

AMERICAN BUILDER

JANUARY 1964
PRICE 50 CENTS

Building

Products

On Review

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**Convention and
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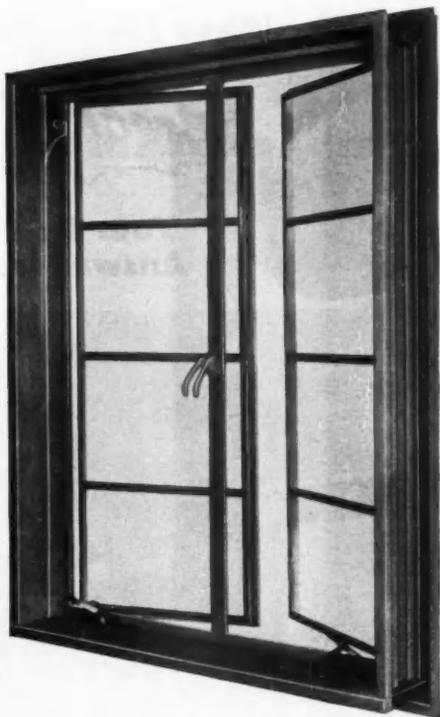
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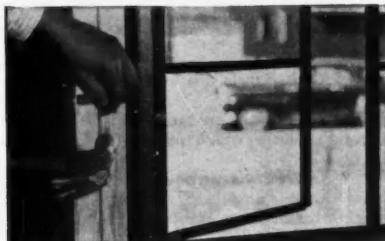
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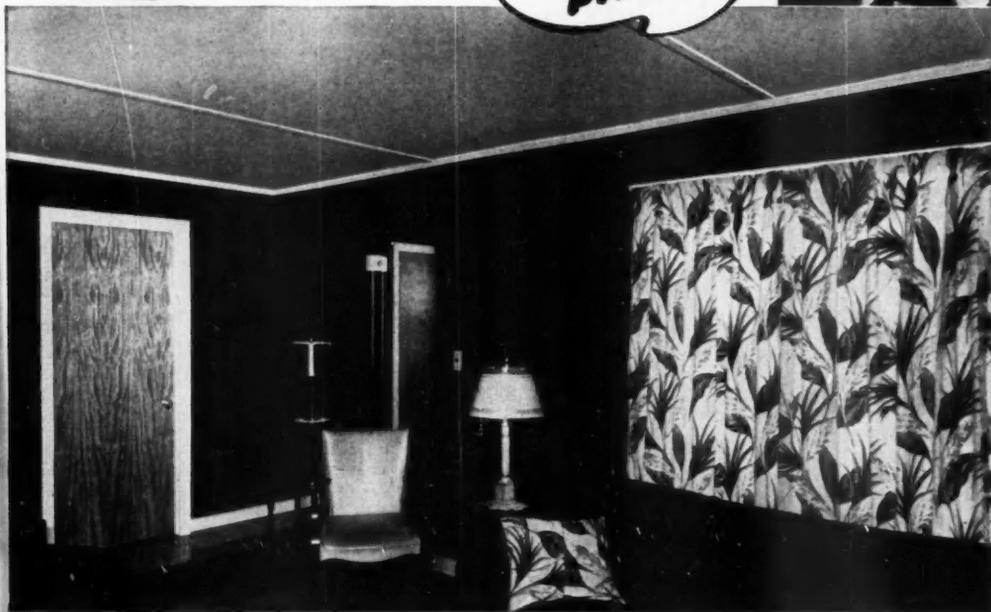


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AMERICAN BUILDER



**IN YOUR
FEBRUARY ISSUE**

TRENDS IN HOUSE DESIGN featuring some of the most popular model homes exhibited throughout the country during National Home Week. These houses tend to reflect America's current taste in house design. The builder who studies them will find many ideas worth incorporating into his 1951 house.

How utility and convenience of electrical equipment can be increased through proper planning of the wiring system is effectively illustrated in a story titled "WIRED FOR BETTER LIVING."

INDOOR-OUTDOOR CONTROL SYSTEMS is the subject of the second and last installment on automatic heating control systems for homes and small commercial structures. This article should be of interest to builders and dealers alike.

GLUED LAMINATED WOOD FRAMING MEMBERS is the title of the third article dealing with Construction Lumber.

A SPLIT-LEVEL HOUSE with three distinctly different elevations is presented as the Gatefold Blueprint House of the Month.



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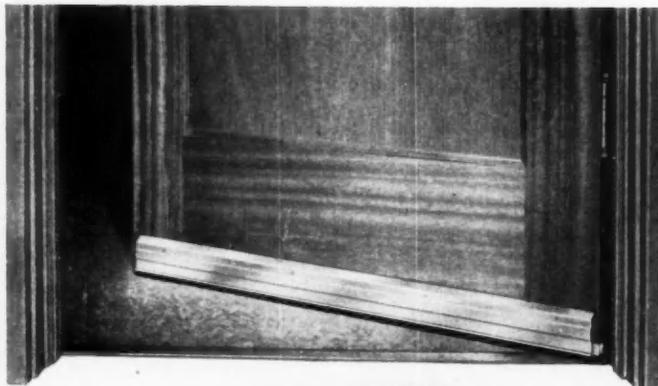
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with these**

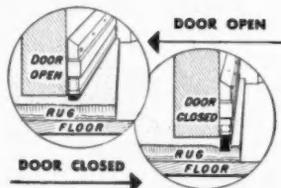


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**DOOR BOTTOM AND
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Publisher's Page



Will Trend Against Socialism Continue?

THE RESULTS of the election looked very significant in November. What the new congress now in session actually *does* will show whether the results were as significant as they looked two months ago.

It has been repeatedly emphasized on this page that all the important domestic issues confronting the people of this country add up to one vitally important issue—viz., that of socialism. It has also been emphasized that there is only one arena in which this great issue can be fought out to a finish—viz., that of politics. And it was fought out in that arena last November, although the issue of foreign policy had considerable influence on the voters.

There are really three major parties in the country—the pro-socialist Truman Democrats, the anti-socialist Southern Democrats and the anti-socialist Republicans. In the primaries in the South, which are equivalent to elections, Truman Democrats were defeated by anti-Truman Democrats in almost every instance. Likewise in the North, most Republicans won in the elections; and the more outspokenly they opposed socialistic policies, the greater their victories. The result is that a coalition of anti-Truman Democrats and Republicans can ex-

ercise complete control of the new congress.

Why most leaders of labor unions favor most socialistic policies is difficult to understand. But they do, and it has been owing to their control of it that the Truman branch of the Democratic party has gone so largely socialistic. But the election indicated that it is the *leaders*, not the *members*, of labor unions who favor socialism. In almost every instance where the labor leaders openly and strongly opposed a candidate for the Senate or House, he was triumphantly elected. The most notable example was in Ohio, where the labor leaders did their utmost with both propaganda and money to defeat Senator Taft. But Taft's re-election by a huge majority was largely because many, or most, members of labor unions voted for him, as he carried almost every important industrial area.

Another notable result was the defeat in Illinois, by a large majority, of the Truman leader in the Senate, Scott W. Lucas, by Republican Everett Dirksen, who campaigned for months against every socialistic policy of the administration. Still another was the defeat for re-election in Utah of an advocate of all socialistic policies, Senator Thomas, who was beaten by—of all people—

a former president of the National Association of Manufacturers!

The new congress can hardly fail to realize that the effort of labor leaders to continue, through the Truman branch of the Democratic party, to keep control of the government in behalf of socialistic policies, was utterly beaten and that members of labor unions expressed themselves, by their votes, as strongly against socialism and for the American system, as other citizens.

The trend toward socialism has been reversed, at least temporarily; but its opponents in the new congress will need strong backing from the people who elected them if the trend is to be permanently reversed.

The danger that it will not be permanently reversed is due to the fact that there are so many voters who are opposed to *most* socialistic policies, but put pressure on their representatives in congress in behalf of *particular* socialistic policies that they believe will benefit *them*. As the election showed, a large majority of the people are opposed to socialism as a whole; and if we ever get it this will be due to the adoption, one at a time, of many *particular* socialistic policies, such as socialized medicine, socialized transportation and socialized housing, which together will add up to socialism.

