Classified Directory Representative at your
local telephone business office. He'll be glad to
assist you in preparing your directory advertising.



AMERICA'S BUYING GUIDE
FOR OVER 60 YEARS



letters . . .

(Continued from page 50)

Wilson Rafter Table a useful tool

Sir: Please advise if you can send a reprint on your *Modular Principles in Roof Construction* which contains the Wilson Rafter Table. My subscription to *American Builder* began in June, so I missed most of this series. However, I did see the Wilson table in a borrowed copy and thought it to be the best. Please keep up the good work.

R. L. Hauptman,
Maderite Block Works,
Litchfield, Ill.

► Copy of the article on *Modular Principles from the January, 1953, issue of American Builder containing the Wilson Rafter Table referred to was sent to this reader—The Editor*

American Builder— can't do without it

Sir: I have recently been doing a great deal of work for a local builder, and have been using his copies of *American Builder* for reference. Since this is awkward, I desire to enter my own subscription for three years.

Your publication has so many materials and products advertised, and contains so much subject matter, I feel that it is a great asset, not only for current trends, but also to keep as future reference.

K. Stanton Lewis, Builder,
Arvada, Colo.,

duplicates \$21,000 house for less than \$12,000

Sir: We recently built the house featured in August as your Blueprint House. If plans for this house are available, we will appreciate receiving them. We were able to build this house for less than \$12,000, even though you report that in the Chicago area it cost \$21,140. We sold both house and lot (90x120 feet) for less than half of this figure.

H. W. Cannon,
Cannon Insurance Agency,
Hartsville, S. C.

(Continued on page 55)

Sell Your Homes Faster For More Money!



SETS
YOUR HOMES
APART FROM
ALL OTHERS
Equals
SPRINKLER
SYSTEMS
on Million
Dollar Estates

New EVERSPRAY Automatic UNDERGROUND Lawn Sprinkler System

Make your homes different! Give them plus value that lures the appetite of all buyers! No matter what type homes you build—large, small, high or low cost, EVERSPRAY is a clincher that closes sales!—the new EVERSPRAY Automatic UNDERGROUND Lawn Sprinkler System! You can buy three such Sprinkler Systems—each one capable of watering up to 1,000 sq. ft. of lawn with six "Pop-Up" heads—for little more than a hundred dollars! Yet this small investment can bring you several hundred dollars more profit on every home! Here's the "plus" that will give you the edge on other builders—sell homes as fast as finished! Mail

coupon now for literature and complete information.

DISTRIBUTORS WANTED

Exclusive county franchises available. Leads furnished from National Advertising. Write a special letter if interested in distributorship.

EASY TO INSTALL WITH ORDINARY WRENCH. ONLY 4 INCHES UNDERGROUND. DRAINS SELF AUTOMATICALLY—CAN'T FREEZE!

EVERSPRAY DIVISION

2001-09 W. Carroll Ave., Dept. 112, Chicago 12, Ill.

EVERSPRAY DIVISION

2001-09 W. Carroll Ave., Dept. 112, Chicago 12, Ill.

() I am interested in Exclusive Distributorship. See letter attached regarding territory I desire.

Please rush Literature and complete information on the new "Automatic" EVERSPRAY.

Name
Address
City Zone State

There's a BESSLER way to do it!



There's an easier, better way to get your home-buyers up into their attics and upper floor areas! It's the BESSLER DISAPPEARING STAIRWAY method. Used for over 40 years in new and old homes of every type. Safety-engineered in every detail. Meets all building codes. Attractively priced! Immediate delivery!

FREE BESSLER CATALOG!

Gives complete specifications on 7 Bessler Disappearing Stairway models. Hundreds of thousands in daily use. More sales and service features than any other type. Write now!

SEE
SWEET'S

BESSLER DISAPPEARING STAIRWAY CO.

1900-A East Market Street, Akron 5, Ohio

Builders say houses SOLD FASTER when equipped with

The Thor built-in electric range

Here is what just a few leading builders* say about the new Thor Built-in Electric Range:

"The Thor Built-in Range has attracted favorable comments from every one visiting our open house—helped sell many homes."

"We feel that the Thor equipment was more than instrumental in helping us

sell our homes in such a short time."

"We notice an enthusiastic response when prospects see the extra convenience and space saving of this Thor unit."

Need we say more? See what's in the new Thor Built-in Electric Range for you!

*Names on request

THOR CORPORATION, Chicago 50, Ill.

FEBRUARY 1954



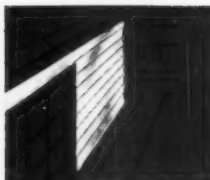
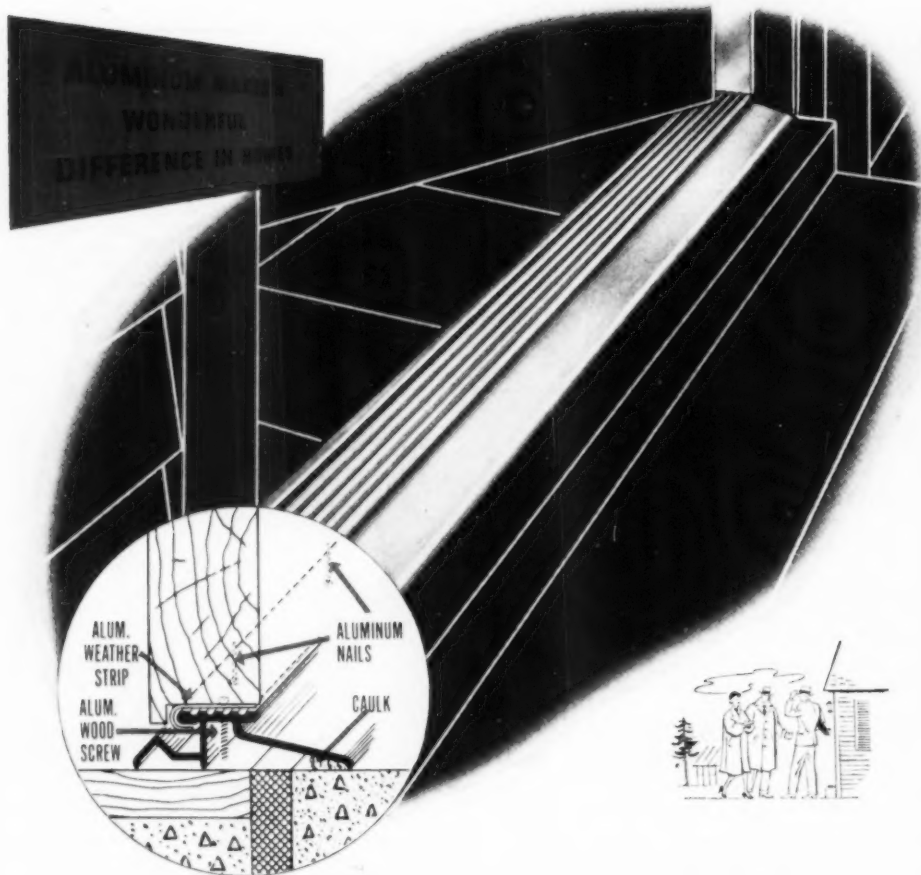
CLIP—MAIL TODAY FOR FACTS!

BUILDER-CONTRACTOR DIVISION

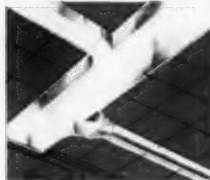
Leeson Steel Products, Inc., Dept. AE
Subsidiary of Thor Corporation, Chicago 50, Illinois
2115 So. 54th Avenue, Chicago 50, Ill.

Gentlemen: I'd like to see how the new THOR Built-in Electric Range will help sell more homes for me.

Name.....
Firm.....
Address.....
City..... Zone..... State.....



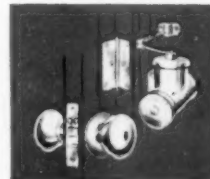
Aluminum siding is easy to work with and install. Won't rot, warp, shrink, swell or crack. Fire resistant.



Aluminum ductwork is easy to handle and install. Won't rust, is a natural insulator, minimizes heat loss.



Aluminum combination doors are rustfree, rotproof, attractive, convenient. A mark of quality in modern homes.



Aluminum hardware's lustrous natural color in a wide range of finishes matches all decorative schemes.

ALUMINUM THRESHOLDS HELP YOU BUILD BETTER, SELL QUICKER!

Aluminum is the modern building material with a "two-way" advantage that benefits both builder and buyer. For example—lustrous, attractive aluminum thresholds are the first assurance of quality construction in entering a new home. They are economical in first cost, easy to install, require no maintenance and are available in a variety of Reynolds designs that provide a type for every entrance or between rooms application—including weatherstrip thresholds.

Several makes of aluminum weather-stripping are also available to complete the

near-perfect door seal provided by Reynolds Aluminum thresholds. Weather-stripping made of Reynolds Aluminum has all the usual advantages plus the added benefits offered by attractive, low-cost, non-rusting aluminum.

Remember—aluminum's strength, light weight, ease of fabrication with regular carpenter tools, and long life—now available in most standard metal building products—help you build better homes. These homes sell easier and faster because buyers quickly recognize that they are getting *more for their money in aluminum.*

Send for free Architectural Aluminum catalog. For quick reference, see catalog ^{5a} in Sweet's Architectural File.

See "Mister Peepers" Sundays on NBC-TV. Consult local listings for time and station.



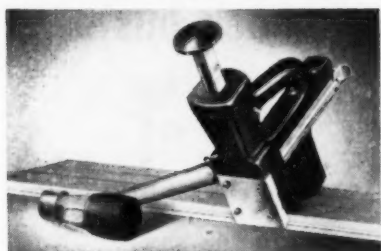
NEED HELP?

For help on aluminum building material problems, call your nearby Reynolds Architectural Distributor or Reynolds office listed under "Aluminum" in your classified telephone directory or write Reynolds Metals Company, 2530 South Third St., Louisville 1, Ky. Remember—Reynolds supplies only the aluminum mill products for many building applications. We will be glad, however, to send you names of manufacturers of all types of standard aluminum building products, like those shown above. We will also be pleased to send you the names of architectural metal fabricators who can perform aluminum work to your specifications.

REYNOLDS ALUMINUM

MODERN DESIGN HAS ALUMINUM IN MIND

NEW POWERNAIL SPEEDS PRODUCTION



Use This Machine to:



- Nail T&G Flooring
- Draw Strips Tight
- Drive all nails 45°
- Expand Production
- Nail & Set One Blow

Hardwood flooring can now be laid better, in a fraction of the time formerly required! The NEW POWERNAIL Model 145 cuts nailing time up to 60%. No more wasted nails or tedious hand setting. The POWERNAIL magazine holds 100 flooring cleats.

POWERNAIL eliminates split tongues, cupping, warping and reduces surface marring and erratic nailing. Can't rust, clog or jam. Built for long dependable service.

POWERNAIL COMPANY
961 MONTANA STREET • CHICAGO 14, ILLINOIS



WITH **Jiffy**

SAWHORSE BRACKETS

- NO NAILS
- NO BOLTS
- NO SCREWS

All welded construction. Use any 2x4s for legs and crossbar.

Set up or knocked down instantly. Easy to move from job to job, and easy to store.

For sale in most hardware and lumber stores. If your dealer cannot supply you, write us direct.



At Work



At Home



At Church



GRAND HAVEN STAMPED PRODUCTS CO.
GRAND HAVEN, MICH.

FEBRUARY 1954

Letters...

(Continued from page 52)

the truth about trade-ins still going strong

Sir: The reprint of the article on trade-in selling of houses has been read with great interest by several on our staff.

They join me in commending you on the article and thanking you for sending it to us.

Edwin R. Butler, Publicity Manager,
Timber Engineering Co.,
Washington 6, D. C.

long-term subscriber renews once again

Sir: I have just begun my seventh year as subscriber to *American Builder* and each issue has meant dollars plus. I particularly like the April "Directory" issue.

Robert K. Martin,
Northfork, W. Va.

"back of the yards" area meets housing challenge

Sir: In July, 1953, a meeting on conservation was called by the Back of the Yards Council. Some 71 people representing the building industry, savings institutions, industry, labor and others attended. A progress report of this program to date has just been issued.

The program is organized on a community level with the people of the community and the forces representing them doing the job without outside help. It is predicated on the belief that the soundest conservation program must be conducted by the residents of each home in the community.

The program's emphasis is centered on: (1) Remodeling of existing homes by the owners with our savings institutions providing loans; (2) Legal conversion of empty stores into flats; (3) A complete title and tax search of a specific area, separated according to whether taxes are paid or delinquent, and if the latter, whether owners can be located for the purpose of new building; (4) Purchase of land and the building of new homes.

Joseph B. Meegan,
Social Action Committee,
Back of the Yards Council,
Chicago, Ill.



Sliding doors operate more smoothly if you insist upon hardware with a pair of 4-wheel hangers. Eight wheels per door... that's Kennatrack!

Kennatrack
SLIDING DOOR
HARDWARE

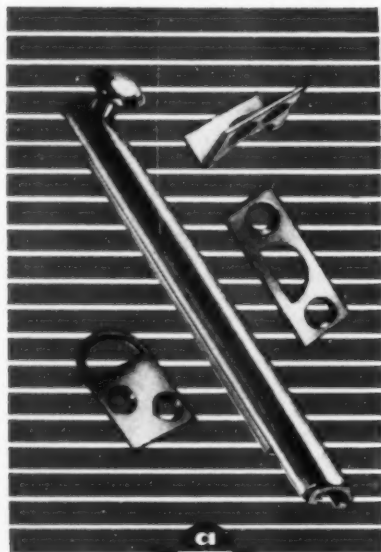


Secret of quick, trouble-free sliding door installations is selecting the right type of hardware. SEND FOR FREE COPY of the KENNATRACK "Buyer's Guide." A book that takes the guesswork out of sliding door installations! Kennatrack Corporation, Elkhart, Indiana.

The New
**CONCEALED-GUIDE
 SURFACE BOLT**

NO. 354

by
ADAMS-RITE



The mark of excellence

The ultimate in streamlined appearance... and made of solid brass, of course.

This is the new Adams-Rite No. 354 Surface Bolt. It is mounted completely on concealed guides—even the screws are not visible after installation.

Designed especially to blend with contemporary architecture. It is unusually strong, made of solid brass throughout and hand polished. Available in 1/2" widths and 4", 6" and 8" lengths.

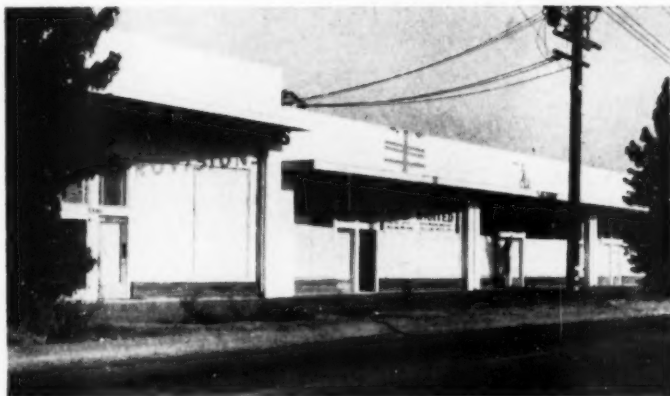
WRITE FOR COMPLETE INFORMATION



SPECIALIZED LOCKS AND BUILDERS' HARDWARE

56

**how small commercial builder
 creates business**



A great sales feature of some of the Hixon buildings is their convertability. The building shown is rented as one industrial unit. Note the store fronts, however. The building can be divided into many units if the future warrants

Don't wait for business to come to you! There is more potential business for every builder if he looks for it. It is a case of creative selling. That is the way Hixon Brothers of Van Nuys, California, see the sales market.

Hixon Brothers is a partnership consisting of L. C. and H. W. Hixon who have been in the construction business for 20 years. Their specialties are commercial and industrial buildings. But it is their ability to anticipate potential business and offer potential customers technical and business service that makes them unique.

Their success lies in acquiring and applying "know how" in putting deals together. The manufacturer, the veterinarian, and the concrete man, whose stories are told in the accompanying case histories, were all experts in their own businesses. But they did not know how to solve their building problems. The Hixons did know how to solve

them. That is why the Hixons got their business.

Sometimes the Hixons start with a tenant who wants a location for his business. Sometimes it is a site owner who wants to put his ground to work. Regardless of how the deal originates, the essential element is that Hixon Brothers deliver a package so complete that all of the guesswork and most of the thinking is taken out of it for the renter and the property owner.

When, for example, the Hixons approach the owner of a vacant lot, they say in effect, "Here is a design for a store which will rent quickly. Here is what it will cost to build. Here's what the loan will be. You will be able to get this much rent for it. Here are the figures showing the return you get on your investment."

The owner cannot help but be impressed, especially when a profit seems probable. The chances are
(Continued on page 58)



Rendering of an office and manufacturing building that is now under construction and is typical of the kind of work Hixon Brothers do

AMERICAN BUILDER



The Kay kitchen features electric refrigerator, dishwasher-sink with electric food-waste disposer, and electric range—so that the homemaker can be modern . . . cook electrically! Each kitchen is designed to save steps and work.

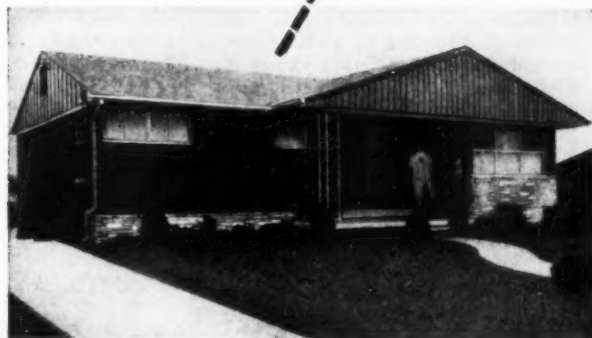
What really sells a house?

When "lookers" turn into buyers, their eyes focus on the features of the house.

That's when an *Electric Range* in the kitchen can help you clinch the sale. When home buyers see that, they realize that here is cooking equipment at its best, that it means economy and ease of operation, a clean kitchen as well as a cool one. Instinctively they feel that the rest of the house must also have the best of everything. They're well on the way to being sold!

Builders of homes in every price bracket, in all parts of the country, are making full use of the *Electric Range* as a selling feature. Are you?

More builders every day
are installing **ELECTRIC
RANGES**



The Kay Construction Company of Washington, D. C. offers different plans, and wide variety of interior design. But Builder Jack Kay says: "When I began to feature *Electric Ranges*, I found the rest of the selling job was easier. Women almost always prefer this type of range. When they see it in the kitchen it 'builds up' the rest of the house in their eyes."

ELECTRIC RANGE SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ADMIRAL • BENDIX • COOLERATOR • CROSLY • DEEFPREEZE • FRIGIDAIRE
GENERAL ELECTRIC • GIBSON • HOTPOINT • KELVINATOR • MAGIC CHEF
MONARCH • NORGE • PHILCO • WESTINGHOUSE



"MODERNFOLD
will help us sell our homes"

... National Homes Corporation
President, James R. Price

"We selected 'Modernfold' doors to be included in the 'Ranger' and the 1954 Custom-Line because they give complete accessibility from floor to ceiling in closet areas, offer enhancing decorative value, and are the most trouble-free folding or sliding door on today's market," says James R. Price, President of National Homes Corporation.

"'Modernfold' will help us sell our homes because they contribute to the happiness of a National Home

owner—and happiness is what we are selling."

Not only do "Modernfold" doors add sales appeal—they speed construction as well. They come complete, ready to install in 30 minutes or less. No exact fitting, no extra hardware needed. No need to "build out" or "build down" with "Modernfold" (note picture).

For full details, see our distributor—listed under "doors" in your city classified directory. Or send coupon.

Sold and Serviced Nationally

NEW CASTLE PRODUCTS, INC.

New Castle, Indiana

In Canada: New Castle Products, Ltd., Montreal 6

Copyrighted New Castle
Products, Inc., 1954



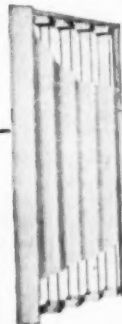
NEW CASTLE PRODUCTS, Inc.
P. O. Box 851
New Castle, Indiana

Please send full details on "Modernfold" doors.

Name.....

Address.....

City.....County.....State.....



"Modernfold's"
double-strength
frame insures
customer
satisfaction.

There's more steel in "Modernfold's" sturdy frame. Double box-like hinges prevent warping and twisting, assures dependable, even opening and closing.

commercial builder

(Continued from page 56)

that the owner will seriously consider the investment. The Hixon's experience is that they usually do consider it seriously.

Naturally, the Hixons must know what they are doing when they persuade people to build stores and manufacturing buildings under the assurance that they will rent quickly and profitably. They must know where to get the construction money and final loans. They must know where to find a buyer if the building is to be sold upon completion. These things are learned through close observation and study of the real estate market as it pertains to commercial and industrial fields.

Any builder can acquire this knowledge about his own market by following, over a period of months, all of the transactions involving this type of construction, noting the rents and sales prices, etc. He can get studies from his chamber of commerce. He can get help from banks who can show the types of businesses needed in the community. He can form his own conclusions by making a study of the development of shopping centers and manufacturing districts in other areas.

The Hixons follow this procedure. They do not get all of their business from people who drift into their offices or from chance encounters, although these contacts are, of course, valuable and are not to be underestimated. The Hixons have established contacts with realtors, with local chambers of commerce and with banks. They watch the newspapers for ads looking for business sites and for business sites that require tenants. They also do some advertising.

One of the problems that the Hixons have in this type of work deals with financing. Les Hixon feels that mortgage money is much more difficult to get on commercial and industrial work than it is for residential work.

He finds it difficult to understand why lending institutions seem anxious to loan money on homes built in an area where there is no industry and then seem reluctant when asked to loan money on industry

creates business

to support these home owners. He feels that part of the reason for it is that many lending institutions do not have the personnel familiar with commercial and industrial building.

The Hixons, however, take an optimistic view. They have found that the lending institutions have begun to change their minds. Little by little, lenders are beginning to have confidence in the Hixon's judgment. The lenders have found that each of the projects on which the Hixons requested loans came out exactly as they had forecasted.

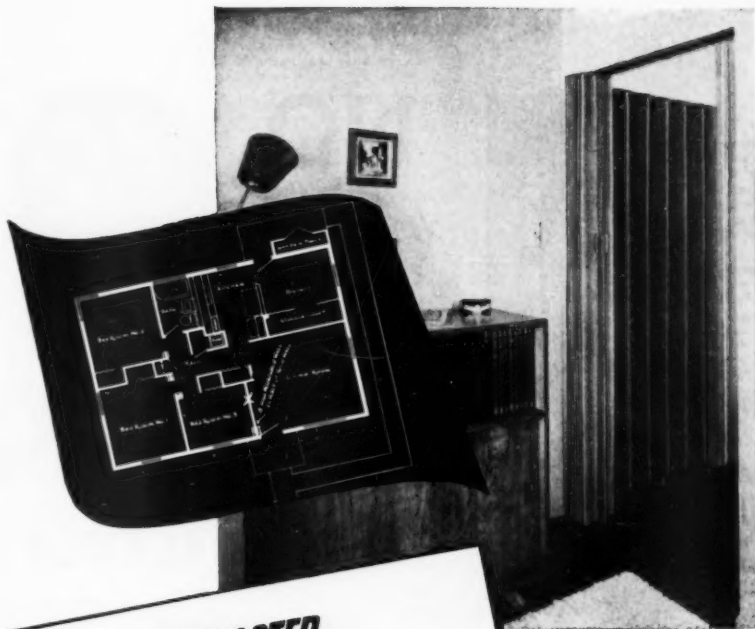
Here's how creative selling works—three case histories from Hixon Brothers files:

Example 1. The case of the maker of blinds. He said that he wanted to build a factory to be used for the manufacture of venetian blinds. He owned a lot, he said, but was not in a position to finance such a building project. The Hixons suggested that he sell the lot he owned. Then the Hixons located another lot suitable for manufacturing. The Hixons arranged for the financing and put up the building themselves. Then they sold the building to an investor who wanted to own income property. The investor gave the manufacturer of venetian blinds a long-term lease. The Hixons created business for themselves. Their two customers are happy with the deal.

Example 2. The case of the satisfied veterinarian. One of the Hixon Brothers talked to a veterinarian one day and found that he was not satisfied with his present business location. The veterinarian said that he could afford to pay double his present rent or \$500 monthly if he could find the right location for his business. The veterinarian was taken to look at possible sites. He chose the first lot looked at. The Hixons saw the owner of the lot and told him that they had a tenant willing to pay \$500 a month for space in a building if it were constructed on that site. When told that the Hixons would prepare plans for the building and arrange financing, the owner of the lot agreed. The owner now has improved property

(Continued on page 60)

FEBRUARY 1954

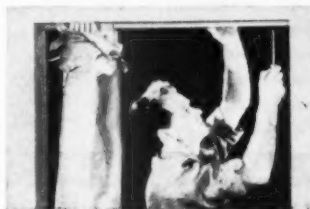


"SPACEMASTER"
made our compact floor
plan possible...and cut
construction costs too!"

...builder
Bill Schleicher
Paul E. Schleicher
and Sons

By doing away with conventional hinged doors, the plan shown above achieves maximum convenience with a minimum of space waste. It was developed by Paul Schleicher & Associates for two successful rental projects—the 270-unit Woodmar in Hammond, Indiana, and the 330-unit Aetna Manor in Gary—and made possible by the use of "Spacemaster" folding doors. Says Mr. Schleicher, "Using 'Spacemaster' doors, we gave people the kind of house they wanted—and cut construction costs too."

"Spacemaster" folding doors are priced so low that they *actually cost less than a wood door and necessary extras*. And you save on preparation costs, installation time and labor too. No trim, no wood casing, no fitting, morticing, planing or sanding needed with "Spacemaster" doors. They go up with eight screws in ten minutes. Two heights; 6' 6" and 6' 8½". Three maximum extension widths: 2' 6", 3' 0" and 4' 0". Textured vinyl fabric covering in popular "decorator gray" blends with any color scheme.



here's how easy it is to
install "Spacemaster"!

Step 1: Cut drilled track to opening width. Mark and drill holes in header.

Step 2: Slide track onto door. Lift into opening and insert screws.

Step 3: Screw 4 spring-steel clips to jamb. Snap jamb post over clips. That's all. Average tested time for entire operation—11 minutes.

COPYRIGHTED BY NEW CASTLE PRODUCTS, INC. 1954

Find out how you can cut costs with "Spacemaster." See your building supply dealer or local "Modernfold" distributor. Clip coupon for more information.

SPACEMASTER folding doors
by

NEW CASTLE PRODUCTS, INC.
New Castle, Indiana

In Canada: New Castle Products,
Ltd., Montreal 6

modernfold
DOORS

P. O. Box 951, New Castle, Indiana
New Castle Products, Inc.

Gentlemen: Give me full information on "Spacemaster" doors.

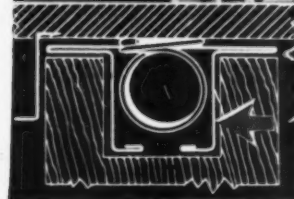
Name.....

Company.....

Address.....

City..... County..... State.....

THE original SASH
BALANCE



NO
building other
goes farther



MASTER
TRADEMARK
No-Draft
SASH BALANCE

ECONOMY

The MASTER Unit offers a superior Balance...PLUS...Full Jamb Weatherstrips...at no greater cost than most conventional balances alone.

The easiest to install . . . no setting of pull mechanisms or adjustment of tension required . . . it automatically adjusts for expansion or shrinkage of sash.

QUALITY

Manufactured of heavier gauge . . . high quality spring aluminum.

Incorporates the finest workmanship and best functional design.

Larger, smoother acting steel sash springs.

Tried and tested in over 4 million windows for over 13 years. Proved in University of Minnesota tests.

SUPERIORITY

In Design . . . Quality . . . and Performance, its Superiority over inferior imitations is well established.

The most imitated . . . but never duplicated . . . product of its kind in the world.

THE STANDARD OF QUALITY

This Channel is designed to avoid any binding or sticking of the sash — especially where shrinkage takes place.

This wide contact area . . . a NO-DRAFT Exclusive . . . assures constant weatherseal . . . regardless of sash shrinkage.

SEND FOR FREE CATALOG

MASTER METAL STRIP SERVICE, INC.
1720 North Kilbourn Avenue Chicago 39, Illinois



builder creates business

(Continued from page 59)

yielding income; Hixons created business for themselves; and the veterinarian is a satisfied renter.

Example 3. A case of concrete facts. A man had a piece of unused property adjoining his concrete yard. The Hixons called on him one day and asked him if he would be interested in doing anything with the property. The owner said that he would like to get some income out of it, but that he needed his capital for his business and did not want to risk any great amount of money on a new venture. The Hixons showed the owner a plan for a light manufacturing building to cost about \$30,000. They showed him that a loan of \$18,000 could be arranged at 5½ per cent interest to be paid off in 11 years at about \$166 a month. They showed him that he could readily rent the building for about \$700 to \$800 a month. Presented with these figures, the owner changed his mind and agreed to put up \$12,000. The building is now under construction.

Red Devil
WOOD SCRAPERS

Longer handles
for **Easier** handling
Supersharpest Blades Cut Waste Motion



Finest carbon steel blades are instantly replaceable. Push in new blade—old one slides out easily. Stock genuine Red Devil Blades for replacement.

7976



#CS-1
carbide
tipped

A Product of
Red Devil Tools
IRVINGTON 11, N. J., U. S. A.

AMERICAN BUILDER



In this installation, hanging roller type, floor-to-ceiling panels with deep valances provide generous closet space, eliminate a door clearance problem.

In this installation, the versatility of these doors is demonstrated by their use on both lower wardrobe and overhead storage areas.

you'll find it in
GLIDEBALL
 Sliding Doors

They're designed to install in a Clo., two, three and they're not (A) You track is easily mounted on ceiling with screws. (B) Aluminum brackets are mounted to floor. (C) Doors are placed in upper track. They are used in wardrobe.

They save construction costs and solve storage problems... Everybody want that double wardrobe and constructed easy for the builder. Low initial cost saves money for the owner. Happy home, get more valuable and accessible closet and storage space.

They offer unlimited decorating possibilities... They're used at home in any room in any type of structure. Glide-all Sliding Doors can be painted, papered, lacquered, varnished or stained in natural finish to match or complement the decorative scheme of any room.

There's a type for every type of construction... Choose from 6" floor-to-ceiling or 6 1/2" standard height, overhead or bottom roller types, in modern flush or recessed panels. Take a look at your construction problems, then take your choice.

Write today for new low price catalogs and specifications bulletins

GLIDE-ALL SLIDING DOORS ARE A PRODUCT OF
WOODALL INDUSTRIES INC.

1000 W. 10th Street
 4 Woodall Plants Coast-to-Coast
 Save You Shipping Time and Cost!
 Write to Dept. 1000
 CHICAGO, 1000 W. 10th St., MOBILE, AL., TAMPA, FLA., P.O. BOX 875, NEW YORK, 10010, SAN ANTONIO, TEXAS, N.Y. • SAN FRANCISCO, 1975 CALIFORNIA, SAN



In this installation, bottom roller type panels provide unobstructed, easily-accessible, wall-to-wall closet area.



In this installation, the floor-to-ceiling, living room wardrobe panels are beautifully wallpapered to carry out the decorative scheme.

**use your
1/4" drill...**



PAT. PEND.

WITH

RCS

Korner King

Reg. U.S. Pat. & Tm. Off.

PLUS

RCS

Super Speed
BITS

Reg. U.S. Pat. & Tm. Off.

**drill up to
2 9/16" diameter hole
IN THE HARDEST
WOOD!**

Simply snap the KORNER KING right angle attachment on your present heavy duty drill (1/4" or larger). LOW side gives you 80% more power at half rpm . . . HIGH side doubles your drill's rpm. Drill holes up to 2-9/16 inch in diameter in the most inaccessible spots — between joists and studs, in tight corners, etc. All with 100% safety because an exclusive RCS Torque Release eliminates dangerous torque reaction if drill jams . . . drive shaft continues turning if load or obstruction ever locks driven shaft or bit.

RCS SUPER SPEED BITS range in size from 5/8" to 2-9/16" diameters. Their new, simple design requires less torque, needs less thrust. Fast acting, cool running and long lasting, RCS SUPER SPEED BITS assure economical operation — as well as low initial cost. They're easy to sharpen, inexpensive to replace.

Extra extensions are available for these new RCS SUPER SPEED BITS which permit drilling holes, in perfect alignment, to just about any length.

If you use a drill, learn more about how RCS KORNER KING and RCS SUPER SPEED BITS can increase its efficiency and versatility.

WRITE DEPT. AR-2 TODAY FOR COMPLETE DETAILS

R.C.S. TOOL SALES CORPORATION
JOLIET, ILLINOIS, U.S.A.

how fast is

Time and motion studies show remarkable comparisons between portable power tools and traditional hand tools

For a long time the various manufacturers of portable power tools have been making claims and counter-claims for the speed and work-saving factors of their electric machines as compared with hand tools. Now one of these manufacturers, Porter-Cable, has used the impersonal eye of the camera to record exactly how much faster a power tool is than its hand equivalent, and how much physical motion or labor is involved in the use of each.

A tiny surgical light bulb was attached to the workman's hand with flesh-colored adhesive tape, and fine wires were run up his sleeve to a battery in his inside coat pocket. The lights were turned off in the workshop while the operator performed a particular task with the electric tool. As soon as he started, the camera lens was opened for a time exposure. A stop watch timed the test. While he was doing the job, only the light streak was recording on the film. The instant he finished the task, a flash bulb was fired off to catch the whole picture—

Photos and equipment courtesy of Porter-Cable



HAND SAW requires 26 seconds to cross cut 1x10 pine plank. Operation requires 73 feet of muscle-powered hand travel as shown by tiny light on carpenter's finger. Sawing uses more human energy than any other building operation

ELECTRIC SAW cuts through same board in 9/10 of a second, 28 times faster than hand method. Brief light streak shows that hand travels only 10 inches and uses 87 times less effort



a power tool?

operator, tool, work being done. The result was a white line track traced by the light bulb, showing the exact pattern of movement of the operator's hand. Thus was recorded the amount of motion and time needed to do the job by electrical power.

Next, the same performance was carried out under identical conditions and for precisely the same task, but using the corresponding *hand* tool.

This procedure produced an accurate comparison. By blowing up the pictures and carefully measuring the lines of light, it was possible to compare the amount of hand motion between electric and hand tools, and also to get an approximate indication of the amount of muscular energy which had to be expended in each case. The time comparisons recorded by the stop watch were simple to calculate. Each performance was run through three times to get an accurate average.

When the three repeat runs were being made with the electric tool's, there was little or no increase in time on the successive runs, which indicated practically no loss of efficiency due to fatigue. In timing the repeat runs on the hand tools, each successive run was noticeably longer because of fatigue slow-down. No attempt was made to plot a fatigue curve for a full day of electric work vs. hand work.

(Continued on page 64)



HAND SANDING makes tracer light build up a strenuous pattern of "spaghetti" on oak stair tread being smoothed with block and sandpaper. This particular operation took 8 minutes, not including necessary pauses for rest

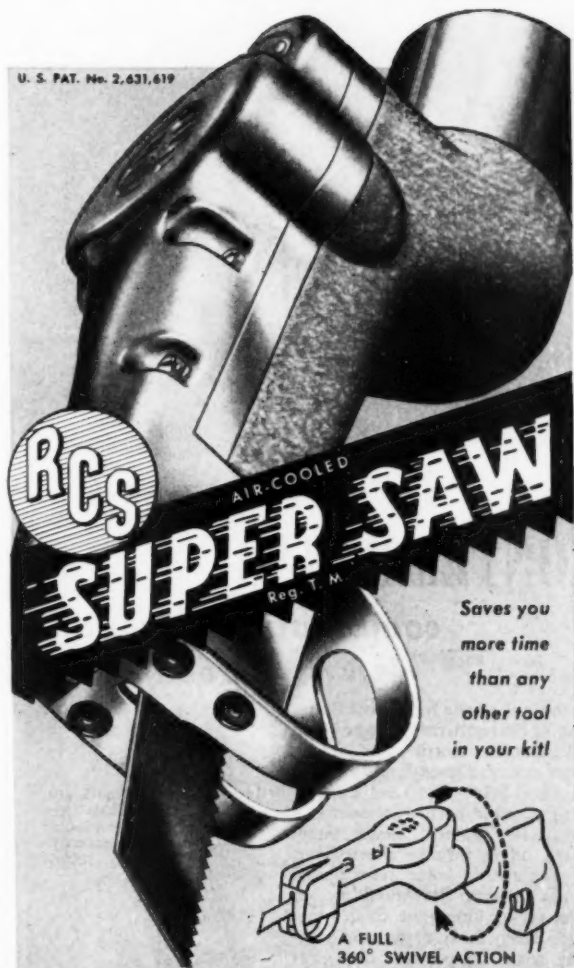


ELECTRIC SANDER, using endless abrasive belt, does exactly same amount of work in two minutes, four times faster than hand sanding. Operation takes only a few strokes

FEBRUARY 1954

DESIGNED, BUILT and GUARANTEED

for constant, heavy-duty service!



Saves you more time than any other tool in your kit!

A FULL 360° SWIVEL ACTION

A "lifetime" tool with built-in blower, ball and roller bearings, sealed lubrication, etc. Safe—(two-handed operation required). 360° swivel action for maximum versatility. Blades to cut everything including stainless steel. Fits your present 1/4" heavy-duty drill.

RCS TOOL SALES CORPORATION

JOLIET, ILLINOIS

Gentlemen:

Please send us Bulletin L-2 and the name of the nearest Super-Saw distributor.

Name _____

Address _____

City _____ Zone _____ State _____

ANOTHER

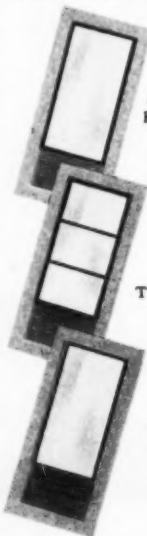
BEST SELLER

BY
WABASH!



the Continental
CONTEMPORARY
combination storm and
screen door

Here's one of the most interesting and architecturally-appealing combination storm and screen doors ever designed for the popular-price field! The new Continental Contemporary presents a delicately "fluted" lower panel which offers infinite possibilities for decorative color treatments. Storm inserts are available in three styles: One-light, flush type; three-light, flush type; and one-light with the popular new protruding "picture" frame. Combining beauty with value, the Contemporary will enrich the appearance of any home, old or new. Continental Contemporary doors are available in all standard stock sizes through retail lumber dealers.



One-Light,
Flush Type
(double
strength
glass)

Three-Light,
Flush
Type

One-Light,
"Picture"
Frame
(double
strength
glass)

Continental
Product

MANUFACTURED BY

THE WABASH SCREEN DOOR COMPANY
Minneapolis • CHICAGO • Memphis

how fast is a power tool?

(Continued from page 63)



FINISH SANDING kitchen cabinet door by hand takes 4 minutes

ORBITAL SANDER smooths same door in 40 seconds, six times faster than by hand



BRACE AND AUGER take 36 seconds to drill 7/8-inch diameter hole through 4 inches of wood. Coil of light shows laborious cranking action necessary. Hundreds of holes must be drilled in contemporary house for piping, wiring and fixtures

ELECTRIC DRILL with 1/2-inch chuck drills same size hole in 6 seconds, six times faster than hand method. Short light streak proves minimum manual effort. Electric drill is oldest and most popular of all portable power tools



EGGBEATER DRILL takes more than 100 hand revolutions and 26 seconds to make 1/4-inch hole in wall of steel conduit box



ELECTRIC DRILL with 1/4-inch chuck pierces same box in two seconds, 13 times faster. Short light streak indicates brief effort



HAMMER AND CHISEL is traditional method of cutting out recesses on door and jamb to seat three hinges flush with edge. Position of each hinge must first be carefully measured. Skill and labor required for operation are indicated by complicated light tracks. Time for average 15-door house is four hours

ELECTRIC ROUTER with hinge butt templet does same job in 22 minutes, 11 times faster. Router also rabbets, dados, flutes, inlays, dovetails, coves, molds and relieves. Interchangeable motor can be transferred to plane or shaper, saves cost of two extra motors



HAND PLANE is used here to trim down storm sash to fit window opening. Manual labor required to fit storm sash and screens for average 16-window house takes 5 hours and 20 minutes. Bottom of frames must be beveled to fit sill

ELECTRIC PLANE is 20 times faster. Fits all 32 frames in 16 minutes. Tracer light reveals that 80 strokes are necessary with hand plane to equal one stroke of electric plane. The tool cuts level or bevel, also serves as jointer and weatherstrip groover

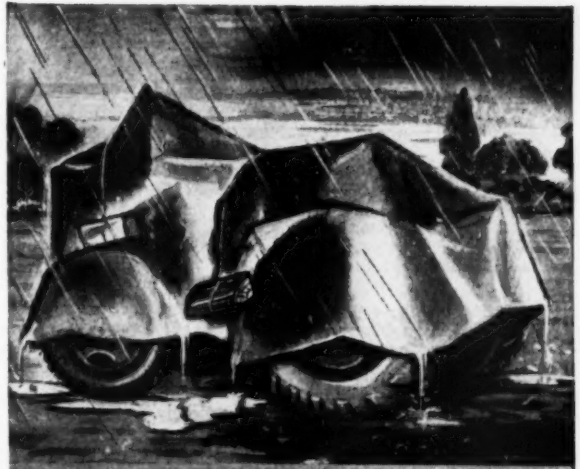


(Continued on page 66)

FEBRUARY 1954

Builders!

PROTECT YOUR EQUIPMENT AND MATERIALS AGAINST BAD WEATHER



with SISALKRAFT!

Genuine Sisalkraft offers low cost protection against water, moisture, drafts, dust.

SISALKRAFT HAS DOZENS OF OTHER USES
Builders use **MILLIONS** of sq. ft. **EVERY WEEK**—

- As waterproof membrane between fill and slab
- Under all flooring
- For curing and protecting concrete
- For "closing in" jobs in progress
- For sheathing
- and for other uses

Available at Lumber and Building Supply Dealers everywhere. For free samples and information, write Dept. AB-2, Attleboro, Mass.



AMERICAN
SISALKRAFT
CORPORATION

ATTLEBORO, MASS. • CHICAGO 6, ILL. • NEW YORK 17, N.Y. • SAN FRANCISCO 5, CALIF.

Are builders missing a bet?

You know from experience that you sell a house by selling its features. You also know that the kitchen contains some of the most important selling features in the house.

There was a time when a builder got by with a modern range in the kitchen as a selling feature. Then he began to include a refrigerator and, one by one, other appliances. Why? Because his customers demanded them!


Now customers are demanding freezers. More and more homemakers every year want this appliance that saves them time, money and work, allows them to serve better meals, at lower cost. They want to "be modern—live electrically." Last year, more than 1,000,000 freezers were installed in American homes.

That's why you're missing a bet unless you design your kitchens with space for a freezer—allowing, too, for the weight of this appliance and its contents, in designing the load-bearing strength of the floor.

Don't miss out on this important selling feature. If you need more information, write to any of the manufacturers listed below—or see their dealers in your community.

FARM & HOME FREEZER SECTION
National Electrical Manufacturers Association
133 East 44th Street, New York 17, N. Y.

ADMIRAL • BENDIX • COOLATOR • CROSLY • DEEPFREEZE
FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT
INTERNATIONAL HARVESTER • KELVINATOR • NORGE • PHILCO
QUICFREZ • REVCO • SEEGER • WESTINGHOUSE



Miller

SLIDING GLASS DOORS
reduce installation costs

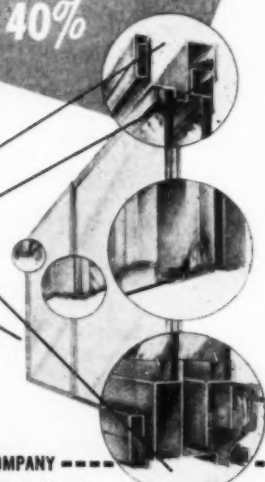
40%

SIMPLICITY OF
INSTALLATION saves
TIME and MONEY

- Jamb and headers are all full width of a standard stud
- Flat surface on the reverse side of jamb, header and threshold
- Less expensive trim

EXTRA FEATURES OF DESIGN

- Center and corner load-bearing columns
- Quality hardware
- Automatic weather stripping



--- FRANK B. Miller MFG. COMPANY ---
3216 Valhalla Drive, Dept. 103, Burbank, California

Please send me complete information on how to save money on my sliding glass door and window installations.

Name _____
Street Address _____
City _____ Zone _____ State _____

how fast is a power tool?

(Continued from page 65)



HAND SHAPER (hidden by light pattern) requires 5 minutes to put single 1/2-round edge on stair tread. Hand shaping is almost a lost art. Old-time carpenters used an assortment of variously shaped blades in a narrow plane-like tool to mold and edge on wood. Most molding and shaped woodwork now is bought ready-cut from millwork shop

ELECTRIC SHAPER does same job in one pass, is more accurate and 25 times faster. Machine cuts all kinds of molded edges. Also chamfers, rabbets, tongues, grooves and serves as a jointer. Builder can make all kinds of fancy trim right on job as needed. Saves time and cost of frequent purchases from millwork shop



STAIR STRINGERS must be notched out to hold ends of risers and treads to prevent squeaking, warping, crackling and breaking off of lip of tread. Hand operation requires drilling a hole with brace and auger, making four cuts with hand saw, chiseling out two notches. Composite photograph records complicated maneuvers involved. For a flight of 13 steps, this series of operations is repeated 26 times; total time is four hours

STAIR TEMPLAT AND ROUTER notch two 13-step stringers in 15 minutes. Templet adjusts to any size step and, after plotting first position, is self-indexing for all additional steps, thus reducing layout time to 5 1/2 minutes; setting tools, 3 minutes; routing, 6 1/2 minutes; complete flight, 15 minutes





Floor: Jackstraw K655.
Counter top: Gold Seal
Vinyl Top 3009. Gold Seal
Congowall W36.

You can make
rooms look bigger
with Gold Seal Nairn
Inlaid Linoleum

"Jackstraw"

TRADE MARK

Have you ever seen a floor make a small room look so big? The colorful Jackstraws seem to push back walls and let in light. *Every* house-hunting couple is looking for extra large, airy rooms. You can convince them they've found their dream house in *your* house . . . with the help of "Jackstraw" in Gold Seal Inlaid Linoleum.

Look at the talking points it gives you! "Jackstraw" makes decorating easy . . . in every pattern there are four different

colors to work with! It's practical, too . . . long wearing, grease resistant and easy to clean. It's so resilient customers notice the comfort underfoot. Next time you build, make your home easier to sell. Specify "Jackstraw" in Gold Seal Inlaid Linoleum. You *know* it will be a success! By the yard or in 9" tiles it offers you the famous Gold Seal guarantee of satisfaction or your money back. Mail coupon for detailed information . . . and for free Gold Seal sign to use in model homes.



**GOLD
SEAL**
FLOORS and WALLS

Congoleum-Nairn Inc., Kearny, N. J. ©1954

Builders' Service Dept., Congoleum-Nairn Inc.,
Kearny, N. J. Send me more information
Send me free Gold Seal sign AB-3

NAME _____
ADDRESS _____
CITY _____ STATE _____



Ceiling treatment in kitchen conforms to adjoining dining room. Note planter over cupboards on high wall

AMERICAN BUILDER BLUEPRINT HOUSE

here's a low-cost modern with luxury features

BUILDER:
J. A. Peterson, Kansas City, Missouri

ARCHITECT:
Everett H. Rothrock, Kansas City, Missouri

SQUARE-FOOT AREA	House	948
	Porch, 1/3 area	80
	Garage, 1/2 area	144
	Total area	1,172

COST, per square foot

	512
--	-----

Front, side and rear elevations show effective window treatment. Note the high strip windows in the bedrooms and in the bath

THIS medium-price three bedroom house includes many features not usually found in houses of this price class.

These features, which add to the comfort and the pride of ownership of the home owner, are seven in number. They include birch cabinets in the kitchen with a planter on the high wall above; sloping beam ceilings in principal rooms; wide-angle eaves; a full dining room that can be used as an extension to the living room or kitchen; a large breakfast bar which is a continuation of the kitchen counter; an all-vertical red-wood board and batten exterior; and casement, awning and fixed California-type windows. A wing wall extension to the front makes the house appear wider than it is. The top cap member of this wall is increased in width and perforated at regular intervals to receive flower pots.

The builder, who has been operating less than two years, has 24 houses under construction with a total of 72 contemplated for the area. Two types of floor plans are now used: one with the end of the house facing the street as shown; the other, with the broad side of the house to the street, has a garage adjoining but the breezeway is eliminated. Five exterior design variations lend variety to the grouping of houses on any one street.

The floor plan integrates the house, breezeway and garage efficiently, with the entrance to the living room in the center of the breezeway, thus providing a sheltered approach. Living, dining and kitchen spaces, while actually separate rooms, are so arranged that in





Ceiling of built-up wood beams on four-foot centers follows slope of roof in living area

reality they become one large area. An effective quiet zone for a house of limited square-foot area is achieved by grouping the bathroom and bedrooms in one end, and connecting the grouping to the living room with a short hall.

Foundation for the house is an eight-inch-thick concrete block wall placed on 8x16-inch poured concrete footings. The structure above is entirely frame. The finished floor is approximately 18 inches above grade with a minimum two-foot clearance under the floor joists for a continuous crawl space. This space is used for the distribution of warm-air supply and return ducts. Frame walls are faced with 1x12 vertical redwood boards. Joints are covered with 1x3 battens. Two-inch insulation is placed between studs. The interior is drywall. The ceiling of the

living area follows the slope of the roof with 4x8 exposed beams approximately four feet o.c. placed against the bottom face of the rafters. The tar and gravel roof is placed over plywood sheathing.

BRAND NAME PRODUCTS USED

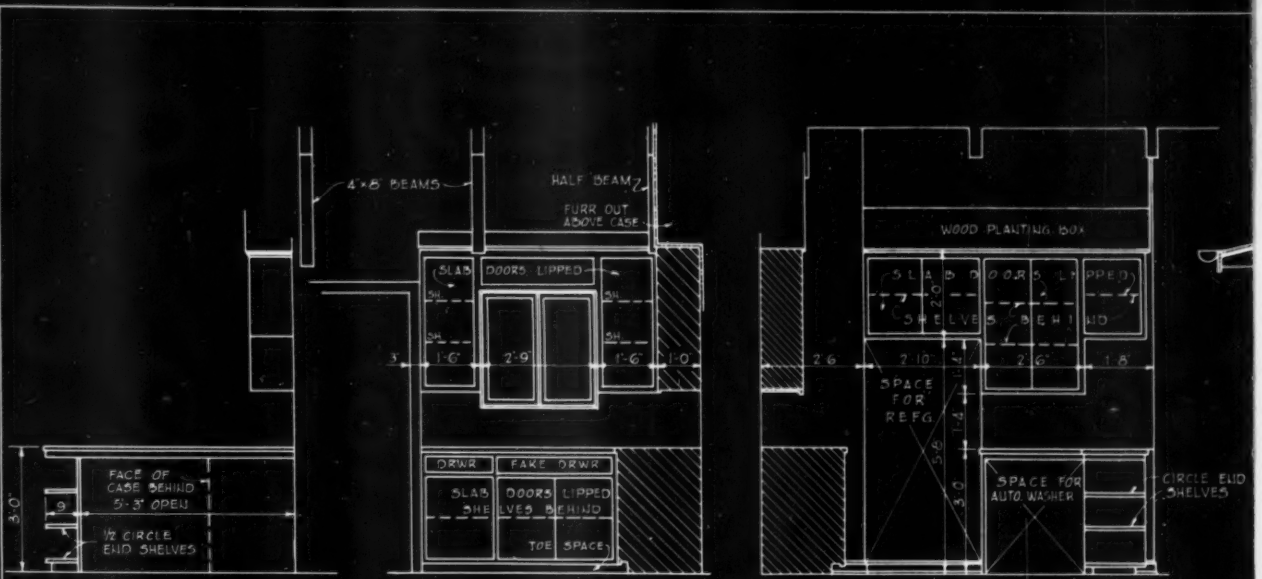
American Cabinet hardware
 American Standard plumbing fixtures
 Andersen Flexivent windows
 Armstrong asphalt tile
 Certain-lead rigid insulation
 Fiberglas insulation
 Kirlin recessed electric fixtures
 Miami-Carey plate glass medicine cabinet
 Minneapolis-Honeywell regulator
 Mission water heater
 Overhead garage door
 Payne warm-air furnace
 Pratt & Lambert paints
 Schlage hardware
 US Gypsum plywood
 Warren folding slat door

For complete one-quarter-inch working plans of this house, write American Builder Home Plan Service, 79 West Monroe Street, Chicago 3, Illinois

See Gatefold
 Blueprint for
 drawings—
 quantity list

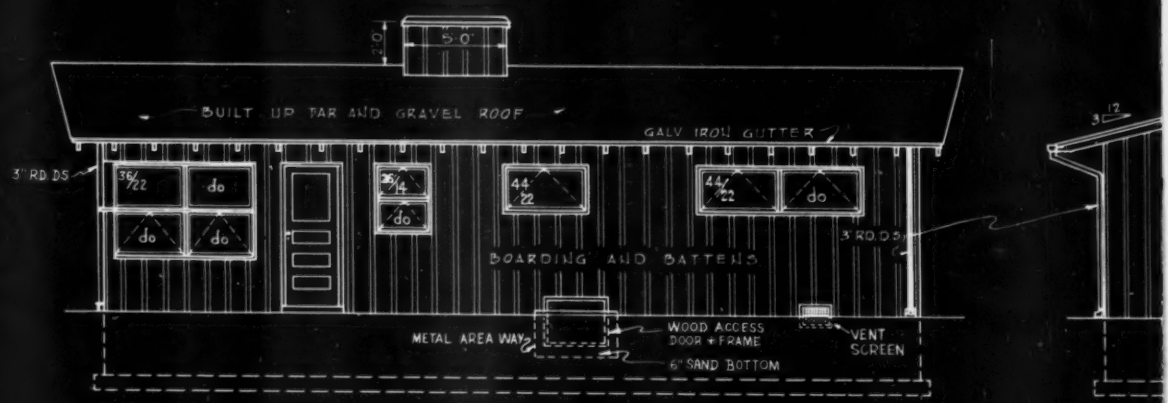


AMERICAN BUILDER

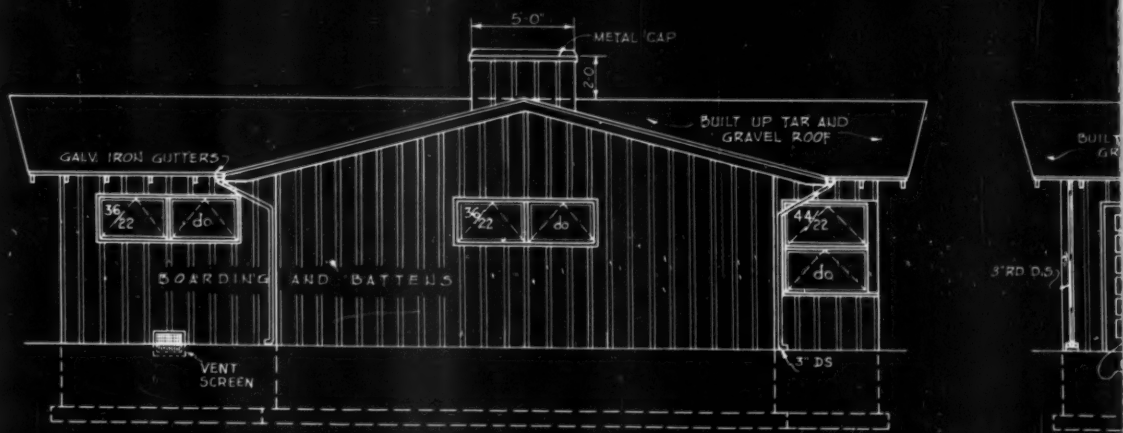


BRKFST BAR FROM DINING SPACE

KITCHEN CASEWORK

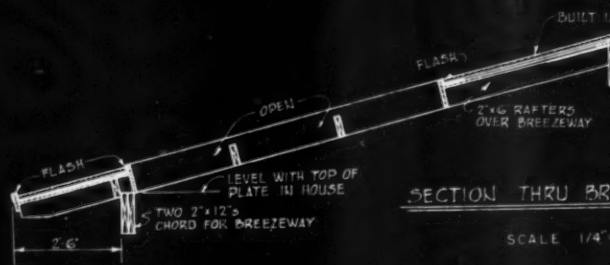


RIGHT SIDE ELEVATION
SCALE 1/8" = 1'-0"



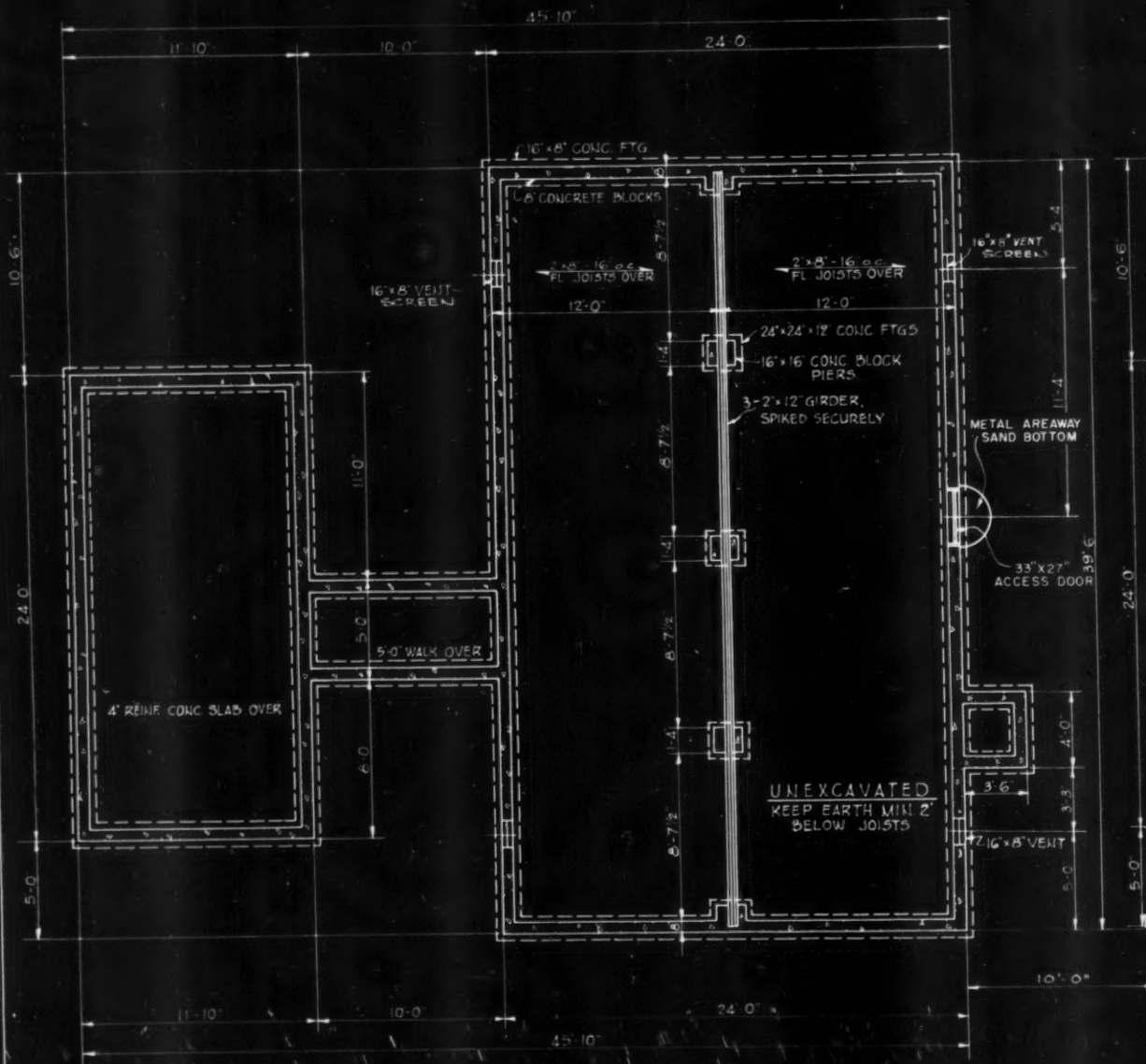
LEFT SIDE ELEVATION
SCALE 1/8" = 1'-0"

(PULL OUT FOR FLOOR PLAN)



SECTION THRU BR

SCALE 1/4"



FOUNDATION PLAN

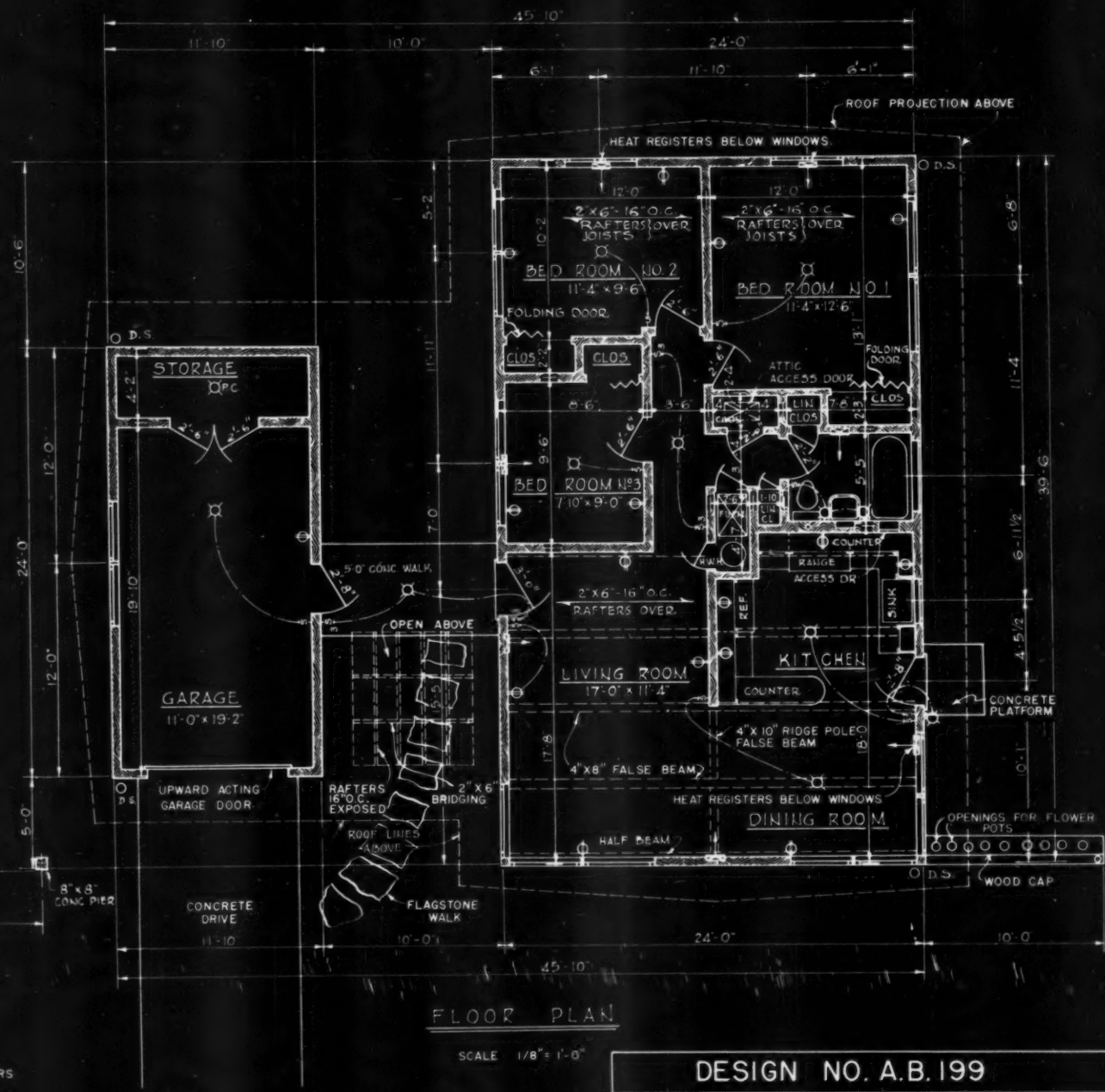
SCALE 1/8" = 1'-0"

NOTE
ALL DOORS SHALL BE 6'-8" HIGH, EXTERIOR DOORS
1-3/4" THICK, INTERIOR DOORS 1-3/8" THICK.