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Samuel O. Drumm,

Chairman Emeritus

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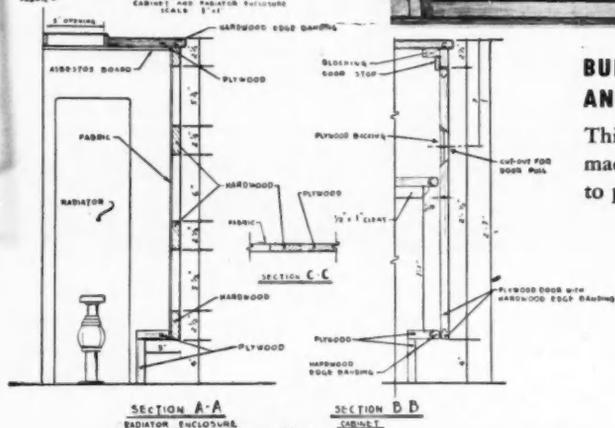
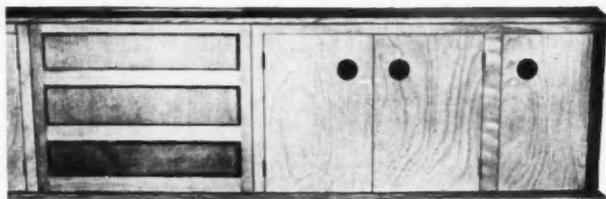
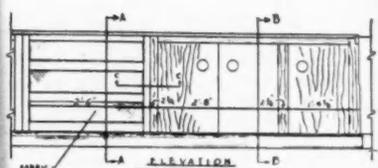
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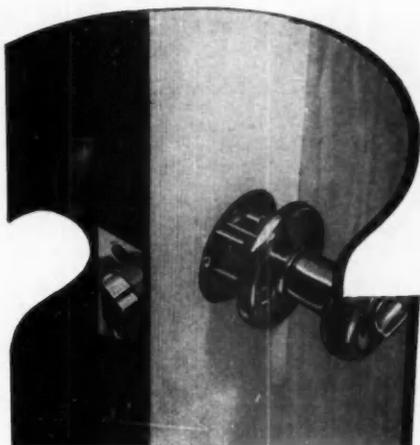
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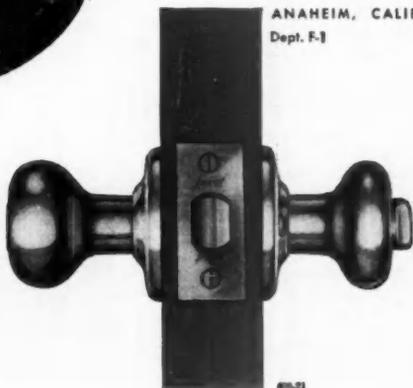


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IT'S INSTALLED!



TRENDS in the Building Field

Factors Which Will Affect Housing in 1951

AT NO other time in history could experts predict residential starts with as great certainty as they can this year, except possibly during the years of World War II when material and labor were allocated. The government is now relying on Regulation X, which imposes stringent terms for financing, to bring housing starts down from 1,250,000 units in 1950 to 850,000 units in 1951. If it appears that too few are being started the terms will be relaxed; if there are too many starts, terms will be tightened. Given these conditions, what is likely to happen in 1951 so far as the building market is concerned?

With five years of peak building activity behind us there is doubt in some quarters that as many as 850,000 new houses can be sold on any terms. The 1950 Census of Housing shows that there has been an increase of 24 per cent in the number of habitable dwelling units since 1940. In the meantime the population has increased only 14 per cent. However, another factor has operated to increase housing demand—the average American family has declined in size by 8 per cent. On the average there were 3.4 persons per household in March 1950 as compared with 3.7 in April 1940. In April 1930 there were 4.0 persons per household. The decline in size of families has of course required more dwelling units. A continuation of this downward trend in the size of families will require still more dwelling units.

Assuming that the number of dwelling units is now equal or very nearly equal to the number of families, a vacancy ratio of as much as 5 per cent is economically very desirable. This would require 2,300,000 dwelling units in addition to 400,000 units required annually for the anticipated increase in families during the next several years.

It therefore appears that the market is still strong. Since consumer incomes are likely to increase there will be a need and a desire for new homes plus better than average ability to pay for them during this period of full employment and high wages.

Regulation X has eliminated the no down payment—\$50 per month arrangement by which families of average means could buy new homes

in many metropolitan areas and in some other places. The continuance and extension of this arrangement would assure a big market. Now a G.I. needs a \$1,300 down payment on a \$10,000 house and a non-veteran needs \$2,300. Government experts calculated that this would cut housing demand one-third from last year's high level. It may cut it more or government experts may be surprised to see demand increase beyond 850,000.

Shortages and delays of building materials will make things tough this year. The shortage will be largely in metal items. It appears that lumber and cement will be plentiful.

The labor situation will be spotty. In localities where credit curbs have reduced residential starts the supply of labor will be plentiful.

Industrial building is expected to expand. But not all industrial building will expand. New or expanding plants that aid the defense effort will get preference. Spending on plant construction is expected to center in steel and aluminum.

Except for amusement building there are no curbs on commercial building at present. These may come later. The government is particularly concerned about the expansion of office space in metropolitan centers where occupancy is very high. Government will need more office space

as the defense tempo goes up.

Material and labor costs will continue their upward spiral. Unless controls are placed on metals, prices will zoom. Lumber, however, which constitutes 67 per cent of the cost of materials of a typical house, is expected to be in good supply and at lower prices than last year. Lumber prices reached an all time high last fall. In September the price stood at an incredible 3.7 times the level of 1926. This was due entirely to the high activity in residential building. Cement should also be more plentiful and cheaper. At the peak of construction activity last fall, the building material wholesale price index of the Department of Commerce stood at 220, an all time high, (1926 = 100) as compared with 193 in 1949, and 199 in 1948.

Labor rates are creeping upward. Most building trades labor in the Chicago area received a raise of 10 cents an hour last year. Recent settlements in other industries show increases and offers for hourly workers of almost 10 cents an hour.

Lumber dealers can expect to sell a lesser volume this year than last. However, lumber and other materials required for 850,000 houses will still result in a large volume of business and should make 1951 one of the ten best years for dealers and builders.



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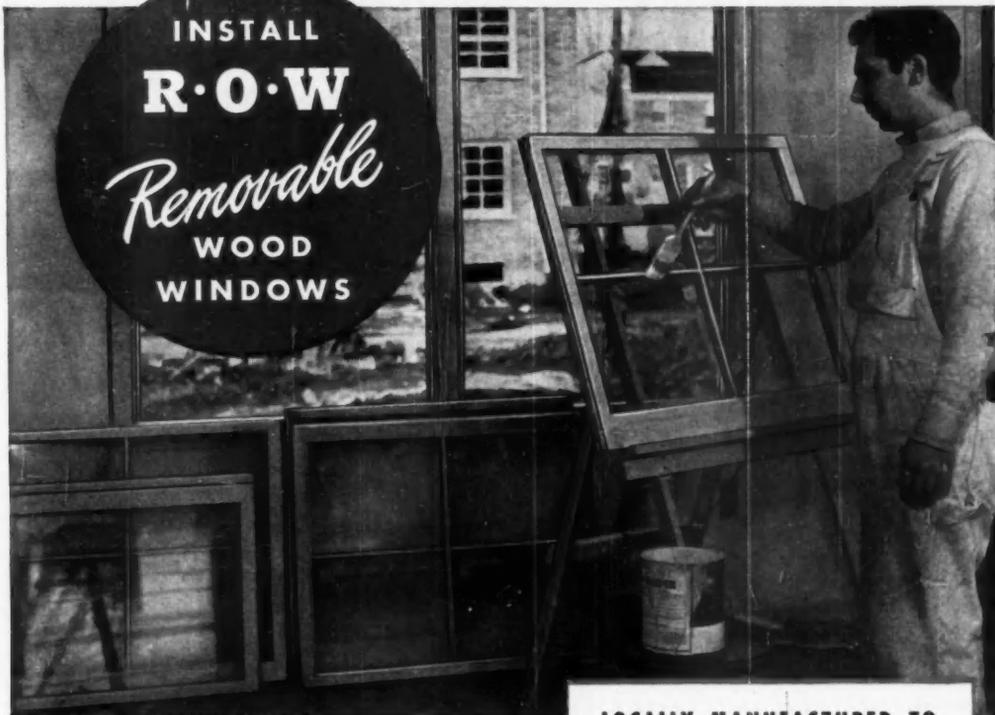
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RANDOM WIDTH OAK PLANK, finished in V-joint only; or unfinished in V-joint and Square-edge. Contrasting plugs in walnut or oak available if desired. Sizes, 25/32 x 3-1/4, 5-1/4 and 7-1/4.