BREEZEWAY ROOF

1/4" = 1'-0"



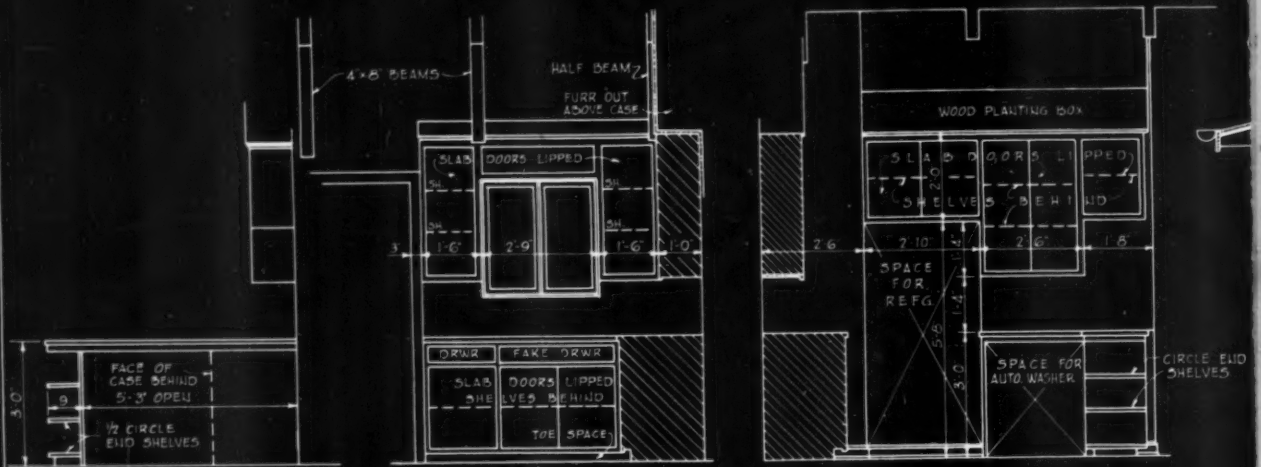
DESIGN NO. A.B. 199

AMERICAN BUILDER BLUE PRINT SERIES

DESIGNED BY
EVERETT H. ROTHROCK
ARCHITECT

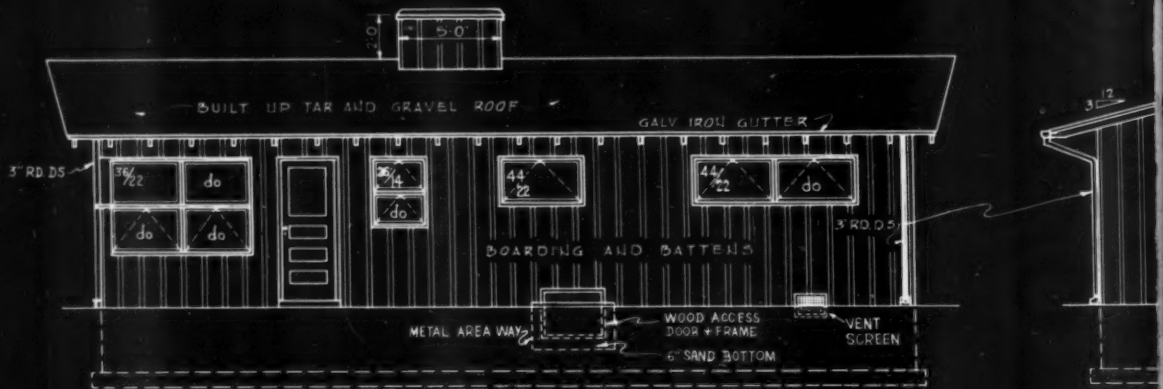
8000 LEE BLVD., KANSAS CITY, MO.

Simmons Boardman Publ., Corp 79 W. Monroe St., Chicago 3, Ill.

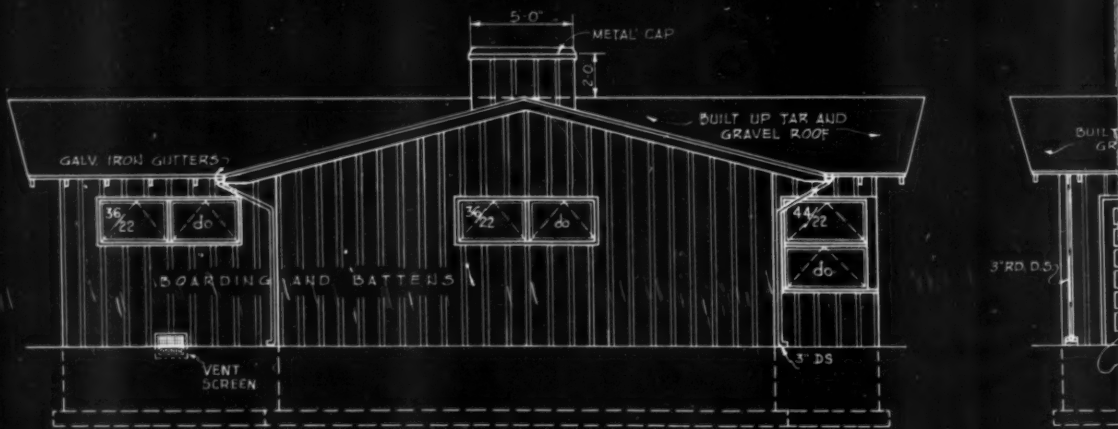


BRKFST BAR FROM DINING SPACE

KITCHEN CASEWORK



RIGHT SIDE ELEVATION
SCALE 1/8" = 1'0"



LEFT SIDE ELEVATION
SCALE 1/8" = 1'0"

(PULL OUT FOR FLOOR PLAN)

Quantity List of Materials

For American Builder Blueprint House No. AB 199

Everett H. Rothrock, Architect

General Information

House — Type	frame
Area	948 sq. ft.
Cube	9,480 cu. ft.
Height taken for cube was 10 feet	
Garage — Area	288 sq. ft.
Cube	2,880 cu. ft.
Height taken for cube was 10 feet	

Excavating

Trench for foundation	222 lin. ft.
Column footings	3
Excavation for crawl space	71 yds.

Cement Work

Foundations	
For footings	200 cu. ft.
Concrete block	735 sq. ft.
Concrete work	330 sq. ft.
Thickness	reinforced — 4"
Anchor Bolts	30 — 1/2"x8"
Waterproofing	parging on foundation
Foundation vents	4 — 16"x8"
Miscellaneous	
Reinforcing steel for concrete slabs . 6x6 wire mesh —	333 sq. ft.
Roll roofing for crawl space	55 lb. — 900 sq. ft.

Masonry

NOTE. Foundation is concrete block and is included in concrete work.

Millwork

Windows — Type	casement, awning and fixed
Material	not included
Windows — Glazed including trim	
Fixed	2 — 44"x22"
	2 — 36"x22"
Awning	7 — 44"x22"
	8 — 36"x22"
	2 — 26"x14"
Casement	4 — 18"x42"
Exterior doors — Material	wood
Exterior doors — Glazed	2 — 2'8"x6'8"
Slab	1 — 3'0"x6'8"
Garage door — upswing type	1 — 8'0"x7'0"
Exterior millwork	
Louvers	1 — 2'0"x1'0"
Flower box planter	1 — 10'0" long
Interior doors — including jambs and trim	3 — 2'6"x6'8"
	1 — 2'2"x6'8"
	2 — 2'0"x6'8"
	2 — 1'8"x6'8"
	1 — 1'2"x6'8"
Special interior doors	
Folding wardrobe doors	3
Special interior millwork	Kitchen cabinets

Carpentry

Beams and girders	6 — 2"x12" — 20'0"
	1 — 4"x10" — 10'0"
	4 — 2"x12" — 12'0"
Foundation plates	2"x8" — 128 lin. ft.
	2"x4" — 64 lin. ft.
Joists	42 — 2"x8" — 24'0"
	4 — 2"x8" — 20'0"
Bridging	240 lin. ft.
Studding and plates	110 — 2"x4" — 12'0"
	30 — 2"x4" — 10'0"
	275 — 2"x4" — 8'0"
Ceiling joist	18 — 2"x6" — 24'0"
Ridge	2"x12" — 68 lin. ft.
Blocking	2"x 4" — 108 lin. ft.
Roof rafters	92 — 2"x 6" — 16'0"
Framing lintels	2 — 2"x10" — 10'0"
	10 — 2"x 6" — 8'0"
	2 — 2"x 8" — 14'0"
Subfloor	875 sq. ft.
Roof sheathing	3/8" plywood — 2,000 sq. ft.
Sidewall sheathing (not shown on section)	1,900 bd. ft.
Sidewall materials	1"x12" — 1,850 bd. ft.
Battens	1,850 lin. ft.
False built-up beams	16 — 1"x8" — 12'0"
	10 — 1"x3" — 12'0"
Flooring — Softwood	plywood — 875 sq. ft.
Asphalt tile	875 sq. ft.
Exterior material	
Soffits	1"x6" — 135 lin. ft.
	4 — 1"x8" — 8'0"
Eaves	1"x6" — 200 lin. ft.

Sheet Metal

Gutters	96 lin. ft.
Downspouts	36 lin. ft.
Flashing — around roof opening	32 lin. ft.
Miscellaneous	
Termite shields	200 lin. ft.
Gravel stop	190 lin. ft.

Roofing

Type	3-ply tar and gravel
Area	20 squares

Interior Walls

Area to be covered — Drywall	3,400 sq. ft.
------------------------------------	---------------

● This quantity list will be subject to variation depending on the common practice in various sections and municipalities of the country, the techniques of individual builders, the types of materials available locally and cost factors. The list published here is a suggested one, complete enough so that it can be used in arriving at a reasonably accurate estimate of the quantities and cost of materials that will be required to complete the structure. It was prepared by experts at the Edward Hines Lumber Co., Chicago.



Front Cover House

seven **FEATURES** for your



Coachman's lantern and design of entrance door in vertical plank wall emphasize traditional motif

BUILDER:
A. W. Wendell & Son, Riverside, Ill.

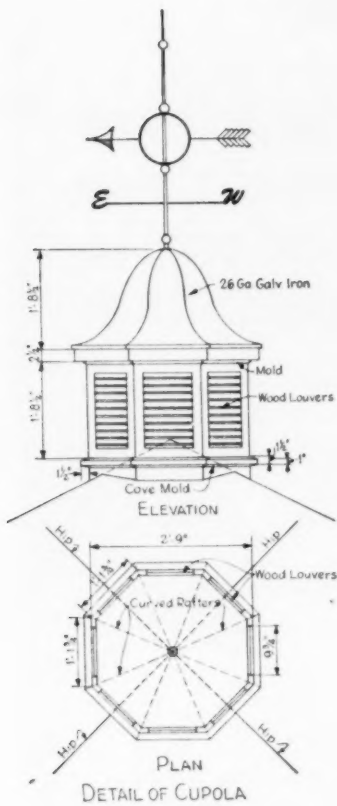
DESIGNER:
Harry Wendell, Riverside, Ill.

OWNER:
Stanley A. Framburg

SQUARE FOOT AREA 3,800

MUCH of the quiet dignity usually associated with traditional design has been captured in this large, rambling ranch house located in Hinsdale, Illinois.

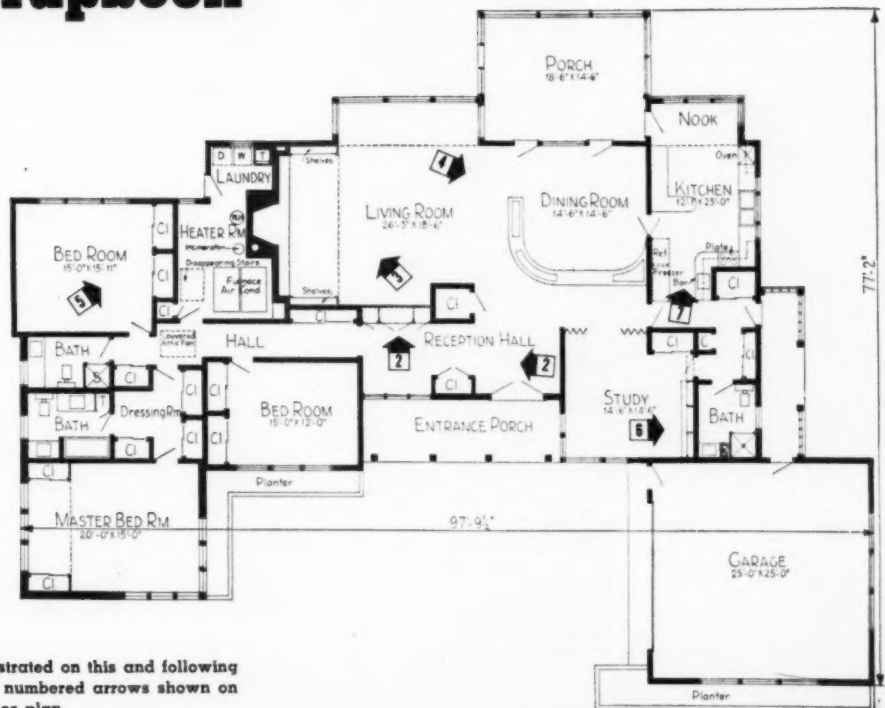
Balanced fenestration and nicely executed details of porch, cornice, cupola and moldings of traditional design blend with low roof lines, wide overhanging eaves and numerous planters characteristic of the modern type of design.



Well designed cupola serves as a ventilator for the garage. Another feature of the front is adequate off-street parking with easy access to the two-car garage. Exterior facing is a combination of painted brick and stained striated wood shingles. Note brick planters on three sides of the entrance court

FEATURE 1

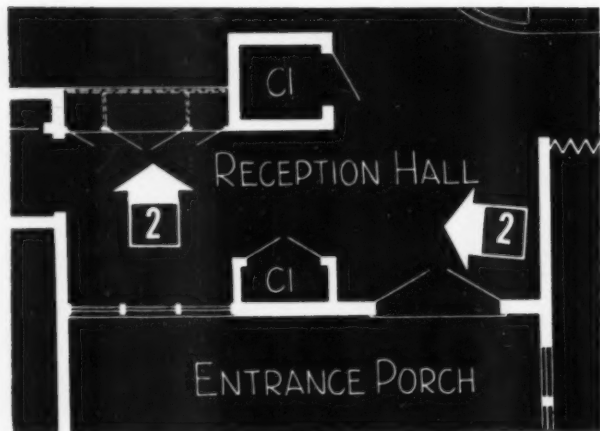
IDEA scrapbook



Interior design features illustrated on this and following pages are indicated by the numbered arrows shown on the floor plan

FEATURE 2

how the hall wall frames a view and provides ample storage



Partial plan of reception hall and surrounding areas. Arrows indicate position of features shown in photographs

Three different doors are used in the reception hall: one is made of adjoining vertical paneling; one is a flush type; and the other shows the molded contour of the entrance doors. Wood paneling in each case extends to edge of frame, thus eliminating casings

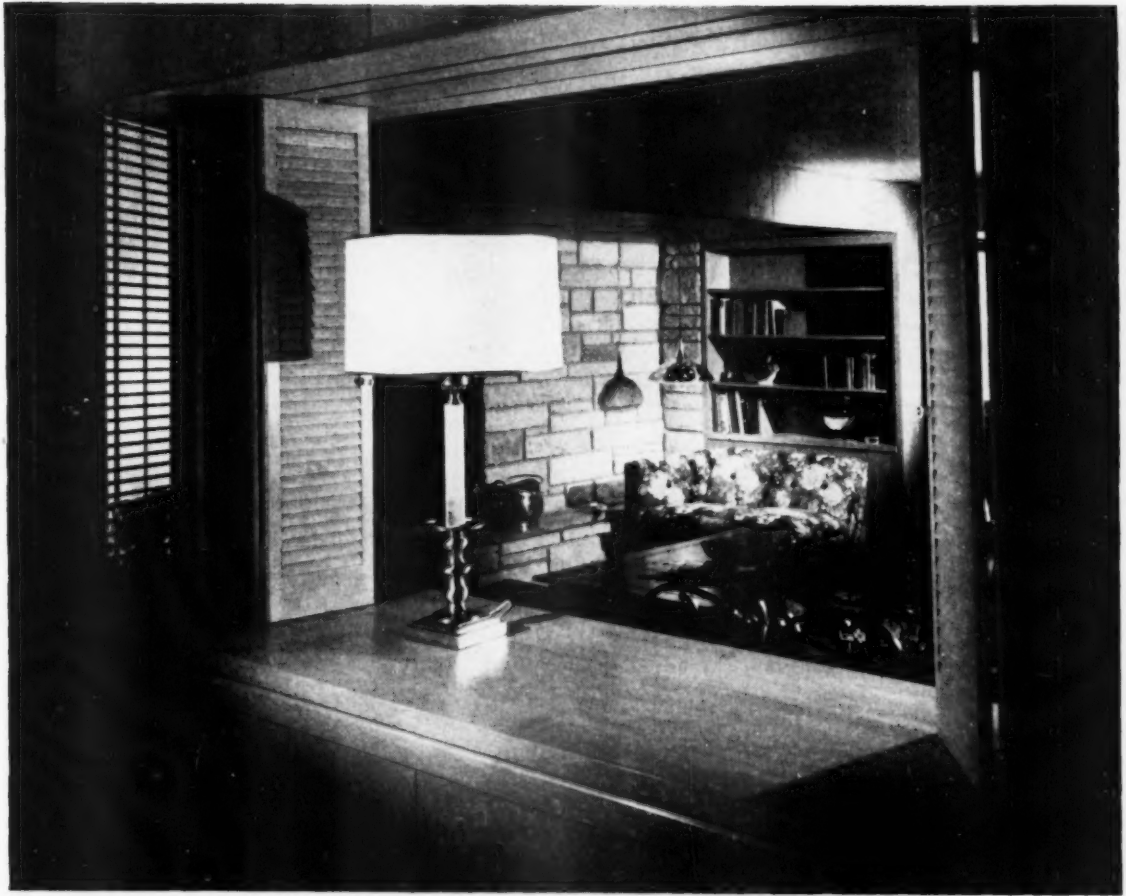


FEATURE number two (refer to plan) consists of a number of interesting details in the reception room.

Through a large counter-high, eight-foot-wide opening in the separating wall, the living room fireplace and bookcase motif is clearly outlined. This opening also borrows light from the window wall of the hall for the part of the living room farthest away from natural light. The design of the guest closet door follows the character of the vertical wood-paneled walls and is flush with the wall surface. Other doors in the reception hall are flush or molded.

BRAND NAME PRODUCTS USED

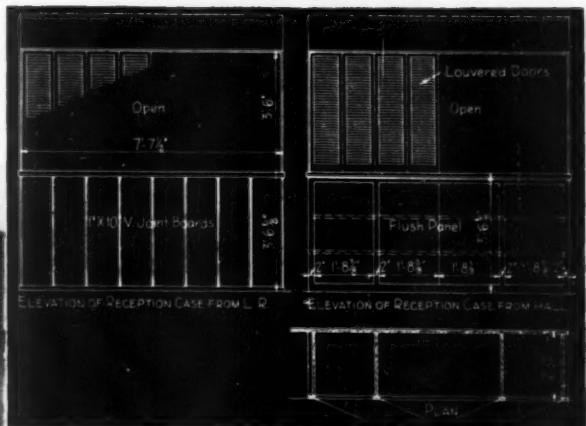
Armstrong linoleum	Kenflex vinyl asphalt tile
Chicago shower doors	Lennox gas furnace
Certain-lead asphalt shingles	McKee garage door hardware
Copper fiber insulation	Minneapolis-Honeywell heating controls
Crane plumbing fixtures	Rosa doors
Dannelly fireplace damper	Rheem hot water heater
Farmica Counters	Robbins vinyl rubber tile
H. A. Framburg lighting fixtures	St. Charles kitchen cabinet
Grant sliding door hardware	Schlage hardware
Hall-Mack bath fixtures	Thermopane glass
Heinley wood shutters	Thermador kitchen range
Hunter attic fan	Trade-Wind kitchen fan
Insulite wall sheathing	Universal gas incinerator
Jetsulation insulation	US Gypsum metal lath
Johns-Manville Rockwool insulation	



Fireplace and bookcase in living room are framed in opening to reception hall. Decorative accordian-type wood-louvered doors with fixed slats are folded against jambs when in open position. Doors are operated on a concealed overhead track

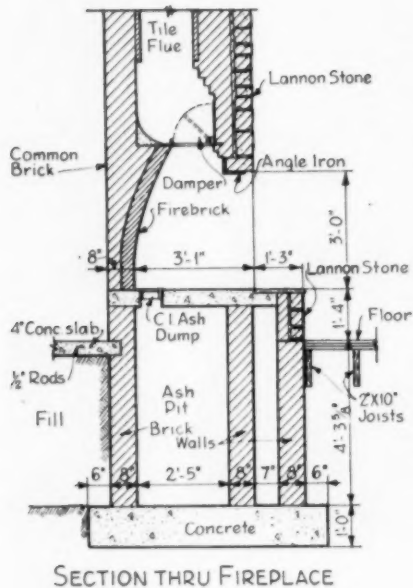


Guest closet in foreground is in end of room-separating wall between reception hall and living room. Accordian-type louvered doors at rear open to bedroom hall. 1x10 V-cut vertical pine paneling is used throughout



Storage case is in the area below counter with accordian doors filling the opening to living room. Opposite wall of case is finished with V-jointed vertical boards

FEATURE 3



**the heart
of the house
is the hearth**



Corner of fireplace wall with flanking book shelves at end of recess

FEATURE number three (see plan on opposite page) is the fireplace recess located at end of living room opposite dining area.

This entire recessed wall is faced with Lannon stone laid up in random ashlar pattern and flanked with open book shelves at each end. The actual fireplace opening, five feet wide by three feet high, is placed in the center of the wall with a 16-inch-high stone hearth extending across the full width of the recess. Soffit of recess is faced with 1x10 pine boards laid the length of soffit.



Large fixed glass panels in bay and recessed fireplace wall, each with a drop ceiling of white pine boards, form two of the principal features of the living room



FEATURE 4

Stub wall which extends in a curved line on two sides forms the outline of dining area. Three metal-lined planters eight inches wide and ten inches long are recessed into the top. $\frac{3}{4}$ -inch drain pipes extend from planters to crawl space under floor.

a stub wall effectively outlines dining area



FEATURE number four (refer to plan) is in the living-dining area which is actually one large room. The dining area is separated from the living portion by a 3-foot 6-inch-high stub wall which curves around two sides of this area and is faced on both sides with 1x10 vertical pine boards. The surface of the stub wall forms a wood counter 17 inches wide with three built-in planters located at each end and in the center of the curve.

In addition to setting the dining room apart from the living portion, the stub wall also forms a passage from the reception hall and kitchen. In this way the wall becomes a room separator without interfering with the ceiling line which becomes an unbroken area for approximately 43 feet 0 inches.

FEATURE 5

mirror doors create illusion of greater space



FEATURE number five is a group of sliding doors that provide access to two closets in the corner bedroom. Each closet contains two sliding doors with a mirror on one door of each closet, and a mirror on the jamb between doors. Each mirror extends the full height of the opening. This provides a mirror surface for an approximate 5-foot 6-inch-wide area on one side wall of bedroom. Doors are hung with standard sliding door hardware.

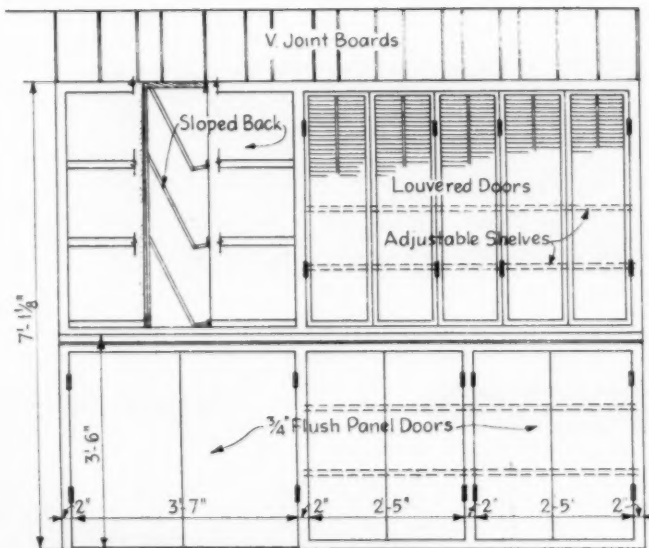
FEATURE 6



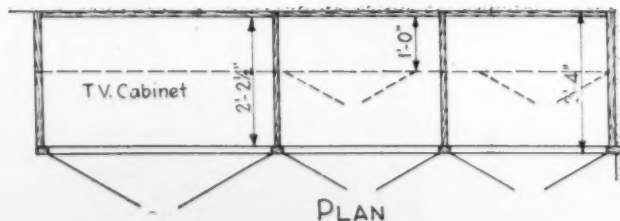
The built-in case in the study is a combination unit containing a magazine rack, display case, storage space below and a television storage area; shown in a closed position at right, in open position below

here's the concealed TV cabinet and magazine rack

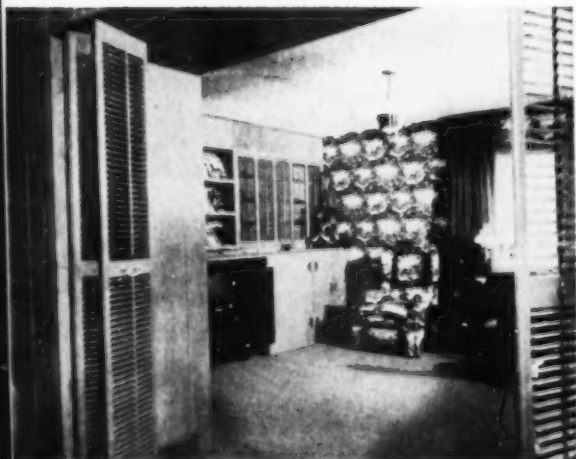
FEATURE number six is a built-in case in the end wall of the study. This case contains a concealed television cabinet, an exposed magazine rack above, storage cabinets adjoining TV space below counter line, and display cupboards above. In the space allotted for it, a full-size TV set is placed. It can be viewed when the cupboard doors are open. The carpet extends into this space and interior walls of the cupboard are finished in the same manner as the outside. The center louvered door of the group enclosing the display case is fixed, with the door on each side hinged to the side stile of fixed door. The other two doors are hinged from the jamb.



ELEVATION OF CASE IN STUDY



PLAN





FEATURE 7

Kitchen Bar service is at extreme left, not shown here



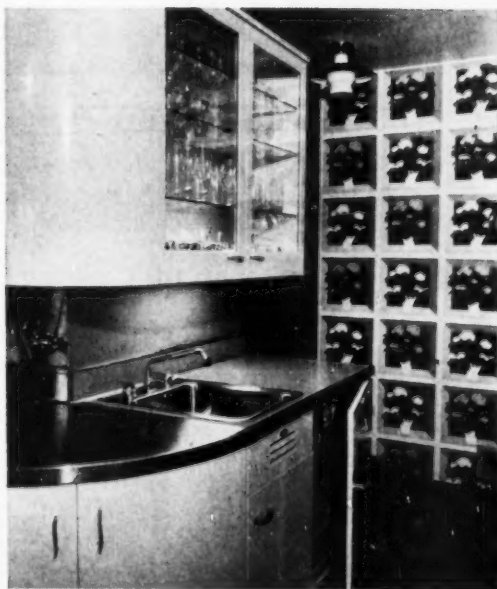
Adequate light is available for breakfast area at end of kitchen

FEATURE number seven is the kitchen arrangement, particularly as it relates to the position of the breakfast area, located at one end, and the bar service which is placed at the other end.

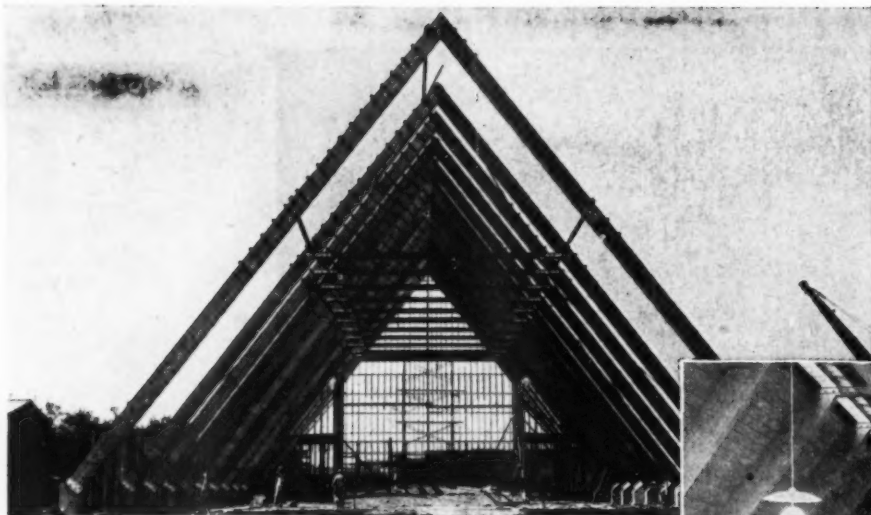
In both spaces the wallpaper is used to define a division line. The work units of the kitchen are placed on both walls between these areas. A further definition is obtained by the drop ceiling over the breakfast area. A battery of casement windows on two walls provides adequate light. The bar service is completely contained in the top and bottom cabinets which are a continuation of the kitchen units.

FEBRUARY 1954

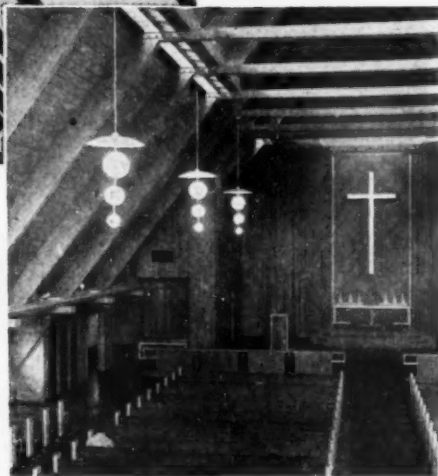
**a roomy kitchen
with eating space
and special bar sink**



Bar service is contained in base and wall cabinets. Stainless steel sink is recessed into counter. Refrigerator is built in below. Wall cabinets with glass doors and shelves provide storage for glassware



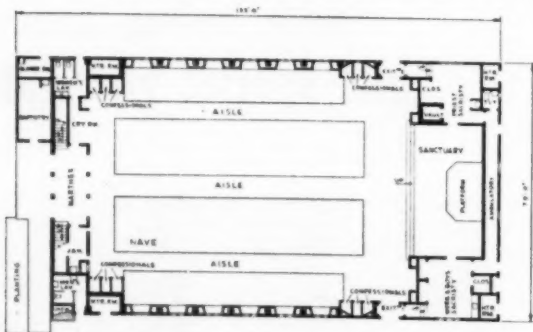
Framing is laminated truss bents and 2x10 studs for front and rear walls, 2x4 studs used for framing of one story portions. (Below) view of nave looking toward sanctuary



laminated trusses lead the way to cost savings

BUILDER: *Elma Pardini, San Francisco, Calif.*

ARCHITECT: *Vincent G. Raney, A.J.A., San Francisco, Calif.*



FLOOR PLAN

Accommodations for 700 are provided on first floor



Architect's sketch of completed church structure


IN THE new St. Martins church, San Jose, California, the use of plain laminated V-shaped trusses as the basic structural element opened the way for the application of new design techniques and cost savings.


Large 8x20-inch truss bents 10 feet o.c. extend to a height of 43 feet 6 inches, from floor line. These are secured to the angled surfaces of concrete pedestals at the floor by means of steel plates and clip angles. Pedestals rest on concrete piles and footings with an 8x20-inch concrete grade beam acting as a tie member. Further footings for the main structural members are not necessary. Grade beam acts as a terminus at exterior wall line for the concrete floor slab.



The exterior profile of the church follows the truss in an unbroken sweep to within 10 feet 0 inches of the floor line, where a vertical projection which extends all around the building intersects the roof slope. Roof sheathing of 2x8-inch t&g spans the area between trusses, and is left exposed as the finished surface in the nave.

Exterior surfaces are covered with vertical and diagonal redwood siding. The two large windows on the front wall and the horizontal skylight flush with the roof surface, in addition to windows in the one story portion, provide the natural light for the nave and other areas. The roof is covered with asbestos shingles.


The greater part of the interior walls is finished with wood. The three walls of the sanctuary are faced with 1x4-inch vertical redwood boards with the area in back of altar lined with 1x12-inch boards laid diagonally. Parts of the walls, other than those finished with plaster, are vertical redwood boards. A thin coat of white paint is applied to wood surfaces and then wiped off to produce a blond finish.

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Ro-Way doors are styled to complement  enhance any architectural design.



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All muntins, rails  stiles are precision squared.


All mortise and tenon joints are both glued  steel doweled for greater strength.

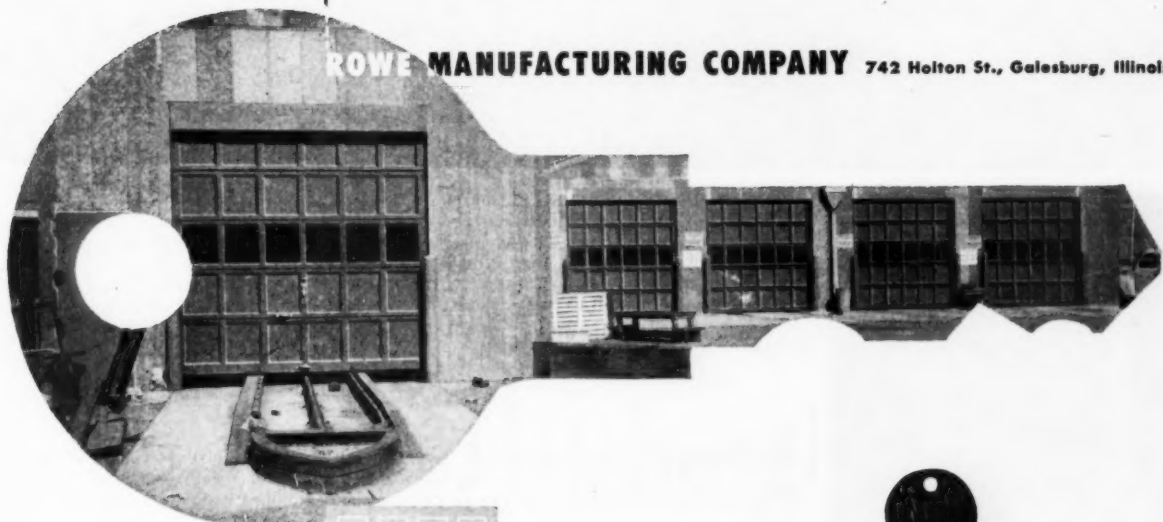
All millwork is drum  hand sanded for exceptional smoothness.

All hardware is Parkerized  painted—after fabrication—for maximum rust resistance.

Ro-Way Taper-Tite track  Seal-A-Matic hinges assure weather-tight closure  easy operation.

Standard  Special sizes  designs meet practically every commercial, industrial  residential need.

All of which adds up to owner approval  satisfaction. If that's what you want, just be sure to specify Ro-Way whenever the job calls for overhead type doors.



Nationwide sales and installation service. See your classified telephone directory for nearest Ro-Way distributor.



there's a Ro-Way for every  Doorway!

Pittsburgh Glass puts



WINDOW WALLS OF TWINDOW. Pittsburgh's window with built-in insulation, are practical in homes in every price bracket. For Twindow openings mean high-grade workmanship, out-of-the-ordinary value. Another proof of this is the installation of these units in the houses of Place Homes, Inc., South Bend, Indiana, shown here. Fact is, the cost of glass walls compares favorably with that of conventional masonry or other construction. Buyers of new homes, as well as homeowners interested in remodeling, know that Twindow means greater interior comfort, actual savings in heating costs, increased enjoyment of the outdoors from indoors.

THIS CUTAWAY shows the make-up of a Twindow unit. Two panes of Plate Glass enclose a dead-air space, giving Twindow its high insulating properties. A stainless steel channel frames the unit, protects the seal and glass edges, makes handling easy, quick and safe.

Every nickel you spend on glass shows.

And the results far outweigh the cost.

the stamp of *quality* on your homes and remodeling jobs!



WALL MIRRORS of Pittsburgh Plate Glass, in the bedroom, living room, bathroom, entrance hall, help you sell your homes faster. For they impress prospective buyers with the superior value of your homes. And in renovating work, they're always in big demand. There's nothing like a Pittsburgh wall mirror to add sparkle to a room. It can make a small room look larger—a narrow one appear wider. Pittsburgh has also developed cost-cutting, labor-saving brackets for use in installing even large wall mirrors flush against the wall. They take care of wall irregularities, too. Ask your local Pittsburgh glass distributor for full details.



FULL-LENGTH DOOR MIRRORS are much in demand, in new homes as well as in remodeling work. You'll be wise to include several—in bedrooms, bathrooms and entrances. They're very easily put up. And they come in five widths—16, 18, 20, 22, and 24 inches. All of them are a full 68" in height and are made to fit all standard interior millwork doors of 80" in height. Your nearest Pittsburgh Plate Glass Company branch can fabricate mirrors for doors other than standard heights.

Build it better with **Pittsburgh Glass**

See Sweet's Builders Catalog for detailed information on Pittsburgh Plate Glass Company products.

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IN CANADA: CANADIAN PITTSBURGH INDUSTRIES LIMITED

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Keystone System of Plaster Reinforcement, called "3 Keys to Stronger Plaster."

You'll be surprised at how little it costs to get this quality feature. You'll be pleased at the valuable benefits it gives to buildings . . . lasting plaster beauty . . . greater client satisfaction . . . maximum fire resistance.

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KEYSTONE WELDED WIRE FABRIC • KEYSTONE NON-CLIMBABLE AND ORNAMENTAL FENCE



3d 11a 3d

Notice how easily Keymesh is lathed to the ceiling. Joints are lapped two inches.

Engineered for true, solid corners, Keybead, goes up easily—is easy to plaster.

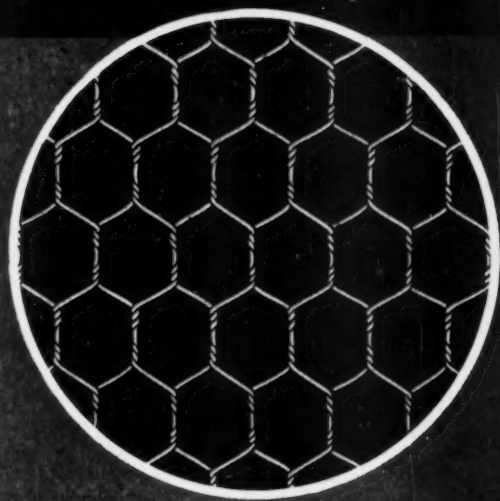
Lathers easily strip joints and corners with preformed Keycorner.



3 KEYS TO STRONGER PLASTER

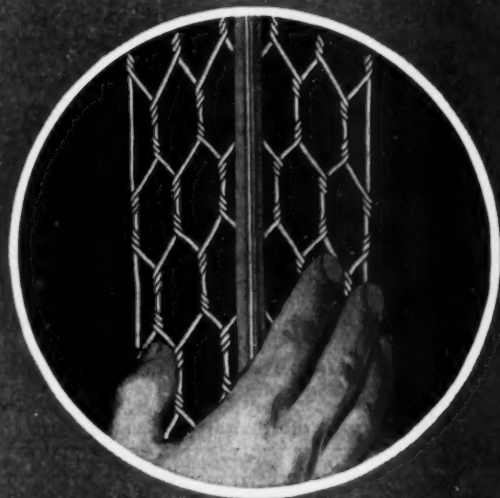
1. KEYMESH

Keystone's woven wire galvanized reinforcing lath—applied directly over the gypsum or insulating lath on the entire ceiling. This network of multidirectional reinforcing increases the strength of ceilings. It assures a uniform thickness of plaster and guards against cracks. Where ceiling radiant heat is installed, Keymesh accelerates uniform heat distribution as well as reinforcing the plaster.



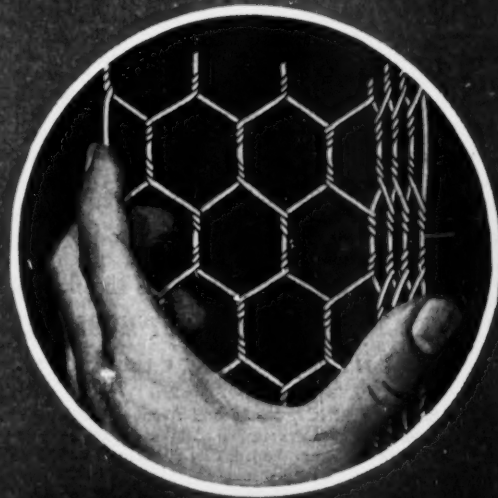
2. KEYBEAD

Keystone's woven wire galvanized reinforcing lath with the precision-formed bead—applied at all outside corners. The open mesh of Keybead wings permits plaster to completely embed the steel wires, adding strength. Full, solid corners result. Keybead is available in standard lengths; is easy to splice when required.



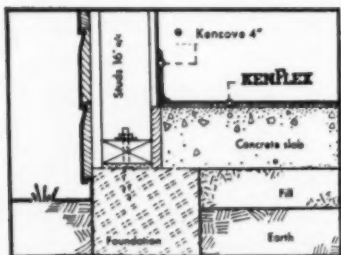
3. KEYCORNER

Keystone's preformed-for-corners, convenient width, woven wire galvanized reinforcing lath—applied at corners, joints and ceiling-wall junctures. It fits snugly in corners when you flex it. It lies flat, too, for stripping wherever required. It has the same multidirectional reinforcing as Keymesh for maximum crack resistance. It doesn't rust . . . and eliminates waste.



KENFLEX vinyl tile floors can be installed below grade... over concrete in contact with the earth

A.I.A. 23-G



Above detail illustrates how KenFlex is installed directly over concrete. Prime coating of concrete is not necessary.

Specify KenFlex for below-grade basements with complete confidence. Once down, it is amazingly durable...outwearing other types of resilient floors of equal thickness. KenFlex is easy to clean, too... with a smoother, non-porous surface that is impervious to spilled greases and oils, inks and detergents...acids, alkalis and alcohols. Yet, normal residential maintenance consists only of a damp mopping...and KenFlex doesn't require waxing except to make the crystal-clear colors shine a bit more.

Specifications and Technical Data

INSTALLATION: Over any smooth, firm interior surface: wood, plywood, radiant heated concrete slab, concrete in contact with the earth—on or below grade.

THICKNESSES: Laboratory and in-use tests have proven the wear-resistance and durability of vinyl flooring. Consequently, Standard Gauge (1/16") is recommended for normal residential and commercial uses. Where traffic will be very severe 1/8" KenFlex is suggested.

SIZES: Standard tile size is 9" x 9"...also available are 9" x 9" decorative ThemeTile inserts, and 1" x 24" Feature Strip in four solid colors.

Approximate Installed Prices (per sq. ft.)

	Standard (1/16") Gauge	1/8" Gauge
KENFLEX—all colors	40¢	65¢

KenFlex is available in 15 colors, all of which are marbled. Costs shown above are based on a minimum area of 1,000 sq. ft. over cement underfloor.

Samples and literature available on request from nearest Kentile, Inc. office listed below. Or, contact the nearest Kentile Flooring Contractor. He's listed under FLOORS in the Classified Telephone Directory.



Interior design, Stanley Haggart...Photography, Maurice Bauman Studios

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**how can an
awning window
be a casement?**



**can a hopper sash
be interchangeable
with a louvre?**

**what window
is always
right side up?**

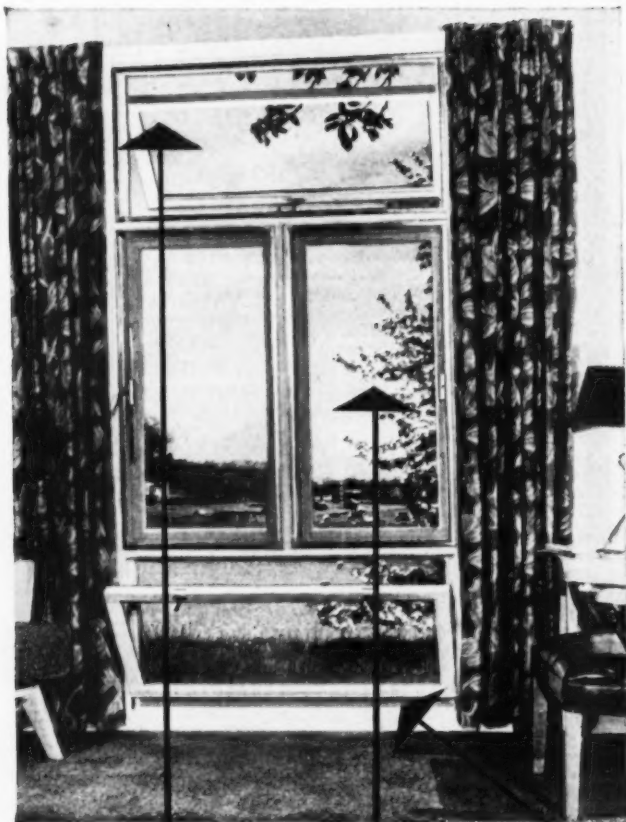


turn the page for

**can one basic
window unit provide
more than 1000
window combinations**

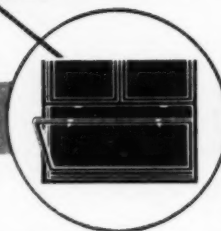
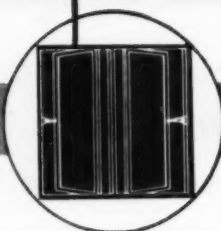
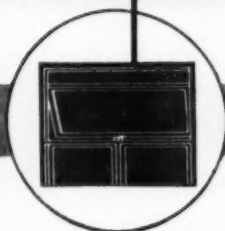
?

today's biggest window news—



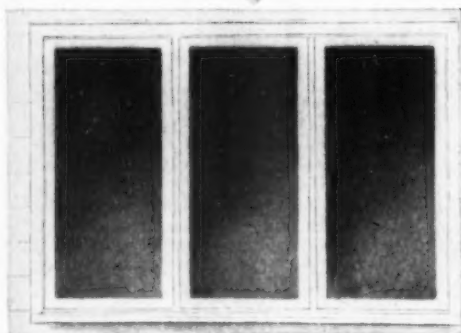
ANNOUNCING

**America's
most versatile
window
CURTIS
SILENTITE
Convertible**



**It's an
ALL-PURPOSE
WINDOW**

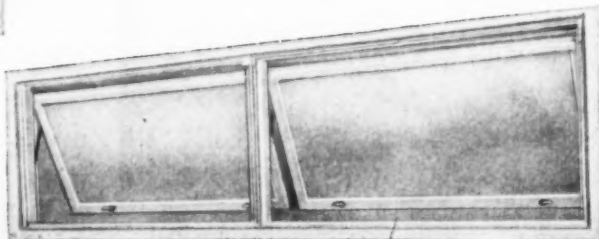
It's an AWNING! It's a CASEMENT! It's a HOPPER!



Attractive, economical casements are easy to have—with the new Curtis Convertible sash.

(Right) Curtis Convertibles are ideal for use as row windows. They fill every need.

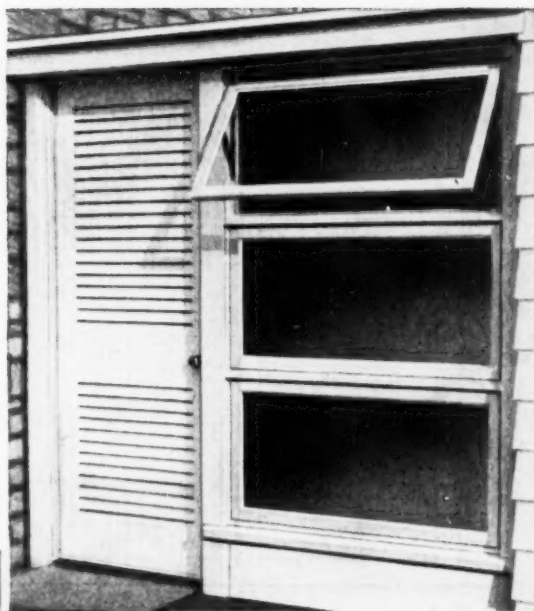
LIMITLESS DESIGN POSSIBILITIES! Now *one* basic window unit provides right- or left-swing casements—the popular awning window—swing-in hopper-type sash—and a thousand or more different window combinations! The new Curtis Silentite Convertible is available in units so proportioned that they can be combined to achieve almost unlimited variety. Basic sash units come in ten sizes and companion louvre units in five sizes. The result: a wood window unit that fits every taste—every job requirement—and every size budget.



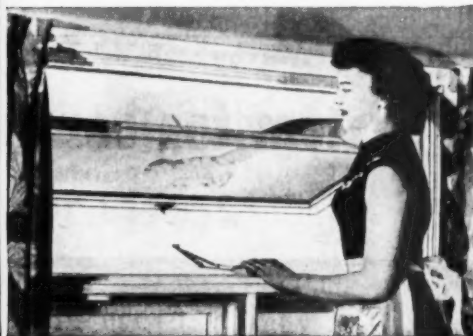
Entirely **NEW** in Design and Construction

—Priced to Fit
the Lowest
Building Budget

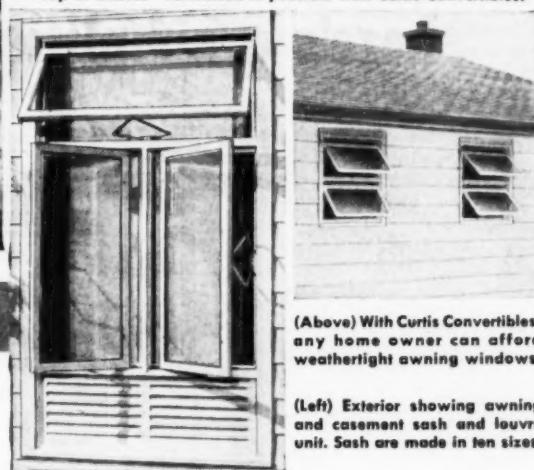
Creative thinking—careful research—modern engineering and production—have created this newest member of the famous Curtis Silentite window "family." Here is a window embodying traditional Curtis quality—yet priced for the modest building budget, thanks to advanced Curtis research and manufacturing methods.



"Top or bottom" ventilation is possible with Curtis Convertibles.



Note how easily sash may be washed from inside.



(Above) With Curtis Convertibles, any home owner can afford weathertight awning windows.

(Left) Exterior showing awning and casement sash and louvre unit. Sash are made in ten sizes.

WHAT'S NEW

about the
New Curtis
Silentite Convertible

- A completely factory-assembled unit, ready for quick, easy installation—basic frame with operating hardware, sash, screen and insulating light installed. May be used without insulating light if desired. All units mortised for sash locks, which are included.
- Fits any wall construction. The Convertible may be installed singly or in any desired combination of multiples—its construction permits stacking for awning or hopper-type operation. Any sash may be stationary. It's ideal for low-cost window walls.
- To match existing exterior trim in remodeling, or to fit local conditions in new construction, any exterior trim—plain or molded—may be applied.
- Superior weathertightness assured by modern spring-leaf type weather-stripping, thoroughly tested both in laboratory and field. The insulating light further reduces heat loss and condensation.
- New-type manual operator is included. An optional crank operator is available for added convenience when

sash are used for awning or casement installation. Operator does not require opening screen to permit sash operation—and it holds sash rigidly in place in any position.

- Greater versatility is provided by wood louvre units—made in five sizes—with interior birch doors for use in regulating ventilation.
- Like all Curtis Silentite Windows, the new "Convertible" is a WOOD window—and now window walls are within the budget of the smallest home!
- All wood members are toxic and water-repellent treated to assure lifetime satisfaction. All units are carton-packed.
- The new Curtis Silentite Convertible, like all windows in the famous Silentite line, comes with a certificate guaranteeing materials and workmanship—your assurance of lasting value. Your Curtis dealer will tell you about this big sales feature.

Write at once—or see your Curtis Wood-work Dealer—for full information on the amazing new Silentite Convertible—the window of a thousand uses.

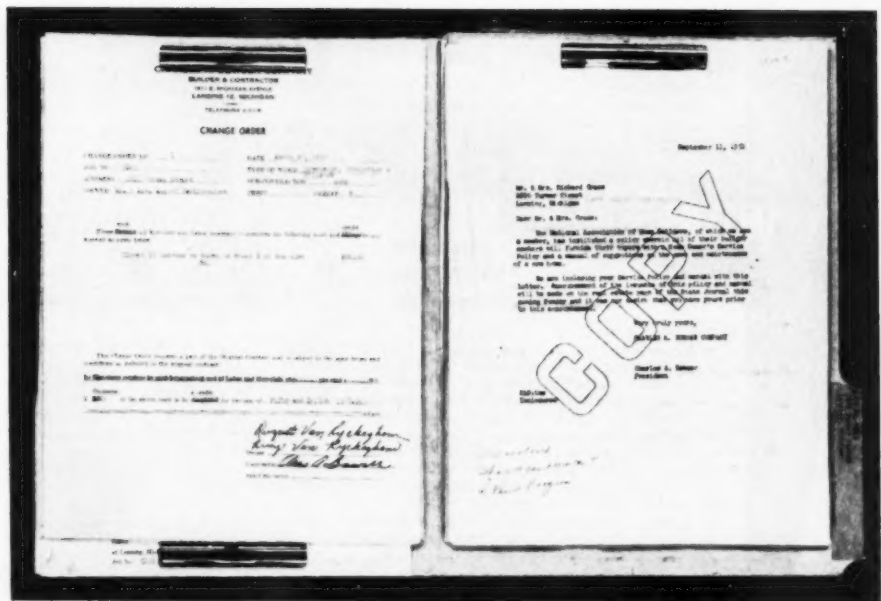


Curtis Companies Service Bureau AB-2-54
200 Curtis Bldg., Clinton, Iowa
Please send complete information on the new
Curtis Convertible and other Silentite Windows.

Name.....
Address.....
City.....
State.....

JOB NUMBER	LOCATION	JOB COST ACCOUNT	PLAN NUMBER
OWNER	ADDRESS		
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here's a simplified system for controlling



Copies of all forms and general correspondence dealing with a certain job are placed in this job file. The builder keeps all data concerning the customer on the left side, and on the right side, data that deals with construction is filed

OUTLINE OF JOB FILE'S CONTENTS

- LEFT**
- Change orders
 - Copies of builder's invoices to owner
 - Copies of builder's correspondence with owner
 - Completed waiver of lien forms

- RIGHT**
- Affidavit of completion
 - Copies of work orders to subcontractors
 - Invoices from subcontractors and suppliers
 - Decorating Schedule
 - Lot survey
 - Building permits

JOB COST ACCOUNT																																							
JOB NUMBER										LOCATION										ADDRESS																			
OWNER										ADDRESS										PLAN NUMBER																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
[Grid area for recording costs]																																							

- day to day cost
- job progress
- contract performance

BUILDERS' record keeping systems have undergone some revolutionary changes in the past few years. No longer are back-of-envelope records or check book stubs sufficient for a well organized business.

Today's accounting system needs a basic program which gives the profit and loss picture for an individual house at any time. Along with the accounting system, a builder needs a set of business forms that detail the dollar history of the job.

Builder Charles A. Bowser of Lansing, Michigan, has such a system. His complete accounting method is based on 20 operations needed to build a house. In addition, Bowser has a complete set of business forms that not only keep the history of the job, but also protect his interests when dealing with the subcontractor and the buyer.

Bowser's system is relatively simple. It centers around a Job Cost Form made out for each house. On the form are columns for the 20 operations.

Bowser, bidding for a house-building contract, makes a detailed esti-

mate. He figures each of the 20 operations and gets bids from subcontractors for those operations. He double-checks the estimate with recent square-foot cost averages. These estimates can be entered in the Job Cost Form and used as comparisons with actual costs. As subcontractor invoices and Bowser's own labor costs for each job are received in the office, they are entered in the Job Cost Form. At any time the builder can see when he stands percentage-wise in regard to cost—the amount of work done against the estimate.

For instance, if Bowser inspects an excavation and grading operation estimated at \$170, and finds half the job done, column three of his Job Cost Form should show \$85 spent.

Keeping the history of the job, Bowser sets up a job file folder. Each file carries the various correspondence and executed forms for a single job. Each job carries a job number so that the records easily find their way to the proper file. Bowser uses the year and consecu-

The Job Cost Account Form is part of the general ledger. It keeps abreast of costs for the 20 operations. "General Expense" in column two is the only heading that is not self-explanatory. Included in this "General" heading are building permit, hazard insurance, equipment rental, temporary power, temporary water, survey, trucking, supervision, clean-up, unemployment insurance, old age benefit, workmen's compensation and sales tax.

Purchase order forms are executed in triplicate. One is retained in the order book, one goes to the supplier, and the third is retained in the office to check invoices. Each purchase order carries the job number to facilitate bookkeeping.




PLYWOOD QUALITY in 1954 *...as always*

We are not crystal ball gazers on world and national events. But of this we are sure—

In 1954 the various products of APMI will be *quality*, as always.

Fine Douglas fir gives us superb raw material. Modern mills give us excellent plant layouts and machinery. Veteran employees provide important know-how. More than 30 years of plywood manufacture gives us invaluable experience in serving you through our own sales warehouses. We welcome your inquiries.

ASSOCIATED 

PLYWOOD MILLS, Inc.

GENERAL OFFICES: EUGENE, OREGON
Plywood plants at Eugene and Willamina
Lumber mill at Roseburg

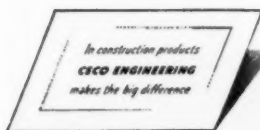
BRANCH SALES WAREHOUSES:
4268 Utah St., St. Louis, Missouri
4814 Bengal St., Dallas, Texas
4003 Coyle St., Houston, Texas
1026 Jay St., Charlotte, North Carolina
Worley Road, Greenville, South Carolina
925 Toland Street, San Francisco, California
Eugene, Oregon
Willamina, Oregon

SALES OFFICES:
31 State Street, Boston, Massachusetts
595 E. Colorado Street, Pasadena, California



LOOK

to Ceco to improve on
trends with tested
metal building products



CECO STEEL PRODUCTS CORPORATION. Offices, warehouses and fabricating plants in principal cities
General Offices: 5601 W. 26th Street,
Chicago, 50, Illinois

■ There's one sure way for the "Sold" sign to go up quicker—and that is to offer proved advantages in the homes you build. Prospective home owners want the new but they don't want the "Untried Experiment."

Before Ceco products are offered to the building industry, they must pass rigorous tests in the field . . . must "make good," time after time, under actual living conditions.

For we at Ceco do not aspire to be first just to be first. Instead we prefer to observe developments with studied care . . . to present new products when we can proudly say—"Here is a Ceco tested and improved design . . . the finest of its kind . . . a product you can use with assurance it will perform as intended."



Here are 4 new
improved Ceco Trend Tested
products . . .



Ceco Intermediate Windows. Exactness in design, assuring the just-right window is the "Trend Feature" here. Only Ceco offers both 1 1/4" and 1 1/2" Intermediate Windows that can be adapted to any building problem.



Ceco Standardized Hollow Metal Doors. Pin-Point Precision in matching hardware to doors is the "Trend Feature" here in the broadest line ever offered with doors and hardware made for each other and supplied by one source.



Ceco Sterling Aluminum Projected Windows. Functional simplicity is the "Trend Feature" in this newest Ceco product. Framing members have simple lines that blend with modern motifs . . . hardware is in keeping with functional thinking.

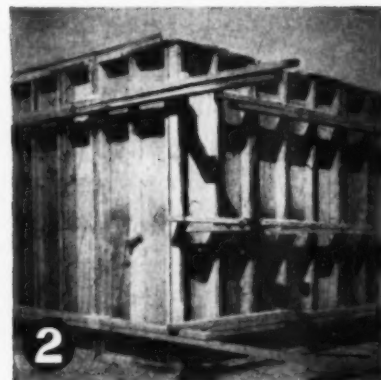


Ceco Sterling 3-in-1 Aluminum Window. Prime window, storm window and screen combine for versatility as a "Trend Feature" of this Ceco creation. Self-storing screens and storm windows take the work out of seasonal changing.

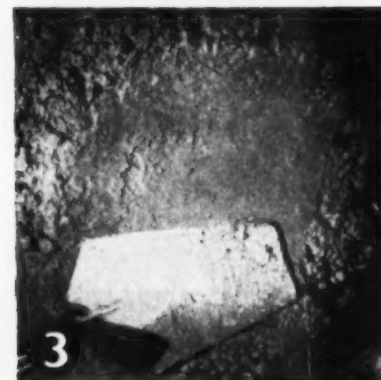
How to build good cast-in-place Concrete Foundations



1



2



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4

In homes or commercial or industrial buildings basements are (1) the most economical space for heating plants, storage, work rooms and other essentials and (2) a safe refuge from tornadoes and atomic blasts. One way to build a strong, dry basement is with cast-in-place concrete foundations. Here's how to do it:

1 Clean forms thoroughly. Coat inside surfaces with oil, soft soap or lacquer to keep concrete from sticking.

2 Erect the forms. Tie and brace them securely so they retain their shape and position while placing concrete.

3 Design a quality concrete mix. Proper proportioning results in a mix which, when lightly troweled, fills all spaces between aggregates with cement paste.

4 Transport concrete in rubber-tired buggies or wheelbarrows to lessen the chance of segregation. Place in even layers not more than 12 in. deep, dumping from as low a height as possible.

5 Spade or vibrate concrete enough to settle it and work it thoroughly against the forms. This avoids honeycombing.

6 Strip forms after concrete hardens sufficiently—usually one or two days in warm weather, four to seven days in cold weather. Then pull out tie rods or break them off back of the surface.

7 Patch tie rod holes with mortar. Remove form seams with carborundum stone and cement-water mixture. Keep concrete damp all during curing period.

8 Brush on two coats of hot bituminous material at right angles to each other over the exterior wall surfaces.

For more information write for free booklet, "Concrete Basements for Homes." Distributed only in U. S. and Canada. Address Dept. 2-3.

PORTLAND CEMENT ASSOCIATION

33 W. Grand Ave., Chicago 10, Ill.

A national organization to improve and extend the uses of portland cement and concrete through scientific research and engineering field work



5



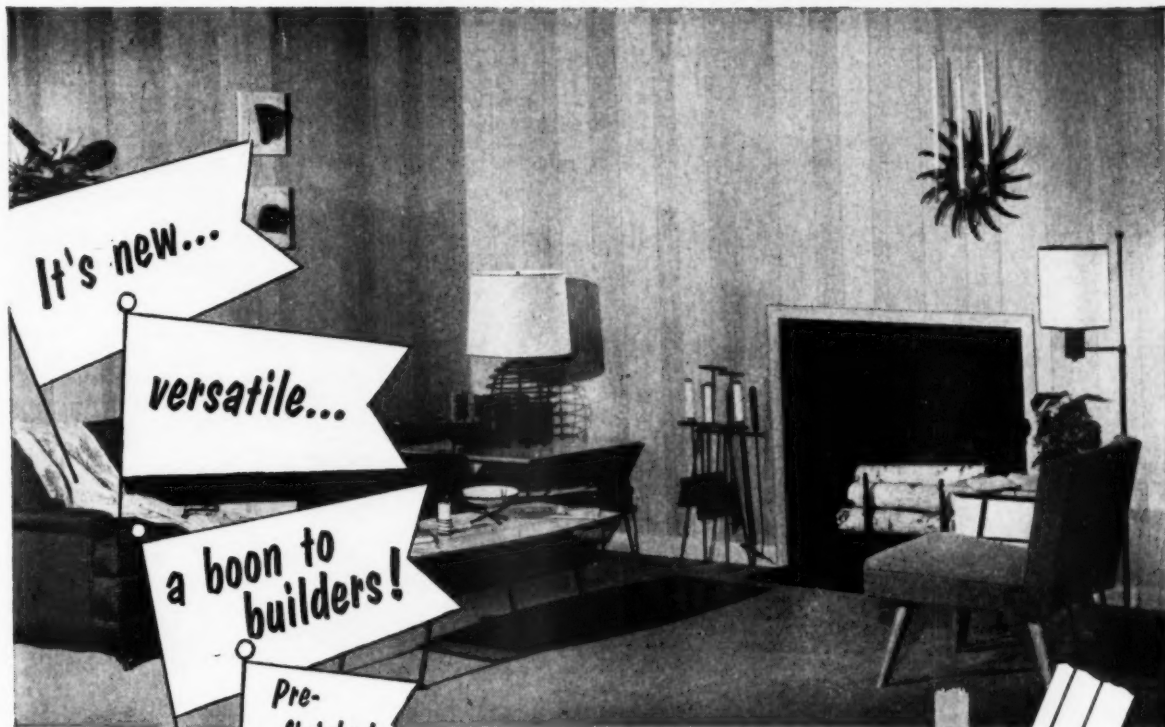
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8



It's new...

versatile...

a boon to builders!

Pre-finished

Oak Craftwall — Style 200

Craftwall

by Roddiscraft

NOW! A better way to add sales-appeal to the homes you build! Roddiscraft is genuine hardwood plywood, but with a difference. Face veneers are random-matched for the luxury look of solid lumber — yet Craftwall costs less than conventional plywood. No matching problems, either!

Pre-finished Craftwall can *eliminate* the tremendous time loss incurred in plastering, painting and papering interiors. It lets workmen complete jobs fast . . . with no possibility of the last-minute troubles that often occur. It assures you of *perfectly finished paneling* for every installation.

Offered in 4 styles — 3 sizes

Pre-finished Craftwall gives you a style for every need . . . and styles that can be used together. It's available in 48" x 96" x 1/4" panels . . . 16" x 96" x 1/4" panels . . . and 32" x 64" x 1/4" panels. Pre-finished Craftwall is carefully carton-wrapped; color-blended putty stick to fill nail holes after installation is included with each shipment. Matching hardwood moldings are available, together with materials and complete instructions for perfectly matching Craftwall finishes.

Roddiscraft

RODDIS PLYWOOD CORPORATION
Marshfield, Wisconsin

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Cambridge 39, Mass. • Charlotte 6, N. C. • Chicago 32, Ill. • Cincinnati 4, Ohio
Cleveland 4, Ohio • Dallas 10, Texas • Detroit 14, Mich. • Houston 10, Texas • Kansas
City 3, Kan. • Los Angeles 58, Calif. • Louisville 10, Ky. • Marshfield, Wis. • Miami 38,
Fla. • Milwaukee 8, Wis. • New Hyde Park, L. I., N. Y. • New York 55, N. Y. • Port
Newark 5, N. J. • Philadelphia 34, Pa. • St. Louis 16, Mo. • San Antonio 6, Texas
San Francisco 24, Calif. • San Leandro, Calif.

In Birch
Maple
Oak
Walnut
Mahogany
Cherry and
Blonde Limba

Matching trim
in genuine hardwoods

MAIL THIS COUPON FOR IDEAS
THAT WILL MEAN MONEY TO YOU!

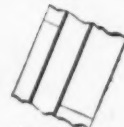
CRAFTWALL
Roddis Plywood Corporation
Dept. 1001,
Marshfield, Wisconsin

Yes, I want to know more about
Pre-finished Craftwall — send me your
full-color booklet, with its beautiful
decorator-planned room scenes.

NAME
ADDRESS (please print)
CITY STATE



Style 100 —
V-grooved
only.



Style 200 —
V-grooved and
cross-scored.

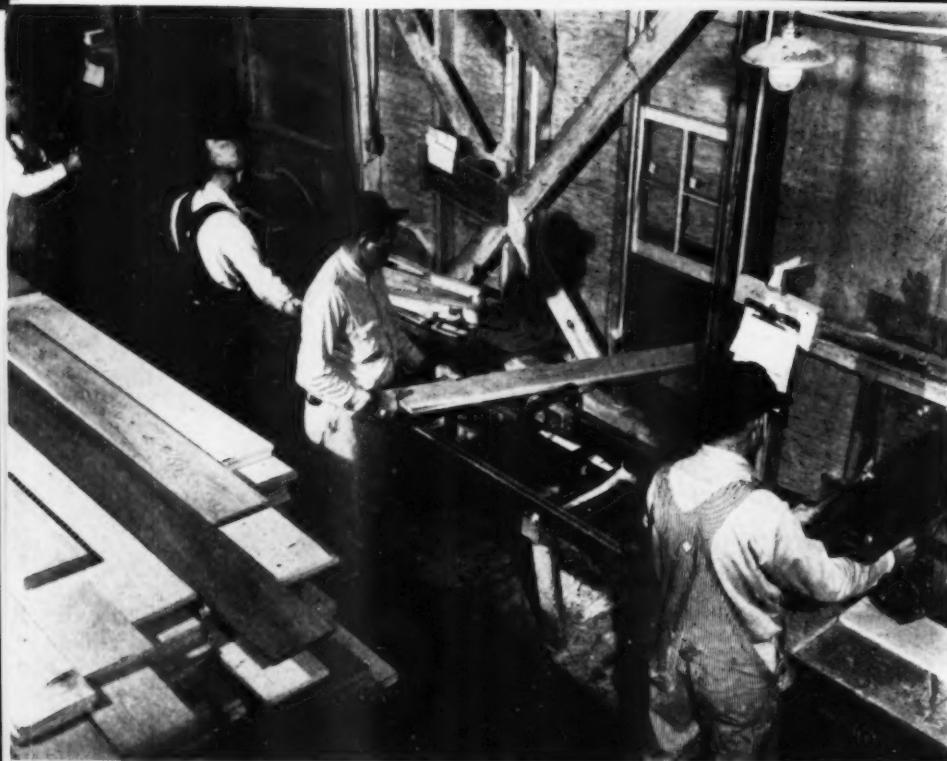


Style 300 —
V-grooved, cross-
scored and pegged.



Style 400 —
For horizontal
V-groove
applications.



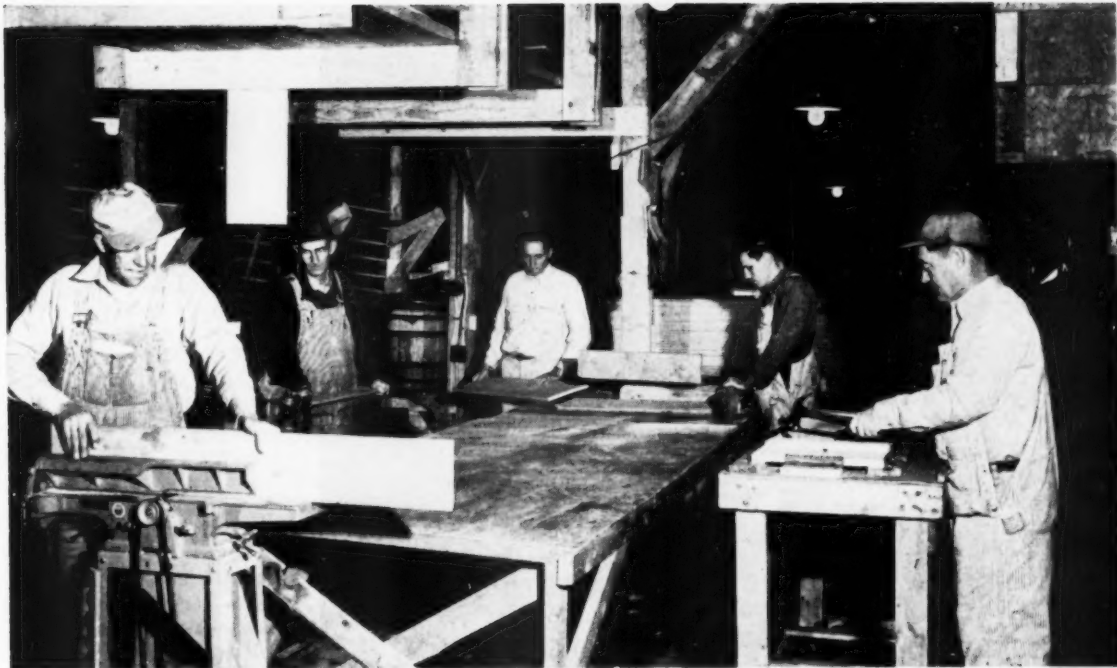


Cutting table in the mill at the project, featuring two DeWalt radial saws with 18-inch blades and 7½ h.p. The lumber comes into the saw shed from the left (to the left saw) and from the right (to the right saw). The clipboard in front of each operator tells him the number and size of each piece to be cut, and the length of material from which it is to be cut. In the case of rafters, the saws are used as a gang, the right saw making the plumb cuts and the left saw making the cheek cut by using a rafter notcher. These special heads are used to eliminate cutting rafters twice

WORK PATTERN for MASS PRODUCTION



Plate jig is used for all outside plates. It drills holes for anchor bolts, marks layout for outside studs, windows and door openings. Same jig is used for top plates. Jig is all-metal and the pipe sleeves are tempered steel so they will wear better while they act as a guide for lining up the bolt holes. Five plates are drilled at one time



The secret of success is three-part: (1) purchasing by the carload or truckload, (2) a highly efficient core organization, and (3) full cooperation from the subcontractors. The last is most important

Carpenter second from the right is ripping shutter material on the large table saw, while laborer at center takes away previous cut and carries piece to planer (second from left). Material then goes to carpenter who is beveling on a jointer (extreme left). Then the pieces are put in the shutter jig (extreme right) and nailed together as a finished shutter. (The jointer, planer and jig table were all moved closer to the cutting table for photographing)

IN STREAMLINED house production, the fullest sort of cooperation between the builder and his subcontractors is really the answer to most of the problems involved, according to the Winn-Rau Corporation of Kansas City. The company's staff includes an engineer and 10 surveyors who prepare the way for the assembly line building process. Then there is a supervisory and office staff and a crew of carpenters, laborers and truck drivers, all on the Winn-Rau payroll. All the rest of the work is let on subcontract.

Meetings That Mean Something

Every Monday noon, a meeting of the company heads and the subcontractors is held in the construction office on the project. Between 15 and 20 attend each meeting. The idea is to stress cooperation among the subs and provide an opportunity for

the subs to bring up their individual problems so that everyone in authority on the job knows what's going on in all departments of work.

Winn-Rau knows exactly where each sub stands by a set of daily charts which show 36 separate operations. If a sub is behind schedule, the spotlight of discussion is thrown squarely on him. Then everyone pools ideas on how to help him catch up and so get the show back on the road. The evil of falling behind is constantly kept before the subs and these weekly meetings have worked wonders in keeping it under control.

Timing Is Of The Essence

It has been agreed at these meetings that timing is one of the most essential factors in successful mass production of housing. When any one sub loses time or slows down, he

slows down the whole chain of work that produces a completed house.

Winn-Rau has found that an assembly line crew can work in two ways. A crew of say 20 men can look busy doing a job that apparently takes five days. But on close study it may well be discovered that the same crew can do the same job in two days. In other words, if the men don't have a schedule to meet, they can slow down their hourly work and string it out for five days and still look busy, instead of hitting the maximum efficiency of two days for the job.

Timing is vital even down to such a seemingly unimportant operation as cleaning the houses. Winn-Rau soon discovered that there was too much lost motion, loafing and waste in materials in the cleaning of houses. So a policy was established which requires each subcontractor



Butt template table: Carpenter on right is using electric butt router, cutting holes for hinges on doors. Carpenter on left is installing hinges with electric screw driver. Each process can be done alternately. Thus, each man works his way around table

to clean up after his work immediately upon its completion.

When the plumber has installed the bathtub and other crated fixtures, he picks up the crates and wrapping paper immediately. When

the drywall applicator has completed his work, he picks up the paper he has laid down to protect the floor, sweeps up and hauls away scrap pieces. And so on down the line. This procedure has saved sev-

eral work days per house on the job.

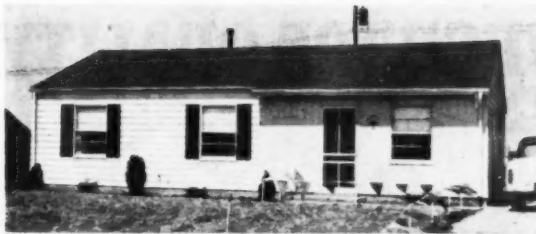
Handling the Materials

Winn-Rau homes start on the production line at the company's siding in Turner, Kansas, five miles from



In the cutting mill yard: Material is piled in foreground, next to jig on which it will be used. Two carpenters on the jig are nailing stairwell frame together and the four pieces of ceiling joist that go with it. After frame is nailed, two handlers at left carry it to flat-bed wagons which convey it to site. Assistant superintendent (center) makes periodic checks of all jigs, cutting lists, tools and the amount of work produced in a given time. Orders are filled by matching a card index which shows everything on the wagon against the written request for material by the superintendent in the field. This way, the job superintendent can know how many houses are on hand already cut, amount of material in yard and how much has been site-delivered

the Winn-Rau system is producing these results



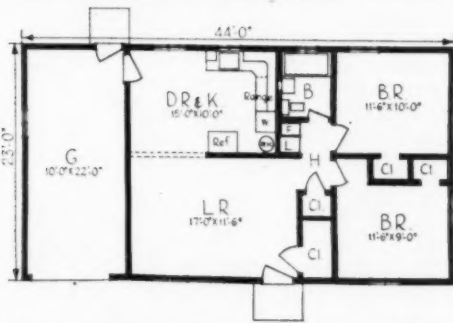
A 4-bedroom house for \$9,100. Blacktop drive, no garage



A 3-bedroom house for \$8,100. Drive runs to rear



A 2-bedroom model with attached garage for \$8,950



A 2-bedroom house with 745 square feet, for \$7,650



the office. A 15-minute truck ride brings lumber and other materials to the company's saw mill on the job. About 100,000 feet of lumber goes through the mill every day Winn-Rau is operating full blast, not including sheathing, insulation and drywall. Various power tools: saws, jointers, sanders and others, help convert about 30,000 feet of lumber a day into gable ends, dormer roofs, window bucks, bathroom walls and stairwell assemblies, all of which are built on jigs.

Every plate is pre-cut and pre-marked by code number at the mill.

All studs are marked and pre-laid on the concrete slabs at the job sites. A template is used for interior partition marking. The plates are fitted to the openings in the template. Then marks from the template are transferred to the plates. This makes a complete pre-laid house, laid out ahead of the carpenters.

Exterior plates are cut at the mill and then go to the layout jig which pre-drills all holes for the foundation bolts and marks all places for the studs, window and door openings and all partitions. All ceiling joists and rafters, after being precision

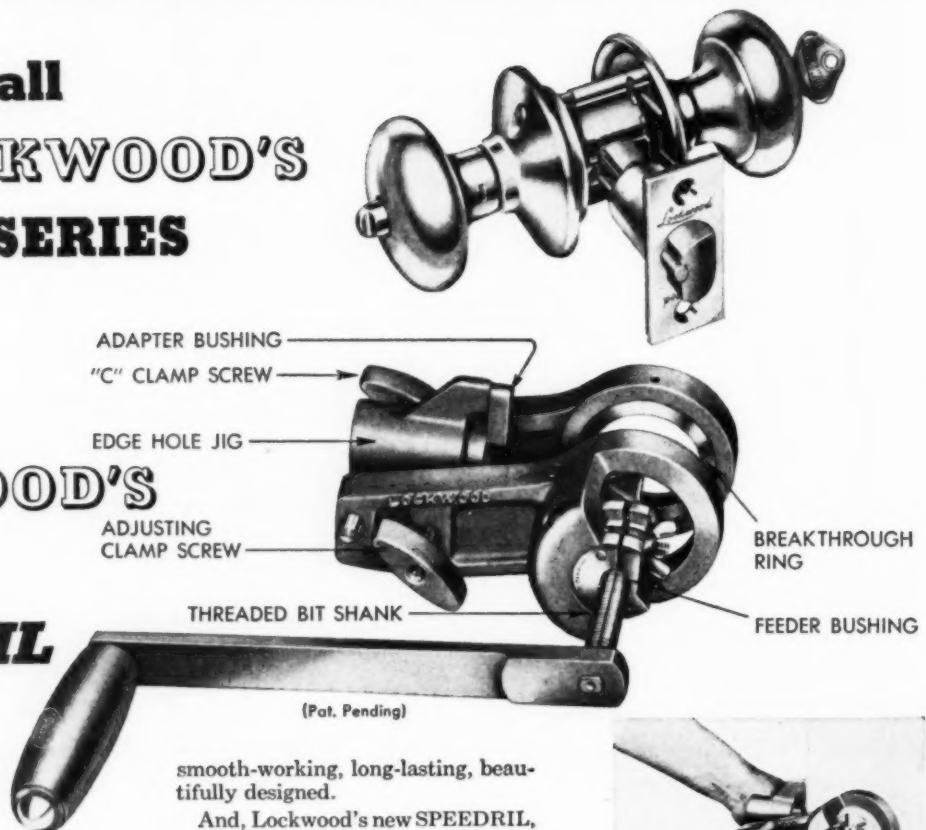
cut at the project mill, are delivered to the house site by tractor-trailer. Three loads make up the delivery schedule: (1) the bottom, including plates, studs and bucks; (2) the intermediate, which takes care of the ceiling joists and rafters; and (3) the top, which includes sheathing, gable ends, boxing and all other materials needed to complete the carpenter's rough-in.

Such items as reinforcing steel and wire mesh, windows, stairs, doors, hardware and bathroom fixtures are on hand for about 100 houses at all times.

How to CUT COSTS & UPGRADE QUALITY

1. Install LOCKWOOD'S 'C' SERIES

2. with LOCKWOOD'S New SPEEDRIL



(Pat. Pending)

smooth-working, long-lasting, beautifully designed.

And, Lockwood's new SPEEDRIL, a tool that makes conventional methods of installation obsolete . . . takes the hard labor out of hand boring . . . makes clean-edged, accurate holes in perfect alignment every time . . . and does it up to 75% faster than other hand boring tools.

Here's the most potent lockset installation ever to hit the home building field:

Lockwood's new 'C' series, the finest quality locksets in the low-price field . . . all brass or steel parts,

- **Actual timed speeds with unskilled operator**
25 to 40 seconds for hole through stile (depending on door thickness),
15 seconds for hole in edge of door.
- **Clean cut edges both sides**
breakthrough ring ensures clean edges, no splinters.
- **Holes in perfect alignment**
threaded bit shank ensures a perfect bore, exactly at right angles to door stile.

SPEEDRIL is available in two models . . . Model No. 540 for installation of Lockwood 'C' Series only . . . Model No. 541 (as illustrated) is a Universal model equipped with adaptors for use with all types and sizes of Lockwood cylindrical locks.

➔ Send for descriptive literature giving complete details on new Lockwood SPEEDRIL.



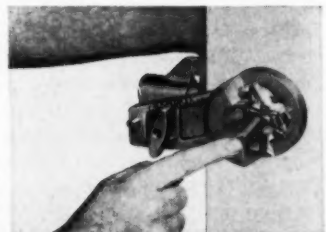
LOCKWOOD HARDWARE MANUFACTURING COMPANY
Fitchburg, Massachusetts



Clamp SPEEDRIL to door with Adjusting Screw, tighten with 'C' Clamp Screw.



After inserting bit, attach handle and turn to bore hole.



Open Feeder Bushing, remove handle and push bit through hole. Then bore edge hole.

AMERICAN BUILDER

Choose the floor that's NATURALLY beautiful!

BRUCE STRIP

Hardwood Floor

Prefinished . . . or for job-finishing

You give owners more for their money when you specify beautiful, durable Bruce Strip Floors.

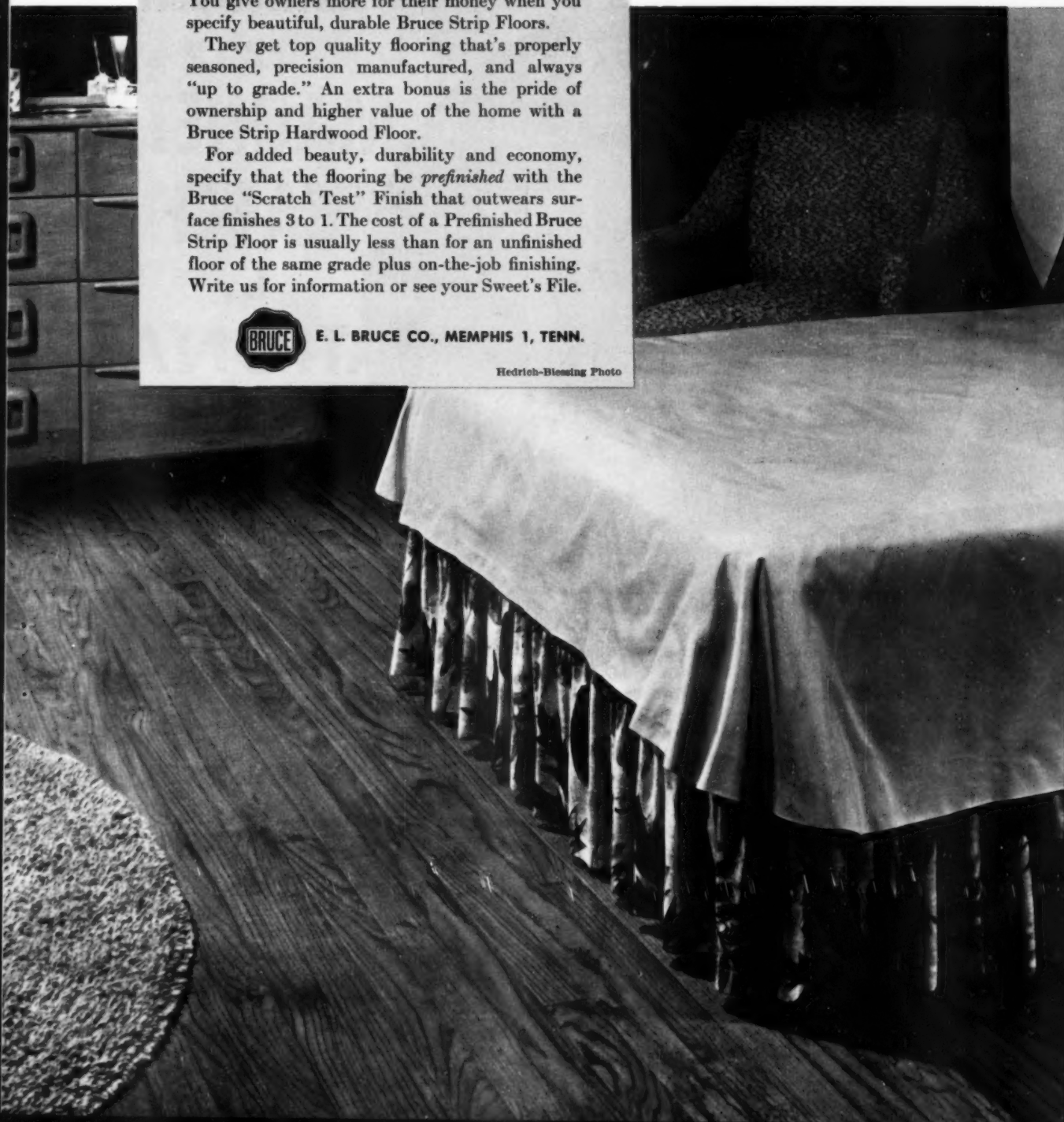
They get top quality flooring that's properly seasoned, precision manufactured, and always "up to grade." An extra bonus is the pride of ownership and higher value of the home with a Bruce Strip Hardwood Floor.

For added beauty, durability and economy, specify that the flooring be *prefinished* with the Bruce "Scratch Test" Finish that outwears surface finishes 3 to 1. The cost of a Prefinished Bruce Strip Floor is usually less than for an unfinished floor of the same grade plus on-the-job finishing. Write us for information or see your Sweet's File.



E. L. BRUCE CO., MEMPHIS 1, TENN.

Hedrich-Blessing Photo



SMALL IN SIZE..



IN FEATURES

with super pulling power for smooth positive action!

retail price **70¢**



**R222
MAGNETIC
CATCH
by
NATIONAL
LOCK**

for cabinet doors
buy it from your wholesaler

small investment
FREE demonstrator
(only 6¼ by 2 inches)

Here's a new item with remarkable profit opportunities. Strong magnetic power closes door quickly, securely, silently . . . at a gentle push of finger, hand or elbow. Steel and aluminum inner parts are contained in attractive, sturdy tenite housing.



packaged in handy SLIDE BOX

Unique box has clear acetate slide cover. Effectively displays merchandise. Provides extra customer convenience and product protection. Box contains catch, strike and necessary number of screws for installing.

packed 1 doz. slide boxes to the carton . . .
1 doz. cartons to the case



Assortment consists of 2 dozen R222 Magnetic Catches with a list price of \$8.40 per dozen. Compact, space-saving demonstrator is provided FREE with this assortment. A real merchandising aid, this attractive, actionized unit encourages your customers to operate the new catch. It demonstrates the outstanding pulling power and convenience.



NATIONAL LOCK COMPANY

ROCKFORD • ILLINOIS
MERCHANT SALES DIVISION

Every inch is livable space with **B & G Hydro-Flo Heating**



The system of controlled radiant heating which meets the demands of modern architecture



Baseboard panels provide ring of radiant warmth around the house

B & G Hydro-Flo Heating solves the problem of properly heating homes with large glass areas. Radiant floor or ceiling panels, or baseboard panels effectively prevent cold downdrafts from the windows...keep floors warm and draft-free.

B & G Hydro-Flo Heating is a *forced hot water system*—which means that the heat supply is always under positive control. The temperature of the circulating water is *automatically* raised or lowered to meet every change in the weather. Even in spring and fall, when only a little heat is needed, indoor temperature is kept exactly at the comfort level.

That's why a B & G Hydro-Flo System costs so little to operate. No overheating to cause fuel waste...but always plenty of heat when the thermometer hits bottom.

Abundant hot water—winter and summer

The modern home needs hot water as never before...automatic washers and showers require ample quantities for satisfactory operation. The Water Heater of a Hydro-Flo System produces an abundant year 'round supply.



Simple, dependable equipment
The basic units of B & G Hydro-Flo Heating are (1) the Booster Pump to circulate hot water through the system, (2) the Flo-Control Valve to prevent an over-ride in temperature and (3) the domestic Water Heater. These units can be installed on any hot water heating boiler.

*Reg. U.S. Pat. Off.



Low-cost hot water for kitchen, laundry and bath—all year 'round.



Easy to have an auxiliary snow melting installation

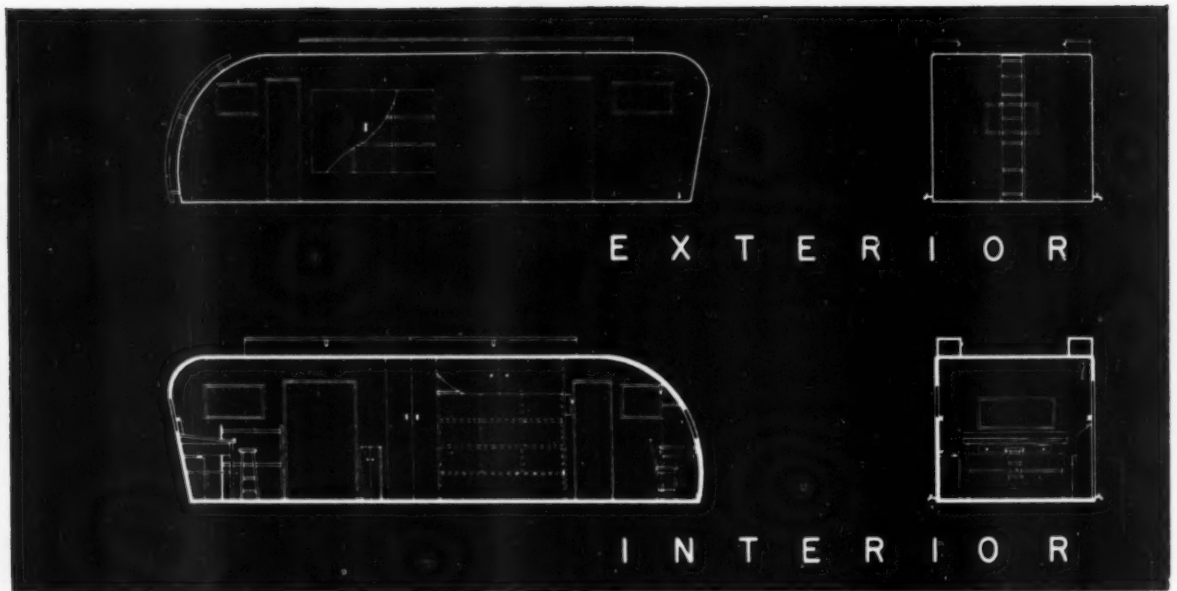


BELL & GOSSETT

COMPANY

Dept. DH-11, Morton Grove, Ill.

Canadian License: S. A. Armstrong Ltd., 1400 O'Connor Drive, Toronto, Canada

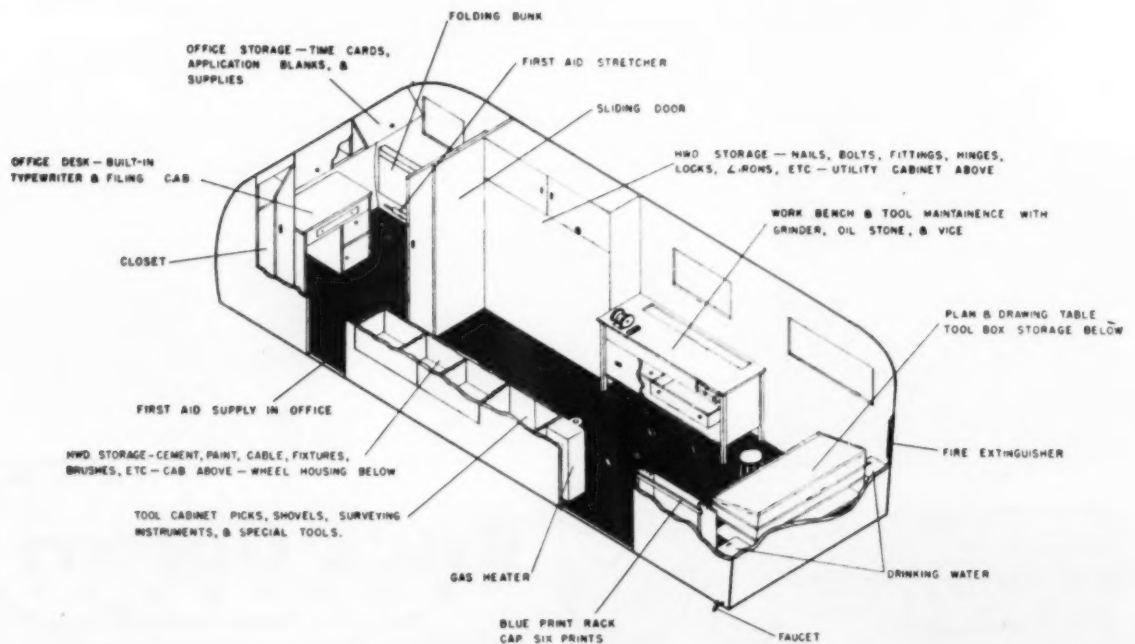


OFFICE-WAREHOUSE TRAILER

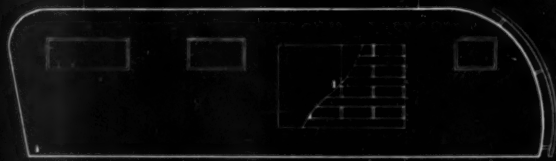
FOR
BUILDERS & CONTRACTORS

DESIGNED BY

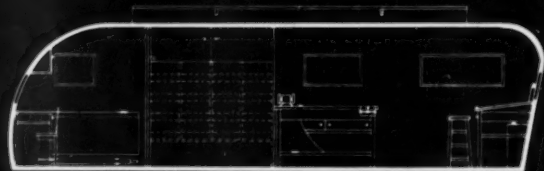
THE DEPARTMENT OF ARCHITECTURAL ENGINEERING
LOUISIANA STATE UNIVERSITY-BATON ROUGE, LOUISIANA



E L E V A T I O N S



E L E V A T I O N S

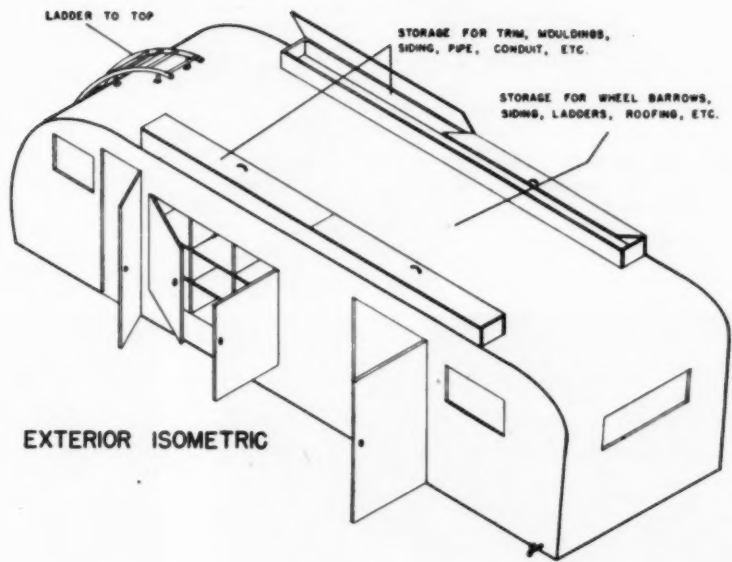


THE STANDARD-SIZE trailer shell is recognized by many builders and contractors as an excellent movable office and warehouse unit for use in connection with all types of building projects.

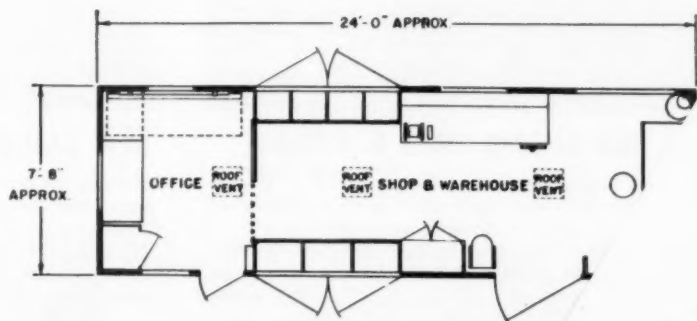
Here are some of the advantages of a mobile unit:

1. It saves the cost of constructing and removing a small building for each separate job.
2. It saves numerous trips during the construction period, and in many cases it avoids delay.
3. It provides better care and permanent storage for transits, tapes and other engineering equipment.
4. It provides safe storage for finish hardware and tools.
5. It provides better facilities for the clerk of the works or the superintendent on the job.
6. It provides "on the job" facilities for tool maintenance.

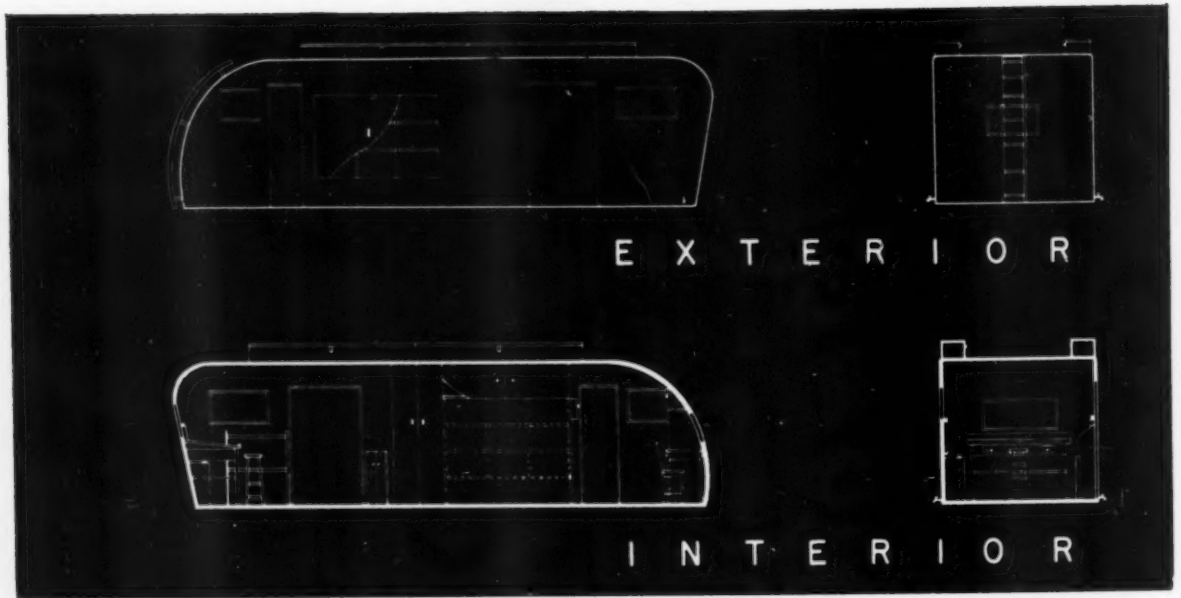
The trailer illustrated in this article is primarily used by building contractors, however, with simple changes it may be adapted and redesigned for use by subcontractors. Units of this type can be of great benefit and can also result in lower costs to the builder.



EXTERIOR ISOMETRIC



FLOOR PLAN

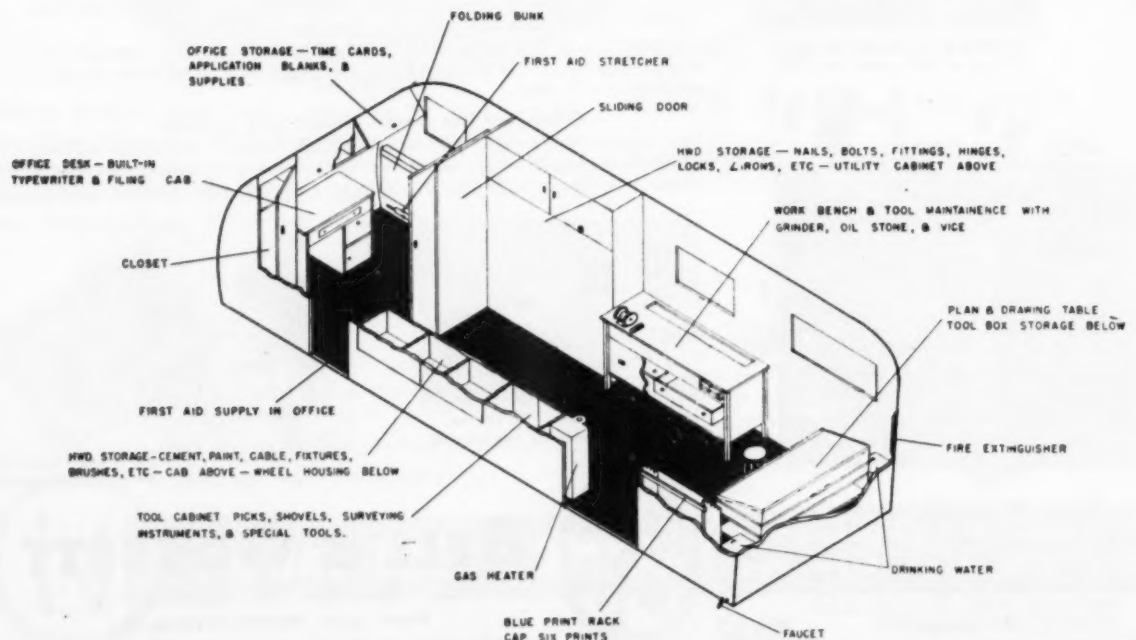


OFFICE-WAREHOUSE TRAILER

FOR
BUILDERS & CONTRACTORS

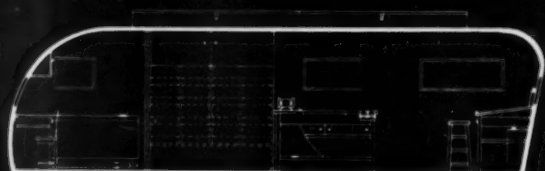
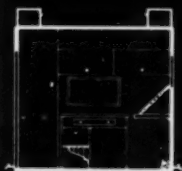
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E L E V A T I O N S



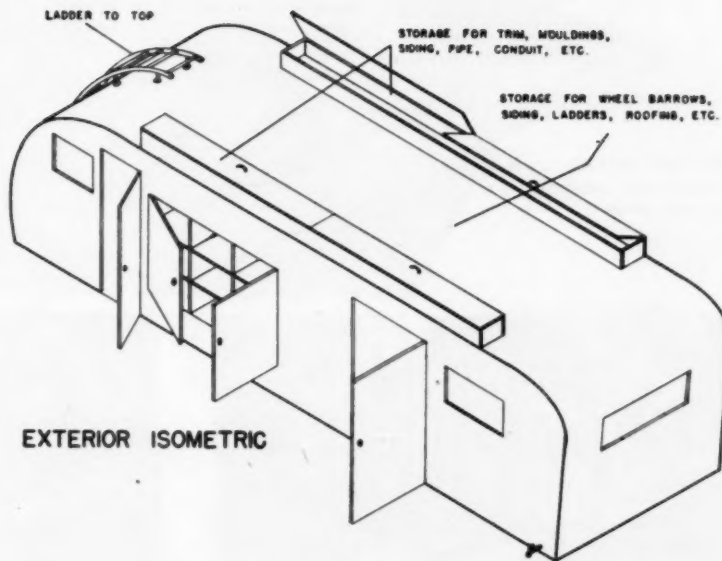
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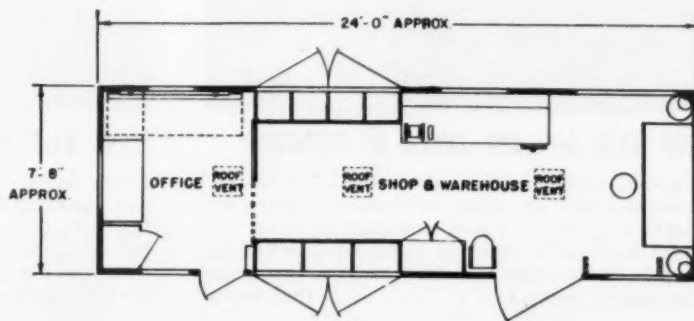
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EXTERIOR ISOMETRIC



FLOOR PLAN

You asked for all these NEW *Black & Decker*

MAN-SIZE CONTROLS . . . big trigger switch, heavy wing nuts give faster action, quicker adjustments!

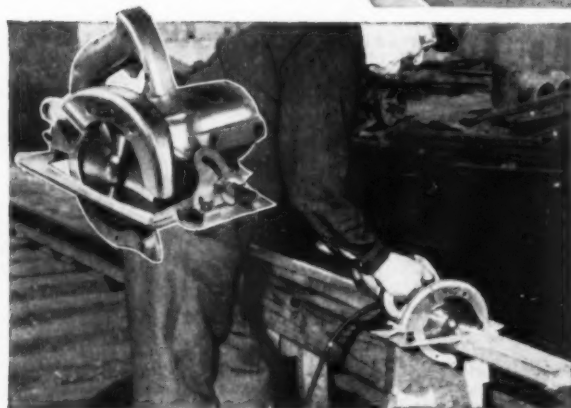
EASY-GRIP HANDLE . . . at natural sawing angle . . . plus second hand-hold . . . and cord is out of the way!

POWER TO SPARE . . . on the toughest jobs . . . because all motors are B&D-built just for these saws!

HUSKIER BUILD . . . larger shoe . . . for solid base, greater stability on every cut you make!

2-POINT SUSPENSION . . . not one but two big wing nuts hold saw steady at every depth and angle!

SAFETY-LIFT GUARD . . . large guard lift-lever lets you retract lower guard by hand safely!



NEW B&D 6" SAW WITH 8" POWER!

Yes, for power and performance, the new B&D 6" Heavy-Duty Adjustable Saw can equal an 8" saw on many jobs! Cuts from 0" to 2" deep . . . bevel cuts from 0° to 45° . . . depth of cut at 45° is 1 5/8". Built-in depth-and-bevel attachment . . . plus all the other new B&D features that make this the greatest 6" Saw yet Only \$64.50

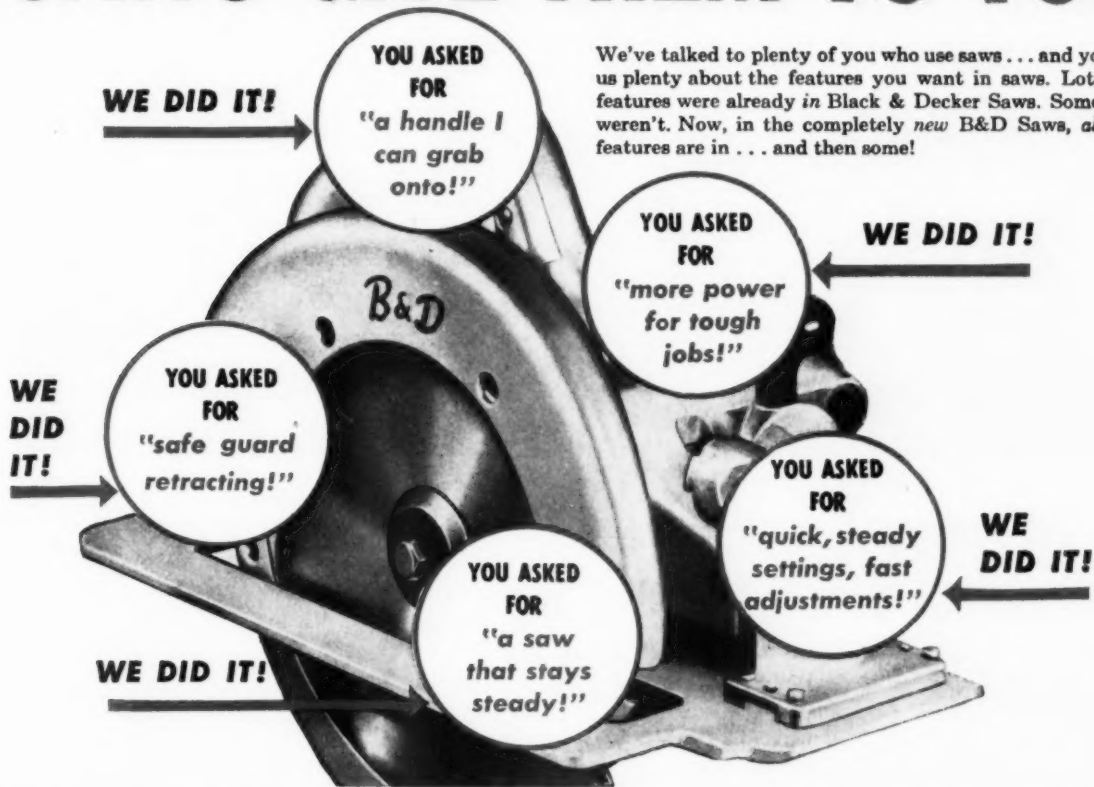


NEW B&D 8" SAW FOR ALL-ROUND WORK!

Here's your power-packed 8" Heavy-Duty Saw . . . an all-round saw that just *won't* stall on the job! Cuts from 0" to 2 13/16" deep . . . bevel cuts from 0° to 45° . . . depth of cut at 45° is 2 1/16". Easy to adjust built-in depth-and-bevel attachment, expertly designed and constructed, plus all the other new B&D features Only \$96.50

ALSO: NEW B&D 7" SAW . . . \$84.50 and NEW B&D 9" SAW . . . \$114.50.
Both Heavy-Duty Units with All the Features Described Above.

features... and the SAWS GIVE THEM TO YOU!

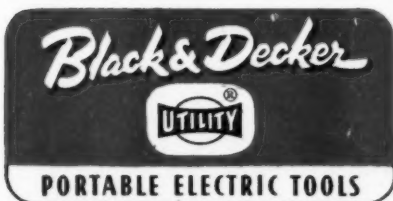


We've talked to plenty of you who use saws... and you've told us plenty about the features you want in saws. Lots of those features were already in Black & Decker Saws. Some of them weren't. Now, in the completely new B&D Saws, all of these features are in... and then some!

NOW PROVE IT YOURSELF and get a chance to win \$1,000.00

AT YOUR DEALER'S! See and try the great new Black & Decker Saws yourself *soon*... AND GET A CHANCE TO WIN \$1000.00 at the same time! Just ask your dealer to show you the new B&D Saws. Try them. Note their many features. Then fill out official entry blank, and leave it with your dealer. He'll do the rest... and you'll be in line for the grand prize... \$1000.00... or one of 52 other awards. See your dealer quick! For dealer nearest you, see Where-To-Buy-It Section of local phone book, under TOOLS-ELECTRIC.

RIGHT ON THE JOB! To make the big B&D Saw Contest even easier for you to enter, we'll arrange to have the new B&D Saws brought right out to your job site, let you try them yourself, enter right then and there. To arrange this, just fill out coupon and mail it *today!*



See TOOLS, ELECTRIC

THE BLACK & DECKER MFG. CO., Dept. H663, Towson 4, Md.

I want to see and try the new B&D Saws right on my job! No obligation, of course!

Name

Company

Address

City Zone State

Job Location

The '54 **P&H** Pioneer Home

- 72 sq. ft. larger living room than most at price
- 27 1/2 sq. ft. more closet space than most at price
- 30 sq. ft. larger kitchen, 43 ft. more kitchen shelving
- extra powder room, folding door room for TV or 4th bedroom



Build homes that offer more . . .
you'll sell more, profit more

There's no selling problem with this new P&H Home. Just let your prospects see it; let them compare with others at the price. That's all the selling you'll have to do. The new P&H Pioneer Home has full bath plus powder room, more than 1,100 sq. ft. of living space. And it has more new ideas, more selling features than any home you've seen at the price in years.

Site costs are lower, too, when you build P&H Homes. Homes arrive at site complete with hardware, millwork, glazing and trim, ready to go up in a day. You can build P&H Homes the year around, offer 2, 3 or 4 bedroom models with or without basements. Financing aid is available from a P&H subsidiary when local sources are limited.

See how risk-free and profitable home building can be

WRITE FOR DETAILS ON THE P&H BUILDER PROFIT PLAN NOW



New Flexibility! 3-Way Dining Area

Here's a real sales-closer in the '54 P&H Homes — a changeable dining area. The matchstick bamboo folding screen on a ceiling track makes dining area part of kitchen or living room, or open to both, in seconds.

P&H HOMES
HARNISCHFEGER CORPORATION

312 Spring St., Port Washington, Wis. Phone Port Wash. 611

Now sell homes to the low-cost market — profitably. Write for details on the new P & H minimum-cost Home, priced to sell at \$5,500.



VIKON TILE

*Watch our monthly
feature announcement

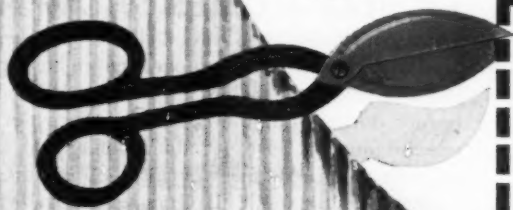
*FEATURE

THE ONLY COMPLETE LINE

It's twice as smart to do business with Vikon, because 1) Vikon is the *only* tile manufacturer who offers you a complete line of steel, aluminum, and stainless steel tiles *plus* two grades of plastic tiles. 2) Vikon has been in the business longer than any other manufacturer, with a reputation for quality that has been growing since 1926. This double-barreled combination means more profits for you, and many more satisfied customers!

HERE'S WHAT VIKON OFFERS YOU

Enameled Steel • Enameled Aluminum • Stain-
less Steel • Plastic • Mastic • Accessories
Matching electric receptacles and switch plates



VIKON TILE CORPORATION
Washington, N. J., Dept. XD-1

Please send me, without cost or obligation, the complete story of
Vikon Tile together with full-color brochure and sample tiles

DEALER DISTRIBUTOR CONTRACTOR ARCHITECT

NAME.....

ADDRESS.....

CITY.....ZONE.....STATE.....

Big Big **LIFE** promotion to

LIVING ROOM



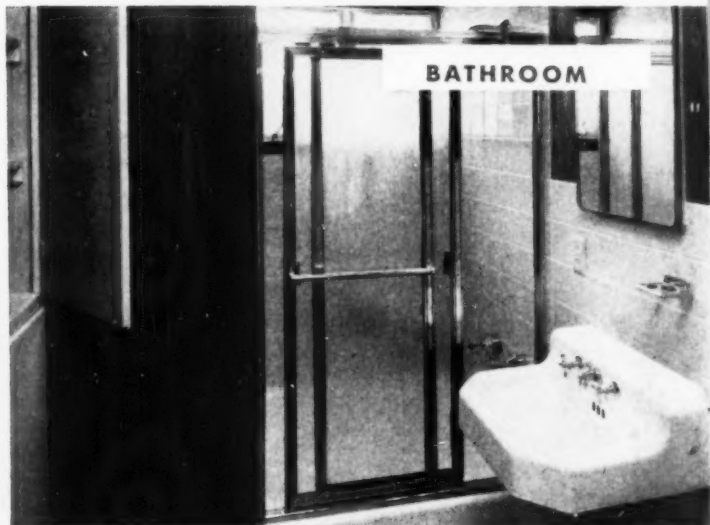
BEDROOM



KITCHEN

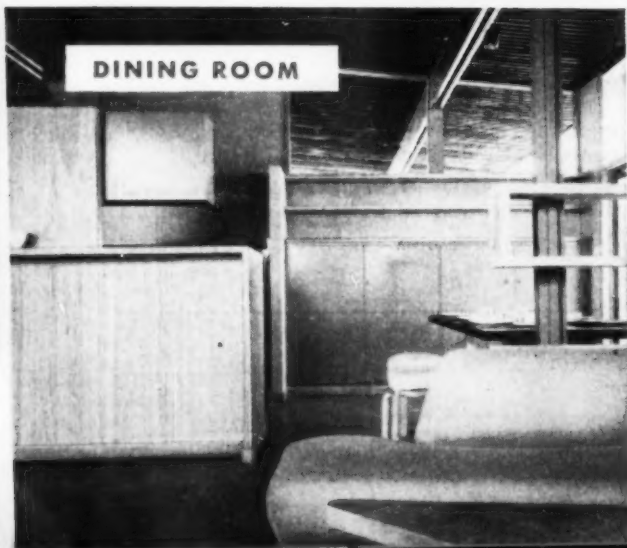


BATHROOM



ALL PHOTOGRAPHS TAKEN IN EICHLER HOMES

DINING ROOM



EICHLER HOMES SHOW HOW —

Eichler Homes of Palo Alto, California, are enjoying ever growing sales success. They panel entire homes with a variety of Weldwood paneling. Eichler's success shows that the beauty, durability and low maintenance cost of Weldwood paneled interiors has tremendous sales appeal. Other builders who feel the same way include: Boris Gertzen Associates, Huntington, L. I., Graeme Stewart, Wheaton, Ill., Joseph P. Carp, Chicago, Ill., Harris Homes Inc., Morton Grove, Ill., C. A. Hemphill & Associates, Evanston, Ill., Trude Land Development, Inc., Arlington Heights, Ill., and many others in every section of the country.

help you put **SOLD** signs on your Weldwood Paneled Homes

Growing public demand for wood paneled interiors, plus Weldwood's hard hitting Life promotion, can help you sell homes.

Whether you panel a single wall or do entire rooms, you'll still be *closer* to a *closing* if you include Weldwood paneling in your plans right now. The big two-page Weldwood ad in full color in the March 1st issue of Life magazine will show interior paneling which you can easily duplicate.

LOW COST! You'll be surprised to learn that for as little as \$26 in material cost, for a wall 8' x 12', you can add this big sales feature to your homes.

Think of the sales appeal of a fireplace wall in rich mahogany Plankweld®, a dining room in sliced walnut, a den or cellar playroom in rustic Surfwood® or dramatic Novoply®,

a library nook in distinctive Weldtex®, a utility room in birch, or a really glamorous room in exotic blond Korina®.

Builder enthusiasm is growing by leaps and bounds. Many tell us that no other type of interior finishing can match the *sales appeal* of real wood paneling. And remember, Weldwood interior paneling is *guaranteed for the life of the home!* The guarantee packs a sales wallop too!

Act now! Be one of the many builders who have already made plans to tie in with Weldwood's big Life promotion which will be seen by more than 26 million readers—many of them *red-hot home buying prospects!*

For further information see your local lumber dealer now or contact any of the 60 United States Plywood or U.S.-Mengel Plywoods distributing units in principal cities, or mail coupon.

FOLLOW THESE SUGGESTIONS—THEY'LL HELP YOU CLOSE SALES!



IN YOUR HOMES—Check your blueprints and see where Weldwood paneling can most effectively be used. (For homes under construction Weldwood paneling can be included for less than you think.) Visit your local lumber dealer or Weldwood showroom and see the paneling.



IN YOUR PROMOTION—Weldwood products are constantly being advertised in other leading national magazines. Your building site display boards and promotional literature should place strong emphasis on the fact that your homes feature beautiful Weldwood paneling.



IN YOUR ADVERTISING—The Weldwood *guarantee* has tremendous sales appeal! Use it in your newspaper advertising and promotional literature. You can even include it in your sales contract because the guarantee is backed by the largest plywood organization in the world.



Weldwood®

United States Plywood Corporation

World's Largest Plywood Organization

55 West 44th Street, New York 36, N. Y.

U.S.-Mengel Plywoods, Inc., Louisville, Ky.

Distributing Units in 60 Principal Cities

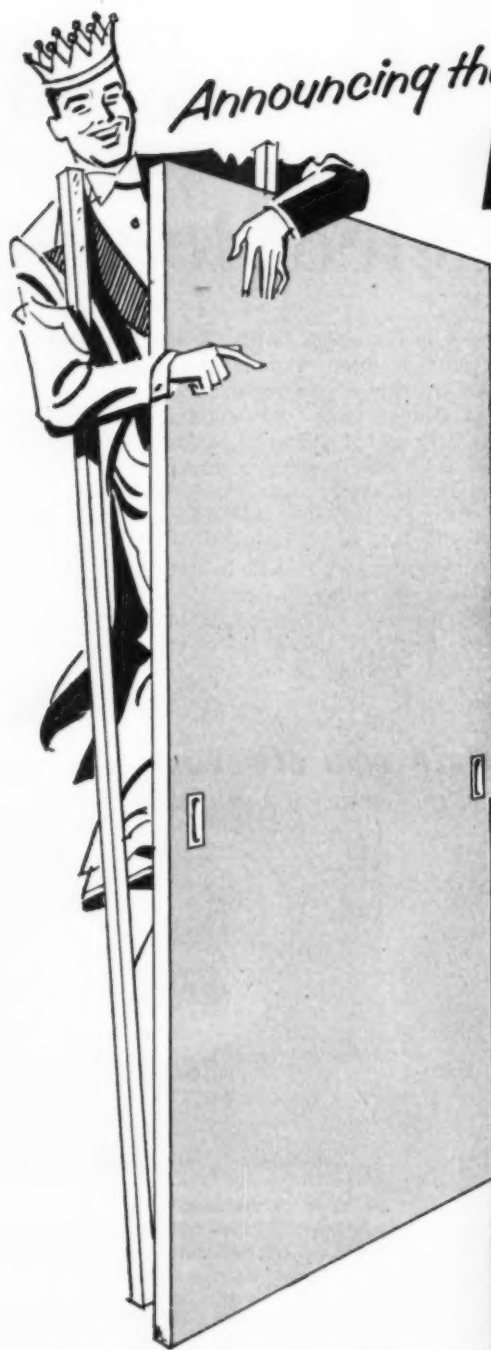
United States Plywood Corporation AB-2-54
55 West 44th Street, New York 36, N. Y.

FREE: Please send me new Weldwood Catalog packed full of Weldwood data and specifications. ()

NAME

ADDRESS

CITY.....STATE.....



Announcing the NEW-

AMWELD® "KING SIZE"

FLOOR-TO-CEILING "K-D" STEEL SLIDING CLOSET DOOR AND FRAME UNIT

Full length floor-to-ceiling wardrobes are high on the list of features that home buyers want this year. Installation is quick, easy, and most important, low in cost. Operation is smooth and quiet—the trim, modern styling enhances any type of decor. Sturdily constructed of heavy-gauge steel, they will not warp, crack, shrink or stick. Once properly installed they require no time-consuming call backs for service or adjustment. Try them on the next house you build. You will find their attractive appearance, and the extra storage provided are an effective sales argument to buyers, particularly to the housewives.

Write today for full details. Let us show you how Amweld Steel Sliding Closet Door and Frame Units can help you cut costs and still build more salable houses.



LOOK AT THESE SALES FEATURES

- SMOOTH, QUIET OPERATION
- BAKED-ON GREY PRIME COAT READY FOR FINISH COAT
- SNAP-IN NYLON HARDWARE AND FINGER PULLS
- LONG-LIFE NYLON ROLLERS
- FITS CEILINGS 8 FEET OR HIGHER



PRIME FINISH

OPENING	NO. PANELS	FLOOR TO CEILING
4'0" wide	2	8'0" high
5'0" wide	2	8'0" high
6'0" wide	2	8'0" high

Amweld Building Products Division

THE AMERICAN WELDING & MANUFACTURING CO.

310 DIETZ ROAD • WARREN, OHIO

AMERICAN BUILDER

RICHMOND SCORES FOR '54

With a New WFD Gas-Fired Boiler

Now available for either steam or hot water systems, fully automatic operation—AGA approved—Meets S.U.R. standards—A.S.M.E. Standards. Controls for all types of gases.

The Richmond WFD Series F wet-base, cast-iron, gas-fired boiler offers many advantages. Its white enamel jacket harmonizes with other appliances in the utility room or finished basement. All controls are fully enclosed within the sturdy steel jacket. All units are "Duridized"* to provide a firm bond for the white enamel finish and positive protection against rust or corrosion.

The WFD Series F boiler is supplied with control groups for all types of gases. Available in 8 different capacities from 80,000 to 290,000 input Btu/hr. for a complete range of hot water or steam installations. The hot water boiler can be supplied with tankless heater for instantaneous hot water in 3 or 5 gal. per min. capacities.

Here is an efficient, dependable source of heat—the new Richmond WFD Series F gas-fired boiler—backed by almost a century's experience in the development and manufacture of heating equipment. For complete information send off the coupon today.