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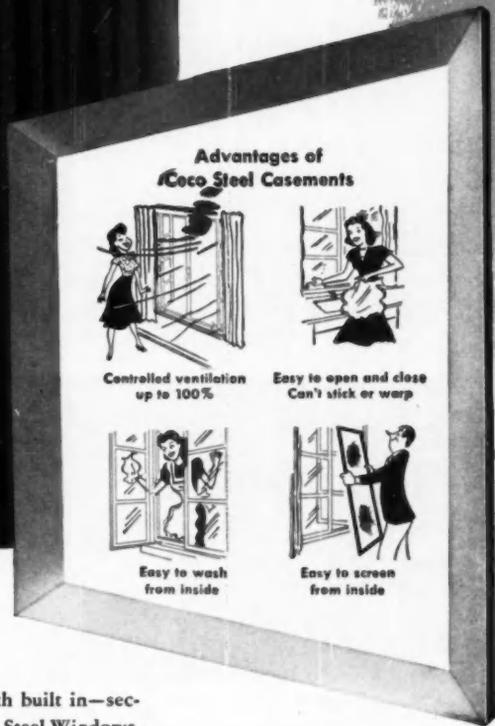
*Come
Spring*

How to Make a Home

It's easy to bring nature right into the home with Ceco Picture Windows of Steel to make each room truly live. There's movement in the murals of the vibrant outdoors framed by these handsome window creations. Distant views, ever changing with the mood of the hours, bring relaxing thoughts and a sense of better living. All this is possible because there's less interruption of vision. The eye is drawn easily to the outside world of motion—barriers are minimized due to slender frames and muntins. And to have Ceco Steel Windows is to know truly sound value. They're engineered to

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provide the tightest weatherseal ever—with extra strength built in—sections are $1\frac{1}{16}$ inches deep. Yes, when you build with Ceco Steel Windows, you know you've used the very best—you're sure of economy too—you're modern as tomorrow.

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makes the big difference



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KENTILE FLOORS

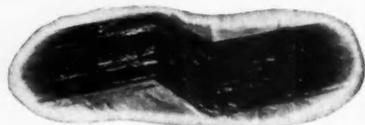
make small homes more saleable

Kentile Floors add to the eye-appeal as well as the value of any home! The 25 light, bright decorator colors can be combined in countless ways to blend with or enhance any style of architecture...decorative inserts that come ready-cut add an expensive custom-designed air at no extra labor cost. Colors never wear off even under the hardest usage because they go clear through to the back of each tough, fire-resistant tile.



Low-cost KENTILE is installed speedily, economically, tile by tile... keeps building costs down—quality up! Yes, KENTILE actually adds to the value of a small home. And it's the name your customers know and want... backed by national advertising featuring the famous Kentile guarantee.

Kentile can be installed anywhere... over smooth metal, wood or concrete... even below grade on concrete in direct contact with the earth or in non-basement homes.



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KENTILE®

The Asphalt Tile of
Enduring Beauty



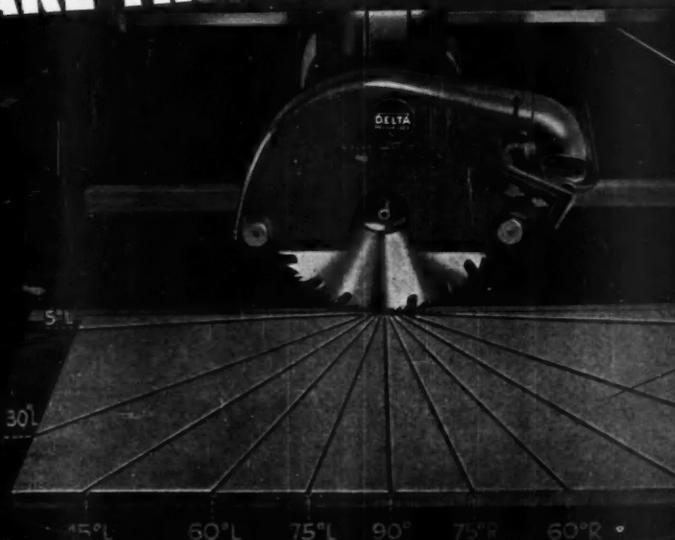
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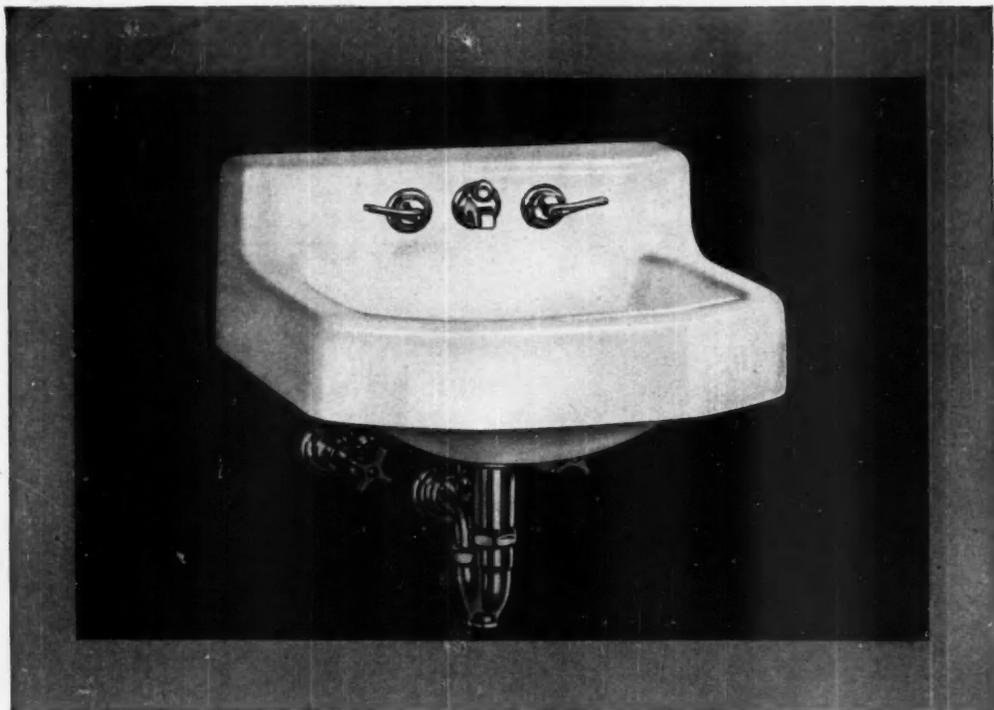
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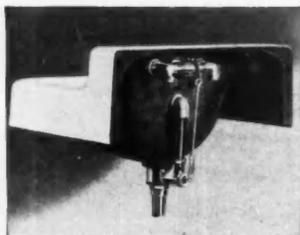
K-2700-A. 19 x 17", 22 x 19". Latter with built-in soap dishes.

HAMPTON LAVATORY

without overflow

The popular Hampton enameled iron lavatory is now available without overflow—an innovation which is receiving wide acceptance.

The Hampton is extensively used in homes and apartments. Features that appeal to home planners, architects and builders include the unobstructed shelf across the back, ample basin, compact mixer fitting with Synchro pop-up drain. The lustrous, easy-to-clean Kohler enamel is fused to non-flexing iron, cast for rigidity. Fittings are of durable brass, chromium-plated.



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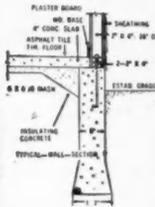
BUILDERS REVEAL SECRETS

of New Ways to Insulate and Plaster, Get Better Results, Cut Time and Cost

RADIANT HEATING SPECIALIST FINDS INSULATING CONCRETE INCREASES EFFICIENCY!