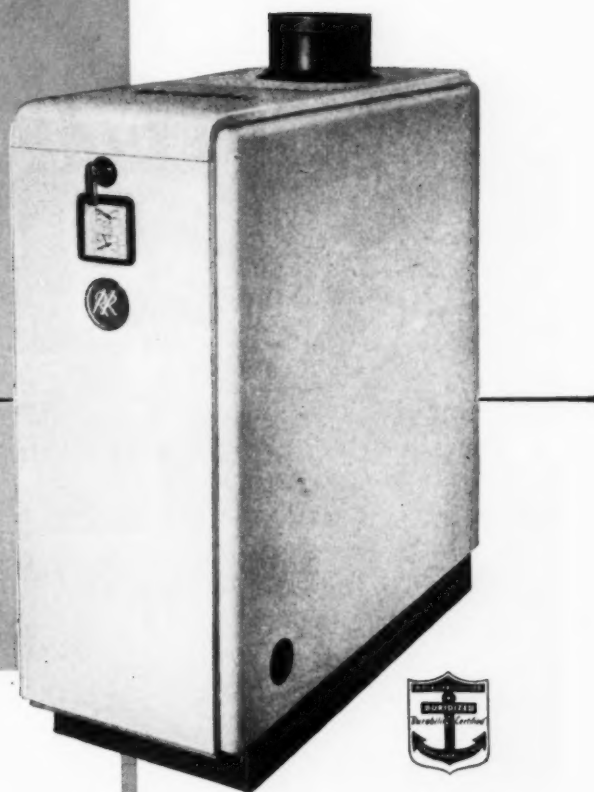
Sold through wholesalers.

*Duridine—American Chemical Paint Co.



RICHMOND

Richmond Radiator Co.
Affiliate of Reynolds Metals Co.



Check these features:

- For hot water or steam systems
- Cast-iron, wet-base—AGA approved for combustible floor installation
- Completely automatic operation
- All controls and tankless domestic water heater enclosed in steel jacket
- White enamel jacket "Duridized" for superior bonded finish
- Available with tankless heater for instantaneous hot water—3 or 5 gal. per min. capacities

Richmond Radiator Company • Box 111, Metuchen, N. J.
Please send me more information and literature on the new WFD Series F boiler. No obligation, of course.

NAME.....

COMPANY.....

ADDRESS.....

CITY.....ZONE.....STATE.....

We are plumbing wholesalers plumbing contractors
 building contractors architects. AB-2



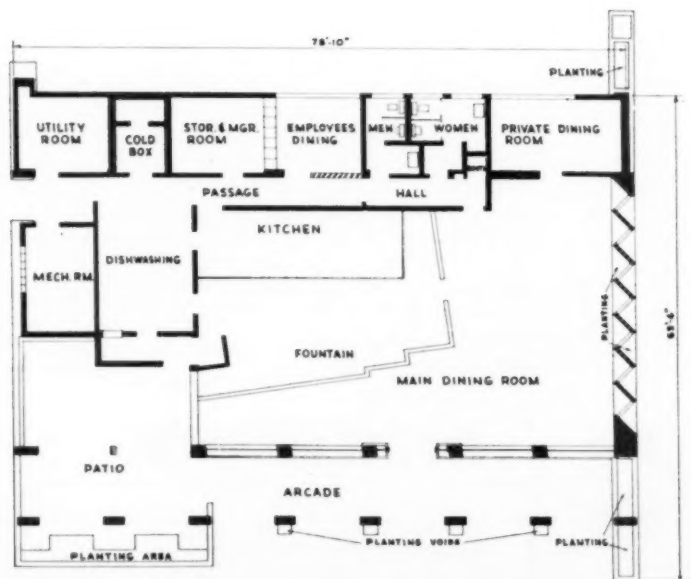
SHOW the frame

The free-standing stanchions, which are the main structural members, are framed to form basic architectural motif of building

Photos courtesy of Pacific Tile & Porcelain Co.

BUILDER:
Roy Diem, La Canada, Calif.

ARCHITECT:
David Underwood, La Crescente, Calif.



FLOOR PLAN

Facilities for complete dining service provided in this one story building

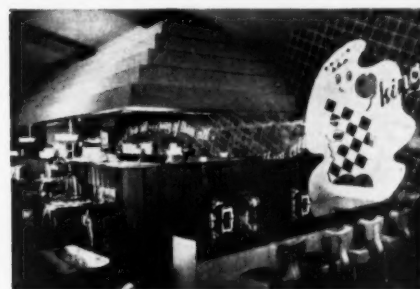
and STOP the traffic



View inside of the terrace with protecting canopy formed by the roof overhang



Interior of main restaurant: outdoor effect obtained with glass walls above counter line



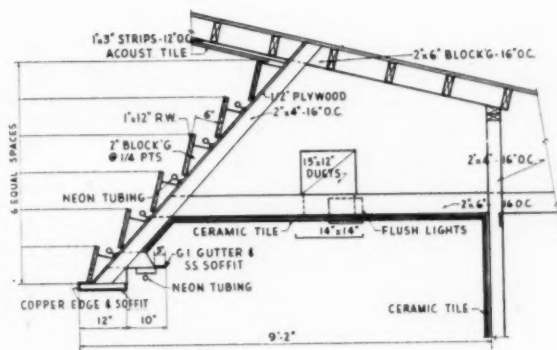
Step design of hood formed of 1x12 boards placed at an angle and secured to 2x4 bracing with 2-inch blocks. Neon tubing is placed in back of steps. Underside of hood is lined with stainless steel

IN THIS new restaurant in Pasadena, California, the designer has taken the basic structural members supporting the building (steel beams and columns) and used them as his principal design motif by effectively extending them beyond the eave line of the roof.

The building is planned as an indoor-outdoor eating place having a partially covered patio at one end. The steel beams and columns are framed out to a width of 2 feet 6 inches and faced with plywood. The furred beams continue on the inside as a feature of the ceiling up to the intersecting beam at ridge.

Of interest is the manner in which piers, columns and beams are finished. They are given two base coats of paint and then a coat of Zolatone which is sprayed on. Due to the special properties and the action of the material, a mottled color results. The exterior masonry is a special type of concrete brick, size 1x3x15 inches, with a one-inch-wide mortar joint.

A novel window treatment extends the full width of the end (west) wall of dining room. Plastered stub walls are placed at an angle of 45 degrees to the end wall of this room. These occur at regular intervals. Glass is installed in metal stops and placed at right angles to stub wall surface. The depressed area at sills between walls and windows, both inside and out, is used effectively for planters. The wall surfaces in this area are also sprayed with Zolatone resulting in a mottled finish.



KITCHEN HOOD DETAIL

The inside wall of the dining room, which includes the kitchen projection, is faced with Ceratiles, a decorative clay tile, in dark green with an inscription and the company's trade mark as a special design in white running through the background tile.

Kitchen projection is faced with rough-finished lapped boards up to the counter line. A stepped designed hood, with concealed fluorescent tubes located in each step, forms a canopy over the kitchen area and is lined on the underside with stainless steel.

Now it costs less than ever . . .
in money and manpower . . .
to give your homes the colorful appeal* of



◀ Here they're used with two standard Murray base cabinets to form a free-standing range with two big storage compartments. The oven can be raised 6½" to provide a drawer beneath oven. Note optional glass window.

* Every builder knows the sales wallop that built-ins of every kind carry in today's new-home market. But up till now, built-in ranges have been costly and difficult to install. Now Murray designers have found the answer to built-in features—counter-top ranges that match lovely Murray Kitchens' "Contour

**SEE THESE UNITS AT THE MURRAY BOOTH
NAHB SHOW**

built-in cooking units!

New Murray color units offer builders advantages never before found in counter-top ranges or built-in ovens!

1

COLOR HARMONY! Murray's beautiful built-in range tops and ovens come in porcelain enamel Sunset colors: Golden West Yellow, Ranch Green, Horizon Blue, Mist Gray, and white. Stainless steel is also available. It's a new, dramatic way to bring smart color into the kitchen! Colored cabinet handles to match let you extend this color scheme throughout the kitchen.

2

STYLE HARMONY! Range tops are actually counter tops—with contours and backsplash to match Murray base cabinet tops perfectly! No more "built-in hot-plates," the Murray range top is a complete, integrated unit with *all* the beauty of Murray "Contour styling!"

3

EASIEST INSTALLATION! Counter-top range fits on any 24" or 30" Murray base cabinet . . . replaces the regular top! Full-depth cabinet drawer gives convenient storage space. No special holes to cut in counter tops. No difficult fitting problems. And the same goes for Murray's oven-to-match! Control panel for counter-top range can be located for greatest convenience.



Murray built-in range counter top and oven in a custom-planned Murray steel kitchen. The oven is fully automatic, includes clock and timer. Electric heating elements are concealed. The possible combinations are unlimited.

styling" exactly . . . replace counter tops on regular Murray base cabinets! Read how your regular Murray Kitchens supplier can help you achieve new, colorful *built-in* glamour . . . at lower cost, with *easier* installation. Then see your Murray supplier or send the coupon . . . now, in time for your next project!

MURRAY

THE MURRAY CORPORATION OF AMERICA
Home Appliance Division
1900 South Washington, Scranton, Pennsylvania

Please send details on new Murray built-in range counter tops and ovens.

Name _____

Address _____

City _____ Zone _____

County _____ State _____

BRIXMENT

Better Mortar for Blocks



BETTER BODY

When concrete blocks are laid, the mortar should have "body", to support the weight of the unit, thus holding it up to the line. If the mortar lacks body, the block will settle below the line even if a thick bed of mortar has been spread.

At the same time, plasticity is required. Unless the mortar is plastic, the bricklayer cannot quickly and accurately tap the block down to the line.

Brixment has body and plasticity. It is firm but not stiff — soft but not sloppy. This combination of body and plasticity makes Brixment the best possible mortar to use with concrete blocks.



AMERICAN BUILDER

LAND PLANNING is worth it



The story of THE VILLAGE in Wichita

as told to the *American Builder*

by **U. A. Denker**

Vice President, The Wheeler Kelly
& Hagny Investment Company

IN THE 1920's, a far-sighted realtor conceived the idea of creating a purely residential community of expensive homes "far, far" to the east of Wichita, with Douglas Avenue, a main east-west artery, running through it. The depression took its toll of this "dream." Nevertheless, today the municipality of Eastborough is a reality and consists of a neighborhood fully improved with some of the finest homes in the Wichita area.

As the city grew, expansion eastward gained momentum, and by the 1940's the city limits were within half a mile of Eastborough. Lying between Eastborough and the city were a 160-acre tract south of Douglas Avenue and a 65-acre tract north

of Douglas. The directors and officers of The Wheeler Kelly & Hagny Investment Company saw this land as an opportunity to preserve the continuity of high-class residential development in its proper course, to plan and restrict large areas in advance, and to build an outstanding shopping center which would serve the eastern part of the city.

So we set out to acquire these tracts. The 160 acres were ready for immediate development; the 65 acres we considered as reserve land for future development. In April, 1946, through our affiliate, Town and Country Estates, Inc., we acquired the 160 acres south of Douglas and called it "The Village." At about the same time, the 65-acre

tract was purchased by a group in which Town and Country Estates has a substantial interest.

The Planning Stage

When we bought The Village tract we knew that we were faced with what would probably be a long-drawn-out court action to acquire title. Actually this took two years, but was probably the best break we ever had because it gave us plenty of time in which to plan.

The tract had the usual share of undesirable features. There was a water course which, because of adjacent development, could not be used for park or playground purposes. There was a major high-speed

(Continued on page 126)



Air view of The Village seen across a section of Eastborough

The developer built simple but significant entrances to the tract, planted pin oaks along the street parkings. The problem of the electric transmission lines was solved by putting the lines in the easements at the rear of the lots, then bringing the service lines underground into the houses. Wires for the street light standards also come from the rear easements. All in all, this arrangement gives a very pleasant and open feeling

(Continued from page 125)

highway bordering the property for half a mile on the south. Worst of all, there was an undeveloped, unzoned, uncontrolled area across this highway, which presented a real danger to the proposed community of fine homes. (This was met by building a service road along the southern boundary, which protects the homes in The Village from the highway and its undesirable features.)

After much time and effort, our office came up with a development plan for the 160 acres. We were not wholly satisfied with it, but in general thought it was good, and certainly far better than the gridiron pattern of land development so commonly used in Wichita.

At this point, we began to realize that after all we were amateurs in land planning and subdividing. It occurred to us that the Urban Land Institute of Washington, D. C., in which we had held membership for a number of years, could perhaps be of real help to us. We decided to present our plan for The Village to the session of the Institute's Community Builders Council which was held in Chicago in February of that year, 1948.

What the Experts Said

The suggestions made by the Council's members convinced us that our plan wasn't much of a plan. However, it wasn't all bad. Where the original plan had merit, we were commended and told how to capi-



talize on the good features. In my opinion, only an impartial group of men who have learned the hard way—such as those who constitute the executive committee of the Community Builders Council—can render such honest and unbiased opinions.

One of the most valuable suggestions made was that our shopping center location was too small and that we should retain considerably more land for this purpose. Also, we were advised to go out and acquire additional land in the immediate neighborhood for the protection of the proposed shopping center and for future residential development to support it.

Having put in much hard work on the original plan, all this was naturally somewhat discouraging to us. But at the noon recess in the Council's session, the late J. C. Nichols took me by the arm and said, "You've got a jewel there, but it needs a lot of polishing." And Hugh Potter of Houston said, "Son, you have a fine piece of property. Get

yourself the best land planner in the country and turn him loose on it. Then bring it back to us for review."

That is just what we did. Harman and O'Donnell of Denver, land planning consultants, made our basic land plan. Sixteen preliminary studies of the tract were made and the master plan which resulted was submitted to the Community Builders Council. After a few revisions it was adopted as final and we have not deviated from it one iota.

Platting and the Master Plan

We now had an over-all plan for the entire 160 acres, but we only platted a small portion. The first site was sold in July, 1949, to an operative builder who immediately started construction. But most individuals and builders were skeptical, and it was November before the second site was sold. Then things really caught fire, and we had to begin recording plats of additional sections to keep up with the demand.

We still feel, however, that it's

a good idea not to plat all of a large tract at one time. If you do, activity will probably begin to scatter, and it's best to hold the development together.

It is all-important to adopt a master plan in advance and to use this master plan in consulting with your city engineer and utility companies. We found our city departments and utility companies to be enthusiastic about such procedure. We are convinced that having a master plan has saved us many times the cost of the land planning service, as well as effecting real savings for those who supply our utilities—all this in addition to the direct savings in land sal-



vage, errors avoided and (most important of all) getting the job done in a reasonable length of time.

Another result of good planning is that by it you can make your tract a self-contained neighborhood, a focal point for surrounding areas. We started our planning by going to municipal authorities and asking such questions as, "Do you want a school and a park? If so, where? May we locate a store center at such-and-such a spot? Will you give us the zoning we need?" We asked ourselves, "Shall we provide for churches and apartment areas?" and had all such answers ready when our land planning consultants went to work on the tract.

Protective Covenants and Amenities

While the land planners were busy with their work, we spent months on preparing what we believe to be the most complete and workable protective covenants ever recorded in the county. Instead of the old-fash-

ioned minimum square foot requirement or dollar requirement, we have relied entirely on architectural control. As developer, we have passed on the plans and specifications of every structure built in The Village.

As developer, we decided to pay for certain amenities—something new in Wichita. We decided to put in spun concrete light standards instead of the usual wooden light poles. We brought the wires in to the standards from power lines in the easements at the rear of the building sites, instead of stringing wires along the street frontage. We built entrances to The Village—stone pillars on each side of boundary streets.

Instead of depending on the home owners to plant trees in the street parkings, and to obtain a uniform appearance, we bought pin oaks and planted them ourselves.

And Now—the Results

The entire 160 acres has now been platted. All but four of the residential sites have been sold and homes valued at from \$30,000 to \$65,000 have been built or are under construction.

Whether we sold to an operative builder or to an individual, we required a written agreement which committed him to start construction by a pre-determined date, usually not over three months off. If this was not done, we had the right to re-acquire the site. So far, we have not had to take back a single site.

A 14-room elementary school has been completed adjoining a 12-acre park and playground under development by the Board of Park Commissioners. The Catholic Church of the

(Continued on page 128)

Little Lessons in Land Development

1 Don't buck the trend. Buy in an area that suits the type of development you have in mind. If you intend to cater to high-cost housing requirements, buy in that environment. By the same token, you have a civic responsibility to refrain from developing low-cost housing in areas generally developed with expensive homes.

2 Be prepared to give the home owner real protection. Record reasonable and comprehensive protective covenants, so that your first buyers will know where they stand. Deed restrictions only bind the buyer. Some developers change their minds as they go along. This is certainly no protection for the home owner. You are safe in recording protective covenants if you plan in advance and if your planning is sound.

3 Give your buyers a little more than the competition offers. Give them certain amenities that will make them proud of their homes and the area as a whole.

4 No matter what the size of the tract is, plan the whole area in advance, even though you intend to plat only a small portion at this time.

5 Consult with all of the city departments as to their needs—parks, schools, streets, sanitary and storm sewers. Consult on the basis of the whole tract.

6 Consult also with the public utility companies.

7 Check with the church organizations.

8 You may not have much of a problem when it comes to grading. But if you lay your master plan before the city departments, grading problems, if any, will show up right away. If a problem exists, the city street department will undoubtedly set your street grades in advance, which will make it much easier for you to grade correctly as you go along. Thus you will avoid setting your houses by guess, only to find out later that they are too high or too low. Remember, too, that a competent land planner will lay out your subdivisions to take advantage of topography, thereby minimizing grading problems.

9 Never attempt any large-scale subdivision plan or shopping center without retaining the most competent technical personnel to assist you. The cost may seem high at first, but you will save in the long run.

Tilt-a-Door

SINCE 1935

America's original, all-metal canopy-type door for residential garages.

Now offers **LIFETIME ALUMINUM GARAGE DOORS, INDIVIDUALLY CARTONED FOR CONVENIENT HANDLING & STORAGE.**



Tilt-a-Door gives you:

- NO SPRINGS! NO TRACKS! NO NOISE!
- Tilt-A-Door's famous teeter-totter principle of operation. Only two moving parts.
- Lifetime wear.
- Ease of operation surpassed by none.
- Convenient awning protection from sun or rain.
- One piece ALUMINUM construction. No maintenance — No painting.
- A SINGLE PACKAGED UNIT. COMPLETELY ASSEMBLED, WITH ALL HARDWARE ATTACHED. THE SIMPLEST DOOR TO INSTALL FOR OWNER OR BUILDER.

Inquiries invited from Individuals, Builders or Supply Dealers.



TWIN DOORS OPEN INDEPENDENTLY. NO CENTERPOST



Tilt-a-Door

TILT-A-DOOR CORPORATION

Aluminum doors for residential garages

2000 East Over Drive

Denver, Colorado

LAND PLANNING

(Continued from page 127)

Magdalen has completed a chapel, school and rectory on a 6-acre site, with plans going forward for other buildings. Another 6-acre site is being built up by the Lutherans.

This, together with a small section reserved for luxury apartments, leaves about 25 acres which we set aside for the proposed "Woodlawn Shopping Center." About seven more acres have been allocated as a buffer zone between the shopping center site and the homes of The Village.

The Shopping Center

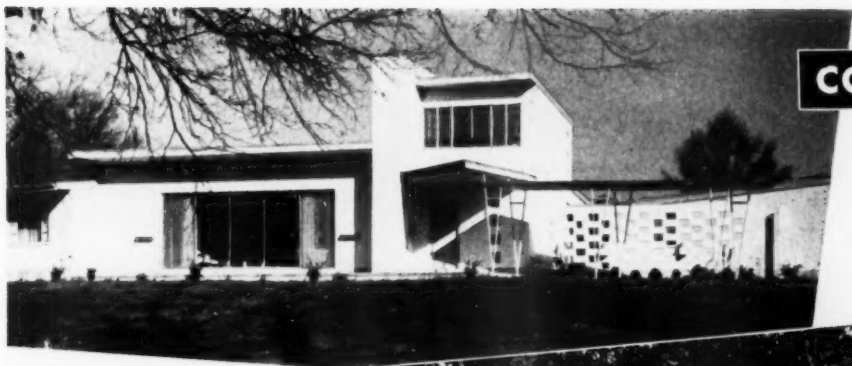
The natural growth of Wichita to the east has made The Village a perfect location for a relatively large shopping center. Our planning for the shopping center has been based on an economic survey made by Larry Smith and Company of Seattle in 1950. Victor Gruen, a New York architect, has designed a split-level cluster of buildings, the construction of which is expected to be started this year.

More Land

Following the Community Builders Council's suggestion, we recently bought 240 acres to the northeast of The Village and its proposed shopping center. Another 320 acres to the east is in friendly hands. This, added to the 65 acres already owned by Town and Country Estates, will assure the continued growth eastward of the better residential section of Wichita, as well as providing purchasing power for the shopping center.

To Sum Up

While the above is the story of The Village, in our opinion it represents the type of planning procedure which should apply to all subdivisions, large or small, expensive or low-cost. Low-cost housing areas are entitled to the same careful planning, protection and forethought as any other. Sometimes good planning is even more important to a low-cost development than to a high-cost one. It may not be possible to add the more expensive amenities to the cost of land in medium- or low-cost developments, but adequate protective covenants should never be omitted.



CONTEMPORARY

Residence at Bryn Mawr, Pa.
S. Kendrick Lichty, Architect

TRADITIONAL

Residence at North Hills, Pa.
Julian H. Jacob, Architect
Drass & Stinitia, Builders



TASTES VARY, BUT...

everybody wants the money-saving advantages of

ALUMINUM WINDOWS

Windows that cannot rust or rot, that never need painting or other costly maintenance are "First Choice" with most everybody who is building or buying a new house.

Regardless of the style, size or price of the new houses you build—either under contract or for sale—your customers are bound to appreciate the money-saving advantages of "Quality-Approved" aluminum windows.

"Quality-Approved" aluminum windows are available through many manufacturers, in sizes and styles (double-hung, casement, projected and awning types) to fit any design treatment. Only those that carry the "Quality-Approved" Seal have been tested by the independent Pittsburgh Testing Laboratory and approved for quality of materials, construction, strength of sections and minimum air infiltration.

For detailed information and names of approved manufacturers, see Sweet's Builders File (Section 4c/ALU), or write to Dept. AB-2.

LOOK FOR THIS SEAL
BEFORE YOU BUY



Aluminum Window Manufacturers Association

74 Trinity Place, New York 6, New York



Paneled Doors...Mark of the Better Home

Fads and fancies in home decorations come and go—but the charm of a paneled door is ageless. That's why paneled doors are so often the choice for the better home ...the home that expresses stability;

enduring beauty and comfort. Today, Ponderosa Pine paneled doors enable you to offer homeowners a wide choice of styles—thus creating sales-stimulating individuality in the homes you build.

Ponderosa Pine **WOODWORK**

GO MODERN WITH WESLOCK

THE 500 CONCAVE SERIES

NOW... MATCHING DESIGN IN

CABINET
HARDWARE

RESIDENTIAL
LOCKSETS



THE NEW, CONCAVE CABINET HARDWARE IS AVAILABLE IN BRASS, BRONZE AND CHROME FINISHES AND IN THE FOLLOWING SIZES: CABINET PULL WITH 3" CENTER; 1½" KNOB WITH 1½" BACK PLATE; 1½" KNOB WITH 2" BACK PLATE; 2" KNOB WITH 2½" BACK PLATE.

Write for further
information



WESTERN LOCK MFG. CO.

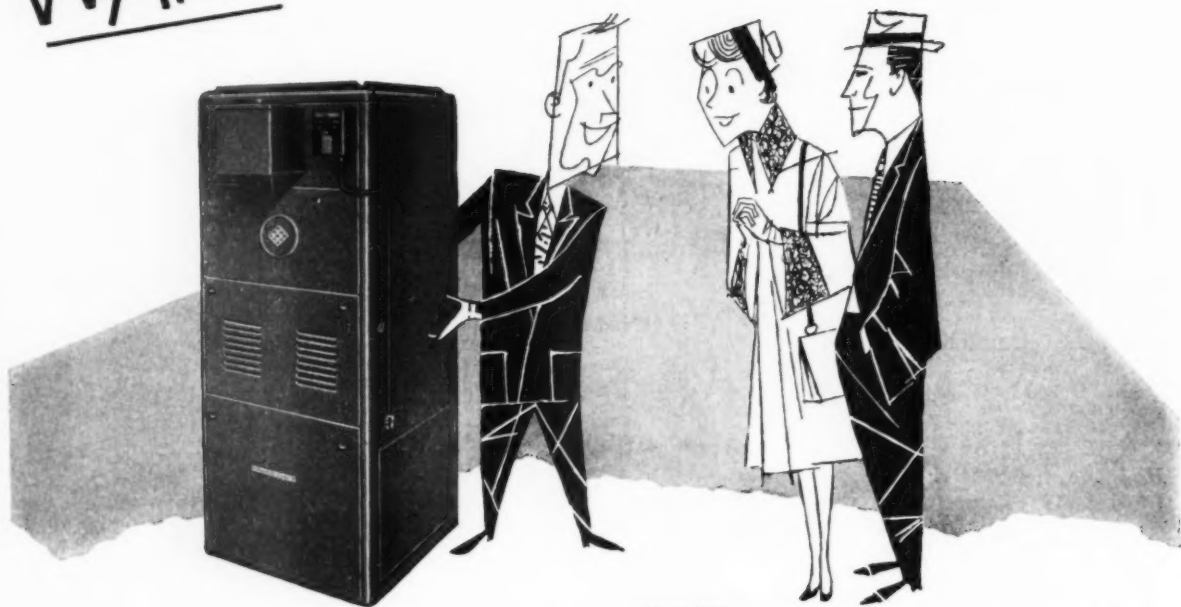
Manufacturers of Weslock Residential Locksets and Builders Hardware



GENERAL OFFICES, 211 NORTH MADISON AVE., LOS ANGELES 4, CALIF. • FACTORY, HUNTINGTON PARK, CALIF.

SALES AMMUNITION!

A FURNACE YOU'LL WANT TO TALK ABOUT!



Perfection with *Regulaire*^{*} the only real exclusive in the heating business

Regulaire[®] is the "blower of 1000 speeds" that regulates air flow to the exact amount of warmth coming from the furnace. No cold blasts . . . no sudden surges of hot air. Regulaire is the one feature that every manufacturer would love to have but *only Perfection can offer*. And it's the

one feature that really gives you something to talk about with your customers. Vital for perimeter heating, too. Ask your heating contractor about Perfection oil or gas furnaces with Regulaire, or write Perfection Stove Co., 7519-A Platt Ave., Cleveland, Ohio.

^{*}Pat. pending

Companion Unit for Complete Home Air Conditioning. Gives you the opportunity to "sell up" with prospects who are interested in air conditioning as well as heating.



YOUR HOME DESERVES
Perfection

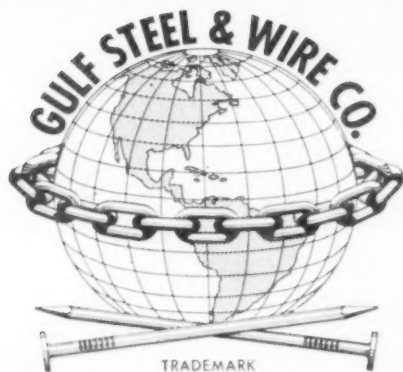


PORTABLE HEATERS

FURNACES • HOME HEATERS • RANGES • AIR CONDITIONERS • WATER HEATERS

GOOD GULF NAILS

Will NAIL DOWN PROFITS For You



Here's Why:

1. **The HEAD** – thick, uniform shape, perfectly centered on the shank. Compare it with others of the same type . . . and you see the result of brand-new *precision machinery*, manned by skilled operators!
2. **The SHANK** – highly polished, uniformly coated, or deeply barbed as the case may be . . . one thing stands out: Here is the product of only the finest, *first-quality steel!*
3. **The POINT** – sharp, centered, clean . . . the uniform result of closely supervised production, prime materials, and the most modern wire mill in the world . . . built expressly for the production of perfect nails!
4. **The TEST** – drive it . . . hear it ring clear as it seats deep and holds fast. Test good Gulf nails again and again . . . you will always get the same result. Straighter, cleaner, easier drives . . . greater holding power . . . **LOWER NAILING COSTS FOR YOU.**

Communicate with the nearest GULF representative:

Davidson Steel Corp.
444 Madison Avenue
New York 17, N. Y.
Phone: Plaza 9-7151

Edward D. Sperry Jr.
P. O. Box 936
Santa Barbara, California
Phone: 2-9625

C. G. Fallon
630 Centre Street
Jamaica Plain,
Boston 30, Mass.
Phone: Jamaica 4-5046

The Crispin Company
1611 Bank of Commerce Bldg.
Houston 2, Texas
Phone: Fairfax 0338

B. S. Meade Company
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Union, New Jersey
Phone: Unionville 2-8068

GULF STEEL & WIRE COMPANY

BAYAMON 39 P. R., U. S. A.

8-0-13

Manufacturers of: Nails and Staples • Chain, welded and weldless • Chain-link fencing • Concrete wire mesh
Steel wire: plain, annealed, galvanized.



How to pick a door

Sure — it depends upon what you want the door for. That's how you pick.

But there are so many different doors for so many different purposes, that the best way to do is pick your *source* for *all* doors. Atlas Plywood is the preferred source for flush doors of all types: hollow or solid core, high grade or inexpensive. Atlas Plywood makes flush

doors and panels its chief business ... controls their kind and quality at each step from forest to finished product.

So tell your supply dealer you want Atlas Plywood; he can get just what you order. Atlas Plywood is one of the world's oldest and largest makers of plywood and its products.

ALL THE WOODS ALL THE GRADES ALL THE SERVICE

Whatever you specify in "Atlas Plywood or equivalent" in doors, dealers can get exactly and speedily from Atlas Plywood jobbers. You get all the advantages of flush doors for modernity, beauty and ease of cleaning and maintenance PLUS the advantage of Atlas Plywood's continuous supervision from tree to the point of hanging.

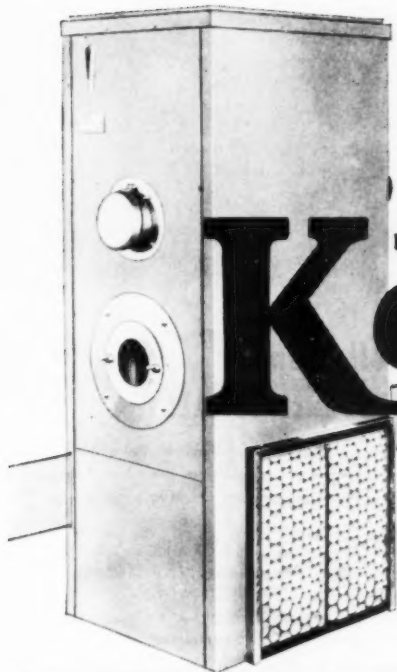
Atlas Plywood

CORPORATION

FROM FOREST TO FINISHED PRODUCT

Boston 16, Mass. Distributors in all principal cities





PLAN ON **Kaustine** HEATING

YOU CAN **SAVE** SPACE...

Kaustine fully automatic oil fired "Jersey 75" Furnaces are designed to operate efficiently in a 3½ square foot area enabling the builder to deliver *extra living space*. Quiet operation makes them ideal for closet installation.

YOU CAN **SAVE** TIME...

Factory assembled, these units are completely wired ready for quick, economical installation. It is only necessary to hook on the plenum, mount the burner, and run the hot wire and fuel oil line.

YOU CAN **SAVE** MONEY...

You need only to compare Kaustine quality, engineering, price, installation costs and their operating and service performance to be convinced that they will *lower your building costs*.

FOR FULL INFORMATION
WRITE TO DEPT. AB-2



Kaustine

QUALITY COSTS LESS

There is a Kaustine Furnace or Winter
Air Conditioner for every type of home.

to Sell 'em-

tell 'em Where to

1954 AMERICAN BUILDER DIRECTORY

SECTION THREE

Where to Buy It Locally

A DIRECTORY OF MANUFACTURERS' LOCAL DISTRIBUTORS

AUBURN MFG. CO.
CHICAGO 3, ILL.

At Your Service
AUBURN MFG. CO. CHICAGO 3

EARLY MFG. CO.
CLEVELAND, OHIO

HANSEN MFG. CO.
MILWAUKEE, WIS.

HANSEN PRODUCTS
include—

HANSEN SERVICE

Buy from HANSEN Distributors
throughout the country

HANSEN MFG. CO.

TRIANGLE MFG. CO.
JERSEY CITY, N. J.

Build Better with TRIANGLE

TRIANGLE PRODUCTS

Here is where you tell them Where to Buy Your Product LOCALLY

Up to now . . . manufacturers have had little or no opportunity to tell builders just where to buy their products or equipment in their local building area. This has been one of the biggest sales problems confronting every manufacturer serving the light construction industry.

But now . . . in the April 1954 Builder-Dealer Catalog Directory . . . AMERICAN BUILDER gives you the opportunity to place your dealer listings in the WHERE TO BUY IT LOCALLY Section . . . and at NO ADDITIONAL COST to you!

FREE To Full Page Advertisers—105 Two-line or 210 One-line Dealer Listings in this Section

This is how the plan will work: for every full page display advertisement placed in the April Catalog Directory issue of AMERICAN BUILDER . . . you will receive 105 two-line or 210 one-line dealer listings absolutely FREE OF CHARGE! If necessary, additional listings may be purchased at \$2.50 each, so that you can list all of your dealers.

This is it . . . the most powerful dealer sales-help ever offered to manufacturers . . . the answer to your problem of building better builder-dealer relationships! It's a natural goodwill builder for you . . . and will pay off . . . in many more SALES. Be sure to list all of your dealers . . . (you get 105 two-line or 210 one-line listings with every full-page advertisement) . . . so builder-contractors know where they can buy your products locally!

1954 AMERICAN BUILDER DIRECTORY

SECTION ONE

ALPHABETICAL LIST OF

Building Products and Equipment Manufacturers

ABRASIVE PAPER and CLOTH

FOR ALL ABRASIVES
Klene-Rub Abrasives

ACOUSTICAL MATERIALS

ADHESIVES

Seal-ter
QUALITY TAPE FOR ANY MONEY

Seal-ter Inc.

DO IT BETTER AND FASTER WITH
GLU-STIX Adhesives

GLU-STIX Adhesives Co.

Here You tell the Builders Who You are and What Products You Make

To further strengthen the tie-in between your dealer listings in the WHERE TO BUY IT LOCALLY Section and the PRODUCT LISTINGS Section . . . AMERICAN BUILDER offers manufacturers a direct route to bigger and better SALES in the light construction industry.

One, two and three-inch display ads . . . to run in both the Product and Dealer Listings Sections . . . are available to any manufacturer wishing to complete the tie-in between his Dealer and Product Listings in the APRIL AMERICAN BUILDER Catalog Directory. These display ads will be placed adjacent to your specific Dealer or Product listings at the nominal cost of \$35.00 for a one-inch ad; \$65.00 for a two-inch ad; and \$95.00 for a three-inch ad.

All display ads should be tailored to fit the specific classification they appear under . . . and they should be used throughout both sections . . . thereby offering you the opportunity to present as many additional sales messages as you desire.

This is the way to obtain maximum product identification! Multiple ads . . . strategically placed . . . all shooting to sell the builder — at the most opportune time — when he is in the mood to buy. And remember — these ads will work for you throughout the year — for this Catalog Directory is kept and referred to all year long.

Buy It LOCALLY

First time available in any Light Construction Magazine

Now for the first time . . . you can let the builders know where to buy your products LOCALLY! Here . . . in the April Catalog Directory issue of AMERICAN BUILDER . . . you can get your sales message across to the 'hard-to-reach' builder-contractors. And furthermore, you can now tell them WHERE TO BUY YOUR PRODUCT LOCALLY!

Stop and realize the impact of your catalog-type advertisement in this readership-stimulating Catalog Directory issue. The builder-readers will come to you . . . in their search through the pages of this Directory . . . looking for the products they NEED . . . the products you make.

This offers an inexpensive way of reaching this biggest of all markets . . . a market that cannot possibly be adequately covered by personal selling. Remember . . . it will cost you money . . . IN LOST SALES . . . if you pass up this once-a-year opportunity to SELL THE WORLD'S BIGGEST MARKET.

Plan now . . . to be adequately represented in this April Catalog Directory issue of AMERICAN BUILDER. Take advantage of the 105 two-line or 210 one-line dealer listings which you can obtain FREE OF CHARGE with every full page advertisement placed in this Directory. Also, remember to use several of the one, two and three-inch display ads in the WHERE TO BUY IT LOCALLY and PRODUCT LISTINGS Sections. Follow these suggestions . . . and do a more complete selling job for your products. Besides, it's a good way of stretching your initial investment over a full year's time.

FREE Send today for 16-page brochure completely describing all the new, exclusive features of the April Builder-Dealer Catalog Directory.

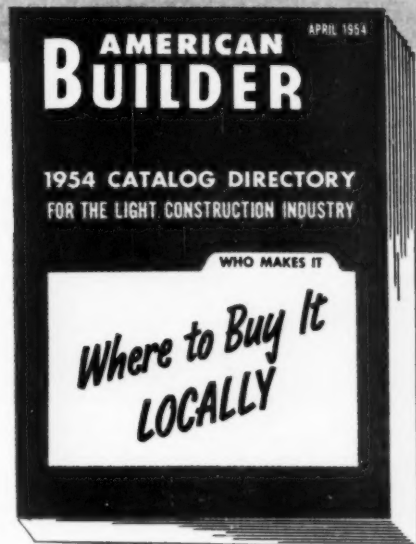
the New **AMERICAN BUILDER**

A SIMMONS-BOARDMAN PUBLICATION

79 W. MONROE ST., CHICAGO 3



30 CHURCH ST., NEW YORK 7



To be Published: **April 1, 1954**

Closing Date: **Feb. 25, 1954**

For standard color - **Feb. 20, 1954**

For special color - **Feb. 18, 1954**

Send your Space Reservation Now
Regular Advertising Rates Apply



Here Builders
can find your
**BRAND
NAME**
with your
name and
address

and . . . here are more sales-stimulating editorial features — designed to make this the most Sales-Productive Buying Guide for Builders

- **Regional Editions** — a new feature started with the January 1954 issue . . . 3 'custom-edited' regional editions . . . Northern . . . Southern . . . Western.
- **Regional Weather Forecast** — by famed Dr. Irving P. Krick. Monthly forecast designed to save home builders countless days and dollars.
- **Color House** — 4-color illustration of exterior and interior . . . complete with black plans and specifications of home designed by top-notch architects.
- **New Products** — editorial description and photographs of new products designed to save time, labor and money for builders.
- **Ask the Experts** — gives factual, concise solutions to problems sent in by builders.
- **Technical Guide** — presents the 'how-to' solutions to new ideas, innovations which enable builders to keep abreast with changing times.
- **Blueprint Gatefold Plan** — shows complete working plans of Color House . . . giving builder first-handed impressions of every detail in its construction.

8 Facts About Chimneys

you should know

Why install a "horse and buggy" chimney on today's modern house? Old fashioned brick chimneys are expensive and slow to build. Metal prefabricated chimneys create sales resistance and are subject to corrosion. There *is* an answer. The Van-Packer Packaged Masonry Chimney combines the advantages of complete masonry construction with the economy of prefabrication. The table below gives you the facts.



Here's the Van-Packer Brick-Panel Housing. It is made of fire-proof, corrosion-proof cement asbestos... deep embossed with brick texture... finished in brick-red with natural color mortar joints. All masonry Van-Packer is the only packaged chimney with the "buyer acceptance" of a brick housing.

PROPERTY	Brick Chimneys	Van-Packer Chimneys	Metal Chimneys
Built of time tested masonry materials	YES	YES	NO
Joints permanently sealed with acid-proof cement	NO	YES	NO
Attractive brick type housing helps sell house	YES	YES	NO
Rust-proof and corrosion-proof construction throughout	YES	YES	NO
Can be installed in 3 man hours or less without special skills	NO	YES	YES
Can be suspended from floor or ceiling	NO	YES	YES
FHA accepted, UL listed, approved by major codes and U.S. Army Engineers for gas, oil and coal	YES	YES	SOME
Available for immediate installation from nation-wide jobber and dealer organization	NO	YES	NO



Van-Packer

**PACKAGED MASONRY CHIMNEY
WITH BRICK-PANEL HOUSING**

INTERESTED IN LEARNING HOW VAN-PACKER CHIMNEYS CAN REDUCE COSTS AND ADD EFFICIENCY? WRITE FOR BULLETIN 5A-AF23

Van-Packer Corporation

209 South LaSalle Street, Chicago 4, Ill.

Also manufactured and distributed in Canada by
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. . . most glamorous selling feature
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- Chrysler Airtemp *Air-Cooled* Air Conditioners can be installed with a Chrysler Airtemp Furnace in a variety of ways—without using a single square inch of living area floor space.
- Because they offer such flexibility and require no plumbing, Chrysler Airtemp *Air-Cooled* Air Conditioners cost you less to install.
- Because Chrysler Airtemp Air Conditioning can be installed without using living area floor space, because it licks all problems of water supply and expense, it makes Year 'Round Air Conditioning practical and economical in any home—anywhere.

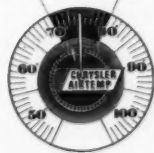
Specify Chrysler Airtemp *Air-Cooled* Air Conditioning for homes where you—and your buyers—will realize the greatest benefits from its exclusive advantages. Where space and water supply are not problems, you may choose Chrysler Airtemp Water-Cooled Air Conditioning. In either case, you will have the extra selling power of a name which people know and have confidence in—the Chrysler Airtemp name. For complete information on *Air-Cooled* or Water-Cooled Chrysler Airtemp Year 'Round Air Conditioning for homes, mail the convenient coupon today.

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FEBRUARY 1954

139

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*

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You *know* that such conveniences as modern kitchen facilities add real value to a home . . . increase its saleability. But did you know that there's another way to make your homes even *more* desirable and at no extra cost? It's National Electric "Plug-In" Strip, the permanent multi-outlet wiring system.

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AMERICAN BUILDER

housing act limits use of mortgage discount

By **John F. McCarthy**
Attorney at Law



THE MATTER of discounts, charges and fees in connection with the sale of guaranteed or insured mortgages—a subject which has received widespread publicity and comment—is not yet free of possible entanglements. This is true despite the so-called clarifying amendments to Section 504 of the Housing Act of 1950, which amendments became effective June 30, 1953.

Those amendments provided that a builder or other seller might pay an originating lender the amount of any discount, charge or fee incurred in the sale of a guaranteed or insured mortgage to a secondary lender or permanent investor. It should be noted that charges against a purchaser of the property—often the veteran—and charges against the builder or seller by the first or originating lender otherwise are strictly regulated.

Under the amendments, the discount must arise in connection with the sale of the guaranteed or insured mortgage by the originating lender to the permanent investor, and may be passed on to, or be absorbed by the builder or other seller, but not by the purchaser of the property. A few specific examples will illustrate the proper application of the amendments and some of the difficulties present.

The obvious case sanctioned by the amendments involves what we loosely may call a mortgage house making loans on residences constructed by a builder. The loans are guaranteed or insured. The mortgage house sells the loans to an insurance company at 96. Under these circumstances it may require the builder to make reimbursement for the amount of the discount involved. However, neither the mortgage

house nor the builder may make such a requirement of the purchasers of the residences. The same result follows where the builder, either in his own capacity or through some wholly or partially owned affiliate, is the mortgagee. He may sell his loans for such prices as he will, but he may not pass on his losses to the purchasers of his residences.

Discounts may not be collected where the mortgage house does not sell the loans but retains them for its own portfolio. In that case the mortgage house is limited to the fees otherwise permitted by the statute and regulations to be charged by originating lenders against builders and purchasers. A similar result occurs when the mortgage house is simply an agent of the permanent investor taking the loans. These conclusions follow in consideration of the language of the amendments that a builder may pay an originating lender the amount of any discount incurred in the sale of a mortgage to a permanent investor. In neither of the above cases is any sale of the loans made.

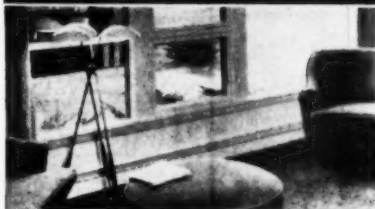
Under the statute and regulations, the sale of the loans must be bona-fide. Thus there is ruled out various devices to accomplish indirectly what the statute and regulations seek to avoid. These include, for example, a subsidiary corporation making loans in name only and formally transferring them to a mortgagee which originally had supplied the funds, or a mortgagee making loans for its own portfolio and then transferring them but later reacquiring them. What cannot be done directly may not be accomplished indirectly.

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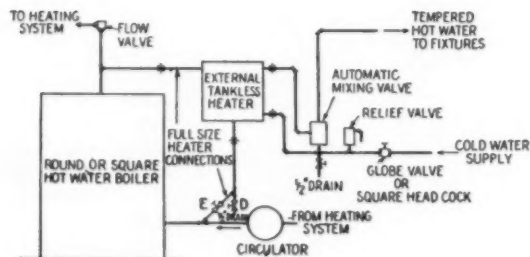
"PLUS VALUES" possible with HOT WATER heating

PART III

by Warren S. Harris

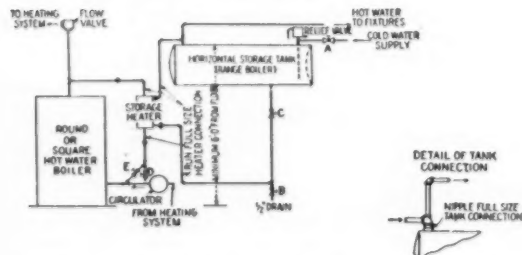
Research Professor of Mechanical Engineering,
University of Illinois

EXTERNAL TANKLESS HEATER with Round or Square Sectional Hot Water Boiler



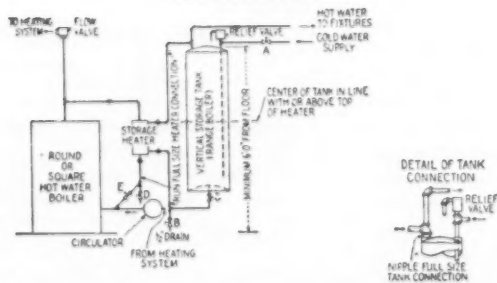
External heaters should be installed at top of boiler to cause active circulation of boiler water

with Horizontal Tank



Storage tanks should be located as high above heater as ceiling permits. Horizontal tanks less than 14 inches in diameter are not recommended because of cost involved

with Vertical Tank



If boiler has two return tappings, it is recommended that return from heating system be connected to one and connection from bottom of external heater to the other

THE increase in demand for hot water heating in recent years has been accelerated by the popularity of such equipment as automatic washing machines and automatic dishwashers. Today the housewife demands an ample supply of hot water, at an automatically controlled temperature, available at any time of day or night.

Domestic hot water may be supplied by a separately fired water heater, or it is possible to use the house-heating boiler to supply hot water for domestic uses the year around when it is heated with steam or a forced-circulation heating system. The advantages claimed for this method of heating are:

1. An ample supply of hot water is available at all times.
2. Fewer units of mechanical equipment are required.
3. The cost of producing hot water by this means is low.
4. The equipment requires a minimum amount of floor space.
5. In localities where the humidity is high during the summer months, condensation on basement walls and floors is eliminated.
6. The life expectancy of the heating system is increased because summer shut-down periods are avoided.

Indirect water heaters may be classified as to type (storage or tankless) and as to location with reference to the boiler (external or internal). The external heater has the heat transfer coils encased in a steel or cast-iron shell located outside the boiler; thus it requires the addition of suitable piping to enable the boiler water to circulate over the coils. The internal heater is screwed into or bolted onto the boiler and extends directly into the boiler proper. A storage-type heater requires less coil surface than a tankless heater because a reserve supply of hot water can be stored in tank against periods of peak demand. A tankless heater, on the other hand, has no storage tank and thus requires a large heat transfer surface in order to provide sufficient hot water to meet the maximum requirements. In all direct heaters the boiler water and the domestic hot water are in separate circuits and never mix, thus giving assurance that the hot water for domestic use will be clean.

There are no hard and fast rules governing the choice of heater for a given installation. The selection to a large measure is one of personal preference. It should be remembered, however, that tankless heaters designed to heat three gallons of water or more a minute from the temperature of the water in the mains to about 140 degrees F require heat transfer rates of 150,000 Btu's

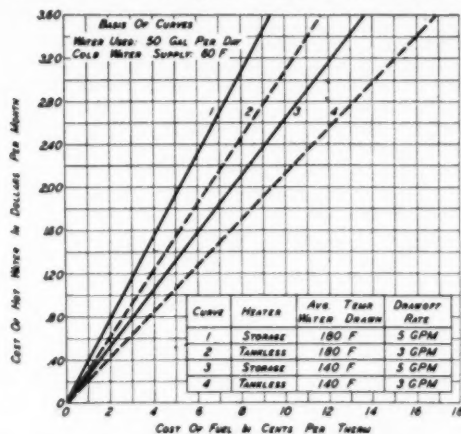
per hour or more. Many boilers installed in homes today do not have this capacity and for that reason some manufacturers follow the practice of not installing a tankless heater on a boiler which has a heat input rate of less than 200,000 Btu's per hour. Storage-type heaters may be used on any size boiler.

Often the design of the boiler controls the selection of the heater. Some boilers are designed to use a particular style of heater with special provision made for its mounting. In such cases it is wise to use the heater recommended by the manufacturer.

Available space may be the factor governing the choice of heaters. The storage type requires the use of a water storage tank which requires extra space over and above that needed for the boiler and water heater. In small utility rooms space is at a premium, and the selection of a tankless heater is more suitable for these installations.

A fourth factor governing the choice of heaters is the composition of the water to be heated. When hard water is heated, scale is deposited on the walls of the tank. This same thing occurs inside the tubes of indirect water heaters in hard water areas. One solution to the lime problem is the use of tank heaters. These are designed so that boiler water is circulated within tubes located in the storage tank. With this arrangement the lime is deposited on the outside of the tubes and may be removed by draining the storage tank and then circulating water as hot as possible through the heater tubes. After that spray the tubes with cold water. This will crack off the scale without damage to the heater.

Satisfactory operation of any indirect heater is dependent upon proper installation. In the first place, the heater manufacturers recommend that the pipe between the heater and the storage tank be made the full size of



AVERAGE MONTHLY COST OF HEATING WATER

These curves are based on tests made in the I-B-R Research Home. They show the average cost of heating 50 gallons of water daily with either a storage- or tankless-type heater attached to a gas-fired house-heating boiler. EXAMPLE: To heat 50 gallons of water to 140 degrees F with a tankless heater, and gas at 8 cents per therm, will cost about \$1.70 per month. If 180-degree water is desired, the cost will be \$2.45 per month.

the heater tapings. Oftentimes the tapings will be bushed down to 1/2- or 3/4-inch pipe at the time of installation when one-inch tapings were provided in the heater. Tests in the Mechanical Engineering Laboratory of the University of Illinois have shown that this prac-

tice reduces the output of the heater by 10 per cent or more, and this is sufficient to make the difference between satisfactory and unsatisfactory operation.

In storage heater installations, the pipe between the heater and the storage tank is sometimes left uninsulated. A study of the operation of storage heaters proved that this method increased the fuel consumption during the summer by as much as 20 per cent. Not only will in-

COST COMPARISON TABLE			
	Series Baseboard		One Pipe Hot Water 180 F Sew. Tank Radiators
	215 F	180 F	
Boiler	Cast Iron - 6 Section - 108 MBH		
Oil Burner	Our Type - 1.5 GPM		
Water Heater	Built-in Tankless - 3 GPM		
Circulator	1" std.	1 1/2" std.	1" std.
Radiation	57 1/2" element	79 1/2" element	264,0 sq ft
Cost of Radiation	\$190.46	\$253.11	\$221.10
Cost of Piping	\$ 35.60	\$ 53.70	\$ 59.80
Labor (man hours)	72	76	76
Total Bid Price	\$1251.60	\$1375.70	\$1356.10

insulation on the piping between the heater and the storage tank result in more economical operation, but it will also prevent excessive heat gain to the house in summer. I-B-R Installation Guide No. 3, "Indirect Water Heaters," outlines details for selecting and installing indirect water heaters with residential hot water heating systems.

Tests conducted as part of the I-B-R Research Program at the University of Illinois have shown that indirect water heaters are economical to operate. Tests made on an indirect storage-type heater attached to a gas-fired house-heating boiler showed that the cost of providing 140-degree F water at the rate of 50 gallons daily with gas at 8 cents per therm (100,000 Btu's) was about \$2.15 per month, or approximately \$25.80 per year. Doubling the quantity of water used increased the operating cost by approximately 20 per cent. More recent tests have shown that the operation of the tankless heater is even more economical.

The cost of adding an indirect water heater to a hot water heater system is generally less than the cost of a separately fired automatic water heater, and the combination of a series-connected hot water baseboard heating system and indirect water heater has proved to be a most economical combination to provide house heating and domestic hot water combined, both as to first cost and operating cost.

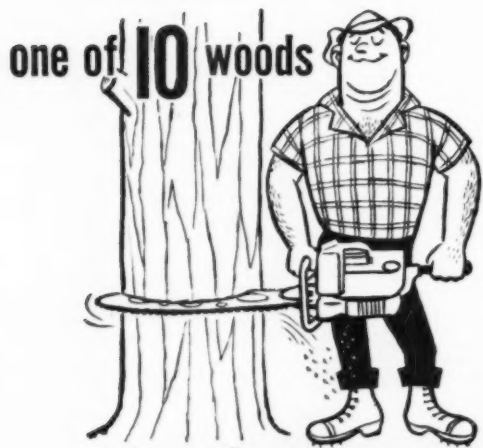
Table 1 is a summary of actual bids for several types of hot water heating systems for a one story, five room house, located in a New England metropolitan area. In every case the total bid price included all material, labor, overhead and profit for the complete system, including the provision of heating water with an indirect tankless heater. The cost of the series hot water system and indirect water heater using a design water temperature of 215 degrees F was found to be less than the combined cost of competitive heating systems and separately fired domestic water heaters.

Snow Melting

A snow melting system is another one of the plus values that can be had in a home heated with hot water. Obviously a snow melting system does not increase the

(Continued on page 144)

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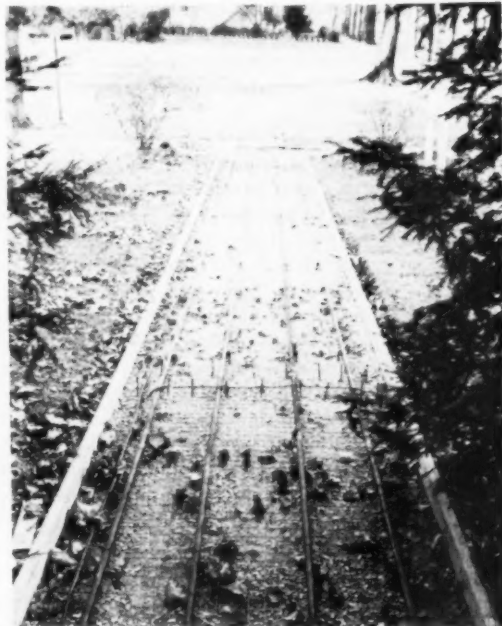
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Yeon Building,
Portland 4, Oregon.

HEATING

(Continued from page 143)

comfort within the home, but in areas where the snowfall is heavy, it can be a welcome labor saving device which many prospective home owners find attractive.

The cost of installing a snow melting system is nominal, usually amounting to only two or three dollars per square foot of area to be cleared of snow. Operating costs are said to be less than the cost of hiring someone to shovel the snow off the walks. An experimental snow melting system has been installed in the front walk and in the driveway at the I-B-R Research Home. This winter



In the experimental snow melting system placed in walk at I-B-R Research Home, the coils were made of $\frac{3}{4}$ -inch steel pipe with all connections welded. Pipes are spaced on 12- and 15-inch centers. The five-inch gravel fill and part of the reinforcing mesh are located under the coils. The slab thickness is five inches with approximately two inches of concrete both above and below the pipes

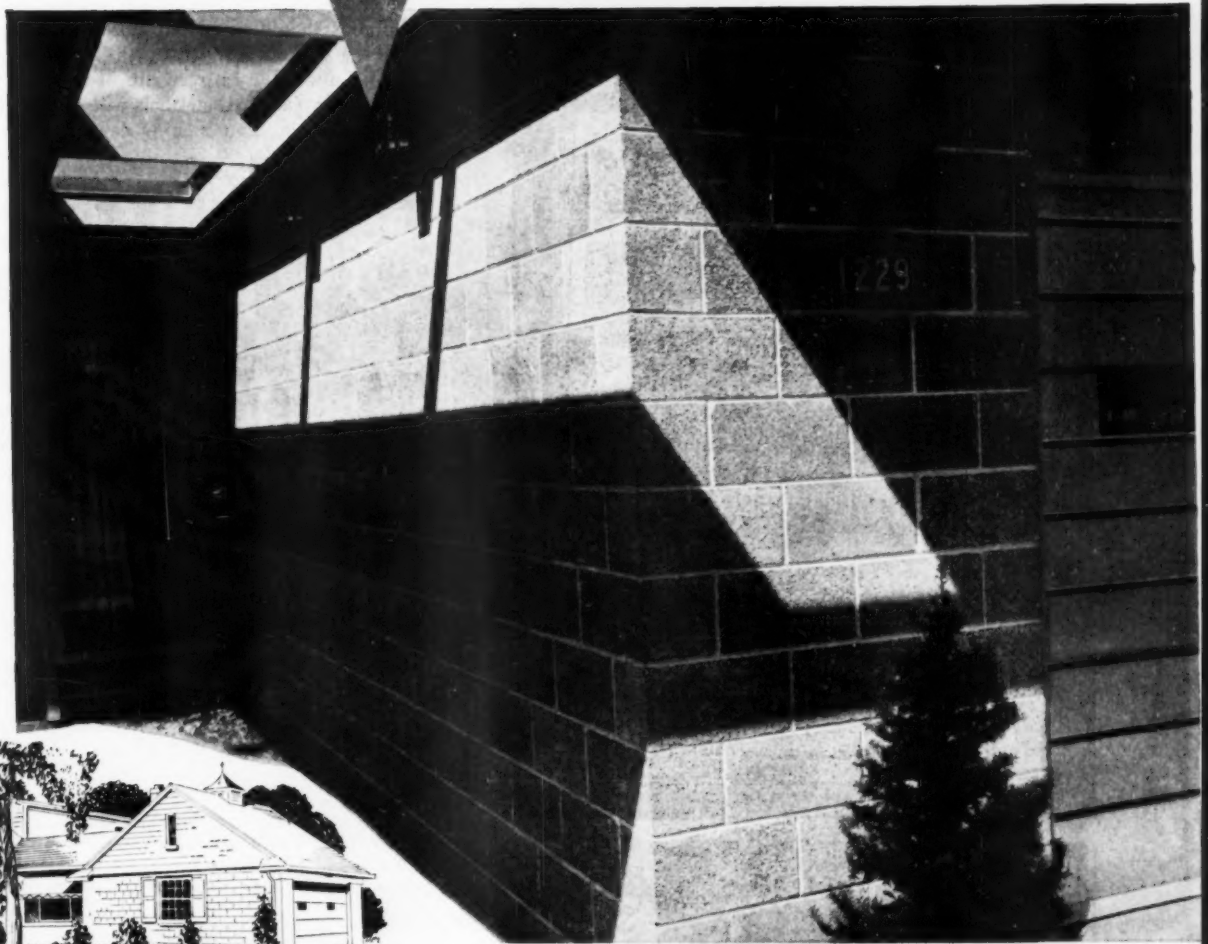
tests are to be made on this system to obtain information on operating costs and loads encountered.

The equipment required for a hot water snow melting system consists of $\frac{3}{4}$ -inch coils under the area where snow is to be melted, a circulating pump, and a heat exchanger somewhat similar to a large indirect water heater. Small systems are usually manually controlled, although controls have been developed to automatically turn them off and on as needed. Since the snow melting coils are subjected to temperatures below freezing, they must be filled with a non-freezing solution. During operation, boiler water is circulated through the shell of the heat exchanger, warming the solution in the snow melting circuit. The solution in the snow melting circuit is circulated from the heat exchanger through the coils and back to the heat exchanger by a small pump.

A common practice in the design of snow melting coils is to use $\frac{3}{4}$ -inch pipe on 12-inch centers. The pipe is buried in the concrete walk or driveway with two inches

(Continued on page 146)

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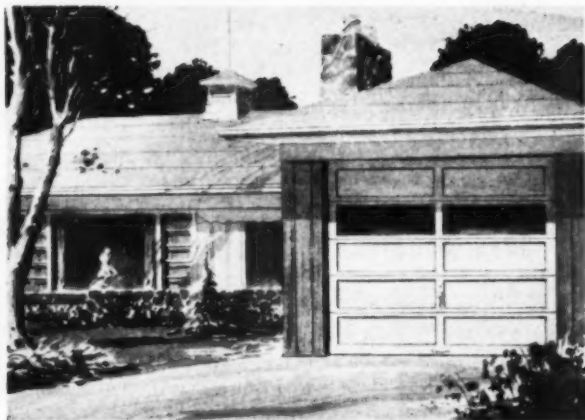
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E. W. Goddard, Sales Mgr.

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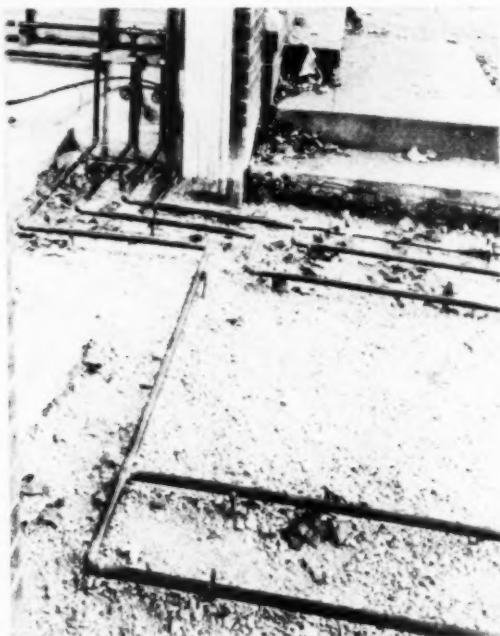


Builders of a Complete Line of Wood Sectional Overhead Doors

HEATING

(Continued from page 144)

of concrete over the pipe and at least two inches of concrete under the pipe. If bituminous type of paving is used, the coils should be placed closer together, about nine inches on centers. On driveways it is not necessary to place coils under the entire width of the slab. One or two pipes under each wheel track will usually be sufficient. Variation in snow melting capacity can be ob-



View of supply header for both circuits in I-B-R Research Home. A valve is included in the return of each circuit (along garage wall) so that either circuit can be operated alone or both together, as desired. In this arrangement the pipes are installed for melting the snow along the tire tracks only

tained by a change in the temperature of the fluid circulated. Design procedures for snow melting systems are given in the "Guide" published by the American Society of Heating and Ventilating Engineers. Design manuals also have been published by manufacturers of equipment and by some trade associations.

Summer Cooling

Throughout most of the United States the winters would be unbearable without some form of heating for the homes we live in. On the other hand the summers are not so severe and throughout most of the country they are of shorter length. No doubt this is one of the reasons why so much work has been done to improve the performance and efficiency of house-heating systems and until recent years relatively little to develop suitable cooling equipment for residences.

The present trend seems to be to develop methods of providing both heating and cooling with the same equipment. Such units are now available for all types of heating systems, including hot water. Homes heated by hot water systems can have summer cooling by the use of room units resembling convectors and containing both heating and cooling coils. These units are used in place

(Continued on page 148)

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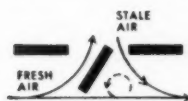


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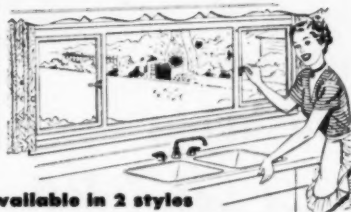
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HEATING

(Continued from page 146)

of the conventional radiator or convector. They can be installed in all rooms of the house to provide complete summer cooling, or they can be used in only one or two rooms. The same piping system is used to circulate chilled water through the summer and heated water through the winter. The dual-purpose room units do not have to be installed at the same time as the heating equipment, but if there is a possibility that they will be added later, certain provisions which are difficult to add should be made while installing heating equipment.

If summer cooling is to be added to a hot water heating system, the pipes should be covered with an insulation intended for use on cold water lines. This insulation has a watertight covering so that moisture from the air will not get to the cold pipes during summer operation. Provision should be made in the piping near the boiler to attach the water chiller and make it possible to circulate the water either through the boiler or the water chiller, depending upon the season. In multi-story houses drains should be provided to carry off the condensate from all units located above the first floor. Drains for first floor units can be provided at the time the units are installed, providing there is a basement or crawl space. If the house has slab-on-ground floor construction, it is usually cheaper to provide all drain connections before the floor is poured.

It is not necessary that the summer cooling system be made a part of the heating system. Individual units may be used. These may be of the window type, or if preferred, they may be a cabinet type of unit which resembles a convector in appearance. Individual room units contain all equipment, including the compressor and condensing unit. They require an opening to the outdoors, either through a window or the wall, through which air to cool the condenser is brought in and discharged. Condensate is discharged to the outdoors as a vapor in the air used to cool the condenser; thus these

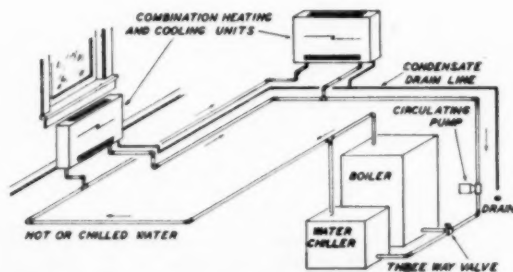


Diagram of equipment for heating and cooling with water. Heated water from boiler is circulated through combination units in winter. Water cooled by mechanical refrigeration in water chiller is used in summer. The same piping system and circulating pump is used both seasons. The combination heating and cooling units contain a coil through which the water is circulated both summer and winter, a fan to circulate the room air over the coil and provision to collect the water removed from the air during summer operation. Air filters are frequently included in the combination units.

units require no plumbing connections. Oftentimes units of this type can be installed in one or two rooms more cheaply than the cost of a complete central system. In localities where the summers are short and mild, such an arrangement will produce very satisfactory results.

In discussing both heating and cooling there is a tendency to ignore the effect of geographic location. Some sections of the United States have very hot summers and the winters are so mild that there is little or no need for heating. At the other extreme there are areas in which the winters are long and severe, but summer temperatures are mild and pleasant. Obviously equipment suitable for one of these conditions is not necessarily suitable to the other. In selecting equipment the relative need of heating and cooling should be taken into consideration. In those areas in which summers are severe and winters mild, first consideration should be given to an adequate cooling system, and heating should be made secondary. On the other hand, in areas where the winter is severe and the summer mild, the major emphasis should be placed on good heating. In this way maximum comfort can be provided at minimum cost over the greatest possible part of the time.

It is important that the house be constructed to keep summer cooling loads as low as possible. However, nothing has been said at this time concerning the importance of window shading, use of insulation, etc., in reducing summer cooling loads since this subject will be treated in a later article of this series.

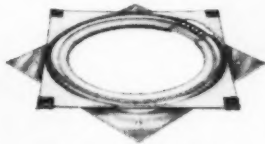


IT'S EASY TO MAKE
TURNTABLES
of All Types With Triangle's

"Lazy Susan" BALL BEARING

All in one interlocked piece—no parts to lose!

● AVAILABLE IN
3-INCH, 6-INCH
AND 12-INCH SIZES

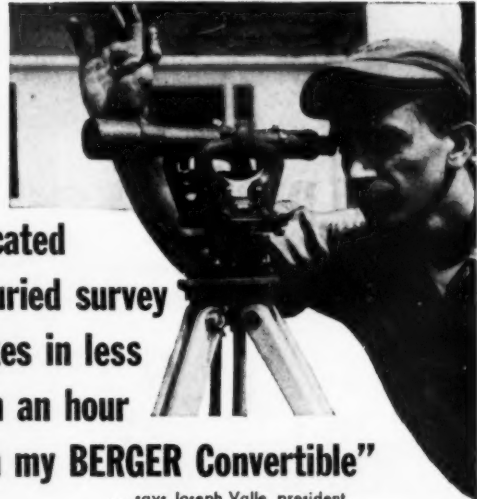


It's easy to make Lazy Susan trays and shelves; TV turntables; revolving fixtures, chairs and stools; toys and novelties with Triangle's Lazy Susan "flat-as-a-pancake" ball bearing—only 5/16" thick! All steel, stamped and interlocked construction. Easy-rolling ball bearings locked in large race for perfect balance.

If your jobber can't supply you, order direct; 3" size—\$1.00 each; 12—60¢ each; 6" size—\$1.60; 12—\$1.05 each; 12" size—\$4.00 each; 3 for \$10. Prepaid orders postpaid in U. S. A. No COD's. Satisfaction guaranteed. Write for quantity discounts.

triangle

MANUFACTURING COMPANY
406 Division St. Oshkosh, Wis.



**"I located
8 buried survey
stakes in less
than an hour
with my BERGER Convertible"**

... says Joseph Valle, president,
Joseph Valle Contracting Co., Staten Island, N. Y.

Watch a builder like Joseph Valle behind his Berger Convertible and you'll see why he says: "It's one of the first things on my jobs and practically the last to leave. I use it for checking existing site contours, staking out foundations, checking cuts and fills, laying out sanitary and storm drains—right up to establishing final grades. And it hasn't been down for repair in the two years I have it."

That's because the Berger is built for builders—designed to be consistently accurate, simple to set up for quick readings, easy to level up. The image you see through the 12", 24 power telescope with its coated optics is *right side up*. Rigid and sturdy—of brass and bronze construction—it takes the bumps in the field and stays on the job without time lost for repair.

Before buying a Convertible... Compare!

This table compares the Berger Convertible with the other two leading instruments—shows why so many more builders buy BERGER.

	Berger Convertible	Convertible No. 1*	Convertible No. 2**
TELESCOPE	24-26 power 34 mm. clear aperture bronze vial sensitivity 60 sec.	less 30 mm. clear aperture fabricated vial sensitivity 90 sec.	less 33 mm. clear aperture zinc die cast vial sensitivity 120 sec.
OPTICS	Coated	Coated	Coated
FOOT PLATE	Brass Trivet integral	Aluminum Trivet integral	Brass Trivet points separate
HORIZONTAL CIRCLE	Forged Brass	Aluminum	Brass
YOKE FRAME	Bronze	Aluminum	Zinc
TANGENT PIECE	Brass	Aluminum	Integral with clamp
TELESCOPE CLAMP	Brass	Aluminum	Zinc
PLATE LEVEL	Yes	No	No
CASE	Mahogany transit case	Level type box	Level type box
STRAP	Padded leather handle	Plain leather <small>*Retais higher than Berger</small>	Plain leather <small>**Retais lower than Berger</small>

Price \$219, complete with mahogany transit case, tripod, plumb bob, sun shade and instruction manual.

Write for literature on this and other Berger Instruments—12" Dumpy Level, Service Transit-Level and Hand Level. And ask about our Engineers' Transits, Levels and Theodolites.

C. L. Berger & Sons, Inc., 37 Williams St., Boston 19, Mass.

THE BEST IN  IS

BERGER

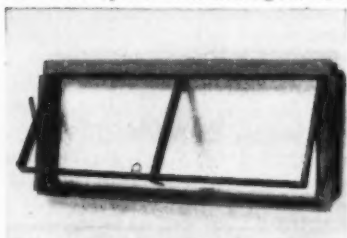
ENGINEERING AND SURVEYING INSTRUMENTS...SINCE 1871

new products



BASEMENT WINDOW AB25410

The "Champion" basement window is now offered with a new improved latch for easier operation. A redesigned cam

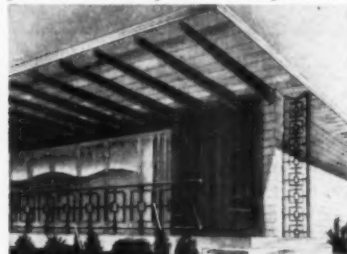


latch and slotted opening allow greater closing tolerance, insuring positive closing and latching under all conditions, according to the maker.

The window is constructed with a 14-gauge electrically welded frame, with the lens welded to the jamb for quick installation and double contact with the leakproof watershed sill. The Vento Steel Products Co., Dept. AB, 247 Colorado Ave., Buffalo 15, N. Y.

ORNAMENTAL RAILINGS AB25407

Seven contemporary designs in ornamental iron and aluminum are being produced in easily assembled, predrilled



units. The line has been developed in response to requests of architects and builders for ornamental work to harmonize with modern buildings and homes.

The manufacturer will continue to produce its present line of S-scroll type of ornamental metal. Kleesons, Inc., Dept. AB, 500 W. Main St., Robertsville, Ohio.

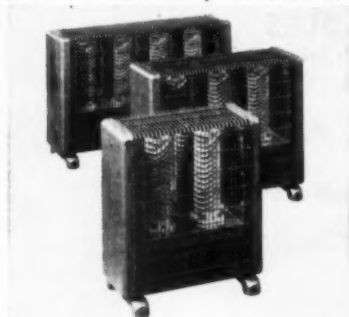


COMPACT HEATING-COOLING UNIT AB25418

This compact Home Weathermaker unit was displayed at the recent National Association of Home Builders exhibit in Chicago, showing how home sales have been stimulated through use of promotional and selling techniques developed by the manufacturer. Quiet and efficient, the unit provides complete home cooling, dehumidifying, heating and year-round filtered air circulation.

WINTER BUILDING HEATERS AB25417

These portable electric heaters have been found to be useful and practical by builders during the colder months of the year. Since 240-volt power lines are



strung to the job sites in most modern housing developments, all that is needed to furnish adequate heat in any location on the site is an extension cable. There are no installation or fuel problems and complete safety is assured.

These heaters are designed to provide a combination of radiant and circulating heat that makes them useful in winter building, where they make possible the maintenance of a uniform temperature throughout a large area in which work may be localized at different spots during the day. Units are completely automatic, being controlled by a combination lock-out thermostat switch, and thus may be left on for the full 24-hour period for drying purposes. Wesix Electric Heater Co., Dept. AB, 390 First St., San Francisco 5, Calif.

It cuts cleaning tasks drastically, eliminating frequent redecoration, reduces cleaning bills and the wear on drapes and furnishings caused by constant cleaning. With this model, possibilities of improving new home design through air conditioning have been extended to mass-market low-cost homes. Carrier Corp., Dept. AB, 300 S. Geddes St., Syracuse 1, New York.

ALUMINUM STORM DOOR AB25408

An all-aluminum storm door, featuring "corner interlock" construction is said to be proof against sagging even after years of service. Use of a screw-adjusted expandable insert at each corner adds strength and rigidity without materially increasing weight. Extruded door sections overlap around the insert to form a joint that tests show to be resistant to stretching, twisting or loosening.

A mitered aluminum frame fits inside the regular door frame to insure squareness and provide a permanent weather-tight fit. Hardware is extra-heavy and of stainless steel for security and ease of operation. The door's glass and screened



inserts can be quickly interchanged. Wisco Aluminum Corp., Dept. AB, 3945 A St., Detroit 16, Mich.

◆ FOR MORE INFORMATION USE COUPON ON PAGE 172

NOW!

smallest...most inexpensive **COMPLETE KITCHEN** ever built!

Ideal for:
Motels · Hotels
Small Apartments
Factories
Trailers



General Chef
5-IN-1
Only 42 inches wide

**5 YEAR
GUARANTEE IN WRITING**

Financing available through
our easy 24-month payment plan



1 DOUBLE SINK One-piece porcelain top of heavy gauge steel. Faucet and all hardware triple-chrome plated.

2 BURNERS Unit comes with 3 gas burners (easily adjusted for bottled, natural or manufactured (L.P.) gas), or 3 electric burners (220 V.).

3 OVEN Large handy oven with broiler and Robertshaw Automatic Temperature Control. Completely insulated from refrigerator.

4 REFRIGERATOR Six cubic feet of space. Electric sealed, self-oiling Tecumseh unit. Owens-Corning Fiberglas insulation. Convenient bottle shelves in door.

5 FREEZER Holds 9 ice cube trays, or 12 standard frozen food packages.

General Chef

NATIONWIDE SALES AND SERVICE

LOS ANGELES: Dept. G-2, 4542 E. Dunham St.
BOSTON · CHICAGO · CLEVELAND
MIAMI · NEW YORK · PHILADELPHIA
SAN FRANCISCO · SEATTLE · TAMPA



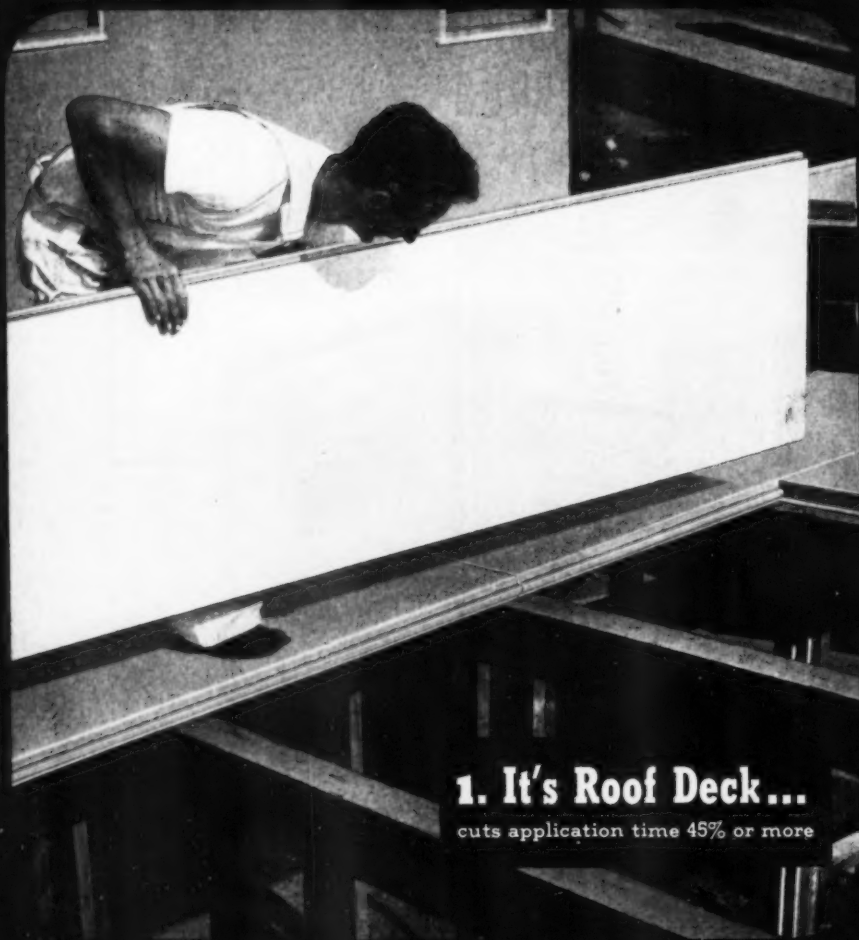
WRITE for complete details and specifications on General Chef 5-in-1. Other units without oven only 27½ inches wide—both gas and electric (either 110 V. or 220 V.).

GENERAL AIR CONDITIONING CORP. Dept. G-2, 4542 E. Dunham Street, Los Angeles 23, California

Please send me complete information and specifications on General Chef units, and name of nearest distributor.

NAME _____ OCCUPATION _____
STREET & NUMBER _____
CITY _____ ZONE _____ STATE _____

Now build exposed beam and save \$80 to \$300 a home



1. It's Roof Deck...

cuts application time 45% or more



"... savings of \$89 to \$344 per M..."

Mr. Orvin E. Linville, Linville Brothers
3374 Mt. Diablo Blvd., Lafayette, California

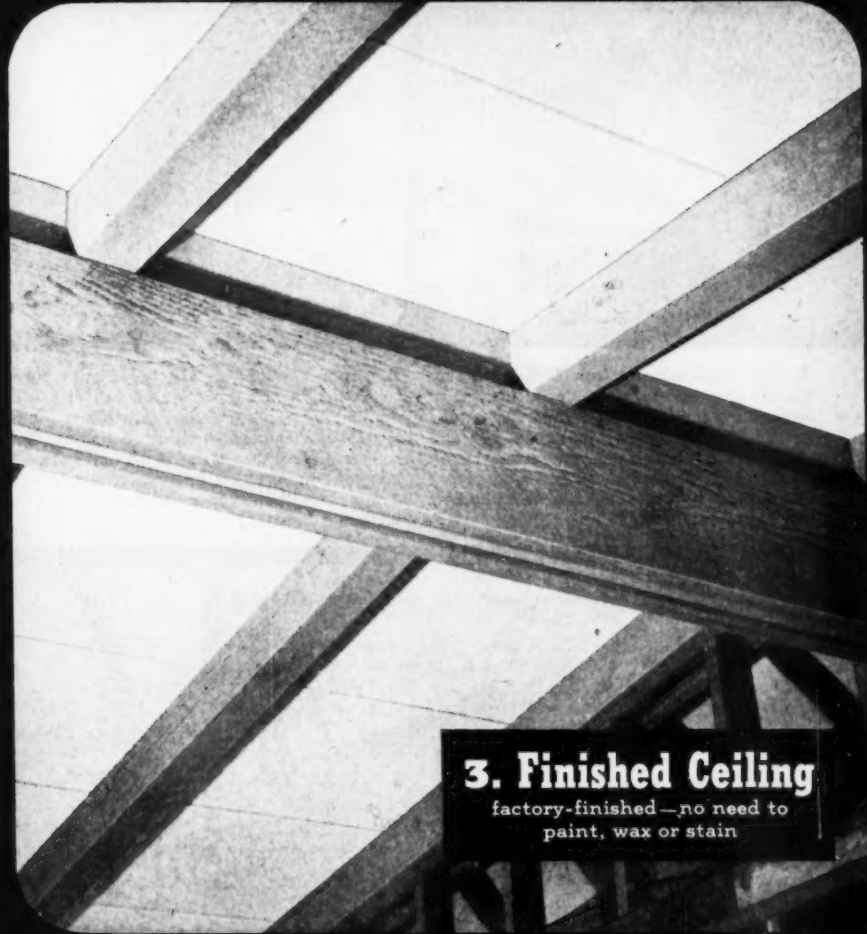
"According to our own cost comparisons, we figure we can put on a built-up roof using the new Insulite Roof Deck at a saving of \$89 to \$344 per thousand sq. ft. For example, compare the cost of 2" Insulite Roof Deck in place against 2" Redwood T&G, stained and finished, plus 1/2" Roof Insulation and you end up with a saving of \$344 per M." Figure your own cost saving. Write today for new cost comparison forms.

Now! Apply roof deck, insulation and finished ceiling in one quick money-saving

ceilings anywhere in U.S. with new 3 in 1 Roof Deck



2. Insulation and...
meets F.H.A. requirements of 0.15



3. Finished Ceiling
factory-finished—no need to
paint, wax or stain

See "how to" pictures next page ▶

INSULITE Division, Minnesota and Ontario Paper Company
Minneapolis 2, Minnesota

INSULITE IS A REGISTERED TRADE MARK.

operation with new

INSULITE



Roof Deck with exclusive vapor barrier

How to save \$80 to \$300 per home with NEW Insulite Insulating Roof Deck



1. Cut application time 45% or more. Handle and install one material instead of several. New Insulite Roof Deck eliminates need for separate roof boards, insulation, lath and plaster and finishing ceiling. In roof-sheathing time alone, you can save 12 man-hours per thousand sq. ft. of surface compared with 2" x 6" D&M roof sheathing.

2. Vapor barrier lets you build anywhere in U.S.A. Another Insulite exclusive! It's a continuous vapor barrier. Combines (1) a *membrane* laminated into each unit, plus (2) a rubber *gasket* that seals T&G joints. Protects against condensation in any climate. (Also available without vapor barrier for use in moderate climates.)

3. Strong and rigid, yet high insulation value. Inch for inch, Insulite Roof Deck provides more than twice the insulation value of wood alone. 2" Insulite Roof Deck, for example, is comparable to 2" wood deck plus 1" fiber-board insulation. Furthermore, Insulite Roof Deck helps absorb sound . . . makes homes quieter, more livable.



4. Makes it easy to apply low-cost built-up roof. Standard mopping and laying of roofing felts plus imbedding of gravel in bitumen provides attractive, weatherproof roof at low cost. For wood, slate or asbestos shingles, simply install nailing strips directly over the deck. Lightweight, yet sturdy, Insulite Roof Deck easily supports weight of workmen and equipment.

5. Pre-finished ceiling reduces labor, material costs. The underside of Insulite Roof Deck is finished with a white flame-resistant surface at the factory. Simply lay the roof deck over pre-finished beams and the ceiling is done. No need to plaster, paint, stain or wax. Insulite Roof Deck is available in 2' x 8' units, 1½", 2" and 3" thick with or without Insulite exclusive vapor barrier.

Complete information now available. Actual on-the-job pictures and construction details show how you can use new Insulite Roof Deck to build better for less. Cost comparison forms show how much you save! Write Insulite, Minneapolis 2, Minn.

Now! Build exposed beam ceilings
in any climate with new

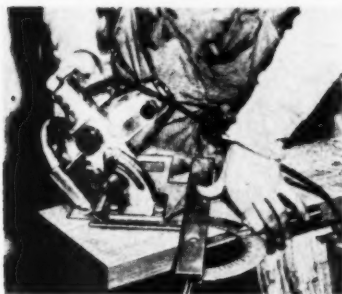
INSULITE

Roof Deck 

new products

PROTRACTOR GAUGE AB25405

An adjustable angle gauge for use with either electric or hand saws can be set in a moment for any angle of cut by means of a simple wing nut on a calibrated protractor attached to a pivoting guide rule 19 inches long. The two arms

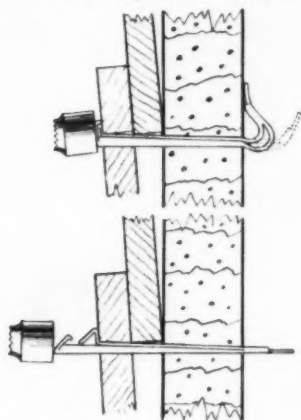


of the gauge are formed of U-shaped steel for absolute rigidity and accuracy. When using an electric saw, no pencil line is necessary, since saw base is guided directly against the gauge. Porter-Cable Machine Co., Dept. AB, 21 Exchange St., Syracuse, N.Y.

SHINGLE FASTENER AB25404

A new blind fastener for attaching Johns-Manville Colorbestos to 1/2-inch non-wood sheathing has recently been introduced. It can also be used to attach asbestos cement siding to Upson All Weather panel sheathing. The device, called the "Loc-Nail," has a radial action when driven through shingles and sheathing, which clinches the fastener in place.

The new "Loc-Nail" has a shoulder which minimizes asbestos siding breakage because the point of compression is spread over a larger area. The nail is



stated to be easy to drive and very responsive to clinching. It performs in asbestos siding nail holes of .112 to .120 inches. The nail's fine point eliminates spalling back of sheathing. E. G. Building Fasteners Corp., Dept. AB, 101 Park Ave., New York 17, N.Y.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 172

FEBRUARY 1954



SQUEEZING-INTO SPECIALIST

Here the Hydrohoe excavates a narrow lot on a busy corner. Its ability to work in extremely close quarters permits it to handle jobs that would normally require expensive hand labor.



For trenching, pit digging, and other specialized excavating, the all-hydraulic Hydrohoe is the stand-out performer, especially when the work requires squeezing into tight places. Here's why:

1. Hydraulic outriggers provide outstanding stability.
2. Extremely short tail swing permits maneuvering in narrow alleys, small lots, congested plants . . . work under almost impossible conditions.
3. Hydraulic ejector pushes dirt out of 12 or 18-inch dipper quickly, cleanly without even hoisting dipper to full dump position.
4. Telescoping boom makes it easy to duck under wires or tree branches — reach into confined spots and bring out big loads.
5. Can be converted to crane in amazingly short time — right in the field.

Here is the builder's answer for a fast, compact, labor saving crane-dragshovel. Your Hydrocrane distributor will be happy to give a convincing demonstration. 14H53

BUCYRUS-ERIE CO.

SOUTH MILWAUKEE, WIS.

WHY American

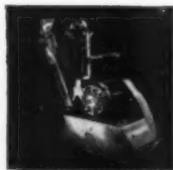
FLOOR SANDERS, EQUIPMENT and SUPPLIES

ARE Preferred!

Successful contractors for over half a century have found—they can do *finest work, faster, and reduce costs* by using performance-proved AMERICAN Machines and Supplies!

When you buy American you can be *sure* of highest quality materials, pre-tested for dependability and wear . . . latest design, engineered to keep out-front in high production, long life. Your *best buy* is American—because experience shows these quality machines last the longest, take more constant use, require less attention . . . and produce the finest results possible to earn the maximum dollars for you!

Check your needs now!



FLOOR SANDERS

Five models, a machine for every purpose. Super 8—8" drum; Standard—8" and 12" drums; AMR—8" drum; Little American—8" drum.



FLOOR EDGERS

Two models, 7" and 5 1/2" discs—for sanding edges, closets, stairs, small halls.



ABRASIVE PAPER

New improved American Black Demon and American Combination high quality papers are scientifically improved to give longer life, faster cutting.



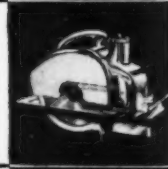
FINISHES

American Finishes are finest quality—complete line for all floors . . . seals, finishes, waxes, cleaners.



FLOOR MAINTENANCE

American Deluxe, for all floors—polishing, waxing, steel wooling, disc sanding, grinding, 19", 16" and 14" sizes.



PORTABLE ELECTRIC SAW

8 1/2" blade cuts 2 1/4" plank at 45°, or 3" straight cut. Motor develops 2 1/4 H.P. Cuts fast, any position, one-hand operation.



BELT SANDERS

Portable . . . many uses, roughing to final finish . . . Sanderplane is ten times faster than hand plane.



LESTO SAW

Portable electric jig or saber saw for scroll work, dovetailing, cutting openings, etc. Two models—3 1/2" and 2" capacity. Sold and serviced by American.



Nation-wide Service

American Distributors in principal cities furnish original replacement parts and factory-skilled mechanics to make repairs quick—when needed. Headquarters of L. R. Mapps, Newark, N. J. distributor, shown here.



AMERICAN

FLOOR MACHINES • PORTABLE TOOLS

The American Floor Surfacing Machine Co.
311 So. St. Clair St., Toledo 3, Ohio

Please send latest catalog on the following, without obligation:

- Floor Sanders
- Floor Edgers
- Abrasive Paper
- Finishes
- Floor Maintenance Machines
- Portable Electric Saw
- Belt Sanders
- Lesto Saw

Name.....

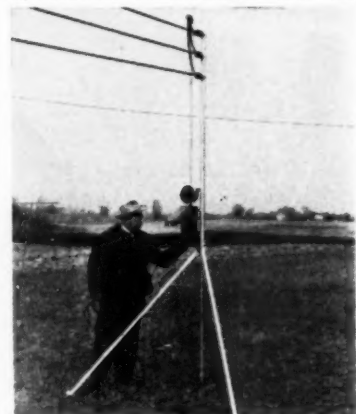
Street.....

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

new products

ELECTRIC SERVICE MAST AB25413

An all-steel temporary service mast that can be installed by an electrician in a few minutes is furnished completely assembled, with heavy-duty insulators, utility box and meter bracket. The mast

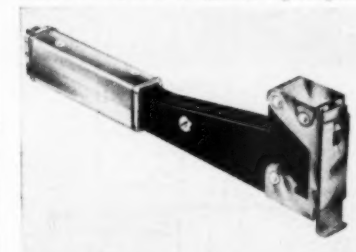


raises service wires 12 feet off ground level and telescopes to eight feet for hauling and storage.

Simplified installation is made by driving a three-foot steel sleeve into the ground (driving head furnished), inserting a spacer pipe and sliding mast unit over the spacer. Heavy six-foot angle braces attach to the mast with a single bolt, dig into the ground for steady support. A self-contained utility box has two 120- and one 220-volt outlets, separately fused. The box is raintight and weatherproof. The mast is designed for new construction, field installations, etc., and is said to meet all code requirements. Utility Service Co., Dept. AB, 921 13th St., Racine, Wis.

HAMMER TACKER AB25402

New tool designed for heavy-duty tacking operates with explosive action. It shoots No. T-50 staples of .050-gauge wire with 1/4-inch to 1/2-inch leg lengths.



The tacker has easy-to-reach parts; the removal of one screw permits the entire mechanism to be removed for cleaning.

The tacker has all-steel construction; mechanism is of hardened steel with an all-chrome head and plastic handle. Arrow Fastener Co., Inc., Dept. AB, 1 Junius St., Brooklyn 12, N.Y.

FOR MORE INFORMATION
USE COUPON, PAGE 172

AMERICAN BUILDER

"There's no question... Mosaic Tile is a big point
in selling houses...
Lake Marie Homes, for example,"

... says Carl S. Damman

Damman Tile Co., Los Angeles, California



NO 4

LAKE MARIE HOMES

BY HARRY BRITTAIN INC., developer of DOW KNOLLS

2 BEDROOMS & DEN
3 BEDROOMS

TOTAL DOWN **VETS**
660 TO 730



Mr. and Mrs. Richard H. Munn in their new "Lake Marie" home. Mrs. Munn is delighted with the attractive combination of Mosaic Tile colors in the house and she likes the easy maintenance of tile. "It makes house-keeping so much easier!", she says. "And it will remain beautiful without costly redecorating or repairing."

Tile Contractor Damman has used Mosaic Tile for 25 years. Mosaic Tile has been the choice in 2,000 of his jobs in the past several years. Mr. Damman is now working on "Lake Marie Homes," built by Harry Brittain, who has built 10,000 Southern California homes in thirty years.

Successful builders and tile contractors *know* what makes new homes sell. Builder Brittain states "Mosaic Tile is one of the largest factors in the sale of these homes. Homemakers like its attractiveness, easy maintenance and durability."

In new "Lake Marie Homes," priced from \$11,500.00 to \$12,500.00, Mosaic glazed tile is used on all kitchen counters and splashes, around all tub-showers and on all shower walls. All bathroom and shower floors are Mosaic unglazed ceramic tile. Each prospective buyer is offered a choice of six different Mosaic color combinations.

Give your customers Mosaic Clay Tile. It will help sell your houses faster, make your buyers happier. See Mosaic Clay Tile today at your nearest Mosaic showroom, or at the showroom of your Tile Contractor. For helpful tile-fact literature, write Department 35-17, The Mosaic Tile Company, Zanesville, Ohio.

THE MOSAIC TILE COMPANY

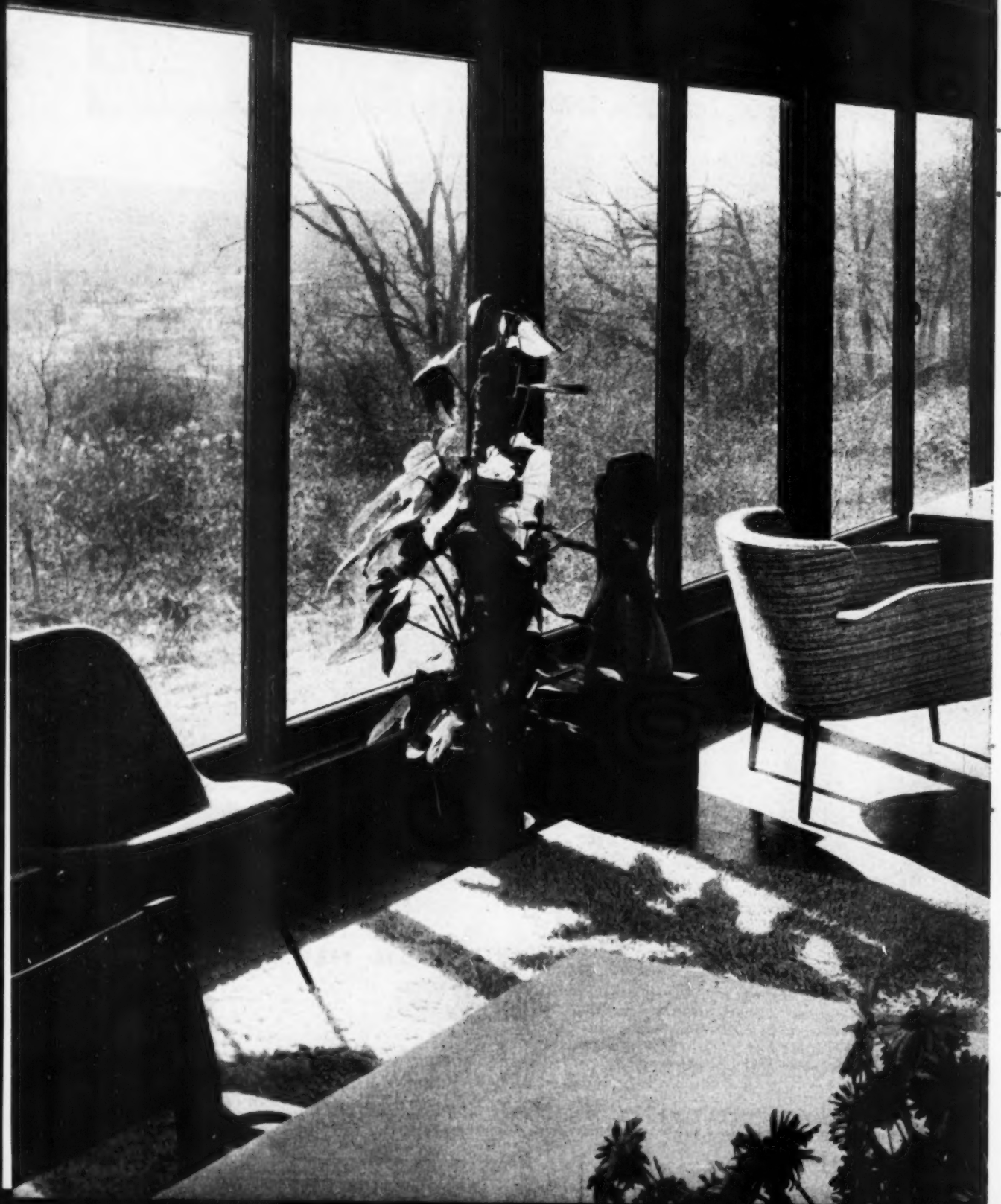
MOSAIC®

1954 Our Sixtieth Year

Member—Tile Council of America and The Producers' Council
Offices, Showrooms and Warehouses across the Nation
Over 4000 Tile Contractors to serve you

OFFICES: Atlanta • Baltimore • Boston • Buffalo • Chicago • Dallas • Denver • Detroit • Fresno • Greensboro • Hartford • Hempstead, L.I., N.Y. • Hollywood • Little Rock • Miami • Milwaukee • Minneapolis • New Orleans • New York • Philadelphia • Pittsburgh • Portland • Rosemead, Cal. • St. Louis • Salt Lake City • San Francisco • Seattle • Tampa • Washington, D.C. • Zanesville

For Free Estimates
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see your phone book
for the name
of Your Tile
Contractor
(Ceramic)





Lovely view through Andersen Gliding Windows—N. Holger Mortensson, architect

**FOR THE OPEN PLAN...
WINDOWS THAT OPEN**

**Andersen
Windowalls***

COMPLETE WOOD WINDOW UNITS

WHEN WALLS DISAPPEAR, even small houses seem to grow larger. Enclosed space becomes more usable. Houses attract buyers faster.

This home shows the way to make certain that an open plan assures comfortable living. Keep plenty of ventilation in the picture with Andersen WINDOWALLS. Andersen complete wood window units fulfill all the demands made of a window—including the demand for lots of fresh air when the owner wants it—the demand to provide the protection of weathertight, transparent walls. How about Andersen WINDOWALLS for *your* customers?

For specification data see your millwork dealer, Sweet's Light Construction File or write Andersen Corporation.

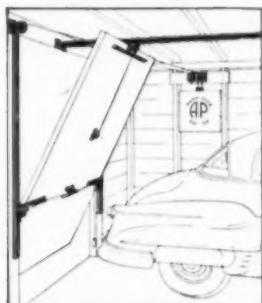
Andersen Corporation

BAYPORT, MINNESOTA

®TRADEMARK OF ANDERSEN CORPORATION

50-50 PUSH-OVER ALLITH

GARAGE DOOR HARDWARE



- USE YOUR OWN OR ANY STANDARD DOOR
- NO MAINTENANCE COSTS
- SIMPLIFIED INSTALLATION
- ADAPTABLE FOR ANY TYPE GARAGE

ALLITH hardware permits you to use standard stock, or special doors if desired, to harmonize with design of accompanying building. All working parts are simple and sturdy—no springs to stretch or loosen. All hardware parts inside and protected from weather.

Unit shipped complete down to the last screw. Quickly and easily installed. Standard set fits any opening up to 9' wide x 7'6" high when doors do not exceed 275 lbs. Other sets available for openings up to 10' wide x 10' high. Complete details furnished on request.

ALLITH-PROUTY, INC. DANVILLE, ILLINOIS



Pour faster with a Jaeger

Look how this mixer puts out stiff concrete as fast as you can take it. You charge in only 5 to 7 seconds with Jaeger's "Skip Shaker" loader. You mix and remix more thoroughly with Jaeger's criss-cross action, then discharge in another 5 to 7 seconds with Jaeger's big bucket and flight blades and special "catch all" spoon.

With that speed you can really turn out yardage with a mixer that's as rugged as it is fast. Your Jaeger has a bigger engine, automotive transmission, Timken bearing drum rollers and heavy duty drum with machined steel tracks—all to give you years of service with low upkeep and without costly breakdowns on your jobs.

Available in 3½, 6, 11, and 165 sizes. Ask for Catalog M-10.

THE JAEGER MACHINE COMPANY 521 Dublin Avenue
Columbus 16, Ohio

PUMPS • COMPRESSORS • HOISTS • TRUCK MIXERS • PAVING MACHINES

new products

AWNING-PICTURE WINDOW AB25412

A new window service for architects and builders is called the "Panoramic Package." It provides a complete variety of standard wood awning sizes together with custom-sized picture windows, delivered preassembled to the job in heavy fiberboard cartons. This service eliminates the



need for on-the-job assembly, reducing installation time considerably. The design of the wood awning windows, similar to double-hung windows, enables them to adapt to any type of wall, eliminating special wall construction problems.

Hard bronze channels provide smooth gliding surface for the metal-on-metal hardware. Each window sash is provided with individual adjustment plates for adjusting the wood window for degrees of closing tightness. All operating hardware is internal and hidden. Windows automatically lock in any open position. Super-Vent Co., Dept. AB, 905 W. North Ave., Chicago 22, Ill.

GARAGE DOOR AB25422

A newly designed, receding-type garage door is provided with "Giant Circle" hardware, a feature which stresses a circular bearing surface more than twice the size of that of previous models. The increased bearing area eliminates the side sway and paint scuffing usually found on receding doors. The large bearings actually lock the doors in a true arc. The



door travel, when opening or closing, is always in the same straight line.

Nylon rollers, stated to last for the life of the door, have nearly noiseless operation. A shutter-type special window adds attractiveness to door's horizontal lines. Taylor Made Garage Doors, Dept. AB, 12430 Evergreen Road, Detroit 28, Mich.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 172

PRODUCT NEWS from AMERICAN-Standard

A review of products in the news and important features worth remembering



NEW AMERICAN-STANDARD POST-FORMED COUNTER TOPS

New American-Standard counter tops are a practical and glamorous feature for the modern kitchen. From integral back splash to no-drip water bead edge these counter tops form a continuous, unbroken surface that has no joints or crevices. They're made of Micarta, the plastic material which retains its beauty even after years of daily use, bonded to a sturdy plywood core. The non-directional scatterline design of the tops eliminates any pattern conflict in turning corners or in adding new tops at a later date. Available in Gray, Dark Green, Lime, Yellow, Red. Special new union strips, joint moulding strips and end caps are available as top quality finishing accessories.



NEW GRAY BATHROOM FIXTURES

Beautiful American-Standard bathroom fixtures now are available in another distinctive color—Platinum Gray. Harmonizing perfectly with virtually any decorative scheme, this new color permits wider flexibility in bathroom planning. And Platinum Gray is one color nearly everyone can agree on; a bathroom featuring American-Standard fixtures in this smartly modern color will have outstanding customer appeal. In addition to the new Platinum Gray, you can choose from six other popular American-Standard colors and white. *All colors are true and permanent. They will not dull or fade.*

For further information on American-Standard products see Sweet's Light Construction File.

American-Standard
Dept. AB-24, Pittsburgh 30, Pa.

Without obligation on my part, please send me literature on:

New Kitchen Counter Tops Platinum Gray Bathroom Fixtures

Name.....

Address.....

Firm.....

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



AMERICAN-Standard

American Radiator & Standard Sanitary Corporation, Dept. AB-24, Pittsburgh 30, Pa.

Serving home and industry: AMERICAN-STANDARD • AMERICAN BLOWER • CHURCH SEATS & WALL TILE • DETROIT CONTROLS • KEWANEE BOILERS • ROSS EXCHANGERS • SONBEAM AIR CONDITIONERS

These *All Aluminum* Screens can change "BYE...into BUY!



Nobody knows better than you that in today's market the extra values built into a house make the difference between Sale and No Sale.

Most "extras" add to your cost—but *Durall Aluminum Tension Screens reduce it!*

Durall consumer prices range from \$3.65 to \$5.82 for most sizes. *Compare that with your present screening costs!*

Not only will these new and different screens cost you less—your home owner will be everlastingly grateful to you because he'll have no upkeep. Duralls

last much longer than conventional screening—never warp, rot, rust or stain.

Duralls are pre-made to fit! That means your installation costs are sharply cut. It also means the home owner can put them on or take them off from the inside in just nine seconds. He can roll them up to store in a nearby closet instead of lugging them from window to basement or attic.

Ask your lumber or hardware dealer today for money-saving, time-saving, sales-building Durall Tension Screens.



DURALL ALUMINUM TENSION SCREENS



N. Y. Wire Cloth Co., Inc., New Canaan, Connecticut

*You seldom see
a used one for sale . . .*

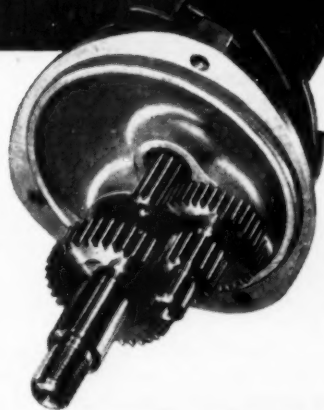


Funny thing about Porter-Cable Tools . . . it's hard to find anyone willing to sell his.

Seems the owner grows mighty fond of it. Likes its feel—its balance—its knack for getting work done in a hurry. Likes the fact that its upkeep figures out to nickles and dimes over the years.

When you want to lay your hands on a real good tool, stop in at your Porter-Cable dealer. Let him show you how to make your job go easier, your energy go farther, your work go better.

Model 107 $\frac{1}{4}$ " Drill, shown above, \$29.95.
Send for free catalog of other fine quality electric tools.



• Porter-Cable Tools are quieter and smoother running because each gear is precision cut and mated to prevent backlash and faulty tooth contact.

PORTER-CABLE MACHINE CO. 2002 N. Salina St., Syracuse 8, N. Y.

Routers • Saws • Belt Sanders • Orbital Sanders • Drills • Planes • Shapers • Chain Saw • Hedge Shear • Combination Drill-Sander

FEBRUARY 1954

Porter-Cable

Quality Electric Tools

163

WITH THE REVOLUTIONARY, NEW

Nova Insulated Sidewalls

- Sheathing and shingling in one operation
- Major savings in time, labor, materials

- Finest cedar shingles
- W-i-d-e exposures
- D-e-e-p shadow lines



Chalk line establishes level for a course of shingles



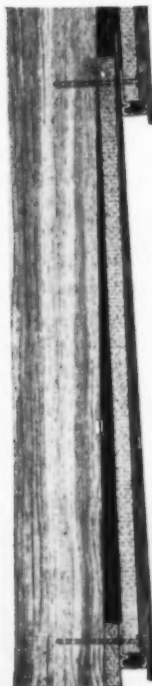
Clip and sheathing are nailed together at each stud



Kerf in butt of shingle is engaged in clip



Only one staple secures each shingle at top



Now sidewalls can be shingled and sheathed — fully insulated — in one operation. Simultaneously, you achieve the rich architectural effect of extra-wide exposures—formerly available only through luxurious double-coursing—at a remarkably low cost. Nova Insulated Sidewalls have beautiful 14" exposures and 3/4" deep shadow lines.

There are no exposed nails to rust or stain the shingles. The shingles cannot split or curl. The method saves 33% of the time, 33% of the labor and 100% of the undercourse materials otherwise required. The beauty of the finished application enhances the value of the property.

Nova Insulated Sidewalls are built with only three major materials: 16" x 96" Homasote Sheathing Panels; galvanized, 26 gauge steel Nova Shingle Clips (in 96" strips); Nova #1 Certigrade Processed Shakes (either Natural or in a choice of 9 colors).

Nova Insulated Sidewalls are eligible for FHA Insured Mortgage Loans.

The method of application is very simple — for new construction or for re-siding existing structures. May we send you the complete details? Kindly address your inquiry to Department 28.

NOVA SALES

Co. TRENTON 3, N. J.

A wholly-owned subsidiary of Homasote Company—manufacturers of the oldest and strongest insulating-building board; wood-textured and striated panels.

new products

BUILDING PAPER

AB25401

Multi-purpose paper for building and construction applications is called "Brown-skin." It is a duplex, creped-to-stretch paper, asphalt-impregnated to make it waterproof and decay resistant. In this form, it is used as a vapor-sealing medi-



um, a sheathing paper, as concealed flashing and for temporary partitions.

A similar company product, called "R.F.D. Brownskin" is a reinforced, asphalt-impregnated sheet designed for farm uses, such as in construction of temporary silos, for snow fences, hay and machinery covers and other farm applications. Angier Sales Corp., Dept. AB, Framingham, Mass.

AUTOMATIC WASHER

AB25411

A new De Luxe companion model to the manufacturer's Laundry Queen Master-piece automatic washer is also provided with the Hydro-Poise principle, said to reduce vibration to a minimum, permitting the use of 750 r.p.m. spinning, producing thorough damp-dryness.

This patented principle of high-speed drying and vibration elimination is combined with full 220 degree arc agitation,



which provides up to 25 per cent more effectiveness in agitation, according to the maker. The full-vaned agitator with triple-zoned washing action is used in both models, eliminating clothes tangling while providing agitation both at the top and bottom of the washing area. Automatic Washer Co., Dept. AB, Newton, Iowa.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 172

AMERICAN BUILDER

NOW... Custom Kitchens

at mass-production prices!

YOURS with Diana-style Youngstown Kitchens



It's true! Now you can offer beautiful, custom-planned all-steel kitchens in the homes you build . . . with more features than ever before in any given space. At the same time, you enjoy the economy of mass-produced steel units.

New Diana-style Youngstown Kitchens give you the long-sought-after *built-in* look in completely fabricated steel units.

- You get more continuous work surface in less space.
- Installation is quick and easy.

New Diana ensemble sinks combine with other exciting new units to give you added freedom in your kitchen planning. Youngstown Kitchens Jet-Tower* Dishwasher and Food Waste Disposer make your homes modern today, modern to stay.

To gain the extra sales appeal of nationally accepted Diana-style Youngstown Kitchens in the homes you build, contact your distributor today. Or write: *Builder Sales Department, Mullins Manufacturing Corporation, Warren, Ohio.*

*Reg. U. S. Pat. Off.

NEW Built-in Beauty!
MORE Work-saving Features!

CABINETS OF STEEL FOR LASTING APPEAL

 **STEEL**
Youngstown Kitchens

MULLINS MANUFACTURING CORPORATION • WARREN, OHIO

World's Largest Makers of Steel Kitchens

FEBRUARY 1954

Mullins Manufacturing Corporation
Dept. AB-254, Warren, Ohio
Please have my distributor contact me about the
new Diana-style Youngstown Kitchens.

NAME (Please print) _____

COMPANY _____

ADDRESS _____

CITY _____

ZONE _____

STATE _____

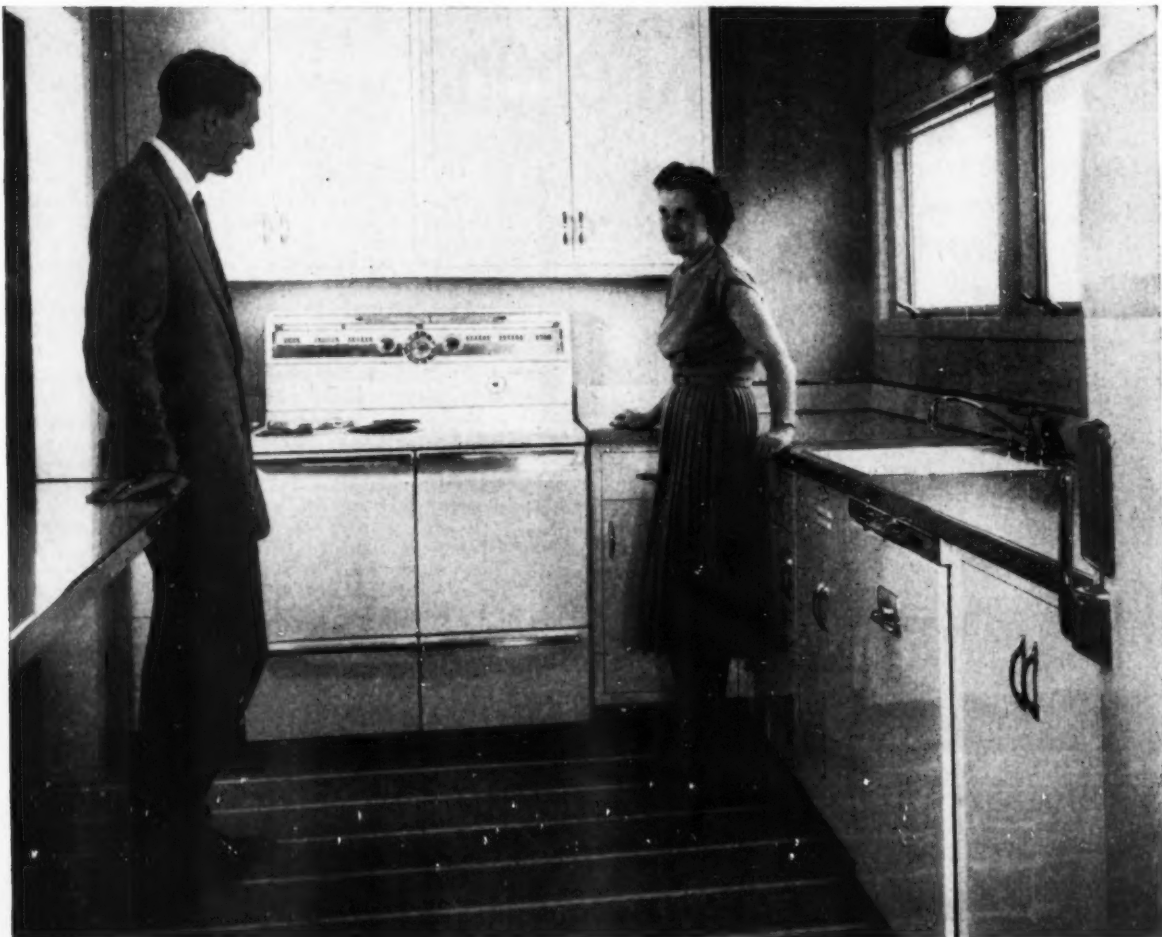
165

"Sold 3 G-E 'Young America'



Between 3,000 and 4,000 people went through this house in one week. The builders are now erecting 22 additional houses. This success story is being repeated in

many sections of the country—month after month. Why not let General Electric help sell your houses, too? See your G-E distributor about the "Young America" program.



Feature attraction of the model home was the General Electric Kitchen-Laundry shown above with the proud owner, Mrs. Gerald Ensign, and builder Robert Mackenzie. When prospects see dependable appliances such as the

G-E Range, G-E Refrigerator, G-E Disposall,[®] G-E Dishwasher, G-E Washer and G-E Dryer, they associate the entire construction of the house with quality materials and workmanship.

Houses the first weekend!"

(The builders are now erecting 22 more)

WHY DID PEOPLE BUY SO QUICKLY?

Let Mr. Robert Mackenzie, president of Contemporary Homes, Chagrin Falls, Ohio, tell you: "Of all the fine features in our G-E 'Young America' House, prospects were impressed most with the General Electric Kitchen-Laundry. Nothing sells houses for us like an array of wonderful, laborsaving G-E appliances!"

Isn't it time you investigated how General Electric can help you sell houses faster?

You get faster turnover when your houses are G-E equipped. Your buyers are more pleased.

And, you or your prospects need *not* worry about "luxury price tags," for G-E appliances have top consumer acceptance yet are competitively priced.

A General Electric Kitchen-Laundry can be included right in a regular mortgage—and the monthly cost to the homeowner is usually no more than that of a typical telephone bill.

How your G-E distributor will help you

Available to you is a folio of 4 new "Young America" Homes, with complete promotion plans for the opening

of your model house—the very same successful promotion plans that have sold thousands of houses for other builders all over the country.

Furthermore, a G-E Distributor Builder Specialist will work with you to tailor these promotional plans to fit your problems and your market. He will place before you builder sales experience gained through many previous successful builder promotions.

Get all the facts today through your G-E distributor, or write to the Home Bureau, General Electric Company, Appliance Park, Louisville, Kentucky.

New G-E Room Air Conditioners at low per-unit cost! Models are easily installed. No plumbing required.



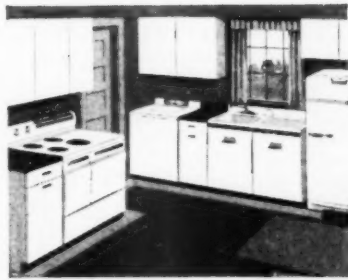
REGARDLESS OF PRICE RANGE, your houses can have a G-E Kitchen-Laundry

(See your G-E distributor for answers to your builder problems)



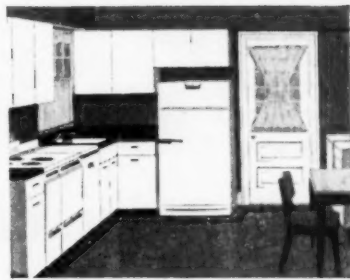
IN YOUR \$9,995 HOUSES

Includes G-E Refrigerator, G-E Range, G-E Automatic Washer, G-E Disposall and G-E Cabinets. Adds as little as \$2.98 monthly to mortgage payments.



IN YOUR \$12,500 HOUSES

Includes G-E Refrigerator, G-E Range, G-E Dishwasher, G-E Disposall, G-E Automatic Washer, G-E Cabinets. Adds as little as \$5.31 monthly to mortgage payments.



IN YOUR \$16,000 HOUSES

Includes G-E Refrigerator, G-E Range, G-E Dishwasher, G-E Disposall, G-E Automatic Washer, G-E Dryer, G-E Cabinets. Adds as little as \$6.31 monthly to payments.

You can put your confidence in—

GENERAL  ELECTRIC

IN YOUR NEXT HOME—ADD

Showmanship

WHERE IT

Pays Off!

\$74⁹⁵

5 ft. size
Retail

\$89⁹⁵

5½ ft. size
Retail



Beauti-Dor

TUB ENCLOSURE

THICK GLASS —

HEAVY RUSTPROOF ALUMINUM

Makes the bathroom the "Showroom"

Feature a custom designed bathroom in your homes—makes any 5 or 5½ ft. recessed tub a glamorous shower enclosure! Takes less than 30 minutes to install comes complete in one carton, nothing else to buy! Silent, double overhead, ball bearing rollers. Exclusive glass patterns—7, 32" thick. Neoprene rubber glass channels. Mastic included.

NEW!

Beauti-Dor

**ADJUSTO
SHOWER
DOOR**

\$59⁹⁵

Retail

Patent applied for

SELF LEVELING • SELF ADJUSTING

Jamb's adjust to out-of-plumb walls without fillers.

Now—a complete Shower Door, with glass already installed, is shipped to you individually cartoned. Now—you can order your Shower Doors ahead of time for your buildings—store them in your warehouse as they come from our factory—ready for instant installation. Specify your sizes for openings required—DOORS ADJUST FROM 24 to 28". No cutting! No glazing! No extra parts! Gleaming, thick, rust-proof aluminum—exclusive glass patterns. Self draining splash. Continuous piano hinge.

WRITE TODAY FOR COMPLETE INFORMATION
Some Territories Available for Distributors

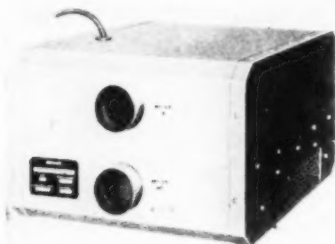
Shower Enclosures, Inc.

1227-L West Devon Ave. • Chicago 40, Ill.

new products

RESIDENTIAL AIR DRYER AB25406

A new adsorption air dryer, capable of maintaining "desert dry" atmosphere in controlled small premises, is stated to reduce relative humidity in controlled areas from as high as 90 per cent to eight per cent. The unit is plugged directly into 115-volt electric circuits; it may be controlled by a standard humid-



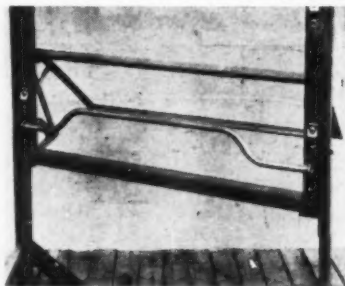
istat, and requires no drains or other connections.

In operation, the new unit brings in outside air, dehumidifies it, and exhausts moisture-laden air from inside. Damp air passes through a bed of silica gel, trapping moisture within the gel particles. A small electric heater continuously regenerates the gel. In periods of high humidity, the unit will remove up to 21 pints of water per day from the air. The dryer mechanism will not frost and its efficiency is stated to improve as its control level is lowered. Bryant Heater Division, Affiliated Gas Equipment, Inc., Dept. AB, 17825 St. Clair St., Cleveland 10, Ohio.

AWNING WINDOWS AB25409

Shatterproof fiber glass comprises all or part of the vents in these awning windows. Credited with filtering out heat and glare while admitting soft, diffused light, the vents are made up in 18 colors, transparent or opaque. They range from 1/16 to 1/8 inch in thickness. Screens and storm sash are interchangeable.

Another recent development by the manufacturer is the introduction of a "balance bar" operator for awning windows in place of the customary crank



handle. This is said to be especially appropriate for use in schools, hospitals and community buildings, since children cannot damage the device. Miami Window Corp., Dept. AB, 5200 N.W. 37th Ave., Miami, Fla.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 172

annular-threaded linoleum underlay drive screws



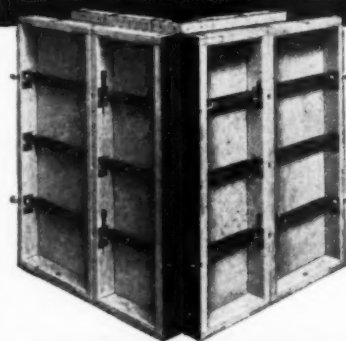
To make your linoleum underlays hold tightly and lie flat permanently, secure them with Hassall annular-threaded linoleum underlay drive screws. They are cement-coated for maximum gripping power. Heads are flat countersunk type. Size: 1¼" x #3 gauge. State quantity when writing for prices to:

JOHN HASSALL, INC.

P.O. Box 2150
Westbury, New York
Established 1850



SYMONS



FORMS

for

- STRAIGHT WALLS
- BATTERED WALLS
- CURVED WALLS
- SLABS

Ask for Estimate



SYMONS CLAMP & MFG. CO. Dept. A-3
4261 DIVERSEY AVE. • CHICAGO 39, ILLINOIS

AMERICAN BUILDER



One Minute...

TO MORTISE AND BORE a DOOR and JAMB

*Completes All
Mechanical Work*

COMBINATION MORTISE & BORING MACHINE

PAT. PENDING

FOR the potential Door Unit Manufacturer, the Door Manufacturer, Retail Lumber Dealer, Project Builder, Pre-Fab House Builder, General Contractor, or anyone using two or more cars of doors per year. One insertion of the door and the jambs into this new machine completes all work for either R. H. or L. H. Door. You handle your product only one time. Materials are held and centered by hydraulic pressure. Any stock Door or Jamb can be mortised and bored. Any type cylindrical lock can be used, 3½" or 4" butts can be used.

- **In 35 SECONDS**, the machine bores for face hole and the plunger hole, mortises for plunger plate and hinge butts. Flush or panel doors may be used.
- **In 25 SECONDS**, the machine will mortise for hinge butts, strike plate and plunger hole on jambs. Either split or straight jambs can be used. Any width or thickness stock jamb can be used.

This machine is equipped to handle any width door from 1'-6" wide to 3'-0" wide; any height door from 6'-0" to 7'-0" high; any thickness door from 1½" to 2". Approximate size is 7' x 12'.

We deliver and install the machine and give your mechanic or foreman two days instruction in the simple operation of same. The machine is operated by one man.

CMCo.

DELIVERED AND INSTALLED
ANYWHERE IN U.S.A.\$2,985.00

CUSTOM MACHINERY COMPANY

P. O. BOX 1803 • TELEPHONE WE-6711 • FORT WORTH, TEXAS

**"...rich appearance
helped sell houses"**

—W. P. "Bill" Atkinson
Oklahoma City Builder-Developer

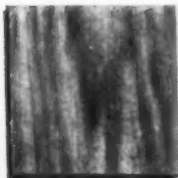
**...that's the beauty
of Higgins Block
INC.**



No wonder builder after builder is chalking up big selling successes with Higgins Block. Just look at the blocks themselves, with all the well-loved grain and texture effect of oak. And just look at the specifications:

- 9" x 9" net face hardwood blocks—easy to install
- 3-ply cross-grain construction—when properly installed will not warp, buckle, cup or crack
- Selected oak face—comes with final finish
- Pressure bonded with marine-type glue—water-repellent, climate-proof
- Deep-impregnated with famous "Penta"—rot-proof, termite-proof
- Grooved back anchors into adhesive—quiet and comfortable
- Can be laid *without* special preparation directly on concrete slab—ideal for radiant heat
- Blocks fit flush—*without* large, visible V-grooves

Higgins BONDED HARDWOOD BLOCK FLOORING
INC. THE WORLD-FAMOUS BOAT BUILDERS 



Use this coupon for free sample block and literature
Higgins, Inc., Dept. A-24, New Orleans, La.
Gentlemen: Please send sample block and literature to

Firm Name.....

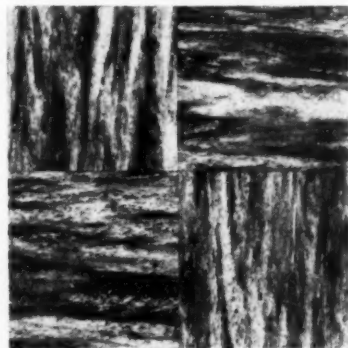
Address.....