CRYSTAL LAKE, ILL., Nov. 5, 1950—More than 300 floor panel radiant heating installations have taught Miles Westbrook, local heating contractor, some interesting facts about insulation. As a result of his experience, he specifies that a layer of Zonolite Insulating Concrete must be laid over the levelled ground before radiant heating coils are installed. Says Mr. Westbrook, "Heat loss to the earth from a floor slab without insulating concrete is usually high. Zonolite Insulating Concrete keeps heat from going downward and, over a period of time, saves a good deal of fuel."

Mr. Westbrook adds, "Over several seasons, we have found in homes where floor coils were laid over Zonolite Insulating Concrete, that *over-ride and lag* were much less of a problem . . . than when coils were laid over cinders or other insulation. Also . . . panels without a Zonolite insulating base needed much higher water temperatures to maintain comfort."



insulation. Also . . . panels without a Zonolite insulating base needed much higher water temperatures to maintain comfort."

Veteran Contractor Tells How He Does Better Plastering with Zonolite!

CINCINNATI, OHIO, Nov. 15, 1950—C. W. Sittason, local contractor who has been in the plastering business for over 29 years, has found that he can eliminate many plastering difficulties by using Zonolite Plaster Aggregate. After using Zonolite plaster on a large Cincinnati ceiling job he said, "Zonolite plaster adhered to the base coat better . . . drop-outs and over-night laps gave no trouble . . . screeding alone produced a finish that looked like troweling!" He also found his men showed great enthusiasm in working with Zonolite.

Mr. Sittason himself enthusiastically states, "I heartily recommend Zonolite Plaster Aggregate and Zonolite Acoustical Plastic to improve the quality of any plastering job!"

House completely insulated in 2 hours!



SIoux FALLS, SOUTH DAKOTA, Oct. 10—Robert Stoneall, local building contractor, reveals his unique use of Zonolite Vermiculite Insulation to completely insulate a home in only 2 hours with just 2 men—including time spent unloading bags and cleaning up after the job is finished! His time and money-saving method enables him to complete side-wall and attic insulation in a 24' x 30' house in a fraction of the normal time. Mr. Stoneall says, "You can't beat ZONOLITE for insulation and ease of installation."

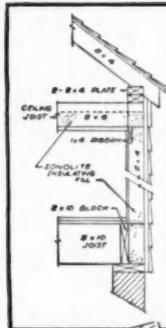
This is Stone-

all's method: By putting the 2 x 4 plates on top of the ceiling joists, he leaves access in the attic so that ZONOLITE may be poured down the sidewalls from the top.

Sidewalls are poured first. The light granular nature of the material permits it to run freely between the studding, all the way to the foundation, filling the space to a uniform thickness. The wall is vibrated lightly with a rubber mallet to produce settlement. Spaces under window openings are filled as the lath is installed.

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ZONOLITE COMPANY, 135 S. LaSalle St., Chicago 3, Ill., Dept. AB-01



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Aluminum Window Manufacturers Association
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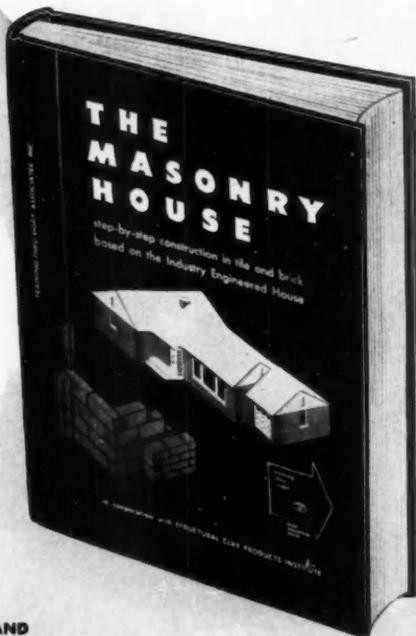
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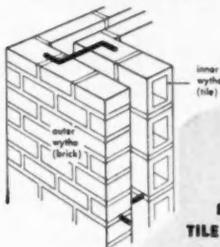


This book describes and illustrates every step in the construction of a masonry house. Comes complete with text and diagrams demonstrating modern masonry methods, masonry tools and modular materials.

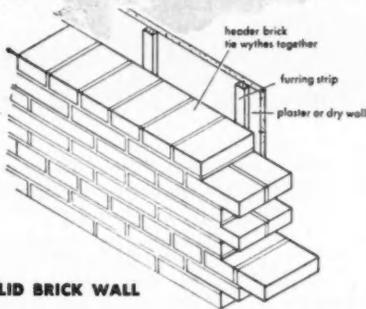


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At Load of 1200 lbs.				
Average Total Deflection, in.	0.2	0.28	0.217	0.147
Residual Deflection, in.	0.1	0.14	0.067	0.040
At Load of 2400 lbs.				
Average Total Deflection, in.	0.6	0.8	0.533	0.483
Residual Deflection, in.	0.3	0.4	0.230	0.187

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stands Intact!

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CELOTEX

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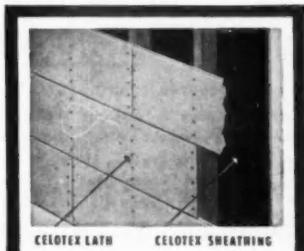
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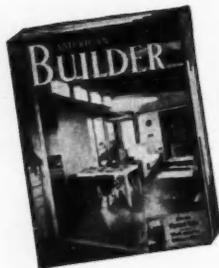
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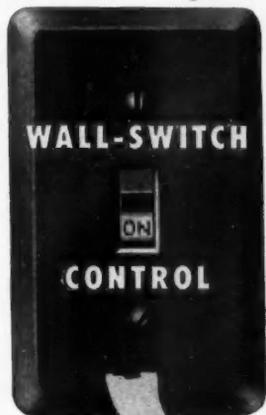
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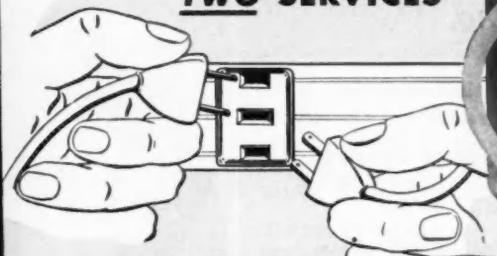
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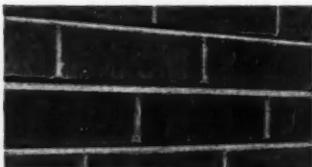
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The houses and apartments in this project were prefabricated by American Houses, Inc., who have over 60 DE WALT SAWS in operation in their three plants for precision cutting and mass assembly of a wide range of house models and designs.

This example of the use of DeWalt for precision cutting for multiple construction should interest all builders.

The building market is rapidly changing. You may want to devote your future efforts to other types of building: defense housing, military housing, low-cost rental housing, special wood structures, etc.

No matter what type of building you do—whether for a single structure or for a thousand—you have a valuable asset when one or more DeWalts are *on the job*. You build faster . . . better . . . more accurately . . . and at lower cost.

DeWalt models are available from 1/2 H.P. to 7 1/2 H.P.

Shown on this page is the newest DeWalt GR—the "builder's saw." This model has 5 new features, including low dead rise motor which permits deeper cut. See what *all five* features mean to you by seeing an actual demonstration! Your DeWalt dealer will show you. Send coupon below for full information.

MAIL THIS COUPON TODAY!