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

new products

PLASTIC FLOOR TILE AB25416

Pabco Floron Tile is a new type of plastic floor covering that can be installed safely on grade-level slab concrete as well as on wood floors. The tile features



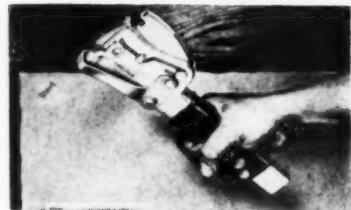
a dense but resilient plastic surface applied to an exclusive, rubberlike mastic backing. The brushed design is available in seven patterns, and is made in nine-inch squares.

The tile's long-wearing characteristics, its resistance to alkali, acid and grease, the attractiveness of design and color and its smooth, easy-to-clean surface are said to give this tile great appeal for commercial installation. Impartial tests on Floron and competitive tiles show that Floron rated high in dampness resistance, alkali abrasion resistance, initial, and residual indentation, flexibility, grease and acid resistance. Pabco Products Inc., Dept. AB, 475 Brannan St., San Francisco 19, Calif.

STAPLING HAMMER AB25403

This stapling hammer drives a new wider staple of .102 x .030-inch wire with a 3/8-inch leg length, stated to be twice as wide as those used by other medium-duty stapling hammers.

The hammer is designed for tacking jobs where a greater surface contact is needed. Applications of insulation batts and roofing paper are examples of work



that can be done effectively with the wider staple. The increased surface contact helps to prevent paper materials from tearing away from the staple. One hand and one blow drive the staple all the way home, even into hard woods, the manufacturer states. Illustrated model weighs two pounds, eight ounces, and holds a strip of 100 staples in its magazine. Bostitch, Dept. AB, 1010 Mechanic St., Westerly, R.I.

♦ FOR MORE INFORMATION
USE COUPON, PAGE 172

General throws no curves

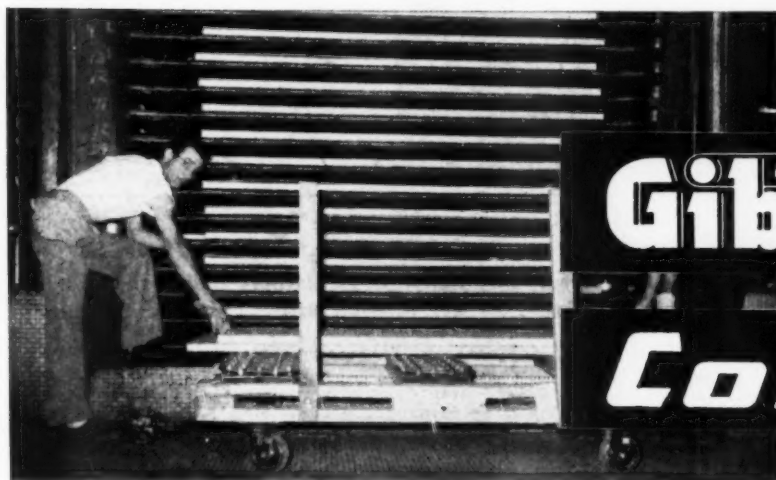
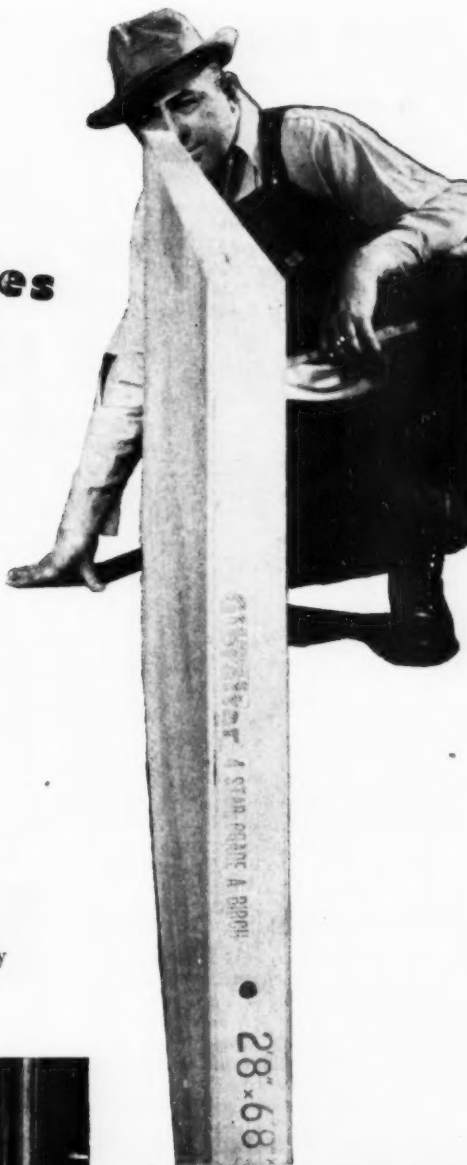
**One big reason why
General Doors
cost less to hang**

If you have wondered why General Doors seem to go up easier and stay put without complaint, the answer can be found in General's manufacturing process.

First of all, frame materials and panels are dried to a uniform moisture content of 5 to 7%. Then, General's giant hot presses drive the finest moisture-resistant glues deep into the assembled doors, sealing out moisture—the most common cause of warpage.

General Doors are not only flat, true and accurately sized when they leave the plant, they remain that way, saving you time and money on the job.

General Plywood Corporation, Louisville 12, Kentucky



**GENERAL
Gibraltar**

**KENTUCKY
Colonel**

FLUSH DOORS



All General Doors are HOT pressed

The doors that pass the "Elephant Test"

new products

AIR CONDITIONING UNIT AB25420

This summer air conditioning unit is designed to increase the salability of low-cost housing. It was introduced at the recent National Association of Home Builders' exhibit in Chicago. The unit, known as the Climatrol Type 910 recessed summer conditioner, is designed for in-the-wall installation. It is air-cooled, self-contained (coil and compressor in the same casing) and compact enough to fit in two stud spaces below a window.

While adaptable to all types of homes, the unit is recommended for providing

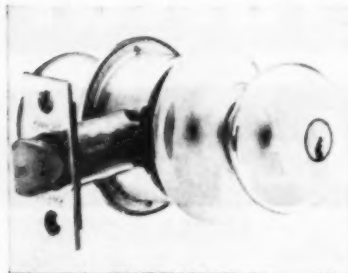


cooling in low-cost homes because of its low installation and operating costs. It is available in two sizes, $\frac{3}{4}$ and one h.p. It uses 220-volt, 60-cycle current. L. J. Mueller Furnace Co., Dept. AB, 2005 W. Oklahoma Ave., Milwaukee 15, Wis.

RESIDENTIAL LOCKSETS AB25423

New "600" line of locksets for fine residential and commercial building are cylindrical-type locks stamped from heavy-gauge steel and brass. They are precision-made and hand-finished to a lasting brilliance in polished and satin brass, chrome and bronze.

The lock's dual-locking feature combines push-button and turn-button in one lock, to provide automatic two-way locking. When the button on the interior knob is pushed and turned, the interior knob turns independently, while outside knob remains locked, giving home owners added protection and convenience. Other



features include simplified cylinder reversing, adjustable strike plate, self-adjusting knobs, feather-touch knob action. New line also has a time-saving installation feature. Kwikset Sales and Service Co., Dept. AB, Anaheim, Calif.

BASEBOARD RADIATION SEAL AB25415

Delivering the positive insulating seal so essential to efficient baseboard radiation, "Alfol Asbestos No. 103" is said to be the first reflective insulation especially designed for use by the heating industry.

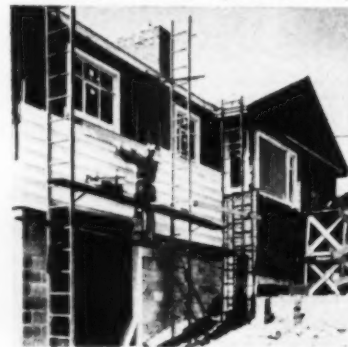


It consists of pure aluminum foil bonded to asbestos paper with a special heat-resistant adhesive which cannot soften or "bubble," and will not run, form odors or permit the foil to peel. According to an independent laboratory, Alfol Asbestos is stated to be equal to nearly two inches of plain air-cell asbestos.

Packaged in rolls of 100 lineal feet, it is available in seven widths: 6, 9, 10, 12, 18, 24, 36 inches. Reflectal Corp., Dept. AB, 155 E. 44th St., New York 17, N.Y.

SCAFFOLD BRACKETS AB25419

An efficient working stage for building and construction operations which can be erected by one man in a few minutes is made possible by the "Step-A-Time" scaffold bracket and its accessories. The bracket consists basically of a sturdy

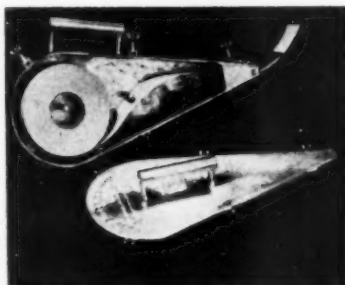


steel unit with angle braces welded to the frame. Hanger gussets are keyhole-punched so that the frame may be attached to any accessible location. All threaded parts are of zinc-coated steel for long wear. Brackets are furnished in pairs for right- and left-hand operation.

Wing nuts on the clamp rod hold the ladder securely in position and may be adjusted toward or away from the building, so that the inside of the ladder may be as close as six inches or as far out from the building as 20 inches. The stage is laid across ladder rungs, thus the ladders, not the brackets, sustain the weight. Brackets fold to a 36x17x2-inch package when not in use. Beaver Art Metal Corp., Dept. AB, Ellwood City, Pa.

TAPING MACHINE AB25414

This taping machine for drywall applicators is said to eliminate 90 per cent of



the hand work in spreading and taping operations, while doing it five times faster. One operator and a finisher can do in one and one-half hours what formerly was a full day's work for an applicator and a finisher, manufacturers say.

The machine weighs only eight pounds when loaded with tape and joint cement, and is thus maneuverable and easily controlled. It tapes over open seams of Sheetrock and over outside corners and angles. The unit holds 250 feet of tape and handles any standard width up to 2 $\frac{1}{4}$ inches. Savings on cement are assured because the cement is spread automatically to any desired thickness; mud will not collect in the machine because of a tight rubber gasket seal. Goldblatt Tool Co., Dept. AB, 1910 Walnut St., Kansas City 8, Mo.

USE THIS COUPON FOR MORE INFORMATION ON NEW PRODUCTS AND CATALOGS IN THIS ISSUE

Save Time—Just Insert Key Numbers and Mail To:
American Builder, 79 W. Monroe Street, Chicago 3, Illinois

Name

Address

City State

Please indicate whether you are

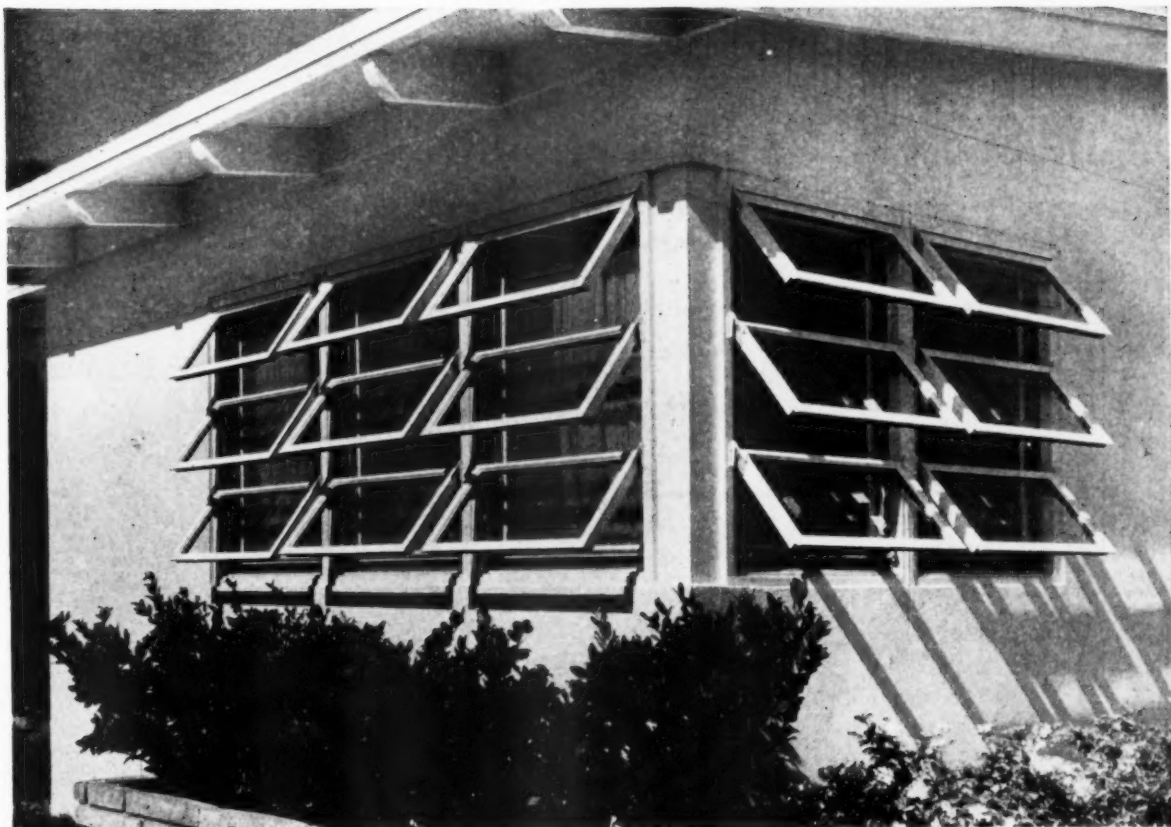
Builder () Dealer or Distributor () Other ()

No. No. No. No.

No. No. No. No.

No. No. No. No.

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder



You can depend on DESIGN to sell the homes You build

And **Good Design** is **Built Right** into Gate City Wood Awning Windows.

Windows are quick to catch a prospective buyer's eye the moment he approaches a house; and, on entering a room, the windows again command his attention. That's why so many builders agree that well designed windows can make sales faster than any other single feature.

With pleasing horizontal lines, and wood sash offering maximum possibilities for colorful decoration, the beauty of Gate City Windows speaks for itself.

More and more home buyers are requesting awning type windows and more architects are specifying Gate City.

See our Catalogue in Sweet's.

Gate City AWNING WINDOWS

Perma-treated for Long Life

"Window Craftsmen for over 40 years"

FEBRUARY 1954

GATE CITY SASH & DOOR CO., DEPT. AB-1
P.O. Box 901, Fort Lauderdale, Fla.

Gentlemen: I would like complete information on Gate City Wood Awning Windows.

Name _____

Address _____

City _____ Zone _____ State _____

TRUSCON METAL DOORS AND WINDOWS ADD EXTRA HOME-SELLING FEATURES



Truscon RANCH WINDOW takes double insulating glass, features awning ventilators, sliding wicket screens. All-steel.

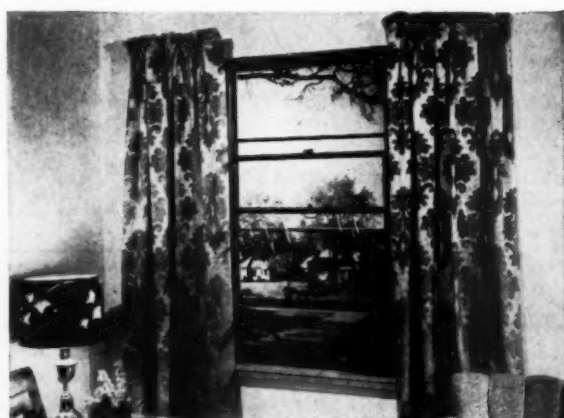
Extra beauty, utility and value provided at low installed cost

Get set now for 1954 selling! Add new interest and excitement to your homes. Make them better competitive values than ever before. Give buyers "plus" features and conveniences — and hold your costs — by standardizing on Truscon quality residential building products. The big Truscon line includes steel and alumi-

num windows and interior steel doors for every room, every home style. All are easy to install. All are lasting values in home comfort and convenience. All are available in warehouse stocks. See Sweet's File for details and specifications, or write Truscon for latest literature.



TRUSCON CASEMENTS. In both aluminum and steel. New aluminum casement is in modular dimensions. Excellent choice of sizes, styles. Storms and screens, too.



TRUSCON DOUBLE-HUNG STEEL WINDOW. Stainless steel weatherstripping. Kool-Shade® screens in steel frames now can be supplied for this popular window.





What woman can resist the wonderful convenience of real sliding doors? Plan them for every closet. Truscon

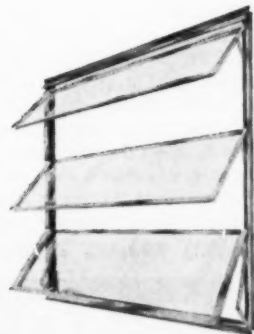
Steel Sliding Doors are complete with frames, easy to install. Insulated. Glide on nylon. 6' 8" and 8' 0" heights.



TRUSCON INTERIOR STEEL DOORS. *Install these in 1/3 the time usually required for door fitting. Complete with hardware and frames.*

NEW!

Truscon's new ALUMINUM AWNING WINDOW. Strong, sturdy. Made in modular dimensions. Fully weatherstripped. Simultaneous ventilator operation. Positive closing. A great value for contemporary architecture.



**TRUSCON STEEL DIVISION
REPUBLIC STEEL**

1050 ALBERT ST. • YOUNGSTOWN 1, OHIO
Export Dept.: Chrysler Bldg., New York 17, N. Y.

TRUSCON® a name you can build on

FRANTZ
GARAGE DOORS AND HARDWARE

No. 10
Overhead
GARAGE DOOR

"Sells" Itself because—
it "OPENS" itself!



FEATURING

"POWERMATIC" ACTION



- Just release the latch — door swings open!
- Fits standard 8' x 7' single-width openings. Other models available to fit 8' x 6'6", 9' x 7' and 16' wide by 7' high.
- Torsion springs on arms start door open, then "Powermatic" takes over—a remarkable extra-value feature that clinches the sale.

Sell the door that sells itself! The Frantz No. 10 does the selling job for you because it has everything you could want in a one-piece door, plus "Powermatic" Action that clinches the sale every time! Needs only 2" headroom, and is as beautiful in looks as in operation. Pre-fitted at the factory for easy installation, designed to give years of trouble-free service, you can show this door with pride. Check up on the No. 10 and other Frantz Overhead Door models. Write for a copy of Catalog No. 302, which gives full details of the beauty and easy operation of FRANTZ line of Overhead Garage Doors.

INSTALL FRANTZ • YOUR BEST DOOR FOR '54!

FRANTZ
GARAGE DOORS AND HARDWARE

FRANTZ MANUFACTURING CO., STERLING, ILL.

Catalogs — and Manufacturers Literature

464—RESIDENTIAL WOODWORK—"How to Have Beautiful Woodwork" is the title of a comprehensive brochure which shows installations of pine panel woodwork in formal and informal designs in actual room settings. Informative, illustrated text includes standard available patterns for vertical interior paneling, dependable instructions for finishing floors and woodwork and directions on how to attain the "suede" finish effect. Arkansas Soft Pine Bureau, Dept. AB, 154 Boyle Bldg., Little Rock, Ark.



465—STEEL CABINET KITCHENS—latest kitchen advances in the manufacturer's line of ensemble and cabinet sinks, electric sinks, dishwashers, food waste disposer units, wall, base and utility cabinets are offered in this 16-page catalog. Special features of "Diana" ensemble sinks are shown in pictures; complete specifications and dimensions of all units included. Youngstown Kitchens, Mullins Manufacturing Corp., Dept. AB, Warren, Ohio.

466 — PREFABRICATED HOMES—20-page catalog presents complete story in pictures of the manufacturer's method of producing its prefabricated units, showing production details of various individual house sections. Advantages of mass-production methods in making different millwork sections of houses are shown by pictures. One series shows an eight-hour construction of typical home. Best Homes, Inc., Dept. AB, 628 W. Lake St., Peoria, Ill.



467—AWNING WINDOWS—these units, described in eight-page catalog, have extruded aluminum alloy frames, sash operating mechanism which rides on nylon plastic bearings and a top sash pivot which provides integral sash frame weathering in open or closed position. All windows are completely weatherstripped. Catalog contains specifications, tables of standard and modular sizes. Air-Vue Products Corp., Dept. AB, 3649 N.W. 50th St., Miami 42, Fla.

◆ FOR MORE INFORMATION USE COUPON, PAGE 172

AMERICAN BUILDER



BUILDING BUY-WORDS by Herb Willson

An Advertising Page.

KITCHEN DESIGNS FOR ONLY \$5? Yes, it's a new service for builders and lumber dealers being offered by Mutschler... specialists in hardwood kitchens. You send rough floor plan with overall dimensions to be used, preference of natural or enamel cabinets, color and style desired... Modern, Early American or other. Mutschler then advises cost for detailed floor plan and artist's sketch of kitchen as it will appear when completed. (Cost, based on number of appliance and cabinet units used, may be low as \$5.) Your "okay" starts a kitchen design like those featured editorially in leading women's magazines... a design that sells the kitchen, sells the home! For free quotations, mail rough plan and information to **KITCHEN DESIGN SERVICE, Mutschler Brothers Co., Nappanee 4, Indiana.**

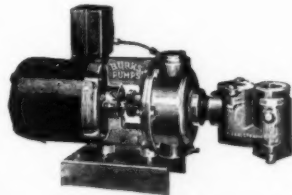


MORE AND MORE BUILDERS are installing Tilemaster, the "mechanic's" tile. "It goes up right—stays on tight"—they say. There's not only profit in it, but it's got some exclusive features. For instance, each tile has an arched construction called "Bev-All" which prevents "dishing-in" or "cupping." Sturdy, Styron plastic withstands hard



knocks or blows. Don't overlook the Mastic-Seal Rib either, that seals mastic in—water out! It prevents water damage in shower or any areas exposed to water! For the complete Tilemaster story, write **A-1 Plastic Molders, Inc., 1415 Diversey Pkwy., Chicago 14, Ill.**

IF YOU'RE BUILDING out beyond city water mains, you'll want to know all about Burks Super Turbine Pumps and Water Systems. The Burks Super Turbine is famous for its Life-Lok feature—an engineering advantage that assures more gallons per minute, better performance, and up to 40% longer life. Guaranteed to lift water 28 feet as a shallow well system, the Burks Super Turbine is readily adaptable to deep well application simply by adding an educer. It's self-priming, fully automatic, has only one moving part, and is available in a wide range of capacities. For full details, write **Decatur Pump Co., 13 Elk St., Decatur, Ill.**



YOU'VE GOT YOUR EYE on the same thing home-buyers have—if you're looking for extra beauty, extra value at no more cost. And I've found a top-notch answer in Fremont Rubber's colorful, long-lasting line of Vinatile and Vinatop. It matches—and its Soft-Glo finish makes it look a lot richer than the price tag. There

are thirteen of today's best colors to choose from, for counter and floor. Vinatile comes in 6" by 6" and 9" by 9" Tru-Cut squares. Vinatop comes in rolls, 30", 36" and 42" wide. Write for samples. **Fremont Rubber Company, 308 McPherson Highway, Fremont, Ohio.**

MR. ROT and MR. TERMITE go hand in hand to cause untold millions of dollars in damage each year to homes and other structures. Did you KNOW that replacement of rotted or termite infested wood uses an estimated 20% of our annual lumber cut? This damage takes place in 47 of the 48 States. Protect your customers and your reputation as a good builder... use **WOLMANIZED** brand pressure-treated lumber. American Lumber & Treating Co., Chicago, Illinois or their Licensees are the ONLY producers of **WOLMANIZED** one specification pressure-treated lumber. Processed and produced to prevent rot and eliminate termites. Sold by Lumber dealers coast to coast. Use coupon for FREE information.



DID YOU SEE those quick-and-handly new "double-coursed" shake units at the NAHB Show? Called "GLUMAC Units," they're just about the slickest idea yet—with deep-grooved cedar shakes bonded to a tapered backer-board. Big, easy-to-handle panels, 16" x 46 1/2" and end-lapped, GLUMACS build sidewalls better

and up to three times faster! Just 22 pieces cover 100 sq. ft.—compared to over 400 separate shakes and under-coursing formerly needed. Tops in beauty, quality and economy, too! See the Yellow Pages, or write **Perma Products Co., Cleveland 27, Ohio.**

AN IN-SINK-ERATOR IN THE KITCHEN will many times mean the difference in the prospective "lady of the house" being enthusiastic or simply interested in the new house you have to offer. One thought goes through her mind when she sees an **IN-SINK-ERATOR**; "No more garbage!" It's a wonderful and inexpensive way to get her on your side. And, the manufacturer has a model just for builders—Model 33. It has all the famous nationally advertised **IN-SINK-ERATOR** features: continuous feed, simple self-service, automatic reversing action, yet has a simple money-saving arrangement for installation in new buildings where rough-ins may be controlled. Write **In-Sink-Erator Mfg. Co., Racine, Wisconsin** for details.



BUILDING BUY-WORDS

5510 Cornelia Avenue
Chicago 41, Illinois

2-3

Please send information on products checked:

- MUTSCHLER'S** Kitchen Design Service (Include rough plan)
- A-1 PLASTIC MOLDERS'** Tilemaster Story
- DECATUR PUMP CO.'S** Burks Super Turbine
- FREMONT RUBBER'S** Vinatile and Vinatop—Free Samples
- AMERICAN LUMBER & TREATING'S** Wolmanized Lumber
- PERMA PRODUCTS** Glumac Shake Units
- IN-SINK-ERATOR** Mfg. Co.

Name
Address

st



PATENT NO. 2489029

SUCCESSFUL PACKAGED DOOR UNIT

The READY HUNG DOOR was the first successful door unit because it was Job Engineered so that nail driving only is required to install it. There is nothing to saw, fit or plane.

SHIPABLE DOOR UNIT

The READY HUNG DOOR is the first to be packaged by a method which will deliver the unit with the joints square and tight. The READY HUNG DOOR crating method (Patented*) will deliver the unit 15 or 1500 miles in perfect condition.

IN UNIFORM QUALITY

Assembly line production assures uniform high quality workmanship with only the finest of materials. The

READY HUNG DOOR Unit is precision built on specially designed high production machinery and incorporates features which insure a better finished job.

IN SAVINGS TO THE BUILDER

The READY HUNG DOOR installs in less than 20 minutes, saving up to \$50 per house in the labor of installation. READY HUNG DOOR Units cost a little more than conventional material but the tremendous saving in installation labor always makes the installed cost less!

**READY HUNG DOORS SAVE
TIME—LABOR—MONEY—WASTE
WORRY—SKILL...
DO A BETTER JOB**

*PATENT NO. 2489029



SOLD THROUGH LUMBER DEALERS—For further information write the mill nearest you.

BALTIMORE, MD.

Central Building Supply, Inc.
210 E. Monument St.

DALLAS, TEXAS

Ready Hung Door Mfg. Corp.
P. O. Box 10025

HOUSTON, TEXAS

Ready Hung Door Mfg. Co.
P. O. Box 124

SEATTLE, WASH.

Acme Millwork, Inc.
P. O. Box 658

BIRMINGHAM, ALA.

National Woodworks, Inc.
2201 29th Ave. North

DENVER, COLORADO

Prefabricators Incorporated
P. O. Box 6886

NEW YORK, N. Y.

Bailey-Whalen Company
17 Park Ave.
W. Orange, N. J.

ST. PAUL, MINNESOTA

Minnesota Wood Specialties, Inc.
P. O. Box 216
Saint Paul Park, Minnesota

BURBANK, CALIF.

Ready Hung Door Mfg. Co.
200 South Victory Blvd.

GRAND RAPIDS, MICH.

Haskelite Mfg. Corp.
701 Ann St., NW

SAN ANTONIO, TEXAS

Ready Hung Door Mfg. Corp.
200 Seguin Street
Jordan Millwork Co.


TORONTO, CANADA

C. Lloyd & Son Limited
1214 Lawrence St.
N. Park P. O., Ont.

PAT. NO. 2489029
*TD. MK. REG. U. S. PAT. OFF.
FORM NO. 21354-1

READY HUNG DOOR CORP., Fort Worth 2, Texas

At Every Important New Housing Project you always find **VITRIFIED CLAY PIPE**



Over 60,000 feet of Vitrified Clay Pipe have been installed to serve 1,000 homes in the new \$15,000,000 Scottsdale Housing Project in Chicago. It is the largest home development in Chicago in more than six years. This "suburb within the city" was designed by A. J. Del Bianco and is being built by Raymond L. Lutgert Construction, Inc. Sewerage contractors are the Di Paola Bros.

When you see a project on which outstanding designers, engineers and contractors are staking their reputations—you always find Vitrified Clay Pipe.

Experienced construction people will tell you that Clay Pipe is the *only* permanently corrosion-proof pipe. Acids and alkalis can't weaken it . . . detergents can't make it soft and spongy . . . sewerage gas does not cause it to crumble and give way . . . backfill loads and ground movement can't cause Clay Pipe to "oval" or squash out. Clay Pipe is so good that it is backed up with a 50-year guarantee.

The manufacturers of Vitrified Clay Pipe work constantly to make this fine product even better through research and testing. You can be sure you're getting the latest and the best when you specify Vitrified Clay Pipe. It is performance-proved . . . precision-produced . . . permanently safe.

NATIONAL CLAY PIPE MANUFACTURERS, INC.

1520 18th St. N. W., Washington 6, D. C.

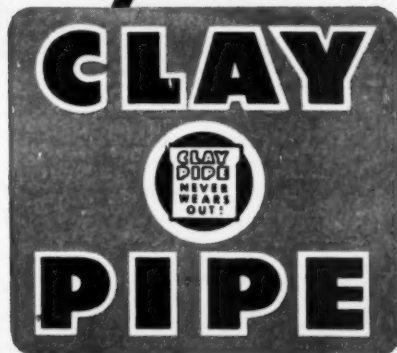
311 High Long Bldg., 5 E. Long St., Columbus 15, Ohio

703 Ninth & Hill Bldg., Los Angeles 15, Calif.

100 N. LaSalle St., Rm. 2100, Chicago 2, Ill.

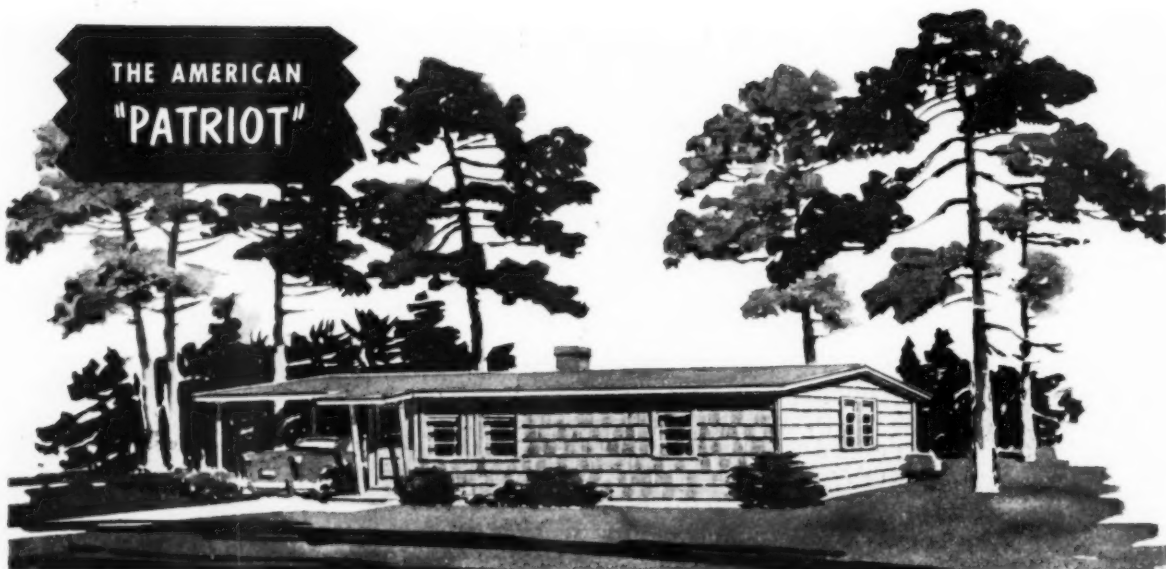
206 Connally Bldg., Atlanta 3, Ga.

Vitrified



C-154-3

THE AMERICAN
"PATRIOT"



Builders!

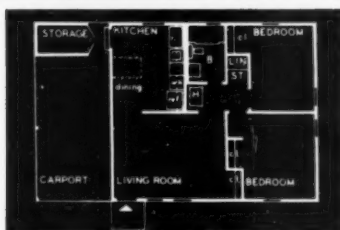
A TITLE II HOUSE AT A TITLE I PRICE!

Go the American way to volume selling with the American "Patriot"

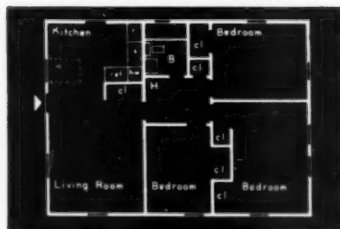
- ★ A low cost line of houses meeting Title I and Title II specifications (3 and 4 bedroom models also available as shown)
- ★ Several variations of each model
- ★ Many styles of exterior finish
- ★ With or without carport
- ★ Slab or crawl-space construction
- ★ Meets the needs of project builders

WE ARE CONVINCED THAT THE AMERICAN "PATRIOT" IS

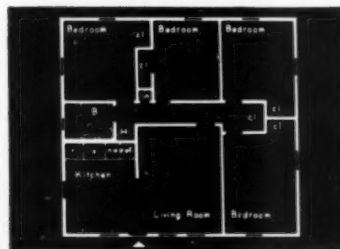
THE LOWEST PRICED QUALITY HOUSE AVAILABLE TODAY



2 BEDROOMS, 707 SQ. FT.



3 BEDROOMS, 806 SQ. FT.



4 BEDROOMS, 980 SQ. FT.

Use the coupon to get further details — now!

AMERICAN HOUSES, INC., Dept. AB-2
165 West 46th Street, New York 36, N. Y.

Please rush more facts on your new American "Patriot" Home.

Name

Firm

Address

City Zone State

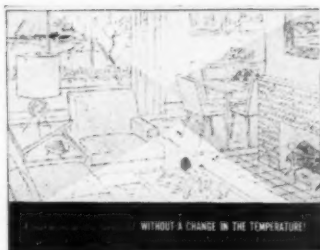
GO THE AMERICAN WAY TO VOLUME SELLING WITH

American Houses Inc.

165 WEST 46TH STREET, NEW YORK 36, N. Y.

Catalogs

468—TEMPERATURE CONTROLS—16-page booklet presents Electronic Modu-flow, completely automatic home temperature control system. Minneapolis-Honeywell Regulator Co., 2753 Fourth Ave., Minneapolis 8, Minn.



469 — WOOD WALL PANELING—12-page booklet for dealers' prospects describes Wedge-Wood, textured plywood wall paneling for homes. Georgia-Pacific Plywood Co., Dept. AB, 270 Park Ave., New York 17, N.Y.



470—PLUMBING FIXTURES—new 146-page, 8½ x11-inch catalog offers practical organization of material and easy reference. Ten full-color pages illustrate bathrooms, washrooms and kitchens, with floor plans included. Large illustrations picture complete line of fixtures and fittings. Many new baths and lavatories are listed for the first time. Modifications and improvements are noticeable in bath and lavatory sections. Kohler Co., Dept. AB, Kohler, Wis.



471—SWIMMING POOL EQUIPMENT—28-page illustrated catalog contains data on everything needed to build a new pool or improve an existing pool. Illustrations and prices of complete range of pool fittings, detailed information on filters, pool ladders, underwater lights and chlorinators are given. Catalog describes automatic skimmers, diving equipment, underwater vacuum cleaners, etc. Modern Swimming Pool Co., Inc., Dept. AB, 1 Holland Ave., White Plains, N.Y.

◆ FOR MORE INFORMATION USE COUPON, PAGE 172

MR. BUILDER
THE **KOTA**

ALL EXTRUDED ALUMINUM
HORIZONTAL GLIDE

is the perfect high quality
window for Low Cost Housing
ASK FOR DETAILS and CATALOG

We make 26 different style Windows
for every room—For every home.

KOTA PRODUCTS INC.

ROUTE 25-A

ROCKY POINT, N. Y.

DeLuxe Maroon Finish



IMPROVED 78" ONLY
3 lb. MAGNESIUM LEVEL \$17.45

Plain Electroplate Finish 78" \$15.95—72" \$15.45
DeLuxe 72" \$16.95

For setting door jams and window frames! No other like it. 4 Plumbs, 2 LEVELS. Use either end or edge up. Weighs only 3 lbs. I-Beam type—stronger than aluminum. Direct from factory. Patented.

NO FACTORY REPAIRS NEEDED

Spirit tube holder (50¢) replaced in a minute with screwdriver. An ideal gift for any occasion. Send check or M.O. express prepaid, or C.O.D.

SIMPLEX LEVEL CO., INC.
P.O. Box 23-A, Harper Station, Detroit 13, Michigan

PREFERRED FOR EVERY TYPE
OF INSTALLATION

Mouflex
IMPROVED VINYL-PLASTIC TILE FLOORING

- Available in both low-cost standard gauge and ½" heavy-duty thickness.
- Vinyl-Plastic throughout—no felt backing.
- Lasts for years!
- Can be installed on, above or below grade.
- Resists dirt, grease, acid, alkali and fire.
- 13 striking color combinations.

Write today for full details!

DEPT. M5-2

Moultile
FLOORING
SINCE 1929

MOULTILE, INC.

Joliet, Ill. • Long Beach, Calif. • Newburgh, N. Y.



... of course, it's electric!

The plus that makes the sale!

Turn lookers into buyers with this handsome
Westinghouse Dishwasher

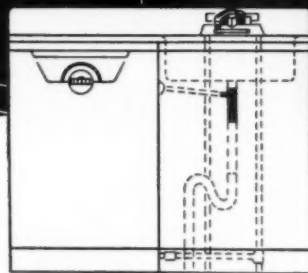
Your prospects will quickly spot this bonus feature in the kitchens of your homes. It's styled to arrest attention.

Dishwashers are plumbed-in appliances that your prospects probably don't own and can't bring with them if they do. But they want one.

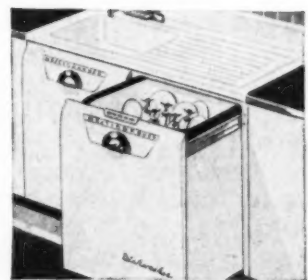
Young people, with growing families, want a Westinghouse Dishwasher because it saves time and sanitizes dishes for health protection. Working mothers, and there are millions of them, will be delighted with the way it

lightens their housekeeping chores.

You'll like this Under-Counter Model because it is easy to install. Only 24" wide, it slips under standard height counters. The front-opening, top-loading design means no sacrifice of valuable counter work surface. And, it does not require a separate drain line or trap. Other models available are the 24" free-standing Cabinet, 48" Dishwasher-Sink and a Portable. Contact your Westinghouse Distributor or write direct for additional specifications.



EASY, LOW-COST INSTALLATION—A simple Y tail pipe, supplied with the dishwasher, makes connection to sink drain line easy. Dishwasher is pump operated, no need for separate trap or drain line.

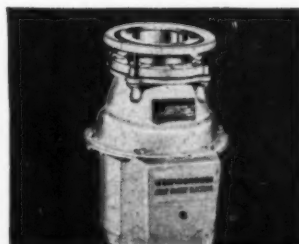


DE LUXE DISHWASHER-SINK
—Front panels match in design. Available with or without porcelain sink bowl and drainboard.

WESTINGHOUSE ELECTRIC CORPORATION
Electric Appliance Division • Mansfield, Ohio

Makers of Refrigerators, Home Freezers, Ranges, Laundromats, Dryers, Dishwashers, Food Waste Disposers, Water Heaters, Vent Fans and Room Air Conditioners.

YOU CAN BE SURE...IF IT'S Westinghouse



COMPANION APPLIANCE is the new Westinghouse A-1B Food Waste Disposer for quick, sanitary removal of food waste. A quality appliance at a new low price.

"You can't skimp anywhere when you build quality homes. That's why we use Revere Copper Water Tube for hot and cold water lines and service lines,"
say the **HENDY BROTHERS**

Arcose Company, Cincinnati, Ohio



"When we sharpen our pencils to find ways to cut construction costs naturally we look for materials, means and ways to do things at less cost *but*, not at the sacrifice of quality. We have found Revere Copper Water Tube is one item on which we can cut costs without cutting quality.

"The slightly higher material cost is more than offset by the ease of handling, and the speed of installation plus the fact that no allowance in pipe size need be made for rust accumulation . . . for Revere Copper Water Tube does not rust. And finally, we are dealing with a metal that has proven its enduring qualities for centuries. All of which results in happy home owners and protects our reputation as builders of quality homes."

Benefit by the experience of the Arcose Company. Keep out of trouble with copper. There is not another metal or alloy that has all of its desirable construction characteristics. Next time you write specs. remember: there is no "OR EQUAL" for copper water tube for radiant panel heating, hot and cold water lines, underground service lines, air conditioning and processing lines, waste stack and vent lines. There is a Revere Distributor near you. And, if you have technical problems, he will put you in touch with Revere's Technical Advisory Service.

(Left to right)
Neal P. Hendy,
Wm. F. Hendy
John H. Hendy

REVERE

COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, N.Y.

Mills: Baltimore, Md.; Chicago and Clinton, Ill.; Detroit, Mich.;
Los Angeles and Riverside, Calif.; New Bedford, Mass.; Rome, N. Y.

—Sales Offices in Principal Cities, Distributors Everywhere
SEE "MEET THE PRESS" ON NBC TELEVISION, SUNDAYS



Top photo shows newest Arcose subdivision—"High View Development." Bottom photo shows completed homes in their "East Covedale Development" . . . both in the Western Hills Section of Cincinnati. In the past 2½ years the Arcose Company has built over 400 homes ranging from \$15,500 to \$16,500, accounting for over 90,000' of ½" and ¾" Copper Water Tube. Plumbing Contractor — JOHN H. KARG COMPANY. Revere Distributor — MUTUAL MANUFACTURING and SUPPLY COMPANY; both of Cincinnati, Ohio.



Builder makes



Celotex National Advertising Builds Business for You

To help you really score in '54, Celotex hits the residential construction market with a great new advertising campaign. Month after month you'll see big, colorful, eye-stopping ads—*working for you*—in THE SATURDAY EVENING POST, BETTER HOMES & GARDENS, AMERICAN HOME, SMALL HOMES GUIDE.

Make the most of this powerful sales help. Tie in by stressing to prospects that your homes are built with genuine Celotex Products. This smooths the way to sales because a third of a century of national advertising leadership has created nationwide preference for the brand name Celotex!

3 important savings

by using *Double-Waterproofed*
CELOTEX INSULATING SHEATHING
instead of ordinary sheathing

"Of the many reasons we have for using 4' wide, 25/32" thick Celotex Double-Waterproofed Insulating Sheathing exclusively, perhaps the most important are: First, it saves material by eliminating the need for corner bracing. Second, it saves labor because it goes up easier and faster. Third, it saves time because its asphalt coating provides such effective moisture protection that after-rain delays are minimized. In addition, Celotex's double-waterproofing process prevents moisture absorption during construction, thus avoiding the risk of enclosing moisture in the walls."

David Refkin, President, Island Construction Company
Division of Long Island Homes, Milwaukee, Wisconsin



Mr. Refkin's letter on the *practical job advantages* of Celotex Double-Waterproofed Insulating Sheathing is typical of reports from builders in every part of the nation. They have found it saves labor and materials—speeds construction—gives your homes the big, added selling feature of fully insulated sidewalls! Applied, Celotex Insulating Sheathing costs no more—usually LESS—than ordinary sheathing. Yet it offers you all these extra advantages . . .

- 1. Insulates and Weatherproofs** as it builds. All at *one* cost. No building paper needed.
- 2. Laminated for Extra Strength** and rigidity. All Celotex 25/32" Insulating Sheathing is made of 2 plies, permanently bonded.
- 3. No Corner Bracing Needed** to meet F.H.A. re-

quirements, with 4 ft. wide, 25/32" thick Celotex Insulating Sheathing. Has approximately 30% greater strength than ordinary sheathing with let-in bracing.

4. Goes Up 30% Faster. Easier to cut and fit. Up to 15% less waste.

5. Excellent Shingle Base. Shingles can be applied direct, or over Celotex Impregnated Backer Board with special nails.

6. Double-Waterproofed. Inside, by special treatment that coats every fiber; outside, by asphalt coating. Lets you resume work quicker after rain. High vapor permeability, too!

7. It is the Only Sheathing made of tough, strong, long Louisiana cane fibers—protected by the patented Ferox® process from dry rot and termites.

Mail coupon for factual FREE new booklet, "40 Questions and Answers about Insulation Board Sheathing."

Build Better... Build with Genuine

CELOTEX INSULATING SHEATHING

REG. U. S. PAT. OFF.



It's double
waterproofed!

The Celotex Corporation, 120 S. LaSalle St., Chicago 3, Illinois

MAIL TODAY!

THE CELOTEX CORPORATION, Dept. AB-24
120 South LaSalle Street, Chicago 3, Illinois

Please send me free the new Celotex booklet, "40 Questions and Answers about Insulation Board Sheathing."

Name

Address

City..... Zone State



HOLT NMPL12 FLOOR SANDER

with patented demountable cushion that's replaceable in minutes right on job—no long, costly delays when nails rip cushion. Designed and built to eliminate vibration and chatter, so you get smooth floors easily. Double, self-adjusting belts, sure-grip clamps, high-speed cutting keeps jobs rolling, enable you to sand more floor daily.

HOLT Rotary Edgers for quick, easy sanding of edges, corners, stairs, closets, etc. Two-hand front and back controls permit fast starts and stops, improve control on close work.



HOLT Floor Machines put a sheen on floors that wins friends and extra business. Use for waxing, polishing, scrubbing, rug shampooing, steel wooling.

Take the HOLT way to more profitable floor jobs—mail coupon TODAY.



Better floor machines for more than 25 years ¹²

ROOM B-2, 669 - 20th ST. • OAKLAND 12, CALIF.

HOLT MFG. CO.

Room B-2, 669 - 20th St., Oakland 12, Calif.

Please send me folders describing HOLT's exclusive, new features.

NAME _____ POSITION _____

FIRM _____

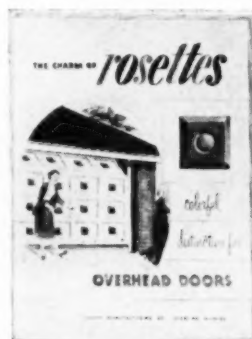
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Catalogs

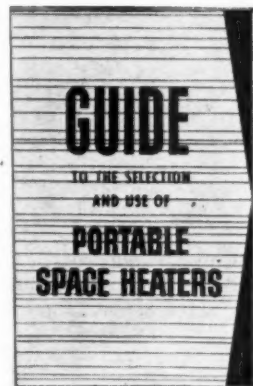
472 — FIRESCREENS — colorful 40-page catalog illustrating and itemizing complete line of mesh curtain fireplace screens also contains details of manufacturer's merchandising plan that answers the retailer's problems of storage and display space and inventory investment. It enables the dealer to fill customers' needs on the first contact. Well illustrated, catalog also lists hearth fenders, andirons, tools and firesets. Portland Willamette Co., Dept. AB, 808 S.E. Alder St., Portland 14, Ore.



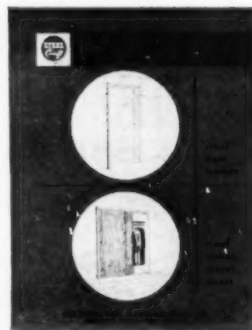
473 — GARAGE DOOR DECORATIONS—new folder describes recent trends in decorator motifs for garage doors. A complete line of decorative rosettes is available which can be applied to most types of modern garage doors to improve their appearance and add colorful design. They can be applied also to home entrance doors to harmonize with decor of rest of house. Variety of patterns fit different panel dimensions. Frantz Manufacturing Co., Dept. AB, Sterling, Ill.



474 — PORTABLE SPACE HEATERS—this useful 36-page booklet is of particular interest to builders, for it presents the facts about these devices as used on construction jobs and elsewhere to meet the needs for temporary space heating equipment. The booklet's objective is to protect property from possible fire hazards, safeguard the well-being of workmen and guide fire and accident prevention officials in evaluating the relative safety of these units. Herman Nelson Div., American Air Filter Co., Dept. AB, Moline, Ill.



475 — STEEL DOOR FRAMES AND CLOSET DOORS—four-page folder presents installation details of manufacturer's line of 18-gauge steel door frames and steel sliding closet doors, with line drawings showing wood stud, drywall, exterior opening and double swing door frame details to facilitate installation. Durability, fire-proof welded construction of frames, designed for 1¾- and 1¾-inch doors, are stressed. Steelcraft Manufacturing Co., Dept. AB, Rossmoyne, Ohio.



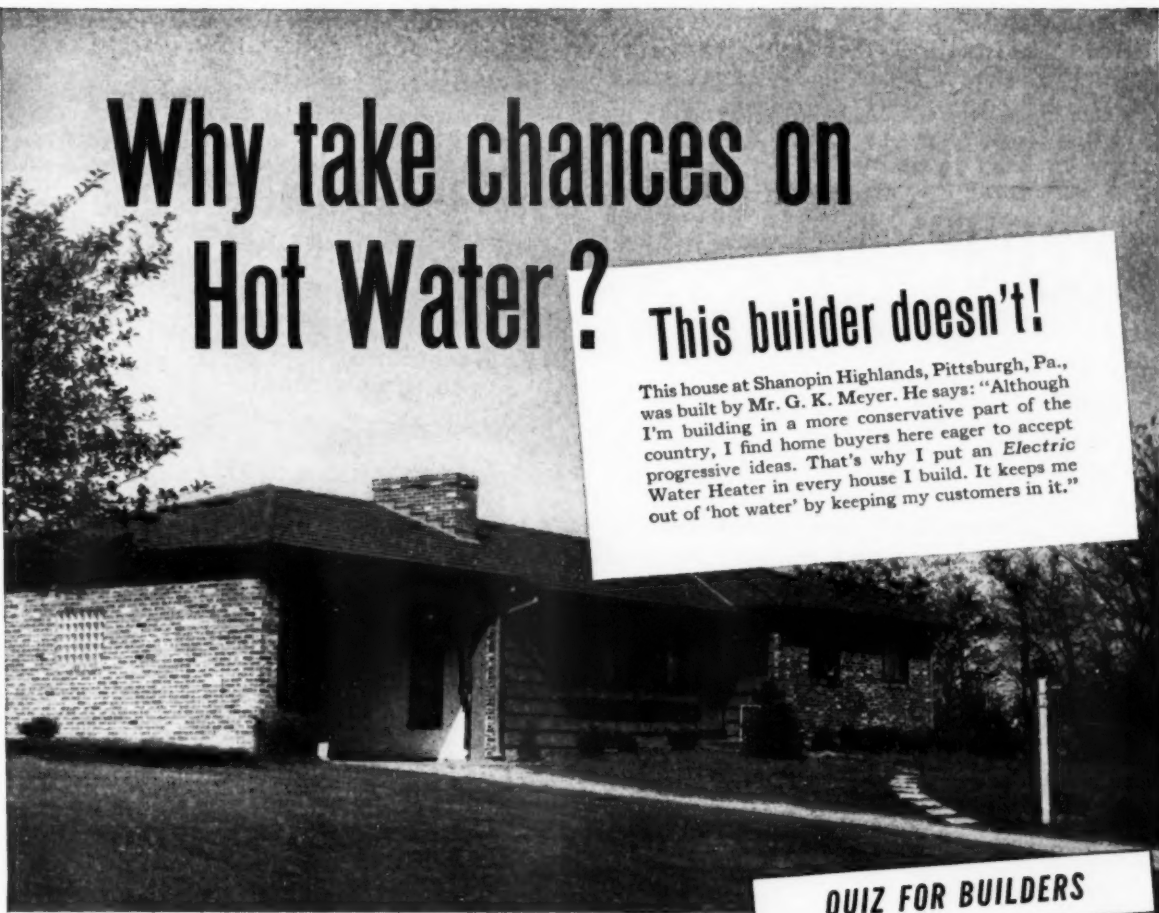
◆ FOR MORE INFORMATION USE COUPON, PAGE 172

AMERICAN BUILDER

Why take chances on Hot Water?

This builder doesn't!

This house at Shanopin Highlands, Pittsburgh, Pa., was built by Mr. G. K. Meyer. He says: "Although I'm building in a more conservative part of the country, I find home buyers here eager to accept progressive ideas. That's why I put an *Electric Water Heater* in every house I build. It keeps me out of 'hot water' by keeping my customers in it."



QUIZ FOR BUILDERS

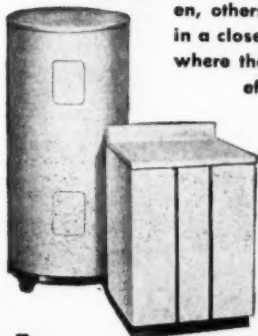
Why risk any question about the hot water supply in the homes you build? You can sell them easier by installing *Electric Water Heaters*.

Home buyers want to be modern *electrically*—so they will want this water heater that automatically assures an ample supply of hot water at any hour of the day or night. They'll like the fact that it's clean in operation, and doesn't heat up the area where it's installed, because the tank is so completely and heavily insulated.

The *Electric Water Heater* is good for the builder—as well as his customer. Since it can be installed anywhere, hot water lines can be short—to reduce installation cost and minimize radiation loss. That's why you should...

Q ■ Where is the water heater installed in this house?

A ■ Here it is installed in the basement. Some builders install it in the kitchen, others in the garage—or even in a closet. It can be installed anywhere that's most convenient and efficient—without regard to flue or vent.



Be modern...
live *Electrically!*

Equip your homes with
electric water heaters

**THEY'RE WHAT
PEOPLE WANT!**

ELECTRIC WATER HEATER SECTION
National Electrical Manufacturers Association
155 East 44th Street, New York 17, N. Y.

ALLCRAFT • BAUER • C-E HEATMASTER • CRANE-LINE SELECTRIC • CROSLY • DEEPFREEZE
FAIRBANKS-MORSE • FRIGIDAIRE • GENERAL ELECTRIC • HOTPOINT • HOTSTREAM
JOHN WOOD • KELVINATOR • LAWSON • MERTLAND • MONARCH • NORGE • PEMCO
REX • RHEEM • SEPSCO • A. O. SMITH • THERMOGRAY • WESIX • WESTINGHOUSE

NATIONAL'S NEW "CADET" SCOOPS BUILDERS SHOW

Sensational 2-Bedroom House for About \$4800 (plus lot)... Opens Up Huge Untapped Market... Your Opportunity

WITH COMPLETE FINANCING AVAILABLE, YOUR VOLUME SALES AND PROFITS ARE ASSURED



Thousands of home builders flocked to see our new "CADET" at the NAHB Convention in Chicago last month. It stole the show! Perhaps you were there. If so, you know what amazing values you could offer as a National Homes dealer, with the 2-bedroom model at about \$4800 plus lot, the 4-bedroom at approximately

\$5400, plus lot! Right in your town—today—there's a terrific pent-up demand for just such homes. Some builder will cash in on that waiting market: why not YOU? Write, wire or phone for complete details on what it can mean to you to build the "CADET" and other fast-selling Nationals!



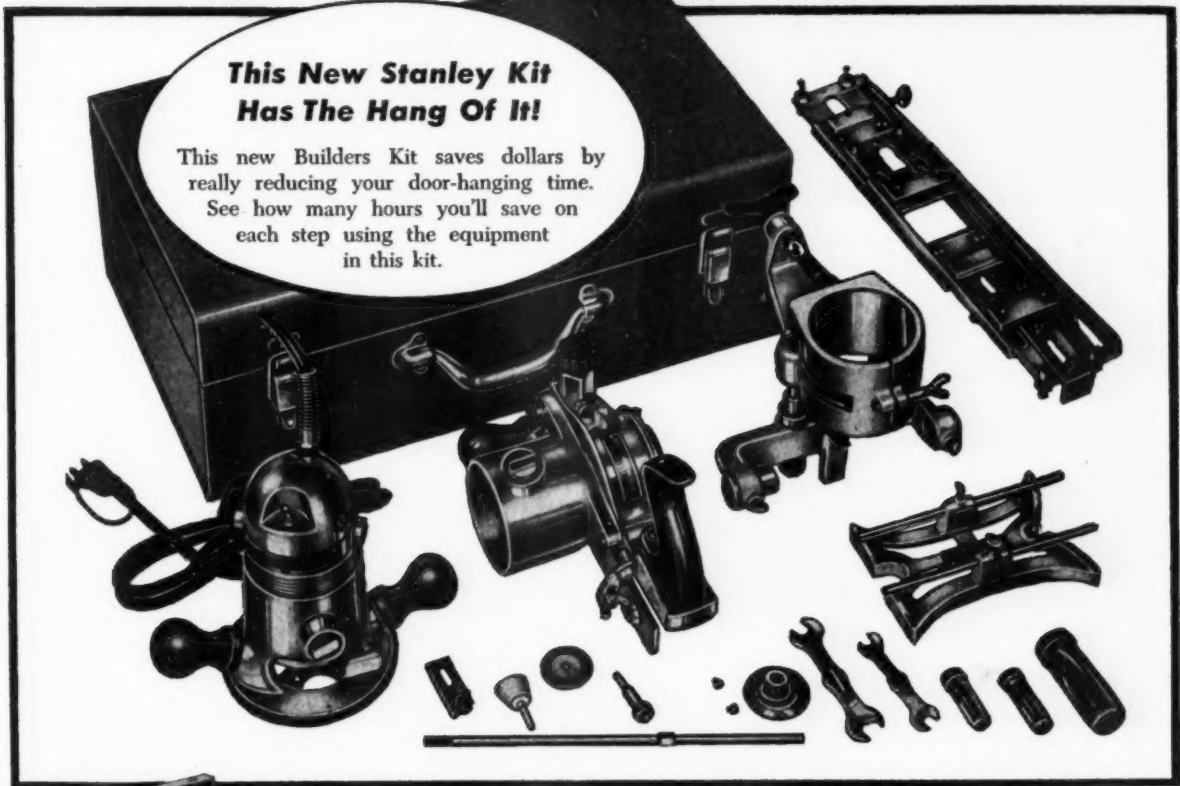
SELL EVERY BUYER WITH NATIONALS!

Besides the incredibly low-priced "Cadets," the 1954 National line includes the thrifty "Pacemakers"... the de luxe "Custom-Liners"... the spectacular open-planned "Rangers"... covering every taste, every income bracket. It's by far the most beautiful, most complete line of homes on the market!

CUT DOOR COSTS

This New Stanley Kit Has The Hang Of It!

This new Builders Kit saves dollars by really reducing your door-hanging time. See how many hours you'll save on each step using the equipment in this kit.

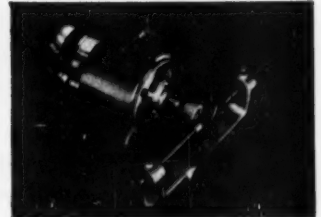
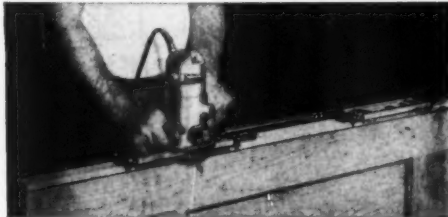


Here's what's in it for you: ½ hp. motor, straight and circular gauge, router base, plane attachment, hinge templet, cutter grinder attachment, templet guide, arbors, bits, plane cutter, grinding wheels, wrenches, spindle and guide finger assembly — all in a distinctive metal carrying case.

Here's the plane attachment for fast, flawless trimming and fitting. Safe chip disposal is positive. Cuts up to 1-13/16" wide and to 3/32" deep.

Here's the router mortising the door for Stanley round cornered butts. It's 6 times as fast as by hand. The hinge templet is adjustable for cutting 2 or 3 hinges on door and jamb. For doors up to 2" thick. Grinding wheel and arbor facilitate bit sharpening. The router is also useful for molding, decorative cuts and many other interior finishing jobs.

Here's the cutter grinder attachment with guide fingers, spindle and grinding wheel. Quick on-the-job cutter sharpening for better work. Keeps spiral plane cutters honed for top production.



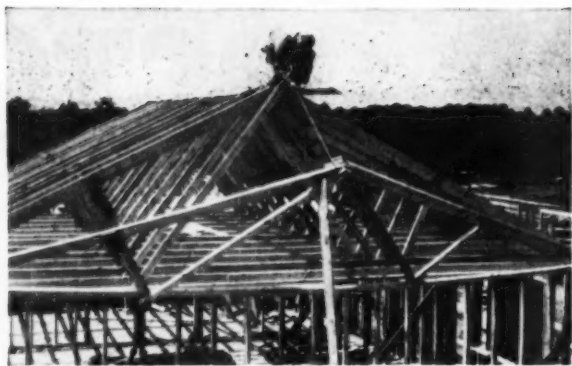
For a closer look at the new Stanley Builders Kit, call your dealer or write for further information to Stanley Electric Tools, 400 Myrtle St., New Britain, Connecticut.

STANLEY

STANLEY

ELECTRIC TOOLS

HARDWARE
TOOLS
STEEL STRAPPING
STEEL



Build Faster, Better and more Economically with TECO TRUSSED RAFTERS

- ★ They speed up interior and exterior finishing by eliminating load-bearing partitions.
 - ★ They are easily, quickly and accurately assembled with TECO Wedge-Fit connectors in conforming grooves.
 - ★ They are erected with minimum time and labor.
- and*
- ★ They are so simple and easy to fabricate right at the job site, using standard lumber items procured at any lumber yard.

Here's "HOW TO BUILD WOOD FRAME TECO TRUSSED RAFTERS"



The new 12-page, illustrated booklet that shows step-by-step fabrication, assembly and erection of these versatile TECO trussed rafters.

TIMBER ENGINEERING COMPANY AB-541
1319 18th Street, N.W., Washington 6, D. C.

Please send FREE COPY of the booklet, "How to Build Wood Frame TECO Trussed Rafters."

Name

Company

Street

City Zone State

a form to analyze labor costs by trades

Sheets like these, collected into a single file on a given job, enable C. A. Blomgren, semi-custom builder of Northbrook, Illinois, to keep a running track of labor costs on every house he builds.

Each trade has its own sheet, with columnar headings broken down into the various categories of work done by the trade. These man-hour records, added up periodically to give intermediate totals, not only enable the builder to check precisely on labor costs-in-progress, but if trouble is brewing, they will indicate the exact phase of the job which is guilty of upsetting cost estimates.

These sheets are filled in regularly by Blomgren's field superintendent (who also fills in the time cards from which the payroll is made up) and are rated by Blomgren as one of his most valuable cost-control tools. These records are not part of the bookkeeping system, but supplement it.

Pella[®] WOOD CASEMENT WINDOWS



WILLIAM J. WAGNER, ARCHITECT. (WETHERILL & HARRISON, DES MOINES, IOWA)

Achieve Exciting Interior Effects



All Pella Casements come with Inconspicuous Pella RolSCREENS — the original inside screens that roll up and down like window shades.



Pella Casement Windows have Dual Glazing that protects against winter cold and summer heat . . . the year-round storm window.