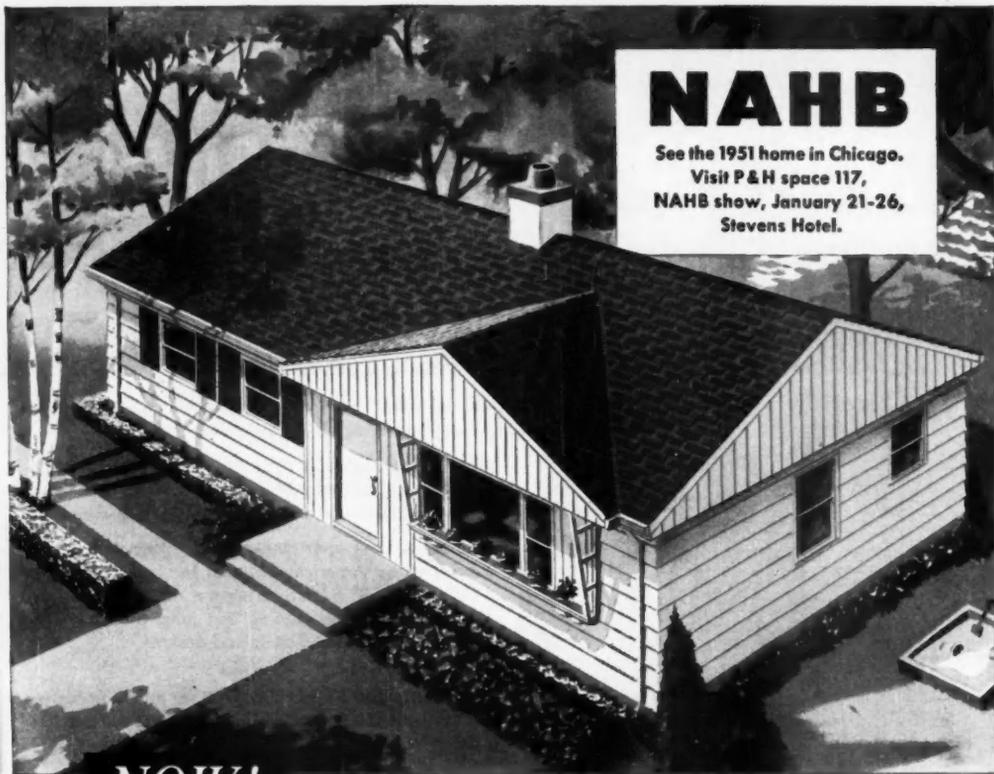
DeWalt, Inc., 11 Fountain Avenue, Lancaster, Pa.
Please send me literature and complete specifications on the new DeWalt GR.

Name.....

Address.....

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





NAHB

See the 1951 home in Chicago.
Visit P & H space 117,
NAHB show, January 21-26,
Stevens Hotel.

NOW!

P & H

*shows you how to win
on the 1951 Home Front*

You can triple your profits in 1951 by following the easy, P&H Builder Plan. Small and medium builders—get big project advantages—low, controlled costs; volume sales with minimum risk; maximum turnover on your money. End your supply problems. Whether you build 5 or 500 homes, P&H gives your projects eye appeal that's buy appeal; steady sales at competitive prices in line with current government restrictions.

Home buyers will recognize the individuality gained through the unlimited design combinations possible with P&H's three basic sizes, 24 elevations, and dozens of special features. Loan agencies value the lasting durability of P&H factory-engineered construction—backed up by Harnischfeger Corporation's 66 years in the construction industry. Let P&H show you how to win on the 1951 HOME BUILDING front, write today.

P & H

Harnischfeger Corporation

H O U S E S D I V I S I O N

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AMERICAN BUILDER

Builders: *when you specify*

ELJER
PLUMBING FIXTURES

your Home Buyers Receive



Prove it to yourself.. *see* ELJER Features
and you'll see *why* ELJER is First in

BETTER DESIGN • ADVANCED ENGINEERING •

OUTSTANDING QUALITY • HARMONIZING COLORS

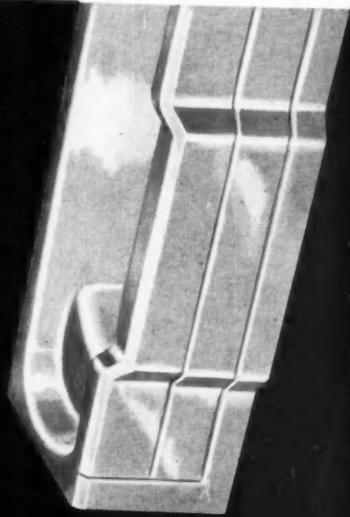
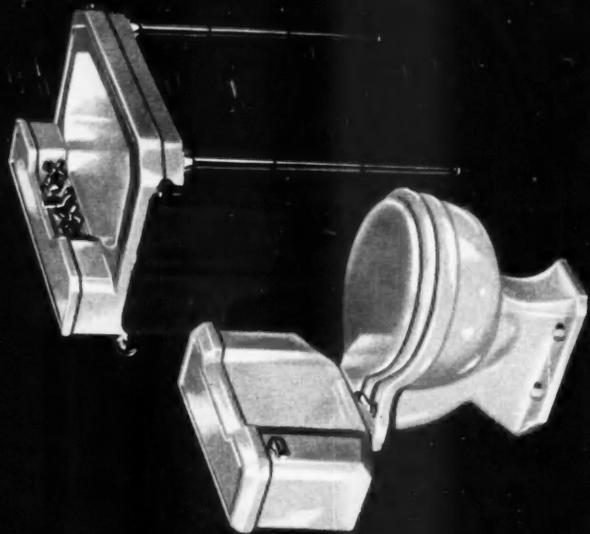
• RENEWABLE BRASS FITTINGS

**AS ADVERTISED IN
THE POST**

Here is the first of a new series of Eljer Advertisements to be seen by the more than 4,000,000 readers of The Saturday Evening Post. In other national publications, more millions of readers will likewise appreciate the beauty and styling of Eljer's Fine Plumbing Fixtures.



ELJER



Color

STARTS IN THE PLANNING

If you want a bathroom that excites admiration, architects and builders will suggest that you use colored plumbing fixtures. We suggest that you specify Eljer . . . in one of our soft, pastel colors that make it easy to have whatever decorative scheme you want. You *will* get quality . . . because Eljer colors *cannot* fade, become dull or lifeless. Bathtubs have an extra-thick finish that is fused to a *rigid cast-iron* base. Vitreous China Lavatories and Closet Combinations resist stains and are impervious to all ordinary acids . . . because they are *real* china. And, you'll find the finish easy to clean and keep clean . . . with just the swish of a damp cloth. So, be *sure* . . . write Eljer's Colored Plumbing Fixtures into your plans.



Ask your plumbing contractor, builder or architect to help you select the exact combination of fixtures you want for bathroom, powder room, kitchen or laundry . . . and for helpful ideas on the use of color, write Eljer Co., Box 192, Ford City, Penna.

ELJER HAS MADE MORE THAN 12 MILLION PLUMBING FIXTURES SINCE 1904 . . . FACTORIES AT FORD CITY, PA., SALEM AND MARYSVILLE, OHIO

**ELJER EQUIPPED HOMES
DO SELL FASTER...**

because... more and more people are asking for the
**EXTRA FEATURES available only in ELJER'S Fine
Line of Plumbing Fixtures and Brass Trim...**

THE ELJER LEGATION
*Offering advantages
found in no other bathtub*



EXTRA FEATURES . . . EXTRA CONVENIENCE . . . EXTRA SATISFACTION

Note the features and you'll see why the Eljer Legation Bathtub is in such demand. This *special* tub . . . an outstanding member of Eljer's complete bathtub line . . . offers your clients *plus* advantages found in no other tub. It gives *you* the opportunity to add extra convenience and satisfaction to the homes that you are planning.

Here are Legation features: thick, vitreous enamel over a rugged, rigid, cast-iron base; comfortable end-

seat; low front rim; wide, flat bottom for safety's sake; easy-to-clean rectangular shape; extra-wide front rim-seat; superb beauty; 5½' length; white or pastel colors.

The Eljer Line also includes a complete assortment of recessed and corner tubs in many sizes. For information, see the nearest Eljer Distributor or write to Eljer Co., Ford City, Pa. Specify Eljer and you specify extra convenience and extra satisfaction.

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

ELJER





ASSOCIATIONS

Their Plans and Activities



NAHB Sees Record Convention Turnout

High interest in discussions of builders' problems during emergency to spur 1951 attendance

UNUSUALLY high interest in the portions of the program devoted to analysis of the home building outlook, in the light of current controls, virtually assures a record attendance at the seventh annual convention of the National Association of Home Builders, it has been reported by the group's convention committee.

The industry-wide "town meeting" and products show will be held at the Stevens and Congress hotels, Chicago, January 21-25. Pointed out as other factors in the expected record turnout were the growth of the association during the past year—addition of around 15 new chapters and 3,000 new members—the month-earlier date and an intensive attendance campaign.