YOU can create countless custom window effects by combining stock-size Pella Wood Casement Windows. Pella Windows also save money on the job because they are completely assembled and pre-fitted at the factory. Your clients appreciate Pella beauty and convenience. Only Pella gives you all 3 — RolSCREENS, Dual Glazing and stainless steel weatherstripping. Available with vertical and horizontal muntins, horizontal muntins or without muntins. Glass openings up to 60" high. Patented hinge design, stronger 1 $\frac{3}{4}$ " wood sash and steel inner frame. Low air infiltration factor permits use of more glass, yet saves more heat. More standard Thermopane sizes available for Pella than any other wood casement window. Investigate Pella Casement units today.

see our catalog in
ARCHITECTURAL
FILE
or write for copy

AND ELIMINATE THESE 6 WINDOW CHORES

- 1 PUTTING UP AND TAKING DOWN SCREENS
- 2 PAINTING AND REPAIRING SCREENS
- 3 STORING SCREENS
- 4 PUTTING UP AND TAKING DOWN "STORMS"
- 5 PAINTING AND REPAIRING "STORMS"
- 6 STORING "STORMS"



FOR DETAILED INFORMATION MAIL THE COUPON TODAY

OTHER Pella PRODUCTS
MULTI-PURPOSE WINDOWS
ROLSREENS
LITE-PROOF SHADES
WOOD FOLDING DOORS
VENETIAN BLINDS

ROLSREEN CO., Dept. F-19 Pella, Iowa

Gentlemen:

Please send free literature on Pella Casement Windows and name of nearest Pella distributor.

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ADDRESS _____

CITY _____

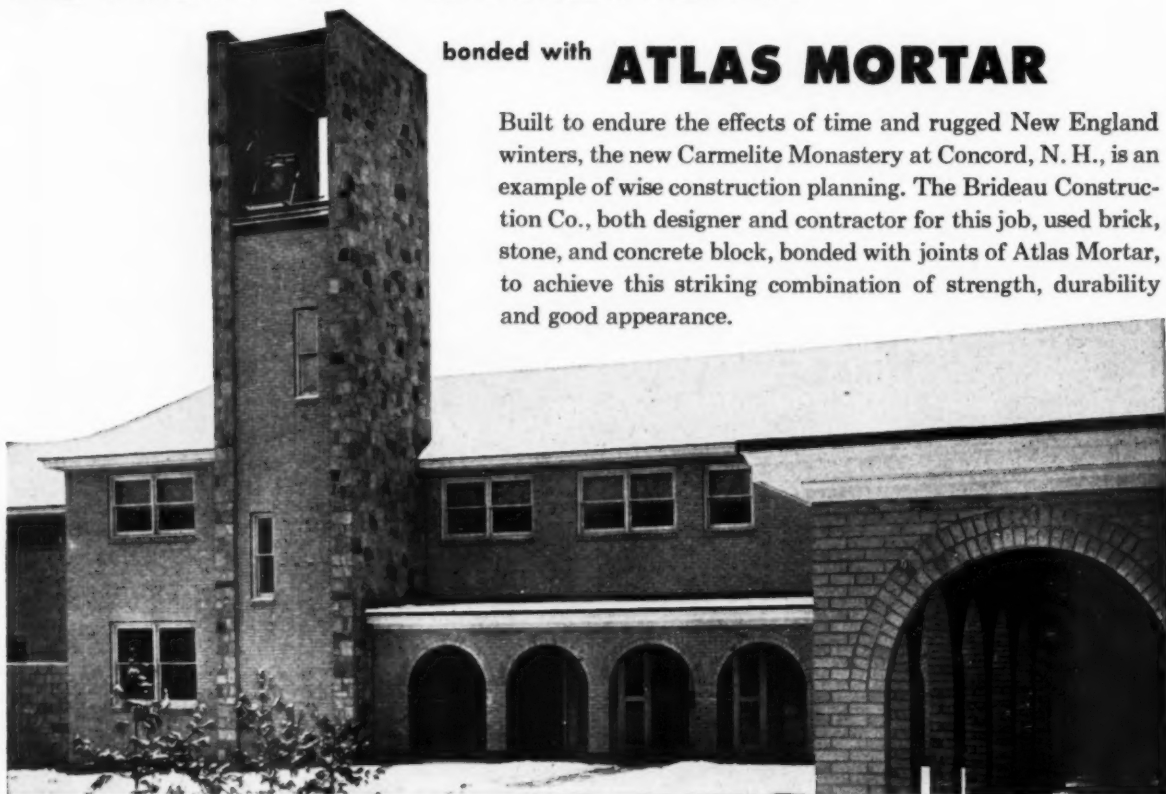
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STATE _____

TOWER OF STRENGTH

bonded with **ATLAS MORTAR**

Built to endure the effects of time and rugged New England winters, the new Carmelite Monastery at Concord, N. H., is an example of wise construction planning. The Brideau Construction Co., both designer and contractor for this job, used brick, stone, and concrete block, bonded with joints of Atlas Mortar, to achieve this striking combination of strength, durability and good appearance.



TRUE, TIGHT JOINTS are evident in this close-up of bell tower and wall. Experience shows that masonry units are strongly bonded with Atlas Mortar and tight joints are obtained.



UNIFORMLY GOOD COLOR and appearance are also characteristic of Atlas Mortar. Overall view shows it contributes materially to the clean, simple beauty of the monastery.



BUTTERY PLASTICITY and good workability of Atlas Mortar are commended by masons, contractors who use it—and by architects who specify it.

ATLAS MORTAR has proved itself on large jobs and small and in the laboratory as well. It complies with ASTM and Federal Specifications for masonry cement. For further information write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N. Y.

OFFICES:

Albany • Birmingham
Boston • Chicago • Dayton
Kansas City • Minneapolis • New York
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AB-M-42

SKILLED HANDS PREFER
ATLAS MORTAR CEMENT
THE SATIN OF MASONRY CEMENTS

A UNIVERSAL ATLAS PRODUCT

UNITED STATES STEEL HOUR—Televised alternate weeks—See your newspaper for time and station.

INVISIBLE RADIANT HEATING

fills every room with sun-like warmth



There's more livable space and your clients are happier with modern heating units which are out of the way and invisible.

plan homes for more *Comfort*
with **THRUSH RADIANT HOT WATER HEAT**

HEAT HOMES BETTER AT LOWER COST

NOW YOU can provide the finest automatic heating comfort in the homes you plan or build, for Thrush Radiant Hot Water Heat is well within the budget of the smallest home. It is one of the most efficient, economical and completely automatic controls for radiant hot water heat offered today.

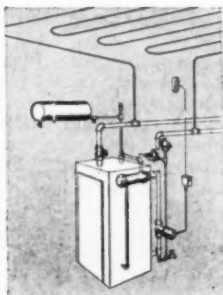
Fuel is saved because there is never any overheating. There is no chilling or discomfort, because radiant heat is present. Room temperature varies less than one-fifth of one degree. Installation costs are reduced. Also, a plentiful supply of hot water for kitchen, laundry and bath is available the year 'round from the regular heating boiler. Get the facts now!



write for new booklet

Send coupon below for our new, illustrated booklet which tells all about Thrush System. Also see our catalog in Sweet's.

The Thrush equipment shown at right maintains room temperature without noticeable variation throughout the heating season.



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today

H. A. THRUSH & COMPANY

Department G-2, Peru, Indiana

Please send, without obligation, a copy of your new, illustrated booklet describing Thrush Radiant Hot Water Heat.

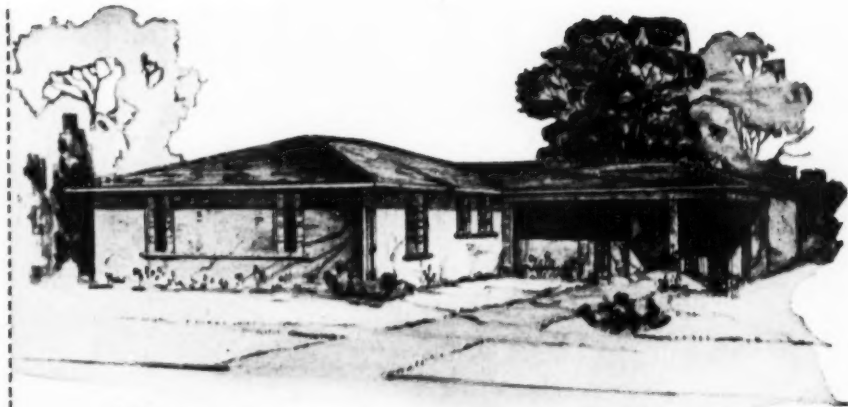
NAME _____

ADDRESS _____

CITY _____

STATE _____

**NEW ORLEANS
BUILDER
REPORTS...**

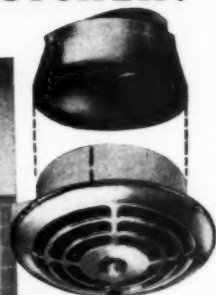


Robert D. Gibbens, President
Associated Builders, Inc., New Orleans, Louisiana

**"FASCO
VENTILATING FANS
"SELL MY HOMES QUICKER!"**

"All my homes have Fasco kitchen ventilating fans because they have proved to be the most efficient and economical way to reduce home air conditioning loads. They have guaranteed the home to be free of kitchen smoke and odors which so often are found in air conditioned homes. Those homes which I do not air condition are equipped with Fasco ventilating fans too. They prove to the prospective housewife that thought and planning have been a part of the kitchen construction. I am also beginning to use Fasco ventilating fans in my baths—they are plus features which sell my homes quicker!"

Robert D. Gibbens



**MODEL 885
CEILING VENTILATING FAN**

Designed especially for single story construction. Simple to install—mount in ceiling and attach to standard 8" round duct which is extended through the roof. Low cost and high efficiency make the 885 extremely popular. 8" blade, 475 CFM.

Bob Gibbens is typical of progressive builders everywhere in his choice of Fasco Ventilating Fans for his 100 custom homes. Power-plus performance, rugged dependability, ease of installation, and wide choice of models make Fasco America's most popular ventilating fans. Customer-preferred Fasco adds a real sales punch!

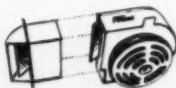
Every Fasco Ventilating Fan you specify *proves* you build extra quality homes.



12 Augusta Street Rochester 2, New York

MANUFACTURERS OF THE ONE COMPLETE LINE OF VENTILATING FANS

SPECIFY FASCO FOR EVERY VENTILATING INSTALLATION





New Chevrolet Trucks for '54

Loaded with brand-new advantages you need and want!

You'll get more work done in less time and at lower cost with new '54 Chevrolet trucks on the job. They bring you more new features . . . more big new advantages than any other truck on the road.

For example, you get new engine power in all models. The advanced "Thriftmaster 235" engine combines bigger displacement and higher compression with other new features to give you greater power and finer performance. The rugged "Loadmaster 235" engine offers increased strength and stamina for heavier trucking operations. The all-new "Jobmaster 261" engine* brings you extra reserves of high-compression power for hauling big loads on schedule.

In addition, you enjoy new and even greater operating economy. All three 1954 Chevrolet truck engines bring you the full benefit of thrifty high-compression power.

And there are many, many more new things you'll like about these great new Chevrolet trucks. New, roomier pickup and stake bodies let you haul more . . . save you time and extra trips. And they're set lower to the ground for easier loading

and unloading. New truck Hydra-Matic transmission* lets you drive all day without shifting. It's offered not only on ½- and ¾-ton Chevrolet trucks, but on 1-ton models, too. New Comfortmaster cab with one-piece curved windshield and amazing new Ride Control Seat* offers the last word in comfort, convenience and safety.

Plan now to see your Chevrolet dealer and get all the facts about the new Chevrolet trucks for '54. . . Chevrolet Division of General Motors, Detroit 2, Michigan.

Most trustworthy trucks on any job!



ADVANCE-DESIGN TRUCKS

CHEVROLET ADVANCE-DESIGN TRUCK FEATURES

THREE GREAT ENGINES—The new "Jobmaster 261" engine* for extra heavy hauling. The "Thriftmaster 235" or "Loadmaster 235" for light-, medium- and heavy-duty hauling. **NEW TRUCK HYDRA-MATIC TRANSMISSION***—offered on ½-, ¾- and 1-ton models. Heavy-Duty **SYNCHRO-MESH TRANSMISSION**—for fast, smooth shifting. **DIAPHRAGM SPIRING CLUTCH**—improved-action engagement. **HYPOID REAR AXLE**—for longer life on all models. **TORQUE-ACTION BRAKES**—on all wheels on light- and medium-duty models. **TWIN-ACTION REAR WHEEL BRAKES**—on heavy-duty models. **NEW RIDE CONTROL SEAT*** eliminates back-rubbing. **NEW, LARGER UNIT-DESIGNED PICKUP AND PLATFORM STAKE BODIES**—give increased load space. **COMFORTMASTER CAB**—offers greater comfort, convenience and safety. **PANORAMIC WINDSHIELD**—for increased driver vision. **WIDE-BASE WHEELS**—for increased tire mileage. **BALL-GEAR STEERING**—easier, safer handling. **ADVANCE-DESIGN STYLING**—rugged, handsome appearance.

*Optional at extra cost, Ride Control Seat is available on all cab models, "Jobmaster 261" engine on 2-ton models; truck Hydra-Matic transmission on ½-, ¾- and 1-ton models.

MORE CHEVROLET TRUCKS IN USE THAN ANY OTHER MAKE!

technical guide

for builders and craftsmen

how to install hardboard underlayment panels



Data and photos courtesy of The Hardboard Association

Hardboard underlayment panels placed in position for "conditioning" before application. With normal atmospheric conditions prevailing, panels are placed on edge around walls of room for at least 24 hours before being applied to the floor. This permits the panels to stabilize. When the air is moist due to wet plaster, wet concrete or other influences, wait for the room to dry out before applying the panels.



Broom-clean the floor and make sure that it is dry and sound before applying hardboard underlayment panels. If irregularities and voids occur over large areas of the subfloor, the high spots should be sanded and sunken areas filled to provide a solid base. Hardboard panels can bridge small gaps and irregularities. All nails securing subfloor should be driven flush with the floor.

Hardboard, which is manufactured in panel sizes of 3x4 and 4x4 feet, is a material that is approximately $\frac{1}{4}$ inch thick and is found to be adaptable as an underlayment floor surface. It can be used as a base for the application of floor coverings. Its advantages include economy, performance and ease of application.

This material is suitable for use over 1x6 or 1x8-inch t&g wood subfloors, laid diagonally or straight, or plywood subfloors. This method is used primarily in the construction of new homes. It can also be applied over finished wood floors in existing homes.

The hardboard underlayment panels provide a smooth, flat surface for the floor covering. The panels will also bridge small irregularities or cracks in the subfloor or the existing wood floor. In addition, the panels add insulation to the floor, decrease sound transmission, and give the floor construction greater strength and rigidity, although basically the hardboard underlayment panel should not be considered as a structural member. Because of the smooth, even surface that the underlayment provides, thus eliminating the possibility of breaking or cracking, the life expectancy of the floor covering will increase.

(Continued on page 200)



Nailing of the hardboard to subfloor should start on side which adjoins wall, partition, or panel which has already been secured, and then work along the walls of room to the center. Each panel should be securely nailed before moving to the adjoining one. Nails should be spaced not more than six inches c. c., nor closer than $\frac{3}{8}$ inch to the edge of panel.

NEVER Ventilate a Ceiling or Wall Space to the Inside...

If you do, the better the insulation, the worse will be the condensation; for the colder the air in the space between insulation and roof, or walls, the less vapor can it support.

In new construction, moisture is evaporating from many tons of cement and plaster. Vapor flows from areas of greater density into this small, cold space, an area of less vapor density and small vapor capacity.

Where multiple accordion aluminum is used, fortuitous vapor and water (for instance rain) will gradually flow out, as vapor, through exterior walls and roofs as vapor pressure develops within. The vapor cannot back up through the continuous, impervious aluminum. It will flow out because walls and roofs have substantial permeability, by comparison far greater than the required 5:1 ratio. Infiltration under the flat stapled flanges of multiple accordion aluminum is slight.

Unusual amounts of vapor, as from crowds in theatres, churches, schools, stores, etc. must be adequately vented to the outside.

The new multiple accordion aluminum* Infra Types 6-Si and 4-Si forms a continuous blanket of uniform thickness between joists, giving the entire area maximum protection against heat loss and condensation formation. Write for samples.

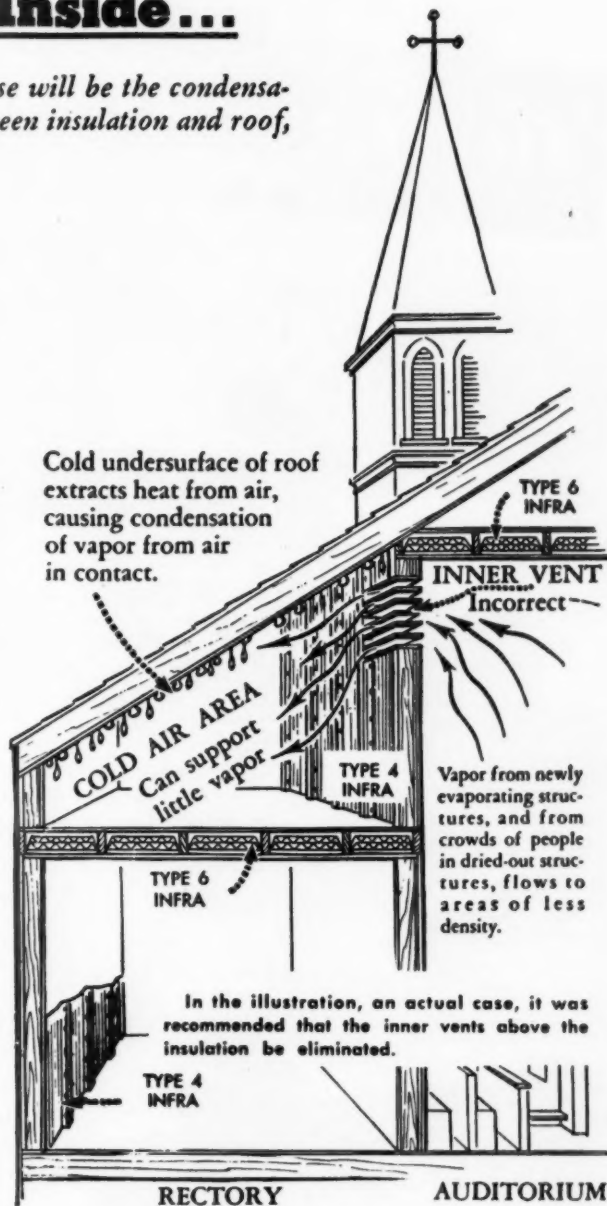
The U.S. NATIONAL BUREAU OF STANDARDS has prepared a helpful and informative booklet, "Moisture Condensation in Building Walls" which discusses causes and cures. Use the coupon and we will send a free copy.

*Patent applied for

COST OF INFRA INSULATION INSTALLED
in new construction between wood joists,
material with labor,

Type 6-S; under 9½¢ sq. ft.

Type 4-S; under 7½¢ sq. ft.

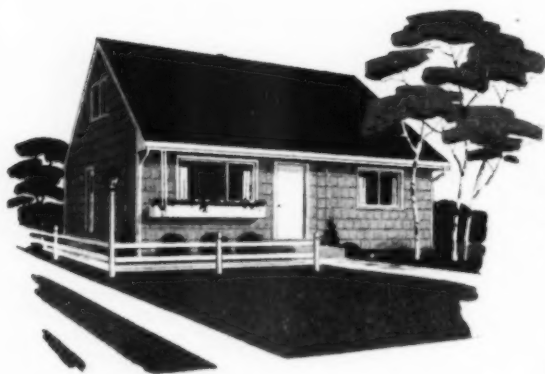


INFRA INSULATION INC.
525 Broadway, New York, N. Y. Dept. B-2
 Please send FREE U. S. Bureau of Standards Booklet BMS63
 Please send samples
 Name _____
 Firm _____
 Address _____

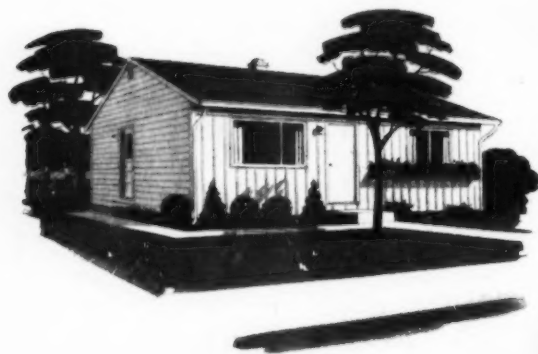
INFRA INSULATION, INC., 525 Bway., New York, N. Y. WOrth 4-2241

Meet Increased Competition with a...

HIGHER QUALITY HOME.. LOWER PRICES



1 1/2-story expandable homes



2 and 3 bedroom ranch types

For over 30 years the Colpaert organization has built homes on a large scale. Retaining the accepted and most desirable features of conventional building, Colpaert homes are factory assembled and delivered as a complete package; ranging in price from \$6,000 to \$15,000 . . . and sold on terms that appeal to 80% of the prospective home buyers.

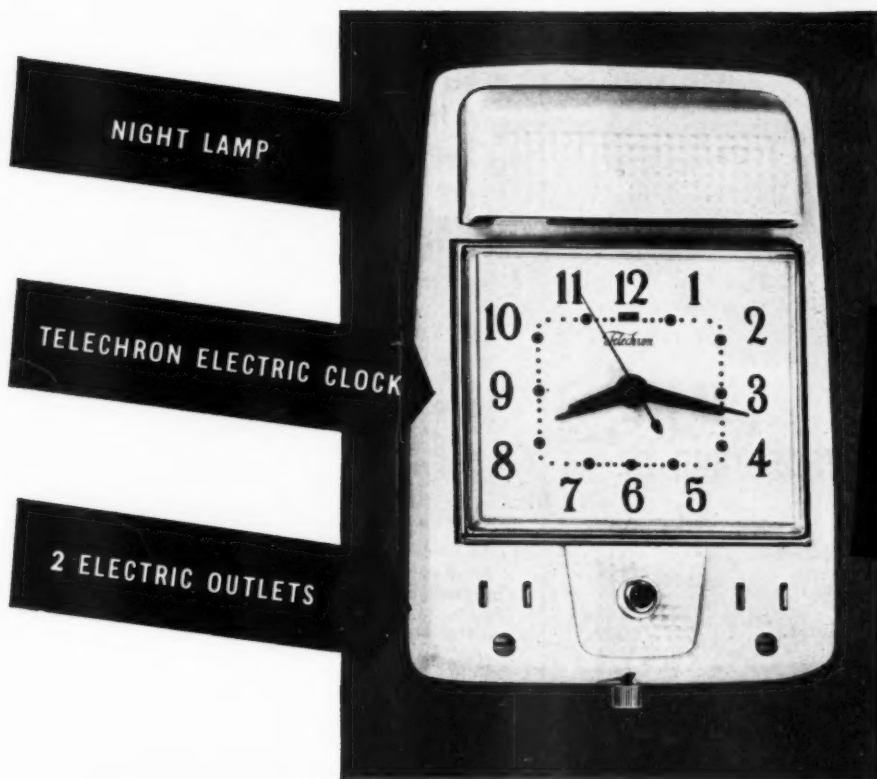
An experienced management and skilled personnel . . . utilizing modern factory facilities and volume buying . . . provide a most complete building service. This includes land planning, engineering, approved architectural designs, landscaping, financing, and proven advertising and sales methods.

The accumulated experience and service of this organization is now available to dealers. Builders in the Midwest who are interested in selling approved quality homes at the lowest possible price and terms, may call or write for detailed information.

Colpaert
HOMES INC.
South Bend, Indiana

AMERICAN BUILDER

new "SELL" for new homes



Built-in unit

... neat, trim, permanent.

TEL-IN-WALL

Low-cost, 3-way feature that helps sell homes. Goes right in wall. No cord shows.



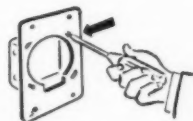
KITCHENS. Built-in wall unit with electric outlets for kitchen appliances. Housewives will love it.



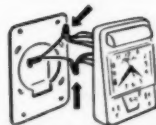
BATHROOMS. Solves bathroom clock problem. 7-watt night lamp a real feature. Other locations include game rooms, bedrooms, utility rooms.

Here's a brand new, low-cost plus feature to help new home sales. Easy to install. Gives modern, uncluttered look. Plan for Tel-in-Wall locations when you lay out wiring for lighting fixtures. No extra sawing or drilling required. A profitable item for remodeling jobs. Also designed for apartments, hospitals, hotels, motels and trailer coaches. Order through your electrical supply or hardware house. Special introductory offer. Telechron Department, General Electric Company, 12 Union St., Ashland, Mass.

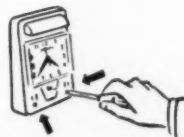
Installs easy as A-B-C



A Attach adaptor plate to 4" outlet box. Fits GE model SP52151 or equivalent.



B Connect wires. Operates on 110 v., 60 cy. house current. Outlets rated at 15A.



C Mount clock. Only four screws to fasten. Movement recesses into wall.



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 want them to
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Made particularly for the building industry (from a special formula using true reclaimed rubber), Tuff-Bond super-strength adhesives are tenacious, flexible, waterproof, and assure extraordinarily strong bonds. They are very easy to apply...with trowel, bead or spot methods; shock-resistant; unaffected by climatic changes (will not freeze); exceptionally economical. Available in different types for specific uses, Tuff-Bond adhesives *stick almost anything to anything!* In 1/2 oz, 1 oz, 1 3/4 oz. and 4 oz. tubes; also 1/2 pints, pints, quarts, gallons and 5 gallon containers.

A few choice distributorships and dealerships are available. Write, wire or 'phone...

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 DANVILLE, ILLINOIS

In Canada: W. D. ELSLIE, Ltd.
 409 Notre Dame St., West, Montreal 11, Quebec

technical guide

.....
 for builders and craftsmen

(Continued from page 196)



All hardboard panels should be fitted loosely. Avoid forcing them together. A space of 1/32 to 1/16 inch should be allowed between abutting panel edges, end panels and walls. The diameter of a small nail offers a good spacing guide. Manufacturers recommend drive screw underlay nails, or 4d cement-coated sinker nails for securing the hardboard to the subfloor. Nail heads should be driven flush with the surface of the hardboard panel



Hardboard underlayment panels should be placed in position on subfloor so that all joints are staggered. Where other than diagonally laid subfloor is encountered, care should be exercised to avoid having underlayment panel joint occur directly over the joint of the subfloor or rigid insulation board. If subfloor joints are parallel to one wall of room, continuous joints of the underlayment panel should be placed at right angles to these joints. Protruding nails, as indicated above, serve as a gap guide in panel fitting

(Continued on page 202)

often the cheapest
ALWAYS THE BEST...



**FOR
COMFORTABLE
FLOORS**

Resilient, sturdy, wood floors combine all the advantages you look for in floor construction. Comfortable to walk on, they are warmer in winter because of wood's natural insulating quality. Between-joists access makes wiring and plumbing easier... and lumber can be shaped to fit the most advanced plan. Use West Coast lumber with confidence... Douglas Fir, West Coast Hemlock, Western Red Cedar, Sitka Spruce.

Send for folder describing free literature available for your reference files. West Coast Lumbermen's Assn., 1410 S. W. Morrison Street, Portland 5, Oregon

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Any letter desired. Adds distinction and identifies the home. Put owner's initials on chimney, fireplace, garage doors, porches, etc. Size 18" high up to 16" wide.

Artistic, antique style workmanship. Solid cast aluminum from hand carved patterns. Has beautiful, hand-rubbed, black antique finish. Fastens with two cap screws.

Write For **FREE Folder**

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low cost storage space with EZ-Way Folding Stairways • specify into your building plans this inexpensive storage space

EZ-Way Folding Stairways

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Write **TODAY** for the illustrated brochure providing information and specifications on EZ-Way products. EZ-Way products are manufactured by EZ-Way Sales, Inc., Box 300-7, St. Paul Park, Minnesota.

EZ-WAY!

technical guide

for builders and craftsmen

(Continued from page 200)



Hardboard panels are easily cut to measured size with hand saw or portable power saw. Underlayment panels come true to line so that another board can be used as a straight edge to draw a line across panel to be cut. All panels should be cut exactly to size to avoid jamming or allowing too wide a gap to occur between panels



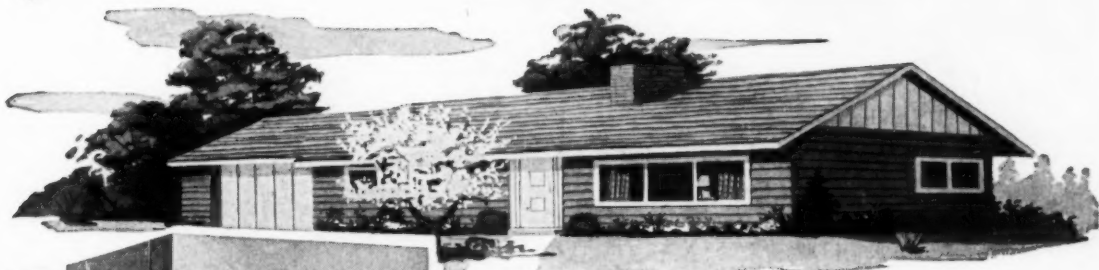
In order to minimize cutting and waste in laying, select the size of hardboard panel (3x4 or 4x4 feet) with respect to the dimension of the room. Securely nail each panel in place before laying adjoining boards. This assures a solid base for the succeeding panels



The hardboard underlayment is now ready for any floor covering. Apply all floor covering in accordance with manufacturer's instructions. In some cases it will be recommended that a liner felt with butt joints should be applied over the underlayment. In these cases avoid having the joint of liner felt directly over the hardboard underlayment joints to avoid any possibility of unevenness

To Make a House SELL . . .

Make it Comfortable!



SERVEL Two-Ton WONDERAIR *All-Year*[®] Air Conditioner HEATS! COOLS! AIR-CONDITIONS!

Particularly in summer, there's *no* feature that leads to faster, more profitable sales!

Servel Wonderair *All-Year* air conditioning offers *every* comfort-control benefit—heating as well as cooling, humidity control, air cleaning and circulation. And it's silent and vibrationless—because there are *no moving parts in heating or cooling systems—an exclusive of Servel's absorption principle!*

The two-ton Wonderair is ideal for smaller homes—*costs* little more than heating, *adds* little to cost of home. Operates on gas . . . carries a five-year warranty. To make a house *sell* . . . make it *comfortable* . . . with Servel Wonderair. What a salesman!



3-ton unit . . .
compact big-home size.



5-ton model . . . extra
sales stimulus for larger homes.

Two-ton model—two full tons of refrigeration . . . 72,000 Btu/hr. heating—in just 2½' x 4' of floor space! This compact Servel unit is ideal for small homes.

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the name to watch for great advances in
AIR CONDITIONING ✓ REFRIGERATION

SERVEL, INC., Dept. AB-24, Evansville 20, Indiana

Please send complete information on Servel air conditioning for homes.

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FREE! If you enjoyed laughing at Herb Brammeier's mirth-making cartoon this month, send for Hager's new book containing 28 full-size popular "Everything Hinges on Hager" cartoons! It's FREE! Just address

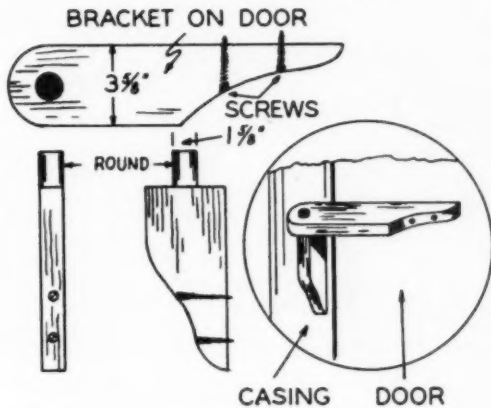


C. Hager & Sons Hinge Mfg. Co. • 139 Victor Street • St. Louis 4, Mo.
 Founded 1849—Every Hager Hinge Swings on 100 Years of Experience

how would you do it?

ideas for the man on the job

to make a rustic hinge

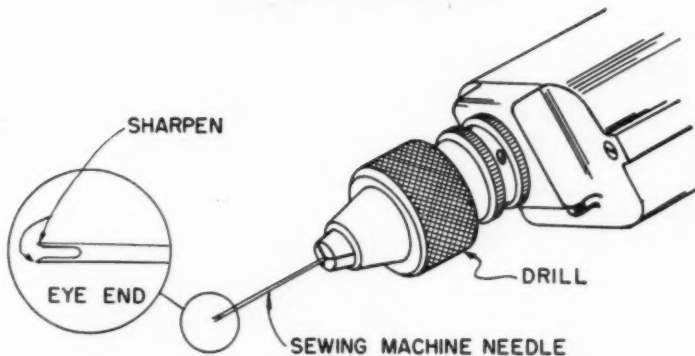


Use a 2x4 for the two parts of the hinge as shown in the illustration. Use it on a knotty pine door to create a rustic appearance. The hinge is made of two parts: a vertical member screwed beside the door, and a

horizontal member screwed to the door itself. The vertical member has a circular dowel-like part to which is fitted the second or horizontal part of the hinge.

J. Menkveld, Grand Rapids, Mich.

use a needle as a drill



An ordinary sewing needle makes a good substitute for drills that are missing or broken. Grind the needle head off as far as the center of the eye. File each prong of the tiny fork on the inside slightly. The pointed

end of the needle goes in the chuck. Needles can be used for this purpose because they are made of strong steel.

A. Springman, Montoursville, Pa.

save that extra concrete!

When pouring ready-mixed concrete, avoid the waste of surplus by having empty cartons on hand. Or have some scrap lumber nailed to-

gether to the size of footing blocks. You will find plenty of use for these precasts.

W. Kraatz, Santa Cruz, Calif.

make it yourself



New, Fashionable Iron - Wood Furniture

Save one-half or more on the new iron-wood furniture, plus designing it to your own specifications. It's simple with Coffman wrought iron table and chair legs. All you need is a screw driver! Fasten legs to beautiful veneers and mahogany plywood, Micarta or Formica tops and build your own. . . .

- Dining Table
 - Dining Set
 - Chairs
 - Sofa Bed
 - Coffee Table
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 - TV Table
 - End Table
- and much, much more.

No. 770 16 inch legs.
In sets of four

No. 771 28 1/2 inch legs. In sets of four

No. 772 16 inch legs. In sets of four

No. 773 11 inch legs. In sets of six

Legs are round, solid iron. Rigid one-piece welded construction. Finish is black primer coat. Prices range from approximately \$9.95 to \$13.50.

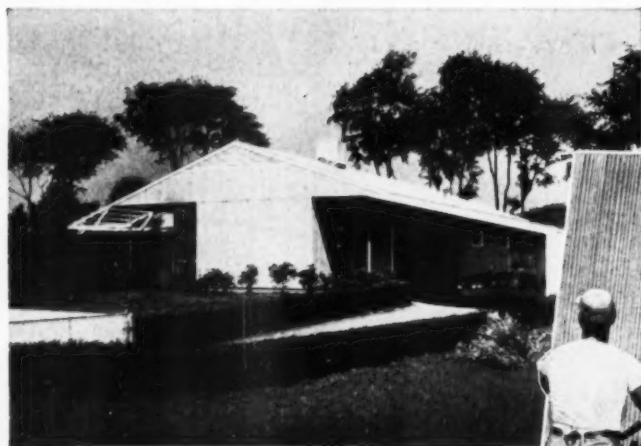
Write for FREE descriptive literature or see your lumber or building supply dealer.

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ORLANDO, FLORIDA

It's New . . . It's Beautiful . . . It's Economical

Johns-Manville **COLORBESTOS** Siding



For contemporary house design . . .

Leading builders in every part of the country are using this newest of siding materials. The wide range of colors lends itself to the variety so essential in group housing. The vertical striated texture adds character, lifts homes out of the ordinary.

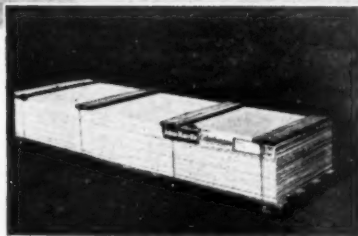
For modern stores and shopping centers . . .

In new communities from coast to coast you'll find Colorbestos on entire shopping centers as well as individual store fronts. Its rich color, striking texture, and maintenance economies make it ideal for soffits, facings and exterior walls.



Colorbestos combines for the first time beautiful color and handsome texture in large-size asbestos siding sheets.

Colorbestos sets a style of its own that is completely different and refreshing. Made of two practically indestructible materials, asbestos and cement, it comes in sheets that are 32" wide, 96" long and $\frac{3}{16}$ " thick. One man can handle a full-size sheet of Colorbestos that weighs only 36 pounds, and each sheet covers 21½ square feet of finished exterior wall. Colorbestos will not burn or rot; once in place it needs no further decorative or preservative treatment. For Colorbestos Booklet and full details, write Johns-Manville, Box 60, New York 16, N. Y.



Colorbestos sheets are shipped from the factory, strapped on a pallet which normally contains the required combination of colors and sheet sizes for each unit.



Johns-Manville

So many ways to use...



this abundant ability wood



Uniform texture, straight grain and the ability to take a lustrous natural finish make West Coast Hemlock ideal for paneling.

West Coast Hemlock—the "Ability Wood"—has served generations as an extra-value flooring in homes, schools and public buildings.

Weyerhaeuser 4-Square

WEST COAST HEMLOCK

The "Ability Wood"

From West Coast Hemlock, Weyerhaeuser produces a great variety of superb lumber products, ranging from boards and dimension to siding and paneling. Used inside or out, Weyerhaeuser 4-Square West Coast Hemlock invariably earns the respect and admiration of builder and home owner alike. Workmen are particularly pleased with its light weight, ease of sawing, and the ability to take and hold nails firmly.

Home owners are delighted to find that Weyerhaeuser 4-Square West Coast Hemlock siding, for example, stays firm and tight for decades. They are pleased with Hemlock's amazing ability to take and hold paint. The absence of pitch in this species eliminates paint discoloration, and natural finishes bring out the straight grain, the uniform texture and the light color which mellows slightly with age.

Because Hemlock is such a remarkably versatile wood—because it is so abundant—and because it has a long record of successful service in a wide variety of applications, builders find it is good business to take advantage of the outstanding characteristics and uses of Hemlock.

Write for literature that tells you more about Weyerhaeuser 4-Square West Coast Hemlock—the abundant "Ability Wood."

PROPER PROCESSING OF HEMLOCK

● Through scientific logging, accurate sawing, controlled kiln seasoning, precision surfacing, proper grading, careful handling and shipping, Weyerhaeuser provides this abundant "Ability Wood" in a wide range of 4-Square West Coast Hemlock lumber products.

Weyerhaeuser 4-Square LUMBER AND SERVICES

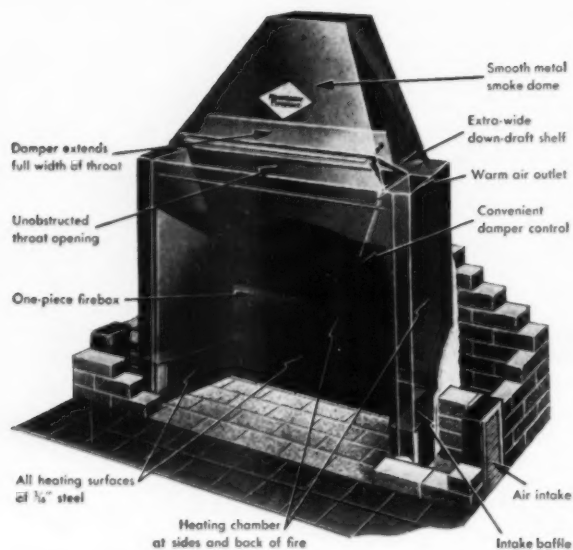
WEYERHAEUSER SALES CO., ST. PAUL 1, MINN.

BUILD BETTER WITH HEMLOCK...THE ABUNDANT "ABILITY WOOD"

FEBRUARY 1954

207

Build a Better FIREPLACE



... the easy HEATILATOR® way!

The Heatilator Fireplace saves the builder time, labor and grief from faulty operation.

It goes up faster, with no separate damper or smoke chamber to install . . . doesn't require a highly skilled fireplace builder.

The Heatilator Fireplace is your soundest assurance that your completed fireplaces will operate perfectly, will satisfy the buyer . . . and *will not smoke*.

Buyers Like the Heatilator Fireplace

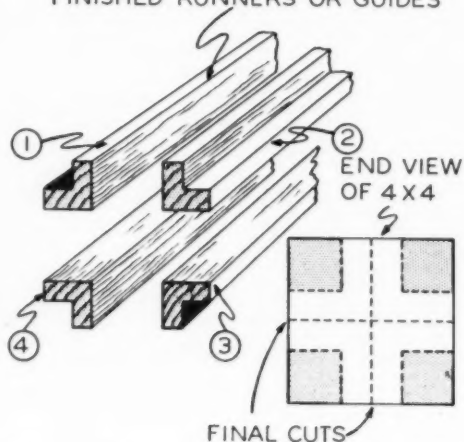
Buyers prefer the Heatilator Fireplace because it actually circulates heat . . . warms all the room and even adjoining rooms. What's more, they can be certain that their fireplaces will give them perfect, smokeless operation.

Write for folder with full details and specifications.

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922 E. Brighton Ave., Syracuse 5, N. Y.

how would you do it? ideas for the man on the job

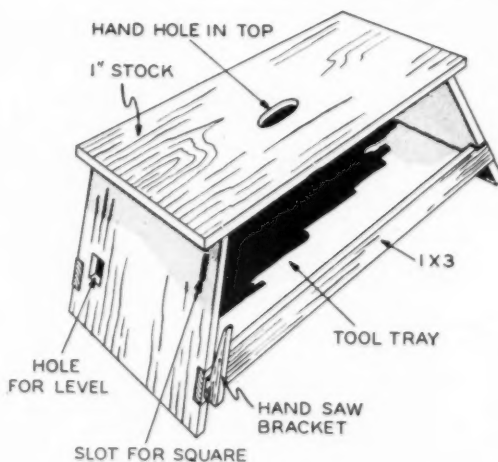
to cut drawer runners from 4x4
FINISHED RUNNERS OR GUIDES



To cut a number of identical drawer runners, set the table-saw blade so that the cut will be made one inch deep and one inch from the edge of the 4x4. Eight cuts are then made without the need to reset or to readjust the saw blade. The two final cuts are then made, as shown, to complete the job.

H. E. Fey, New Braunfels, Texas.

for a handy helper—



Try this combination saw horse, step stool, tool box and workbench. Use it for finishing or general carpentry. Measurements may vary to suit the individual with height of bench about 18 to 20 inches high, top of bench about 12 inches wide. Note in illustration, the slot for the square, hole for level, hole in top for easy transport. Note also the tool tray for tool storage.

W. Hite, San Fernando, Calif.

how would you do it?

ideas for the man on the job

about warping doors

When fitting doors, take the trouble to paint the newly cut surfaces. This is particularly true of the bottom of the door where more moisture is encountered and where cutting for fitting is most frequently done. A great deal of trouble with warping can be avoided if this is done.

C. H. Conroy, St. John's, Newfoundland

use a tire chain scaffolding



Use this simple scaffolding rig for those occasional repairs that do not require elaborate equipment. A tire chain makes this arrangement possible. The ends of the staging plank are supported by a readily adjustable triangle formed by ladder, tire chain and a short piece of lumber cleated on the underside to engage the rung of the ladder.

C. V. Johnson, Bristol, Conn.

fine hair cracks in plywood

If fine hair cracks show up on fir plywood after painting or enameling, it is often impossible to fill them by merely applying another coat of paint. Putty will not fill the cracks because the cracks are too fine for the putty to penetrate. But if you use a wide putty knife and apply thick paint from the bottom of a paint can, the cracks will disappear. Another coat of enamel or paint will, of course, have to be applied after the filling of the cracks.

M. J. Hiland, Lansing, Ill.

CASH FOR JOB SHORTCUTS—American Builder will pay five dollars (\$5) in cash for each shortcut or job pointer accepted for publication. Send all material to the Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, Ill.

FEBRUARY 1954

NEW SERVICE ENTRY FOR MODERN BASEMENTS



Service-way provides easy, direct access from outdoors!

The new Heatilator * Service-way is one of the most desirable convenience features for modern homes. This improved service entry makes it easy to get things in and out of the basement, without going through the house.

The Service-way makes basements convenient for storage. Lawnmowers, garden tools, bicycles and storm windows can be kept in basement... easily taken in and out when needed.

Extra-wide Service-way opening permits installation of bulky equipment. Plenty of clearance for freezers, ping-pong tables, hobby shop equipment. The Service-way is made of heavy-gauge steel, structurally reinforced. Overlapping flanges assure snug fit—keep out rain, snow and wind. Slide bolts lock door securely from inside.

The Service-way adds to property values... worth many times its moderate cost. See it at leading lumber and building supply dealers. Made by the makers of famous Heatilator Fireplace. Mail coupon for folder and specifications on the new Service-way.

*Heatilator is the reg. trademark of Heatilator, Inc.



Functional design... Most useful door in the home! Blends with any style architecture. Comes assembled, ready to install.



Finger-tip control... Special double-action spring suspension counterbalances weight of steel door.

HEATILATOR SERVICE-WAY

Heatilator, Inc.
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Please send me A. I. A. folder on Service-way specifications.

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ask the experts about

-
-
- Planning
- Concrete Work
- Framing
- Roofing
- Heating and Plumbing
- Air Conditioning
- Wiring
- Insulation
- Interior Finish
- Power Equipment

to prevent an echo

What can be done to stop an echo from occurring in a large church room? We have built an addition, using hollow tile, to the original church building. The ceiling is high and is finished with Sheetrock. The echo is so bad that conversation is not understandable.

I. F., Lewistown, Mo.

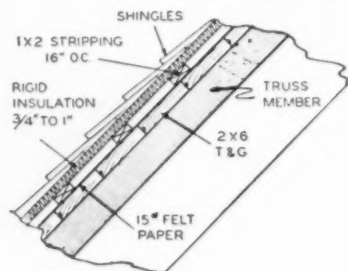
Echoes usually develop from the use of non-sound-absorbent material. Sounds rebound from wall to ceiling thus causing the echo. Applying a sound-absorbent material to the walls and ceiling would help greatly. This could best be done by applying a coat of acoustical plaster.

insulating a church roof

We are building a church, using laminated rafters and purlins with 2x6 end-matched center-matched roof sheathing. The decking, purlins and rafters are to be left open, with a natural finish. Therefore, no insulation can be used on the inside. The

roof is to be of 12x36 thick-butt shingles. Some heating engineers do not think that 1 3/4-inch sheathing is enough insulation. How would you suggest that the ceiling be insulated?

H. P., Findlay, Ill.



In your case where the roof sheathing, purlins and rafters are exposed, strip the top side of the 2x6 roof sheathing with 1x2 stripping, 12 inches o.c. This will provide space for conduits which will have to be distributed within this area in order to fit the lights exposed in the auditorium. On top of the furring strips apply 1-inch-thick rigid insulation and on top of that your regular thick-butt shingles.

This has been done a number of times and has proved successful.

when the chimney leaks

What can be done with a chimney that is drawing moisture and wetting plaster and paper around it? The furnace in this house has been converted from coal to gas. The owner asked about the possibility of using a flue liner that would slip down inside of the present flue.

My suggestions to him were: (1) Remove all plaster from chimney and cover the brick with a masonry paint and then replaster; (2) Remove chimney entirely and replace with a Transite pipe of right size.

J. M. N., Marysville, Ohio

The remedies you suggest have been mentioned by heating equipment dealers who have had first-hand experience with such problems. Here is what they say: A number have inserted a special, tightly constructed flue liner (sometimes of metal, or of other material) which was slipped down inside the present flue. Many have found it satisfactory. But the majority have found that if the original condition is really serious (which it seems to be in your case) they have not been too well satisfied. This has not seemed to be because of any defect in the material of the flue liner, but rather it has seemed to be due to the difficulty of installing it so that it will be absolutely tight.

Removing the plaster, painting the brick with masonry paint and then replastering has usually been unsatisfactory if the original condition was serious.

Removing the old chimney and replacing it with a first-class gas-vent flue is relatively expensive but it has usually been reported as being the safest and surest remedy.

GOT a problem you haven't solved? Can't solve? Haven't the time to solve?

Have you solved a problem with an answer you aren't sure of? Are you doing some particular job—big or little—in a way that you think might be improved?

Then "ASK THE EXPERTS"—a group of industry authorities—experts in their fields. They'll give you the answer.

Address your questions to: "Ask The Experts," *American Builder*, 79 West Monroe St., Chicago 3, Ill.

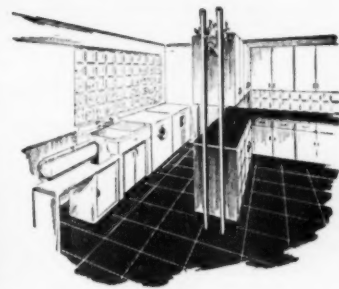
As many questions and answers as space permits will be published monthly in *American Builder*, under the head—"Ask The Experts."

**INSULATED DAYLIGHT
THAT HELPS YOU
"SEE" MORE SALES**

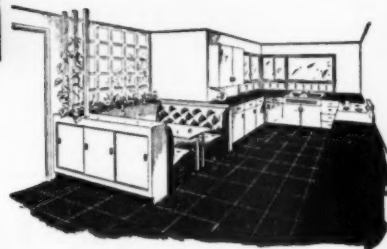
*Here's the "boss"
of the house*



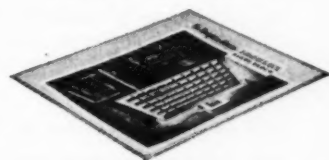
Because she does much of her work at her kitchen counters, include counter lighting to brighten these working surfaces. Her wall of daylight won't rust nor rot nor lose brightness no matter how often washed or splashed. An occasional wipe renews the sparkle.



Counter lighting with Owens-Illinois Glass Block adds glamour to normally dark places. Used in the laundry, a panel brings plenty of soft light right down on active working surfaces.



A "see-out" dining nook. A panel of super-clear Glass Block lets you see out but ends problems of condensation, and because of its high insulation value, stops icy drafts... keeps rooms more comfortable.



Literature for any Owens-Illinois Glass Block application is available free of charge just by writing to the address at the left.

Let Owens-Illinois Glass Block help you sell your homes faster by adding visible evidence of extra value

What prospective homeowner's eye wouldn't be caught with a "see through" wall as attractive as this one? You can build such a desired feature into your homes by including panels of Owens-Illinois Glass Block.

Glass Block panels are as practical as they are beautiful. They have the insulating efficiency of an 8-inch brick wall... won't frost or sweat in winter. Patterns are available in a wide variety—from the clear block shown above to those that restrict sight completely.

Give the homes you build the benefits

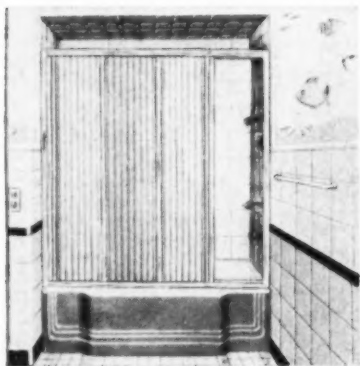
that Owens-Illinois Glass Blocks bring. Applications are practically limitless. Stairwell, kitchen, utility room and basement, to name just a few places—can use glass block panels to advantage. Start to plan now to use this versatile, practical building material to help you sell your homes, faster.

For information about these uses of Glass Block or for help with a specific problem, just write Glass Block Division, Owens-Illinois Glass Company, Dept. AB-2, Box 1035, Toledo 1, Ohio:

**GLASS BLOCK
AN  PRODUCT**

OWENS-ILLINOIS
GENERAL OFFICES • TOLEDO 1, OHIO

for YOUR sales and profits
from America's foremost manufacturer



FIBERGLASS BATHTUB ENCLOSURES

Fully assembled — ready to install

- Translucent panels
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- Shatterproof, crackproof
- Each panel completely encased in metal
- 2 sliding panels suspended in header with NYLON bearings
- Finger tip action
- No sagging panels
- For 5' and 5½' recessed tubs, standard height

5 ft. size

(Lots of 50 or more)

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6-12, each \$52.95

(For 5½' size add 10%)

13-49, each \$47.65

Our glazed units are designed for "over-the-counter" sales.

GENUINE GLASS ENCLOSURES

Precision built — all uniform parts — superior chrome-like finish. Glazed with 7/32" selected obscure glass. Complete with all parts necessary for installation. For recessed tubs.

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\$5250

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(For 5½' size add 10%)

13-23, each \$58.50

Complete facilities for glass enclosures, multiple panel units and shower doors. Get our prices — the industry's lowest for such quality.

Let qualified engineers do the job.

We know the enclosure business —
this is our only business.

BROADWAY

SHOWER DOOR CO.

5425 N. Sheridan Road — Chicago 36

ask the experts

how shall the framing be done?

What roof pitch must I have on a 24x30 foot house to obtain a 9 foot wide room on the second floor? The height of sidewalls should be about 6 feet. If a 9 foot wide room cannot be had without a steep roof pitch, could outside walls from grade to underside of roof soffit be increased with the inner partitions and ceiling and remaining at the eight foot height? If this is done, how will the ceiling joists be secured to outer walls? Would the 2x6 inch ceiling joists be solid nailed into side of outer studs with a block under each?

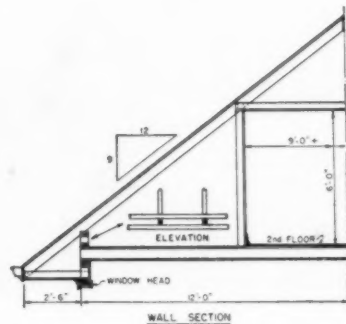
Recently many old houses have been moved from the country into our city, remodeled and rented. Some were in pitiful condition until they were repaired. After seeing the changes made in these old houses I was wondering about some of the construction practices. For example: would it be feasible to erect a frame house with studs on 4 foot centers if the outside is diagonally sheathed and all inside walls and partitions were stripped horizontally with 1x4 inch furring strips? Would this make a substantial house? (One story, not one and a half) By furring the inside I thought I could use 16 inch planks of tongue and groove pre-painted wallboard. This would speed up the slow finishing work. If a house would be strong enough on 4 foot centers (for walls-partitions), would it be feasible to put rafters or ceiling joists on four foot centers? Would it help any to make ceiling joists and rafters 2x6's?

The point I want to find out is this: Can I use less lumber? If so, will I save labor erecting it, and thereby cut the cost of labor and material, as well as get a house up faster?

L. F., Hominy, Okla.

In order to supply sufficient head room in the rooms on the second floor, the pitch of roof would of necessity have to be at least 9-12 or

8-12. This pitch might be reduced in the event that a wide overhang is provided in front of the two side walls. The soffit of the overhang should be directly above the head of the window. This would automatically drop the soffit of the overhang below the finished first floor ceiling, but it would also provide additional head room in the rooms on the second floor. It would also permit a reduction in the pitch of the roof. There is no reason why the roof rafters cannot be notched into the wall plate and the ceiling

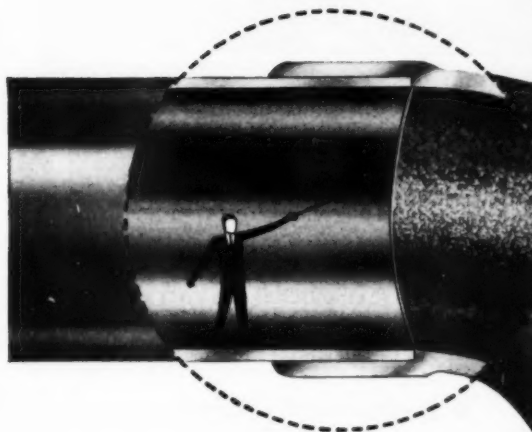


joist nailed into the side of the roof rafters. The sketch indicates the way this should be framed. FHA probably would not go along with a house having exterior walls using 2x4 studs four feet o.c. It will be necessary to employ a post and beam type of construction in the event that the 4 foot centers are maintained. This would mean that these timbers would be of sufficient size to thoroughly brace the exterior walls together with diagonal bracing placed between both horizontal and vertical members. It is my opinion that you would not save much on material and certainly less on labor by changing from the norm of construction. I believe the most economical method would be to employ standard type of frame construction such as 2x4's, 16 inches on center. All carpenters are familiar with this method and I am sure that your building would proceed faster than when using the other special type.

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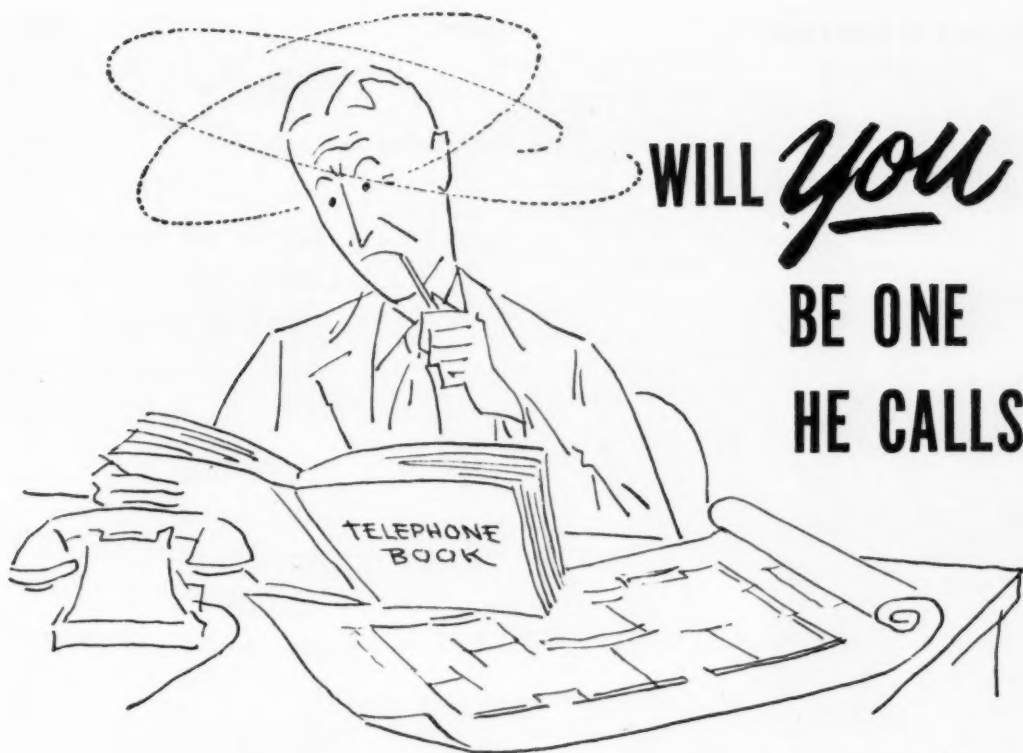
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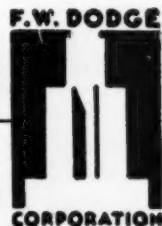
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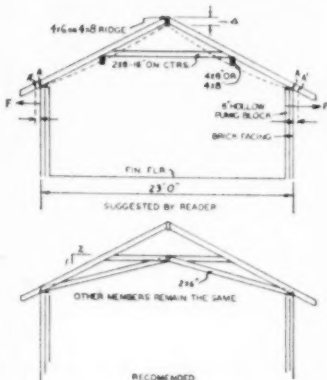
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ask the *experts*

use truss construction

Would you study the accompanying sketch of roof construction and tell me whether you consider it sound practice? Will the rafters fatigue and spread out under the pressure of roof and weather load? The wing, for which this construction is proposed, is 31 feet long. Walls will be of pumice block.

G. M. Jr., Chesterfield, Mo.



The roof system you propose has the tendency to thrust against the walls. The tendency is that when the roof is loaded to a deformed position, indicated by dotted lines, the original point "A" will tend to move to new position "A'". This would create a force "F" thrusting against the walls below.

Wall construction, such as you indicate, would develop horizontal cracks and a tendency to buckle. Use the system shown in the bottom sketch. Thrust will be less likely.

Wilbur Tuggle,
Structural Engineer

wants information

Where can I get information about concrete block construction, including proper furring methods, insulating, plastering and stuccoing concrete block walls?

R. H., Green Bay, Wis.

Write to the National Concrete Masonry Association, 38 South Dearborn St., Chicago 3, Ill., or to the Portland Cement Association, 33 West Grand Ave., Chicago 10, Ill. Either will be able to supply you with information.



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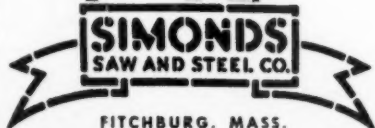
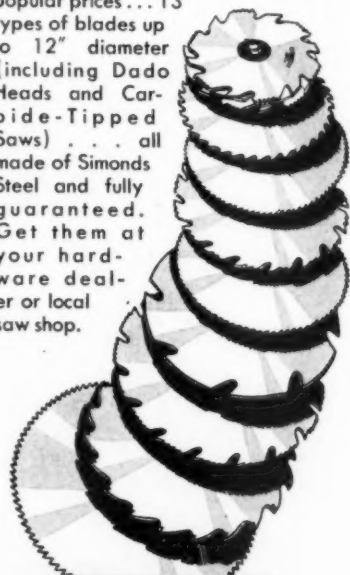
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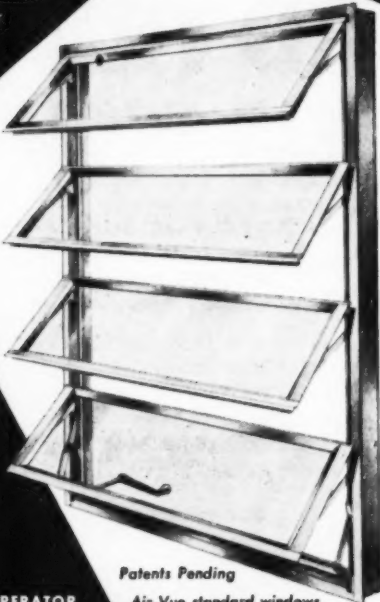
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ask the experts

the sound of dancing feet

We have the problem of sound deadening a dance floor located above offices. The floor is of maple laid over a subfloor. The dancing classes held on the second floor make noise that the tenants below find objectionable.

We have suggested using 5/8-inch underlayment, spot cemented to the present floor to hold it in place. Over this, we have recommended placing 3/16-inch-thick 24x24-inch blocks diagonally for the wearing surface. Please advise if this would remedy the case.

O. F. K., Bucyrus, Ohio

Your suggestions would seem to be the answer to your problem. A regular acoustical treatment would be very expensive and require quite a little tearing up. Although we feel certain that the recommendations you have made will do the job, it might be a good idea to take a piece of underlayment, put it on the floor and lay the tiles over it. Then let somebody Charleston on it to see what the results are before you go ahead and do the whole job.

do I need a surveyor?

I own a large tract of 52 acres. I employ the front, facing the road, for my own use. I have an opportunity to sell the land to the north which is of no use to me. The buyer must borrow money. The bank insists that we secure the services of a surveyor for the correct information to be put in the deed.

Can a surveyor take this information and give the degrees suitable for description of the property without having him come out and charge a huge fee? I think that this is unnecessary since I have been measuring accurately for 42 years and have never had any kick-backs.

S. B., Leechburg, Pa.

It is consistent with all mortgage houses to insist on a regular platted survey from a licensed surveyor before they will agree to loan or prepare the necessary mortgage papers. You, no doubt, are familiar with the existing property lines, nevertheless, a disinterested person can rely only on a complete survey.

Now—"3-D" for the Builder!

New G-E "3-Directional" line gives you complete freedom in locating home heating and cooling system!

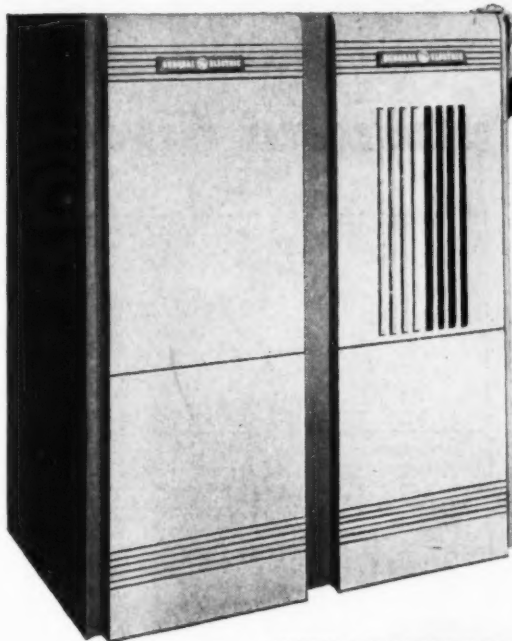
Biggest News at the Builder Show. General Electric, with the most copied line in the industry, is first again—with "3-D." Now there are new G-E Oil and Gas Furnaces, G-E Home Cooling Units and G-E Year-Round Air Conditioners with airflow in any of *three directions*. For homes with basements—Upflow units. For homes without basements where floor space is at a premium—Downflow and Horizontal flow units. (Horizontal units can be suspended in crawl space, hung from ceiling, installed in attic.)

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Home Heating and Cooling Dept., Sec. AB-1, Air Conditioning Div.,
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Rush complete details on G.E.'s "builder-designed" line. I am a Builder
Architect Home owner Other occupation

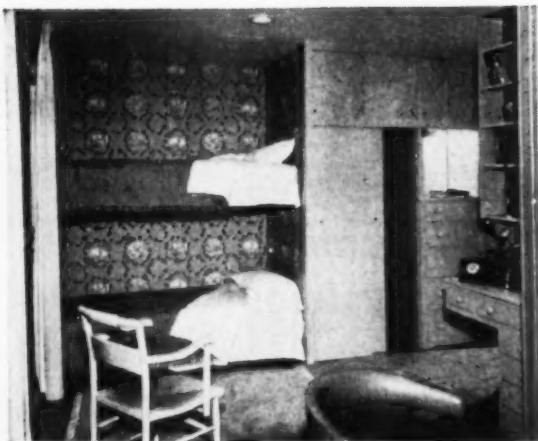
Name.....

Company.....

Address.....

City..... County..... State.....

IDEA of the MONTH

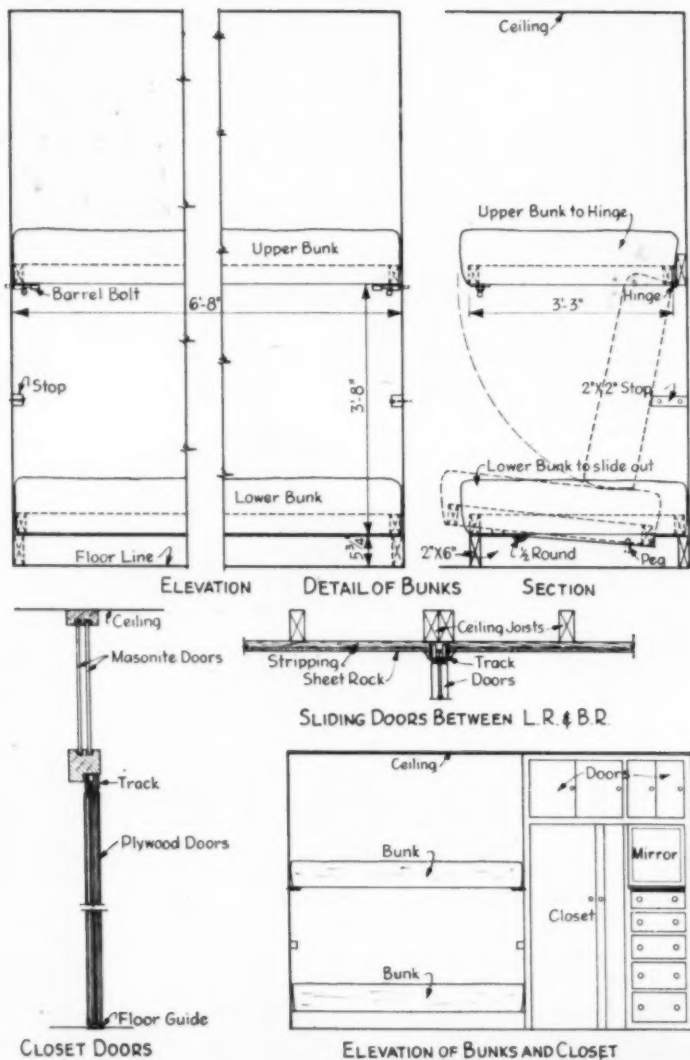


Scheme for sliding doors which conceal closet at end of divan



Scheme for the Novoply partition that can be used to shut off den-bedroom from living room

a pullman divan for a den



THIS clever divan-bed combination for the den-bedroom of a house built by Richard Hail Brown in Birmingham, Alabama, does not require anything that is not in regular stock. It simply utilizes two standard Hollywood beds (mattress, springs and wood frame all in one).

One bed is set on a box base on the floor; the other is hinged to the wall with barrel bolts at each end (top) to hold it up. In order to give proper pitch to the bottom bed when used as a divan, a slanted base sill or joist was made (see sketch). This permits pulling the bed forward and raising it at the front edge. For extra comfort, Brown added a sheet of foam rubber over the top of both beds.

Actually, as the photograph shows, the divan-bed is part of a built-in arrangement which occupies the whole wall and also includes chest of drawers, mirror, strip light and clothes closet with sliding doors which cover closet when room is being used as a den. These doors are 6½ feet high. The storage space above them has Masonite by-pass doors without rollers, which slide in a groove in the closet door header (see sketch).

The Novoply partition between den and living room is merely two 4x8 sheets hung from a regular double track screwed to the rafters, which lets it recess the thickness of the stripping and the Sheetrock. The doors by-pass and pile up on the 4x8 fixed piece which forms one wall of the built-in desk shelves, shown at extreme right in the photo.

Cool the entire house at lowest cost



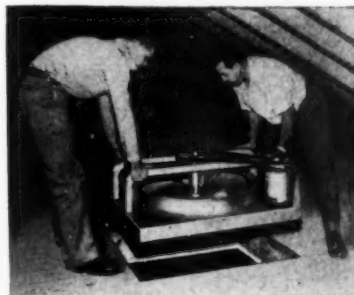
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The Hunter Package Attic Fan, complete with ceiling shutter, is

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This new, improved attic fan has the same smooth, quiet operation and dependable performance that have made Hunter Fans famous for 67 years. Fan unit is guaranteed 5 years; motor and shutter, 1 year.



Easily installed — Simply place the Hunter Attic Fan over ceiling opening on attic floor or joists. Modern automatic ceiling shutter with metal trim screw-fastens from below.



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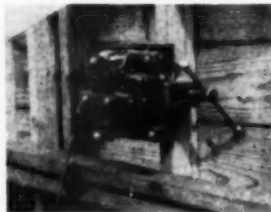
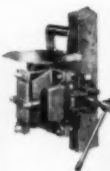


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NO. D-107 fireplace used as room divider

One particular type of fireplace that is finding favor with project builders as well as with builders of custom-designed homes is the two-way fireplace detailed here.

This fireplace, extending out from the wall approximately four feet, serves as a partial divider between the living and dining rooms. With three sides exposed, it can be viewed from any part of the two rooms.

The flue area in this kind of fireplace needs to be increased nearly 50 per cent to eliminate any possibility of smoke's drifting out into the room. The concrete smoke diverter is placed in the center of the smoke chamber just above the opening. This prevents any down rush of air into the fireplace.

The two-inch steel pipe, placed in the center and at one end of the fireplace opening, supports the steel angles above. These angles are welded together at corners to make a continuous member.

While on the sectional drawing the hearth is indicated as a level surface 12 inches above the floor, in the photograph it is shown with the floor depressed and a 4-inch curb above the hearth level and all around the opening.

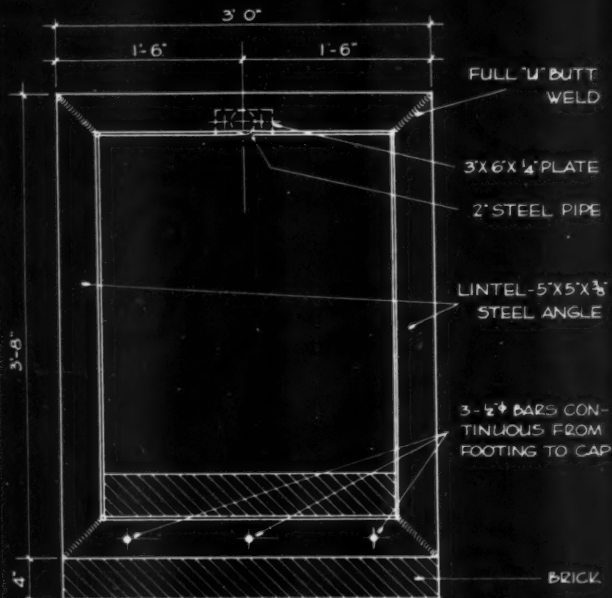
A hearth at floor level can be dispensed with where the level of the interior hearth is depressed as shown in the photograph. The brick curb provides the protection needed. If constructed as detailed in the drawing, a hearth at floor level is optional. The wire screen which surrounds the opening prevents the sparks of the fire from getting onto the floor.

AMERICAN BUILDER'S BETTER DETAIL PLATE

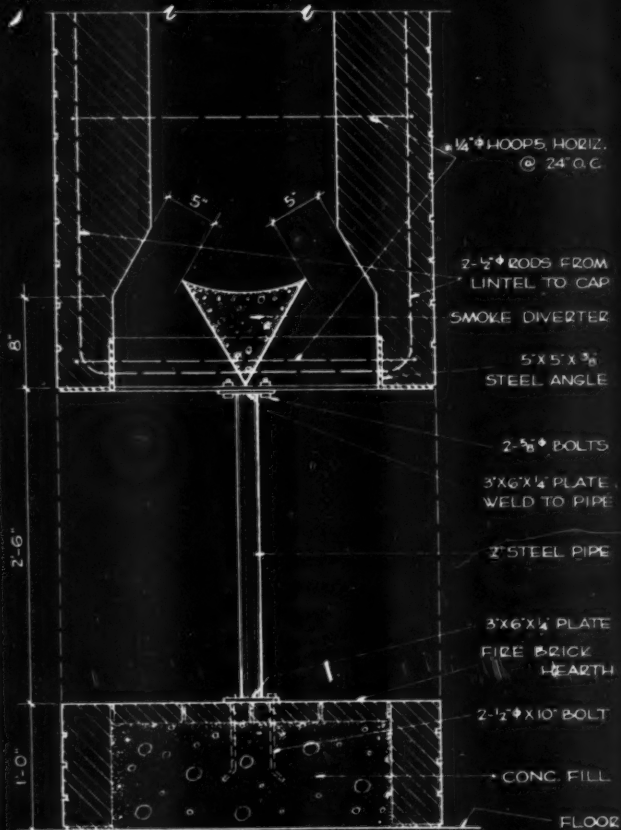
Designed by Edward H. Fickett, Architect

Detalled by K. Roderick O'Neal, A.I.A. for American Builder

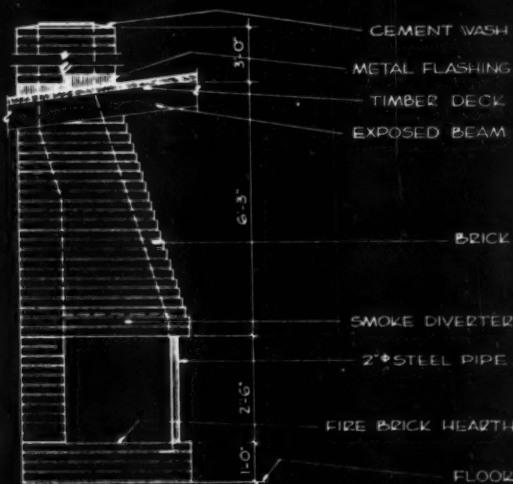
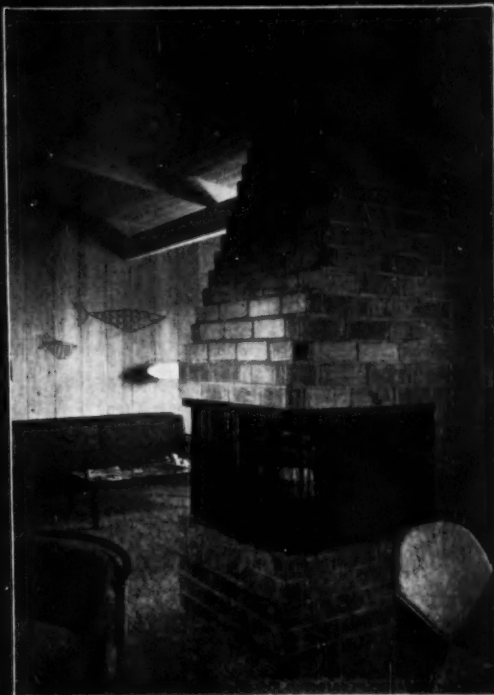
NO. D-107 FIREPLACE . . .



Plan (AT LINTEL) . . .



Section . . .



Elevation . . .



Plan (AT HEARTH) . . .

**fast, easy-boring
electric-drill bits
by Greenlee**



Do the job faster, "cleaner," better with these carefully made electric-drill bits.

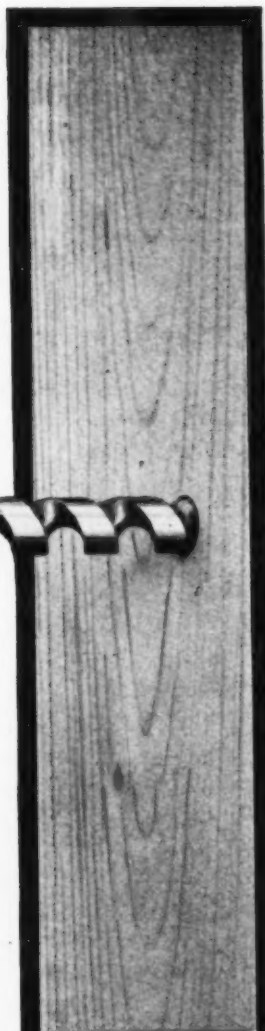
Modeled after the famous GREENLEE brace bit line, these new bits are specially designed for use in portable electric drills. They have fine-pitch screw points to compensate for high rpm of electric drills and are completely heat-treated for extra strength.

Shanks are accurately machined for precise alignment of the tool throughout.

GREENLEE electric-drill bits are of highest quality to assure fast, accurate boring and long life. Write direct for additional information and descriptive material on the GREENLEE hand tool line.



GREENLEE TOOL CO.
2202 Twelfth St., Rockford, Illinois
224



New GREENLEE line of electric-drill bits includes Nos. 56-PT and 53-PT Solid-Center Electric-Drill Bits, No. 64-PT Ship-Auger Electric-Drill Bit, and No. 28-PT Single-Twist Electric-Drill Bit . . . all in wide size ranges.

**NO. G-51
corner entrance**

In the design and layout of a new F. W. Woolworth & Co., store on the far south side of Chicago, the emphasis is on a large and prominent corner entrance. This arrangement was prompted by the location of a lunch counter which extends the entire length of the street wall adjoining the entrance-way. The extra pair of doors provides accommodations for both shoppers and diners.

A point of interest to builders is the method employed by the architect in framing the circular canopy over the entrance, supporting the octagonal-shaped masonry wall above, and recessing the entrance doors into the back wall of show windows, leaving a smooth, unbroken surface for the canopy soffit.

This cantilevered effect is obtained by extending the two 24-inch steel beams, that support masonry over the show windows, out to a point where they intersect a 12-inch steel beam. The octagonal masonry wall above is supported on these beams. The canopy framing is carried on an 8-inch steel beam extending out from the main structural framing. To this framing is hung a series of 6-inch channels and steel facing members to form the canopy framing. Wood joists secured to steel framing provide nailing surface for the wood sheathing to which is applied Marlite secured with snap-on molds. Two inch concrete slab laid on Hi-rib lath forms the roof of canopy. Wood vertical sheathing on face of canopy provides a backing for display signs.

Credit was inadvertently omitted for the store-front detail plates in the October and November issues of American Builder. These plates were designed by Elmer C. Carlson, architect from Chicago, Illinois.

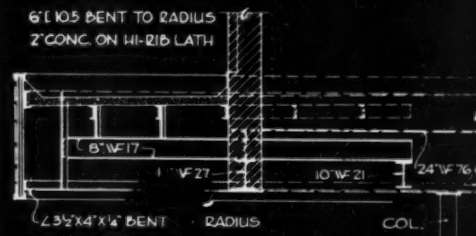
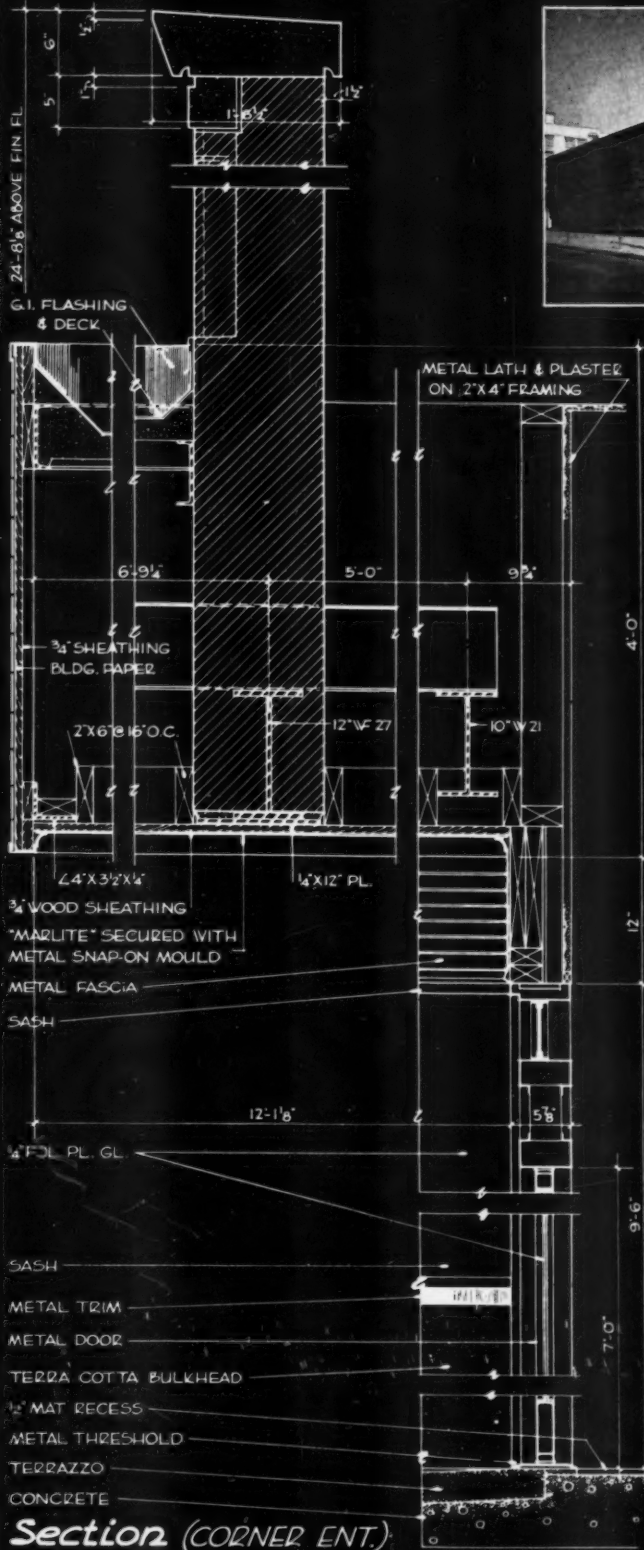
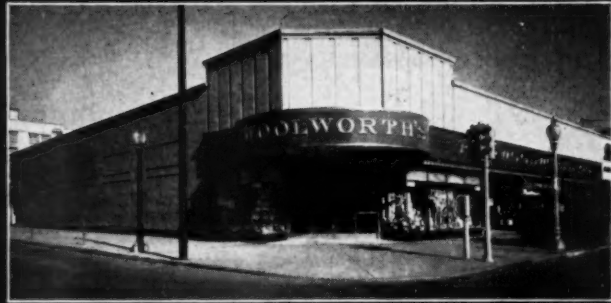
AMERICAN BUILDER

AMERICAN BUILDER'S STORE FRONT DETAILS

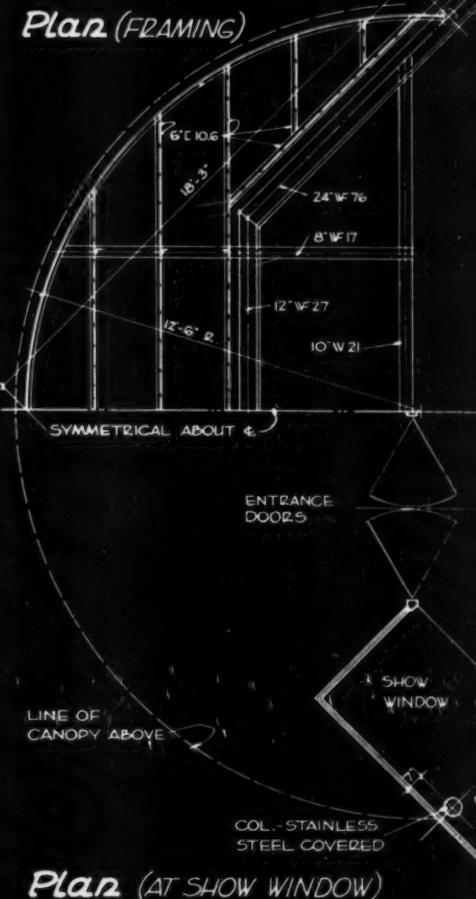
Designed by Sidney C. Finck, Architect

Detailed by X. Roderick O'Neal, A.I.A., for American Builder

NO. G-51 STORE ENTRANCE



Section (FRAMING)



Plan (AT SHOW WINDOW)

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**Hydraulic Safety
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2. Operate stairway silently, safely, without effort.
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present **PRECISION**
Stairways at small cost.

Manufactured by
PRECISION PARTS CORP.
400-AB North First Street . . . Nashville 7, Tennessee

ask the *experts*

who is right?

I recently specified vertical siding for gables using 4x8x1/2 exterior plywood which the owner contends is not vertical siding. Who is right?

P. R. K., Bay City, Mich.

It is undoubtedly a matter of local interpretation. In Chicago, plywood is not normally called "vertical siding" when it is used on gable ends. We think of vertical siding as t&g V-jointed boards. Recently, some scored plywoods have been put on the market and will, no doubt, be known as siding. The use of any material needs to be carefully specified to avoid misinterpretation.

Edward Hines Lumber Co.

terrace floor effloresces

How can I prevent or reduce efflorescence on a masonry surface? The present case occurs on a brick terrace floor laid over a concrete slab. The brick was laid this year. The concrete slab has been in place for several years.

G. A. G., Iron Mountain, Mich.

The problem of preventing efflorescence in a terrace floor is more difficult to solve than is the case of efflorescence occurring on a wall. There will be many times, following a heavy rain, when there will be a considerable amount of water standing on the floor. This will be absorbed eventually by the masonry. Upon evaporation, this moisture will bring to the surface the soluble salts that form efflorescence.

In many cases, such a condition will gradually correct itself as the soluble salts, present in either the masonry units or in the mortar, are dissolved and disappear. If, however, the efflorescence continues to occur, it might be possible to correct the condition by applying a base-water repellent. Since a terrace floor would be subjected to a considerable amount of wear, such treatment could not be considered permanent. You would probably have to renew it every few years to maintain its effectiveness.

Structural Clay Products Institute

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Installation shown is in
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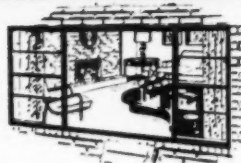
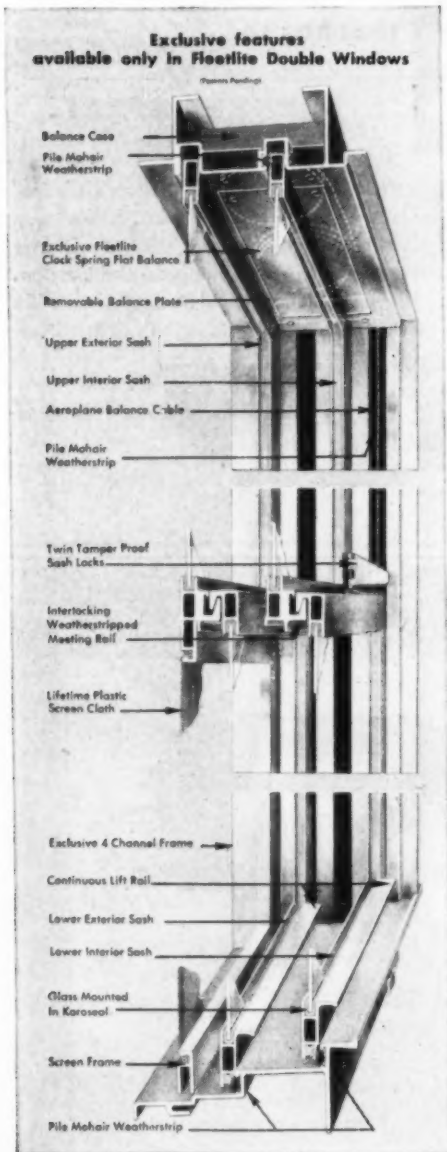


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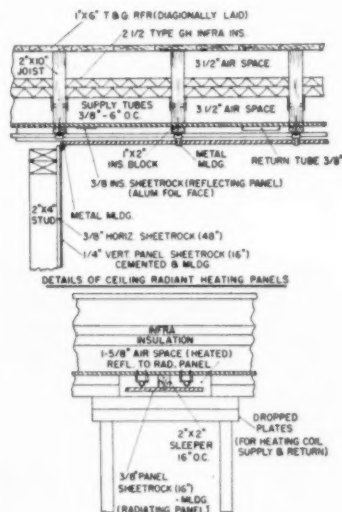
FLEET OF AMERICA, INC., 112 Pearl St., Buffalo 2, New York

ask the *experts*

an opinion on a method of heating

I am sending a drawing I have made of a ceiling radiant heating panel using Sheetrock. The forced warm water circulation is 120-140 degrees F. Could you oblige by criticising this panel as to construction and efficiency? You will note its efficiency is dependent on reflection of warm air to lower radiating ceiling panel.

R. F. C., Teaneck, N. J.



Concept of system is satisfactory although somewhat complicated. Since the heat transfer is from water, to tube, to air, to Sheetrock, a fairly high water temperature will be required.

The panel is similar to Kritzer panels in design though probably less efficient since there is less metallic transfer surface. Assuming that the ceiling is the only source of heat, the probable required panel output will be approximately 45 Btu's per square foot (average). At a mean equivalent room temperature of 70 degrees, the panel surface temperature would be approximately 100 degrees.

Required air temperature above first layer of Sheetrock:

(Continued on page 230)

NEW DODGE "JOB-RATED" TRUCKS OFFER . . .

A better deal for the man at the wheel



A better deal in comfort, visibility! More vision area than in any other leading make. New easy-chair seats with most hiproom. New cab sealing against dust, drafts. New two-tone interior styling.



A better deal in loading height with pick-up and panel floors less than 2 feet from the ground . . . kneehigh for loading ease. Lower running boards for easier entry. Lower hood for greater visibility.



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Please send me the facts about Plaswood and the name of your nearest jobber or dealer.

I am:

- Home Owner Contractor
 Material Dealer Architect

Name.....

Address.....

ask the *experts*

(Continued from page 228)

U for 3/8-inch Sheetrock + 1 surface
1

$$= \frac{.27 + .82}{1} = .92$$

$$.92 \times \text{temp. difference} = 45$$

Temp. difference = 49 degrees
Therefore, required air temperature is 149 degrees (approximately). Heat loss from tarnished copper tube to air approximately .45 Btu's per lineal foot per degree of temperature difference. Since tubes are six inches o.c. there will be two feet of tube square feet of panel area or .90 Btu's per square foot of panel surface.

$$\frac{45}{.90} = \text{air to tube temperature}$$

Temperature difference = 50

Some temperature difference will exist between average water temperature and tube surface. Therefore, the water temperature required will be approximately 202 degrees F. S. R. Juracich, Consulting Engineer.

and that includes
a *Scott's Lawn*

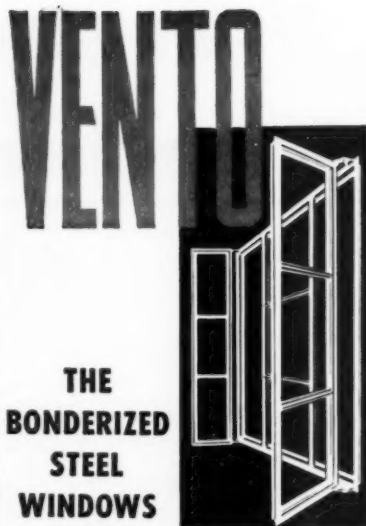


This builder knows a *Scott's lawn* adds value . . . helps clinch sales. He knows too, that folks realize a *Scott's Lawn is the best* . . . more beautiful, healthier, more enduring. *Scott's Lawns* are economical . . . *Scott's seed* goes farther . . . use less. Get all the facts on *Scott's Lawns*—you'll be pleased and so will your clients. Just drop us a card and say "Lawns." We'll also send you a binder of *Lawn Care* bulletins. Free!

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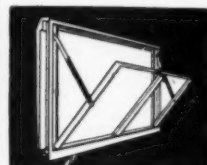
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WINDOWS

14-gauge electrically welded frame, fins welded to jamb for quick installation and double contact with leak-proof watershed sill. A plus value incorporates a redesigned latch which assures positive operation under all conditions.

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Vento "Champion" Barred Basement Windows
Vento "Champion" Utility and Barn Windows
Vento Thrifty Utility and Special Type Windows
Write us for full information

Some desirable territories are open for representatives and distributors. Write for particulars.

VENTO STEEL PRODUCTS
CO., Inc.

247 Colorado Ave., Buffalo 15, N. Y.

AMERICAN BUILDER

restoring colored concrete

My concrete patio was colored with a mixture of cement and red color. It has faded severely. How can I bring it back to its original color?

K. M., Paradise, Calif.

Clean the surface and make it more dense by washing with liquid soap. Allow the soap to stand overnight. Wash it off thoroughly the next morning. After washing, there are three things you can do: (1) apply floor wax once a month for a time; (2) if waxing fails to restore color, apply an acid wash (10 per cent muriatic acid solution) then paint with a commercial stain; (3) if this fails, apply a new topping of colored concrete after getting professional advice as to procedure.

wants truss information

I would like to know how to build trussed roof rafters. I have seen them used on different housing projects and would like to try using them. The bracing size of lumber and method of making the splices would be important to me.

A. R. P., Ware, Mass.

The Small Homes Council of the University of Illinois has several publications relating to trusses in which you might be interested. Write to them asking for the yellow sheet of their publications. See also page 42 of the August, 1953, issue and page 51 of the July, 1953, issue of the *American Builder* for articles on roof trusses.

log cabin construction

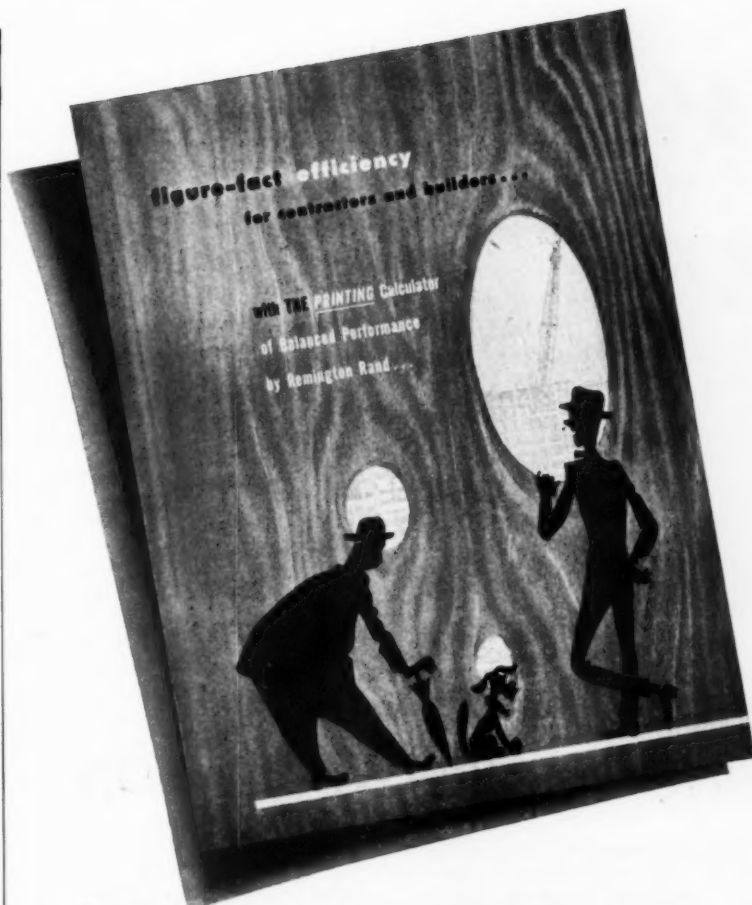
I have a log house, and find the logs have large cracks in them; logs are fairly good size lying lengthwise of house (not up and down).

Can you advise me as to where and what I can get to fill the cracks before I stain or oil the logs?

D. F., Harrisville, Mich.

We are attaching a copy of an information sheet, "Chinking Log Cabins with Portland Cement Mortar," which specifically covers the subject on which you requested information.

FEBRUARY 1954



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It tells how the printed tape on the *Printing Calculator* proves each step of every calculation... on *all* your figuring jobs — how the touch-controlled ten-key keyboard means easier operation. Mail the coupon below for your free copy of "Figure Fact Efficiency For Contractors and Builders."

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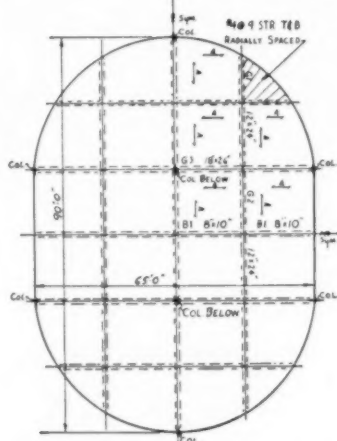


ask the *experts*

cement slab on mine site

I plan to construct a community hall in a mine site. You will find enclosed my sketch of the slab that I have considered using. Will you please advise me as to the size of the reinforcement and the thickness of the slab that would be most suitable in my case?

A. C. W., Oriente, Cuba



The accompanying drawing and table will answer your request in regard to the cement slab. There still remain, however, the problems of columns, supports, lintels, footings, and details. For these problems, we suggest that you consult a structural

BM	MK	SIZE W X D	REINFORCING	
			BNTBARS	STRBARS
B1	15'-0"	8x10	1-#6	1-#6
G1	30'-0"	12x24	2-#7	1-#8
G2	30'-0"	12x24	2-#7	1-#7
G3	32'-0"	18x26	3-#10	2-#9

*A SLAB 4" THICK 4@ 9" OC.

engineer in your area. Give him the information that we have supplied and discuss the situation with him before proceeding further. A structural engineer, who has the advantage of seeing the site and the problems peculiar to it, will be better able to advise you.

Wilbur Tuggle,
Structural Engineer

oil stain on stucco

Can you suggest any way of removing a yellow stain caused by accidentally splashing fuel oil onto a white stucco wall? Repeated washing with soap and water has partially reduced the discoloration, but

AMERICAN BUILDER

it is still very noticeable. Can you recommend a way of reducing or eliminating the discoloration?

G. A. A., Iron Mountain, Mich.

Fuel oil will dissolve in mineral spirits, gasoline or kerosene. The stain you mention is probably the result of dirt imbedded in the fuel oil. It is likely that the stain is not limited to the surface, but has soaked into the stucco. Soap and water will not remove it.

Use kerosene. Several applications may be necessary. Since the stucco surface may be rough, soak Fuller's earth with kerosene and apply the paste to the stained area. The kerosene will dissolve the fuel oil and draw it into the Fuller's earth. Later, you can brush it off. This is the method used to remove oil or grease from concrete floors.

National Paint, Varnish and Lacquer Association, Inc.

exhaust fan in chimneystack?

A chimney runs through my kitchen. In the basement, a gas hot-water heating flue is connected to the same chimney stack. I want to connect a kitchen exhaust fan to this same chimney. Would the fan

work efficiently? If it did not, would the normal draft of the hot water heater be impaired?

A. F., Vineland, N. J.

Do not connect your exhaust fan to the chimney stack. Such a fan should be exhausted directly outside through a duct prepared specifically for this job. If this exhaust empties into a chimney, there is a possibility the draft will blow the exhaust back down through the chimney and out into the hot water heater. If this happened, there is the danger of the heater pilot blowing out, creating a hazard.

Too often a chimney is considered an instrument to move a draft only upward. This is true, under satisfactory conditions. However, certain weather and air conditions will cause the draft to go down rather than up. It is also possible that the outside air pressure is such that the air in the chimney will move in no direction and an exhaust fan blowing into the chimney will take the line of least resistance and have a tendency to go down into the hot water heater.

Heating Division,
The Majestic Company, Inc.



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This Imperial LUX-RIGHT Streamlined Straight Type Steel Areawall enjoys national leadership among basement window well walls. Sizes for all standard window openings. Round type also supplied, casement type too.

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YOUR CHOICE OF THREE RETICULES
AS SHOWN BELOW —



Fig. I
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arrangement for
our standard
levels.



Fig. II
Stadia hair
arrangement for
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Fig. III
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hair arrangement,
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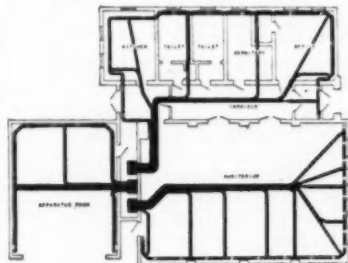


Superior Township Hall, Washtenaw County, Michigan

perimeter heating
good for larger
buildings, too

The newer central heating systems which have been developed in the warm-air industry during the past five years are proving to be as applicable to larger, non-residential heating problems as they are to house-heating. A good example is the Superior Township Hall, a rural community center built by Helge Johanson in Washtenaw County, four miles north of Ypsilanti, Michigan. Its 6,408 square feet of floor space are heated by the warm-air perimeter system shown here.

Calculated heat loss for the main body of the building runs close to



Plan of 3-zone warm-air perimeter system

300,000 Btu's. As the plan shows, heating is by a three-zone, in-slab perimeter system, each zone supplied with its own 145,000 Btu-input downflow furnace.

The subfloor trunk ducts range in size from 32x14 inches down to 11x10 inches. Procedure followed on this installation was to pour a concrete bed for the trunk ducts at the proper depth below the established surface height of the finished slab. This bed was supported on a crushed rock fill topped with a suitable vapor barrier. A layer of vapor-

(Continued on page 236)

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FEBRUARY 1954

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perimeter heating

(Continued from page 234)



Perimeter installation serving rear section of the building. Trunk duct (right) lies under corridor. Loop and feeder ducts (foreground) are under kitchen

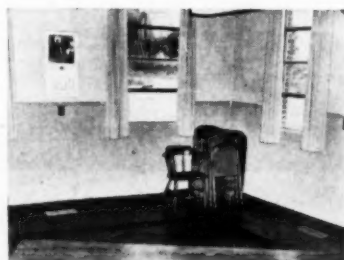


Graduated trunk and multiple "Y" feeder assembly used in auditorium zone. Feeders are made up of concrete tile joints sealed with vapor barrier sleeves

proof insulation board was then laid on the bed and the sheet metal trunk ducts installed on this board.

The same insulation material was applied to the sides and top of the duct work, and concrete retaining walls were poured along the insulated sides of the duct. Metal reinforcing rods were laid over the insulated tops of the trunks to give proper reinforcement to those sections of the concrete slab which spanned them.

Insulation of the trunks eliminated hot spots in the floor over the trunk ducts, conserving heat for dis-



Office-meeting room. Registers 4x14 inches are used in floors throughout most of the building

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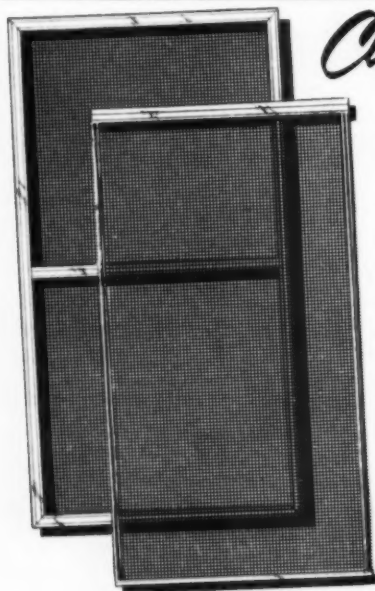
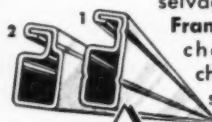
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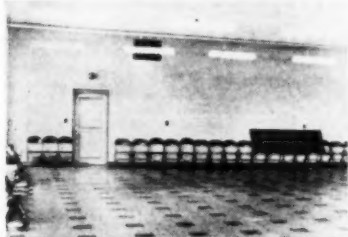


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Return air grille high on auditorium wall is 30x18 inches. Use of furnace blower helps keep summer audiences cool

tribution into the eight-inch feeders and perimeter ducts.

Most of the feeders and the perimeter ducts in this installation are of concrete tile, a special type of eight-inch round being manufactured in the locality. Tile joints were sealed with strips of vapor barrier locked in place by a clip. Tile was connected to sheet metal ducts by sheet metal sleeves and elbows.

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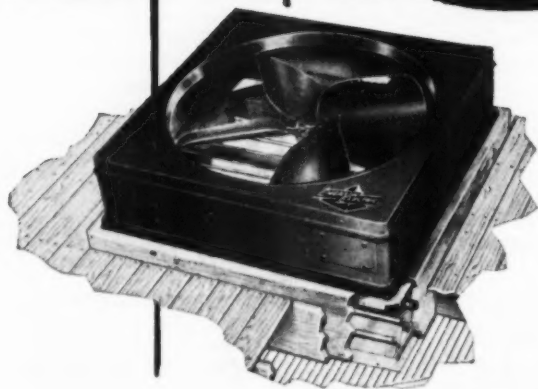
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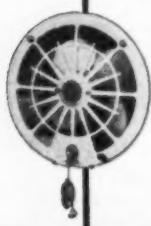
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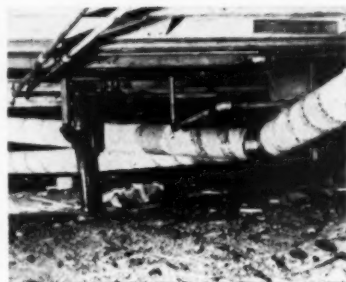
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new laminated fiber duct for



Typical crawl space installation showing feeder lines running to plenum chamber

A laminated, insulated fiber duct has been developed for use as supply or return lines in crawl, basement or attic space with gas- or oil-fired warm-air heating systems. It is recommended for crawl space radial, trunk-and-branch, standard plenum or extended plenum systems. Called "Sonoairduct-XP," it has "built-in" insulation, with a 16-pound asbestos wrap on the outside and an aluminum foil inner wrap, permitting a low coefficient of air friction. Heat-loss factor is stated to



Attic installation of fiber duct: note feeder line running from supply line

be identical with that of 26-gauge metal with a half-inch fiber glass insulation.

The duct will support a 200-pound weight without damage. Its fiber construction is said to possess sound-deadening qualities, thus minimizing transmission of sound from the heating unit or from room to room. "Sonoairduct-XP" is supplied in 27 sizes, from two to 36

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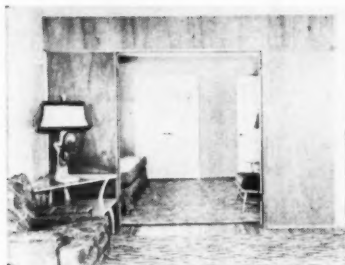
and insulated warm-air heating

inches inside diameter, and up to 24 feet long or longer on special order.

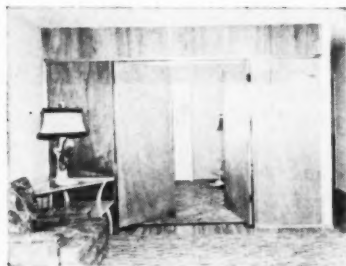
This new development should not be confused with regular "Sonoair-duct," made by the same manufacturer, which is for use only in slab-on-ground perimeter heating systems, encased in concrete.

Courtesy of Sonoco Products Co., Hartsville, S. C.

DOORS for a double-duty room



When a den room adjacent to the living room, and essentially a part of it, doubles as a bedroom, extra wide doors can be a handsome solution to the problem of making the separation. In this house built by Henry C. Cox in Garden Grove, California, very wide doors in Philippine mahogany plywood do the job. When closed they become an unobtrusive unit in a living room wall section paneled in the same material.



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- ★ Completely equipped with controls and instruments.

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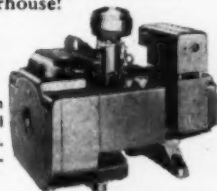
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Each room in the motel has an unrestricted view of the lake

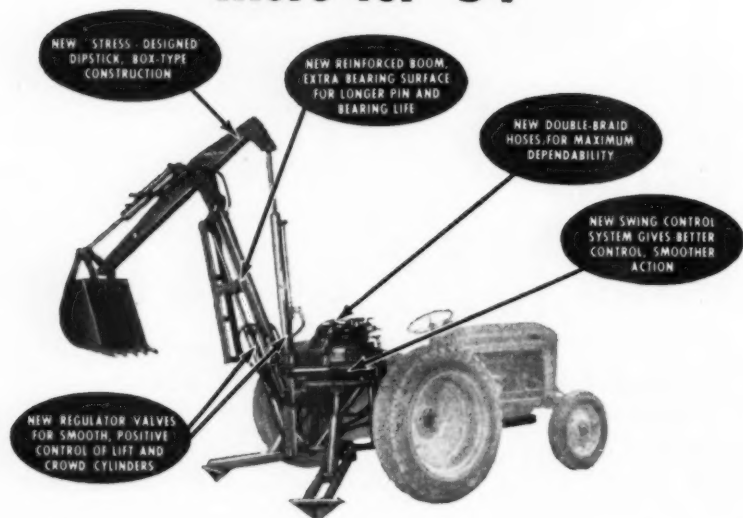
here's a MOTEL for a northern lake

Good, sound construction is now the rule rather than the exception for motels, including those built for occupancy by summer tourist trade.

This two-story motel was built on the shore of Rice Lake, Wisconsin, by King Brothers, Rice Lake builders; plans by E. W. Hanson, Stillwater, Minnesota architect.

The structure is modern in design with a low-pitched shed roof

New reasons why.. Sherman Power Diggers give you More for '54

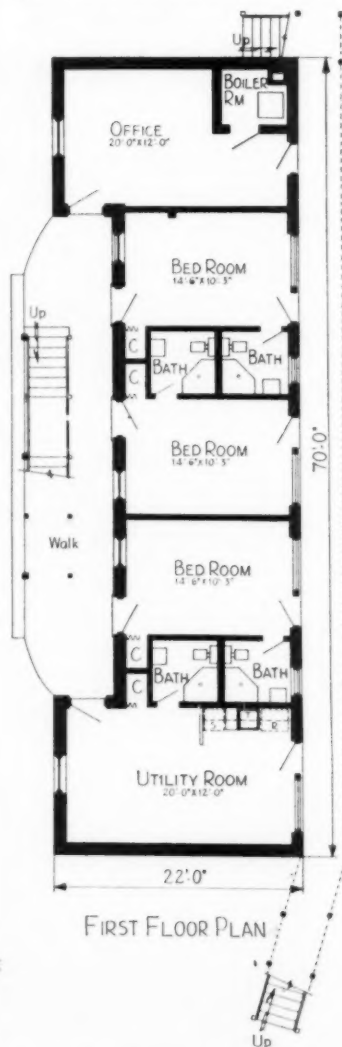


Important new features, combined with advantages proven by thousands of users, add up to more production for your digging dollar! The Sherman Hydraulic Power Digger is designed and built for that wide range of job requirements beyond the economical use of hand labor and below the efficient use of larger equipment. Yes, between the smallest and largest jobs, you'll find there's always a place for your Sherman Power Digger! Ask your nearby Sherman dealer for an on-the-job demonstration today. Write for free literature, Dept. T-49.

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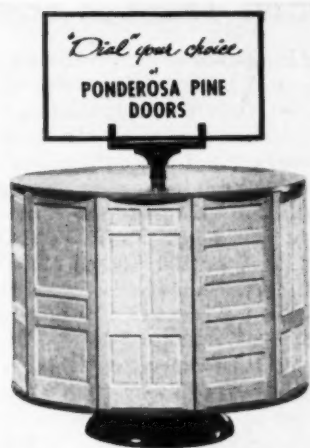
An equal number of rooms are provided on the second floor. Two of these are housekeeping apartments and the balance single rooms and bath

AMERICAN BUILDER



The building in process of construction and a continuous balcony across the lake front and at the second floor level. The balcony on the opposite side is used for service. The building contains, in addition to three house-keeping apartments which are located on both levels, six single rooms and bath and an office.

door selection made easy

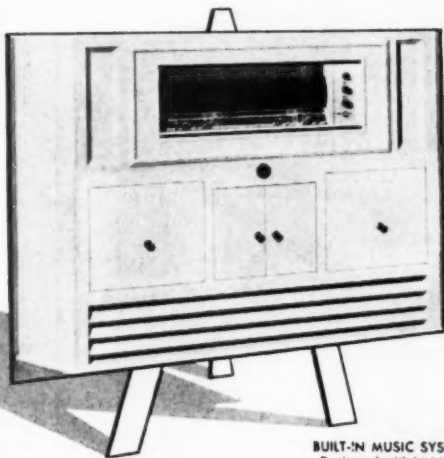


A new device called the "Merry-go-Round Door Selector" gives builders a chance to see and compare a complete selection of door designs almost at a glance.

The door selector is a revolving drum on which are mounted wood miniatures of the most popular designs of wood doors. Each of the doors is reproduced at 1½-inch scale and is precision cut. The selector contains space for 10 doors or for nine doors and a plastic pocket to hold descriptive literature.

By revolving the drum, a builder can compare the doors on display and make a choice quickly. All doors displayed are said to be readily available for delivery. The door selector is put out by Ponderosa Pine Woodwork, 38 South Dearborn, Chicago 3, Illinois.

FEBRUARY 1954



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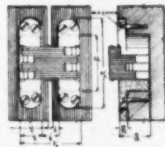
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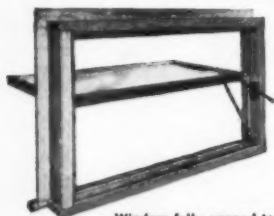
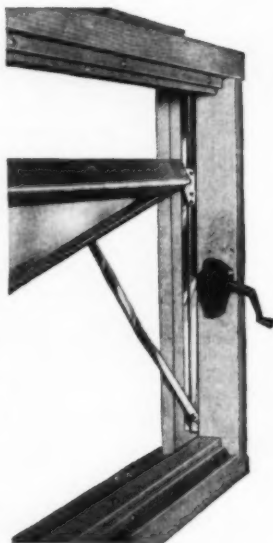
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Under construction is La Porte's new house with an \$18,500 price tag. House will be completed in 30 days. Builder gave old house owner 30 day trade-in guarantee: will take old house if not sold



The 35-year-old house was offered to Portland builder John La Porte as a trade. Owner believed it to be worth \$16,000. Builder valued it at \$14,250. Stated it needed \$1,500 repair before resale at a profit

Portland builder demonstrates selective TRADE-IN selling

"I'd rather be stuck with one of my new houses than an old worn out house I had taken on trade," stated John La Porte, builder from Portland, Oregon, when emphasizing his selectivity in accepting trades. To prove his point, La Porte demonstrated with an example.

He had received a phone call from an interested prospect, who wished to trade an old home for a new one. La Porte was told that the old house was worth \$16,000. His new house is priced at \$18,500. The old house was in a good section of town where resales have been above average. The house was a two-bedroom, basement home, 35 years old.

La Porte, after a detailed appraisal, valued the house at \$14,250. He appraised it as follows:

1,500 sq. ft. at \$8 per ft. (2/3 of the present building cost due to age—35 years)	\$12,000
Land	3,000
Finished party room	750

Total \$15,750

Deduction for repairs	\$ 1,500
---------------------------------	----------

Total \$14,250

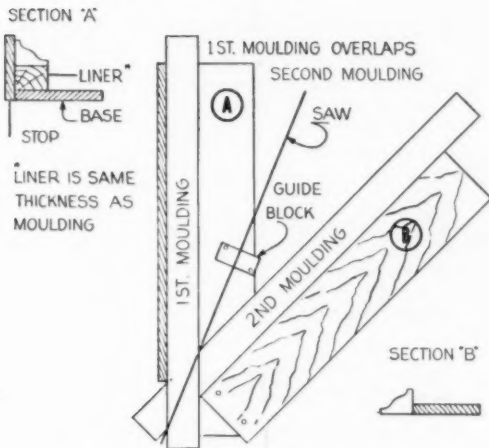
He offered the owners of the old house a 30-day guarantee plan whereby, if their old house did not sell (at the owner's price), he would allow them \$14,250. If La Porte did take in the old house, he planned to decorate it throughout, take off the gingerbread on the front, build a private driveway for parking, repair the garage, and completely remodel the bath. He figured these alterations would run \$1,500. This would place an eventual price tag on the house of \$16,750. The sales price figures \$14,250 trade-in guarantee, \$1,500 repair, and \$1,000 gross profit.

La Porte believes that trade-in selling will be an increasing part of a builder's business. "The future of trades is just ahead," stated La Porte. "People will expect a builder to take an old house on trade."

how would you do it?

ideas for the man on the job

mitrecut moldings this way



Miter cuts of complicated moldings are sometimes hard to lay out and scribe and sometimes cannot be cut in an ordinary miter box because of the sharp angle required. But two pieces of molding that fit this description can easily be cut at the same time with the rig shown above.

Piece A has a stop on it to hold molding against it. It also has a liner to raise the molding as much as its own thickness. In this way, the second molding can pass under it. Piece B acts in itself as a stop for the second molding. This piece is nailed on top of A to the required angle (easily railed to a different angle). A guideblock is nailed halfway between the stops to facilitate aiming and guiding the saw.—W. Kraatz, Santa Cruz, Calif.

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ADVERTISERS IN THIS ISSUE

Adams Rite Manufacturing Co.	56
Airtemp Division Chrysler Corporation	139
Allith Prouty, Inc.	160
Almetal Weatherstrip Company	14
Aluminum Window Manufacturers Association	129
American Builder	136, 137, 235
American Cement Products	214
American Floor Surfacing Machine Co.	156
American Houses Inc.	180
American Radiator & Standard Sanitary Corp.	161
American Screen Products Co.	233
American Siskrafft Corporation	65
American Telephone & Telegraph Co., The	52
American Welding & Manufacturing Co., The	118
Andersen Corporation	158, 159
Associated Plywood Mills, Inc.	98
Atlas Plywood Corporation	134

B & W Enterprises	236
Bell & Gossett Company	109
Berger & Sons, Inc., C. L.	149
Besser Manufacturing Company	145
Bessler Disappearing Stairway Co., The	53
Black & Decker Co. Mfg. Co.	112, 113
Broadway Shower Door Co.	212
Brown-Graves Co.	147
Bruce Co., E. L.	107
Bucyrus-Erie Company	155
Building Buy-Words	177

Calder Manufacturing Co.	9
Carlson & Sullivan, Inc.	237
Carr, Adams & Collier Company	41
Ceco Steel Products Corporation	99
Celotex Corporation, The	184, 185
Certain-Teed Products Corporation	Cover 3
Chase Brass & Copper	213
Chemold Company	237
Chevrolet Division, General Motors	195
Clipper Manufacturing Co.	46
Coffman Co., Inc., R. G.	205
Coleman Company, Inc., The	22, 23
Colorado Fuel & Iron Corporation, Wickwire	50
Spencer Steel Division	23
Colorecrete Industries, Inc.	148
Colpaert Homes Inc.	198
Congoleum Nairn Inc.	67
Connor Lumber & Land Co.	243
Craig Wood Products Company	243
Crawford Door Company	Cover 2
Curtis Companies Service Bureau	91, 92, 93
Custom Machinery Co.	169

Delco Appliance Division, General Motors Corp.	51
Dodge Corporation, F. W.	215
Dodge Div. of Chrysler	229
Dur-O-Wal Division of Cedar Rapids Block Co.	202

Eliason Tool Company	243
Eljer Co.	36
Emerson Electric Mfg. Co.	238
Everspray Division	53
Ez-Way Sales, Inc.	202

Fasco Industries, Inc.	194
Fir Door Institute	33
Fleet of America, Inc.	228
Ford Division of Ford Motor Company	217
Frantz Manufacturing Company	176

Gate City Sash & Door Co.	173
General Air Conditioning Corp.	151

General Electric Co., Telechron Department ..	199
General Electric Company 26, 27, 166, 167, 199 ..	219
General Plywood Corporation	171
General Portland Cement Co., Trinity Div.	227
General Products Co.	48
Gerwin Industries, Inc., Thermo-Base Division ..	141
Goodyear	35
Grand Haven Stamped Products Co.	55
Grand Rapids Hardware Co.	242
Greenlee Tool Co.	224
Gulf Steel & Wire	133

Hager & Sons Hinge Mfg. Co., C.	204
Hammel Radiator Engineering Co.	216
Harnischfeger Corporation	114
Hassall Inc., John	168
Heatilator Inc.	208, 209
Higgins Inc.	170
Holt Manufacturing Co.	186
Homasote Company	164
Hunter Fan and Ventilating Company	221

Independent Lock Co., Lockwood Hardware Man- ufacturing Company	106
Infra Insulation Inc.	197
Insulite Division, Minnesota and Ontario Paper Company	152, 153, 154

Jaeger Machine Company, The	160
Johns-Manville	206

Kaustine Company, Inc.	135
Keasbey & Mattison Company	42
Kennatrack Corporation	55
Kenline, Inc.	90
Keystone Steel & Wire Company	88, 89
Knickerbocker Stamping Co.	243
Kohler Co.	18
Kota Products, Inc.	181
Kwikset Sales And Service Company	1

Lakeside Metalcraft Co.	202
Leonard Company, R. B.	218
Lockwood Hardware Manufacturing Company In- dependent Lock Co.	106
Lone Star Cement Corporation	7
Louisville Cement Co.	124
Ludman Corp.	2

Macklanburg-Duncan Co.	30, 31
Malta Manufacturing Company	15
Maple Flooring Manufacturers Association	14
Marsh Wall Products, Inc.	47
Master Metal Strip Service, Inc.	60
Miller Mfg. Company, Frank B.	66
Minnesota & Ontario Paper Co., Insulite Division	152, 153, 154
Moore Inc., Goodloe E.	200
Mosaic Tile Company, The	157
Moutile, Inc.	181
Mullins Manufacturing Corporation	165
Murray Corporation of America, The	122, 123

National Clay Pipe Manufacturers, Inc.	179
National Electrical Manufacturers Association ..	57, 66, 187
National Electric Products Corp.	140
National Homes Corporation	188

National Lock Company	108
National Manufacturing Company	Cover 4
New Castle Products	58, 59
N. Y. Wire Cloth Co., Inc.	162

Onan & Sons, Inc., D. W.	239
Owens-Illinois Glass Company, Glass Block Di- vision	211

Perfection Stove Company	132
Per-Fit Products Corporation	44, 45
Pittsburgh Plate Glass Co.	86, 87
Ponderosa Pine Woodwork	130
Porter-Cable Machine Co.	165
Portland Cement Association	103
Powermail Company	55
Precision Parts Corporation	226
Prefabricated Home Mfrs. Inst.	232
Price Fireplace Heater & Tank Corp.	12
Pryne & Co.	4

Raynor Manufacturing Company	146
R. C. S. Tool Sales, Corporation	62, 63
Ready Hung Door Corp.	178
Red Devil Tools	60
Remington Rand	231
Republic Steel Corporation, Truscon Steel Di- vision	174, 175
Revere Copper And Brass Incorporated	183
Reynolds Metals Company	54
Rheem Manufacturing Company	38
Richmond Radiator Company	119
Roddis Plywood Corporation	101
Rolscreen Company	191
Rouse Manufacturing Company	85
R.O.W. Sales Company	16, 17

St. Paul & Tacoma Lumber Co.	49
Saint Paul Corrugating Co.	233
Saturday Evening Post, The	29
Scott & Sons Co., O. M.	230
Servel, Inc.	203
Sherman Products, Inc.	240
Shower Enclosures, Inc.	168
Simonds Saw and Steel Co.	216
Simplex Level Co., Inc.	181
Soss Manufacturing Company	241
Southern Plaswood Corporation	230
Spencer Heaters, Locoming Division	34
Stanley Works, The	189
Steel Scaffolding Company, Inc., The	237
Sterling Hardware Manufacturing Co.	19
Superior Shade Company	234
Surface Combustion Corporation	11
Symons Clamp & Manufacturing Company	168
Syntron Company	222

T & S Brass & Bronze Works, Inc.	227
Taster, Freez Corp. of America	243
Telechron Dept., General Electric	199
Thermo-Base Division, Gerwin Industries, Inc.	141
Thor Corporation	53
Thrush & Company, H. A.	193
Tilt-A-Door Corporation	128
Timber Engineering Company	190
Timely Products	237
Triangle Manufacturing Company	149
Trinity Division, General Portland Cement Co.	227
Truscon Steel Division, Republic Steel Cor- poration	174, 175

United States Plywood Corporation	116, 117
Universal Atlas Cement Company	192
Universal-Rundle Corporation	10

Van Packer Corporation	138
Vento Steel Products Co., Inc.	230
Vikon Tile Corporation	115
Vulcan Radiator Company, The	236

Wabash Screen Door Company	64
West Coast Lumbermen's Association	201
Western Lock Mfg. Co.	131
Western Pine Association	144
Westinghouse Electric Corporation	182
Weyerhaeuser Sales Company	207
White Company, David	234
Wickwire Spencer Steel Division, Colorado Fuel & Iron Corporation	50
Wiggin's Sons Co., H. B.	148
Woodall Industries Inc.	61

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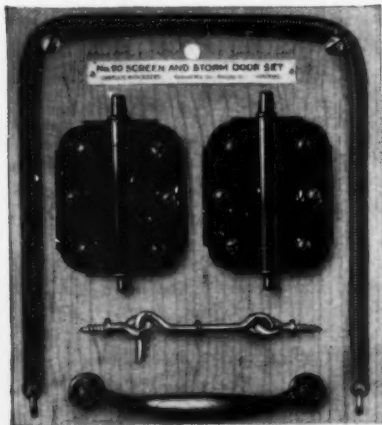
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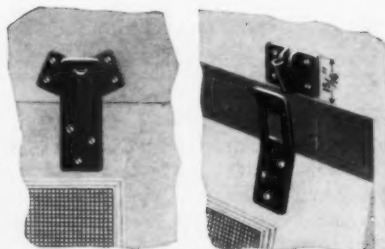
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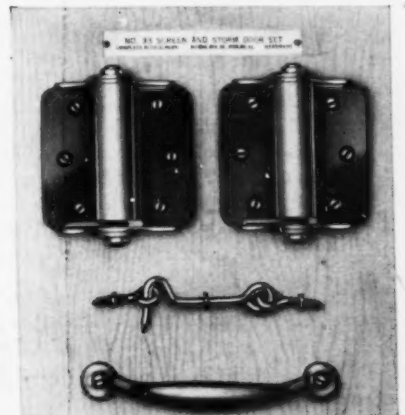
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