Discussion panels, clinics, shop-talk sessions and speeches have all been planned to attempt to give answers to the many difficult problems confronting the business. A group of outstanding authorities will be on hand to discuss regulations and controls.

Exposition Open Sunday

The big exposition of building materials and equipment opens Sunday afternoon, January 21, with more than 700 products on display in the exposition hall, foyer and mezzanine of the Stevens

and in the Casino Room of the nearby Congress Hotel.

The showing will include plumbing and heating equipment, lumber and mill-work, siding, roofing, insulation, hardware, paints, tools, electrical fixtures, all kinds of metal building products, flooring, tile, glass, kitchen and bathroom equipment and scores of specialty items.

A large percentage of the products shown will be either new or substantially improved models of existing products.

Exhibitors have made elaborate plans to assist builder-delegates at the exposition, sending an estimated 2,000 sales, executive and technical personnel to Chicago to demonstrate and explain their latest products. This is a sharp increase over previous years. Most exhibitors will offer consulting services to builders whereby they will analyze working plans and submit installation and design ideas.

As another service, many manufacturers have arranged to have their distributors, who are familiar with local building problems, augment regular exhibit personnel. Manufacturers will also use the occasion to conduct special sales and merchandising meetings for distributors and dealers who attend the show.

While the primary purpose of the exposition is to help builders in selecting the products they buy, it also helps manufacturers decide what to make. An interesting sidelight of the 1950 show, for example, is the case of a manufacturer of heating equipment who introduced a

(Continued on page 206)



ARRANGING finishing touches for NAHB convention program in New York recently were (seated, left to right): Peggy Raynor, NAHB Washington office; Paul S. Van Auken, convention-exposition director; E. M. Spiegel, convention chairman; Frank W. Cortright, executive vice president; (standing) Walton Onslow and William Molster, NAHB staff

CONVENTION HIGHLIGHTS

Sunday, Jan. 21

- 1:00 P.M. Exposition Grand Opening
Congress Hotel
- 2:30 P.M. Exposition Grand Opening
Stevens Hotel

Monday, Jan. 22

- 10:00 A.M. Women's Program for Home Builders
Housing for Minority Groups—a color film presented by Mrs. Velma Grant
Debate: "Does the House You Build Her Satisfy Mrs. America?"
- 10:45 A.M. First Discussion Groups
Financing and Management Under 608
Small Builders Shop-Talk Session
Earl Smith, Moderator
- Discussion Among Tax Counselors
- 1:00 P.M. First General Session
Presentation of NAHB officers
Feature: "Your NAHB Reports for 1950"
- 1:00 P.M. Inspection Tours of Chicago Housing
- 9:30 P.M. Exhibitor's Dance.

Tuesday, Jan. 23

- 10:00 A.M. Demonstration:
"Man from Mars"
Second Discussion Groups
Builders Tax Problems
Building and Merchandising Homes for \$20,000 and Up
Defeating Public Housing by Local Referees
Low Cost Economy Rental Apartments
Small Builders Shop-Talk Session—Earl Smith, Moderator
"Public Relations and Merchandising in 1951"—Fritz Burns
- 1:00 P.M. Inspection Tours of Chicago Housing
- 2:00 P.M. Second General Session
"Stretching the Supply of Building Materials in 1951"
- 8:00 P.M. Panel: Land Planning

Wednesday, Jan. 24

- 10:00 A.M. to Demonstration: "Man from Mars"
- 5:00 P.M.
- 10:00 A.M. Third Discussion Groups
1. "Simple Bookkeeping and Time and Material Accounting"
2. FHA-VA-Federal Reserve Board Questions and Answers
Small Builders Shop-Talk Session—Earl Smith, Moderator
Third General Session
Illustrated Address on Color
Beatrice West
Panel: "Better Design for Today's Houses"—NAHB-AIA Presentation and NAHB Architectural Forum Contest
Moderator: Clark Daniel
- 12:00 M. University Students Luncheon
- 1:00 P.M. Inspection Tour of Chicago Housing
- 2:00 P.M. Fourth General Session
Panel: "Status of Housing Construction and Problems of Mortgage Finance"
Rayman Foley, HWFA
T. B. King, VA
Franklin Richards, FHA
- 6:45 P.M. Annual Banquet
Entertainment by Eddie Carr

Thursday, Jan. 25

- 10:00 A.M. "On Stage Press Conference"
Retiring and New NAHB Presidents
Discussion: "Things I Never Knew 'til Now"—Earl Smith
Dr. Hi-Coo—Joseph Heverstick
Convention Closing by New President
- 1:00 P.M. Inspection Tour of Chicago Housing



Dealer's Viewpoint

H. R. NORTHUP, Executive Vice President,
National Retail Lumber Dealers Association

New Dealer Product Data Book

If, as practically everyone believes, there is to be a definite buyers' market for many building materials in 1951, the Dealer's Product Data Book about to be offered by N.R.L.D.A. and the Producers' Council is a most timely development.

Many manufacturers claim that retail lumber and building materials dealers don't do a very effective job of selling building products across the counter. And a good many dealers say that most manufacturers haven't done too good a job of providing dealers' salesmen with the right sort of selling information.

The new Data Book, which will be offered to dealers at approximate cost through their 32 State and Regional Associations, was developed for the express purpose of correcting both deficiencies. It will consist of a loose-leaf binder filled with product data sheets supplied by participating manufacturers. Additional data sheets and revised sheets will be issued from time to time to keep the Data Book up-to-date as a continuing service.

Developed over a period of two years by N.R.L.D.A.'s Products Data Committee, the Data Book is a well-planned project aimed at giving the dealer and his salesmen basic, factual sales data in com-

plete, convenient form. The emphasis is on FACTS which will tell the salesman what he needs to know about the uses, properties, packaging, etc., of the products he sells, so that he can give his customers accurate, complete information in a minimum of time.

The Data Book falls into a promotional category which has been greatly neglected. It is not intended to sell dealers on the desirability and profit possibilities of carrying individual products. That job is left to the business press.

Instead, the Data Book is intended to facilitate the sale of products once the dealer has accepted them as part of his line.

The Data Book is fully indexed for convenient reference and will contain in one place a wealth of essential data which often is not available in the sales department or else is scattered in a dozen locations when the salesman needs it.

With renewed emphasis on selling and the prospect of losing a good many younger employees to the armed forces, the retail lumber and building materials industry will find this new sales aid a welcome and valuable tool for training new employees and making more effective salesmen of the others. It will be available about February 1.

Laurels from the Ladies



THREE WINNERS of awards for exceptional service to South Texas Builders Association receive them from women guests of group at annual Frolic in Corpus Christi. From left: C. R. Layton, vice president and entertainment co-chairman; Mrs. Joe Holland; Mrs. Margaret Lindsey; L. V. Bert, director; Mrs. Barbara Crook; and Floyd Burt, entertainment chairman. At microphone is A. J. McCall, group president. Awards are made twice a year

Hoo-Hoo Officers Named at Convention

Elected Snark of the Universe at the 59th annual convention of the Concatenated Order of Hoo-Hoo in the Copley-Plaza Hotel, Boston, was Lynn Boyd of Pampa, Texas, a member of the executive committee of the National Retail Lumber Dealers Association and a former president of the Lumbermen's Association of Texas.

Members of the Supreme Nine are Supreme Hoo-Hoo Robert J. Stalker, Quincy, Mass.; Senior Hoo-Hoo Harry B. Weiss, Memphis, Tenn.; Junior Hoo-Hoo Martin J. McDonald, Port Arthur, Ontario, Canada; Scrivener John B. Egan, St. Paul, Minn.; Bojium John H. Dolcater, Tampa, Fla.; Jabberwock Edwin F. Fischer, Milwaukee, Wis.; Custodian Dave Davis, San Francisco, Calif.; Arcanoper Arthur H. Geiger, Tacoma, Wash.; and Gurdon Clifford Schorling, North Kansas City, Mo.

Plan Committee to Probe Frauds in Building

A plan to form a builders' investigation committee, to work with a recently-created Michigan state senate study committee for the purpose of safeguarding home buyers against operators who have shown they work by unethical standards, has been announced by John Weinhart, president of the Builders Association of Metropolitan Detroit.

According to Weinhart it is contemplated that the investigation group will be composed of representatives of all components of the home building business—builders, realtors, credit agencies, lumber and material dealers, subcontractors, labor and government agencies.

During the NAHB CONVENTION
the American Builder staff will
be on hand to greet you at
BOOTH NO. 85, STEVENS HOTEL

Clay Products Institute Picks 1951 Officers

C. Forrest Tefft, Columbus, Ohio, was elected president of the Structural Clay Products Institute at the recent annual convention in Colorado Springs, Colo. Completing the new officer roster are L. S. Meyer, St. Louis, vice president; George Gammie, Chicago, treasurer; and Joseph J. Cermak, Washington, D.C., secretary. Tefft, who is president of the Claycraft Co. in Columbus, succeeds W. J. Goodwing of Des Moines, Iowa.

Woodwork Jobbers Elect

Carl G. Horn of the Iroquois Millwork Corp., Albany, N. Y., was re-elected president of the Woodwork Jobbers Service Bureau at the 1950 annual meeting in Atlantic City, N. J. Other officers are A. J. Jordan, Jordan Millwork Co., Sioux Falls, S. D., vice president; Phil Hill, Harbor Plywood Corp., Chicago, treasurer; and Adolph Pfund, secretary.

AMERICAN BUILDER

New Chicago President



E. C. MAHONEY, former vice president, was named president of the Chicago Metropolitan Home Builders Association, succeeding A. O. Aldrich, at the annual election meeting Dec. 7. Other officers for the new year are: Vice Presidents Martin H. Braun, J. T. Schless (reelected), Cornelius Teninga and Harry L. Nathansen, Secretary C. E. Blomgren and Treasurer Morton Robbins.

1951 Leaders Named by Hartford Association

Dean A. Caudill was elected president of the Home Builders Association of Hartford County, Conn., succeeding Arthur Oleson, at the group's recent annual meeting for induction of new officers. A record member attendance of 135 was set at the session, at which Thomas P. Coogan, president of the National Association of Home Builders, and Irving R. Stich, NAHB regional vice president, were guests.

Also named to lead the Hartford group in 1951 were Joseph M. Howard, first vice president; C. Oscar Carlson, second vice president; Howard L. Menzel, secretary; and Carl E. Larsen. Directors are Patsy R. Ambrose, Robert Hopkins, Aage Jespersen, Edward T. Murphy, Samuel Walters, Justin R. Tucker and Joseph Slobin.

Prior to the meeting, at which he spoke and led a question and answer session, National President Coogan visited a number of building projects in the area.

New Officers Named by Wisconsin State Group

E. B. A. Sokoloski of Madison was elected president of the Wisconsin Builders' Association at a recent meeting in Milwaukee. Other officers for the 1951 term are Charles W. George, Milwaukee, vice president; Glenn D. Webermeier, Beloit, secretary; and John Parmentier, Kenosha, treasurer.

Named to the board of directors were: Tom McGovern, G. J. Goucher and Jim Imhoff, Madison; R. A. Lainey, Sid Dwyer and Harris K. Evans, Milwaukee; La Verne Burmeister, Janesville; Richard Hansen, Kenosha; H. M. Grommes, Beloit; E. A. Precour, Oshkosh; E. A. Luech, Watertown; and Joseph Callaway, La Crosse.

JANUARY 1951

Cortright's Column



FRANK W. CORTRIGHT, Executive Vice President, National Association of Home Builders of the United States

608 Program an Outstanding Success

In my many visits to different parts of this country in the past few weeks I have heard unfortunate rumors regarding the status of this Nation's program of rental housing—that built under Section 608 of Title VI, as administered by the Federal Housing Administration. The rumor mongers would have the country overbuilt in rental housing, with hundreds of projects in default and the taxpayers taking a licking. Nothing could be further from the truth.

This type of controversy, based on thin-air assumptions, can do much harm to public confidence in the FHA. The rumors should be dispelled for what they are—just unfounded rumors.

Actually, the 608 program has been one of astounding success, thoughtfully planned and ably administered. Both the private builder and the FHA can be immensely proud of the record. When you think back to the vast number of problems involved, the record is even more remarkable.

Emerging from a long, hard-fought war, in which very little private housing was permitted to be erected for nearly five years, the nation faced a drastic shortage of both rental and for sale units in 1945. Emergency measures were needed to provide good housing—FAST. Section 608 was set up to stimulate rapid construction and provide the needed housing. The program was emergency in nature, but the resulting construction was something that will stand for generations to come. Let's review for a moment what has been done along these rents' lines. Has this immense rental housing program been mishandled? Absolutely not!

There has been the unbelievable volume of over 6,500 DIFFERENT rental projects erected so far under Section 608. These 6,500 projects contained over 400,000 separate apartments, enough to house an estimated two million persons comfortably! And keep in your mind that these projects were erected in a time of crisis, when emergencies were the order of the day, when speed was the byword and "Get the veterans housed" was heard constantly at every corner.

For the first time one is able to review the progress and achievements made under this program. How many projects are in default as of today? Out of the huge number of 6,500 projects, a mere 1.28 per cent are in default! This is all the more remarkable when one considers that the program was so emergency in nature. This 1.28 per cent contains about 5,000 units, or about 1/80th of the total built!

Most of the unfavorable publicity which the 608 program has received has been based on defaults of 608's in one resort area. These have been few and far between in the light of projects insured. In fact, as of right now, FHA has had to take back only 36 projects over the country by foreclosure—only 36 projects out of 6,500, a total of 5,200 units.

The 608 program is a successful one. The record shows that. It is important that everyone understand the success attained by this program. With the Communist threat getting stronger every day, and our defense muscles flexing more rapidly, it will again be necessary to erect emergency rental housing. It is urgent that similar financing vehicles be available to private enterprise to spur such housing. Congress and the public will be much easier to sell on the merits of such financing if full information on the success of the 608 program is made public and fully understood.

Chicago Builder Secretary Named FNMA Manager

John P. McCollum, formerly executive secretary of the Chicago Metropolitan Home Builders Association, has been appointed manager of the Chicago office of the Federal National Mortgage Association.



John P. McCollum

McCollum has had years of experience in both private real estate and building and government work, in which he served with the Home Owners Loan Agency and as deputy regional representative of the National Housing Agency.

Commenting on the appointment, Martin C. Huggett, executive vice president of the Chicago builder group, said:

"What appears to be a loss to our staff operations may prove of benefit to our banker and builder members, since the purchase and handling of government-insured mortgages is the chief business of FNMA. We are glad to have a friend and former close associate in such a strategic position."

30-Day College Courses Prove Value to Dealers

For the fifth straight year, the 30-day courses for employees of retail lumber and building material dealers are making a major contribution toward industry training and efficiency, the National Retail Lumber Dealers Association reports.

Developed by NRLDA's educational department from a training program originally set up by the Western Retail Lumbermen's Association of Seattle, 17 of these classes have already been scheduled in 14 colleges and universities for the current school year.

Subject matter of the course is divided into three groups: product subjects, in which properties and uses of the various species of lumber and of most major building materials are analyzed; general business topics, including advertising, business records and bookkeeping, business law, writing of business letters, credits and collections, mortgage financing, insurance, pricing and purchasing, selling and store and yard arrangement; and construction and estimating subjects, which cover blueprint reading, design and construction, estimating and farm structures.

Prior to the present school year, some 4,000 employees from 3,000 yards had completed 89 of the 30-day courses.

New York State Group Formed



LOOKING OVER constitution and by-laws of newly-formed New York State Home Builders Association at organization meeting in Albany are (from left) Leonard L. Frank, president of the Long Island Home Builders Institute; Albert Bartlett, Syracuse, president of new group; Joseph Entress, Rochester, vice president; and Leo P. Byrnes, Albany, secretary. Oscar R. Giesecke, Buffalo, (not in picture) is new state treasurer. The state association was organized by delegates from local chapters in Long Island, Westchester, Albany, Schenectady, Syracuse, Rochester, Buffalo, Niagara Falls, Elmira and Binghamton.

Get a BOOT out of Winning



GOAL OF 100 PER CENT has been set in new membership drive by Home Builders Association of Schenectady, N.Y. Pictured here with cowboy boots, souvenir of the recent Texas meeting of NAHB directors, are (sitting) Ralph Palmer, left, and Vince Popolis, captains of the competing "Hammer" and "Saw" teams; (standing) Lou Lafforthun, association executive secretary; William Priess, president; Bryant Kolner, chairman, membership committee; Thomas Wysocki, vice president; and Frank Cimco, treasurer. Winning team will retain possession of both boots and be treated to dinner by association. One year-old NAHB affiliate now has 53 members, started with a registration of 15.

Regulation X Effects Probed by Texas City

A survey by the South Texas Home Builders Association, Corpus Christi, of the last 100 loans made by 10 local mortgage companies revealed that, on the basis of verified cash on hand, only 39 per cent of borrowers would have qualified had Regulation X been in effect.

Analysis of the 1,000 loans showed 51 per cent of the borrowers had less than \$1,000 in cash, 21 per cent had from \$1,000 to \$2,000 and 18 per cent had over \$2,000.

Of the homes on which loans had been made, 74 per cent cost less than \$10,000, 12 per cent cost from \$10,000 to \$20,000 and 4 per cent had price tags of more than \$20,000.

Right
from

House Beautiful

BETTER your home...better your LIVING

A DIGEST OF SALES-BUILDING IDEAS FOR YOUR BUSINESS FROM THE PAGES OF FEBRUARY HOUSE BEAUTIFUL WHICH REACHES YOUR BEST CUSTOMERS ON OR ABOUT JANUARY 20th

RIGHT FROM HOUSE BEAUTIFUL ADVERTISERS

FOR EASIER, MORE PROFITABLE SALES TIE-IN YOUR FORTHCOMING PROMOTIONS WITH THESE FAMOUS NAMES FEATURED IN THE ADVERTISING PAGES OF FEBRUARY HOUSE BEAUTIFUL

INSULATION

- 87. JOHNS-MANVILLE "BLOWN" HOME INSULATION**
JOHNS-MANVILLE CORP.

SURFACING MATERIALS

A. WALLS & CEILINGS

- 7. GENUINE CLAY TILE**
TILE COUNCIL OF AMERICA
- 8. MISSISSIPPI STRUCTURAL GLASS**
MISSISSIPPI GLASS COMPANY
- 9. PITTSBURGH PLATE GLASS**
PITTSBURGH PLATE GLASS CORP.
- 10. WELDWOOD PLYWOOD**
U. S. PLYWOOD CORPORATION
- 11. YORK WHITE ROSE WALLPAPERS**
YORK WALLPAPER CO.

B. FLOORING

- 12. BRUCE RANCH PLANK FLOOR**
E. L. BRUCE CO.
- 13. NAIRN INLAID LINOLEUM**
CONGOLEUM-NAIRN, INC.
- 14. RUBBER TILE**
DAVID E. KENNEDY CO., INC.
- Rubber Tile, by the makers of Kentile, provides quiet, lustrous floors of "cushioned beauty" that won't wear out through years of use. No other Rubber Tile offers all these beautiful colors and exclusive, decorative ThemeTile and Feature strips. 14 harmonized colors. David E. Kennedy, Inc., 58 Second Avenue, Brooklyn, N. Y.

WINDOWS, DOORS & EQUIPMENT

- 15. ANDERSON WINDOW WALLS**
ANDERSEN CORP.
- Window beauty of Andersen WINDOW WALLS is again featured in powerful photographs. Window walls are those fine complete window units made of beautiful, insulating wood. They function simultaneously as well as windows.
- 16. CRAWFORD MARVEL-LIFT DOOR**
CRAWFORD DOOR COMPANY
- The only garage door backed by continuous national advertising in leading consumer and

architectural magazines. Single and double widths, many sizes, with Crawford Marvel-Lift Mechanism which activates BOTH sides of door evenly and gives finger-tip double width door. Radio control available.

17. MODERNFOLD DOORS NEW CASTLE PRODUCTS

In 1951 New Castle Products will promote the sales of "Modernfold" accordion-type doors and their amazing space-saving, more aggressively than ever in all markets, in consumer magazines "Modernfold" door advertisements will appear in 4-color, bringing out the full beauty of these vinyl-covered, steel-framed closures. Literature available. NEW CASTLE PRODUCTS, New Castle, Indiana.

18. PELLA CASEMENT WINDOWS ROLSCREEN COMPANY

19. THERMOPANE LIBBEY-OWENS-FORD GLASS COMPANY

PAINTS

- 20. NU-HUE CUSTOM COLOR PAINTS**
MARTIN-SENOUR CO.
- Nu-Hue Custom Color Paints are precision mixed in any one of almost 2,000 tones, shades and tints, in flat, semi-gloss and high gloss as well as tinted sealer. They are available through prescription mixing machines located in leading paint, department and hardware stores throughout the United States. Nu-Hue Custom Colors come to the consumer packaged in even gallons or quarts—ready-to-use.
- 21. O'BRIEN PAINTS**
O'BRIEN CORP.
- 22. RAMUC ENAMEL FOR POOLS**
INERTOL, INC.

SANITARY EQUIPMENT

A. PLUMBING

- 23. CRANE DREXEL LAVATORY**
CRANE CO.
- Featured in this issue is the Crane Drexel Lavatory in Persian Red. This color is ideal for modern powder rooms. All Crane fixtures are available in white and eight exclusive Crane colors. A wide range of plumbing is available to suit every taste and every budget.
- 24. ELJER FINE PLUMBING FIXTURES**
CRANE CO.

B. GARBAGE DISPOSERS

- 25. G-E DISPOSALL**
GENERAL ELECTRIC CO.
- 26. IN-SINK-ERATOR FOOD WASTE DISPOSER**
IN-SINK-ERATOR MFG. CO.
- IN-SINK-ERATOR, the original Food Waste Disposer with famous Reversing Action, is telling millions of homemakers about its extra advantages via full page color advertising. The convenience and efficiency of safe Continuous Feeding . . . the superiority of Reversing Action . . . the proved dependability since 1928 are highlighted. Write In-Sink-Erator Mfg. Co., Racine, Wisconsin for builders data.



AMERICAN STYLE HOUSE

—for year-round comfort, right from the editorial pages of February House Beautiful. Indoors and outdoors are perfectly integrated. It gives its occupants both privacy and view. It's designed for comfort—not show. Honest use is made of simple materials. Each room has its "garden", and living space extends, literally, from one property line to the other. Watch for this important house—its ring of outdoor "rooms" for relaxation, its Climate Control principles, its strategic arrangement of fences for privacy, its simplicity and efficiency for easy family living. Keep pace with the best new home prospects of your area by using its American Style characteristics, singly or collectively, in your business!

HEATING

- 27. B & G HYDRO-FLO HEATING**
BELL & GOSSETT
- 28. BURNHAM BASE-RAY RADIANT HEATING**
BURNHAM CORP.
- 23. CRANE BASEBOARD HEATING**
CRANE CO.
- 29. DELCO-HEAT CONDITIONAIR DELCO APPLIANCE DIVISION**
GENERAL MOTORS CORP.

New homes sell better when they're equipped with Delco-Heat! The Delco-Heat Conditionair with exclusive "Rotapower" Oil Burner automatically heats, cleans, humidifies and circulates the air. Delco-Heat makes automatic heating equipment for oil fuels, all heating systems, all sizes of homes. Write for literature. Delco Appliance Division, Rochester 1, N. Y.

30. DELCO-HEAT CONVERSION OIL BURNER
DELCO APPLIANCE DIVISION
 GENERAL MOTORS CORP.

31. DELCO-HEAT OIL-FIRED CONDITIONAIR
DELCO-APPLIANCE DIVISION
 GENERAL MOTORS CORP.

32. HEATILATOR FIREPLACE UNIT
 HEATILATOR, INC.

33. LP WINKLER OIL BURNER
 U.S. MACHINE CORP.

35. MINNEAPOLIS-HONEYWELL THERMOSTATS
 MINNEAPOLIS-HONEYWELL
 REGULATOR CORP.

36. MODINE CONVECTOR RADIATION
 MODINE MFG. CO.

You can provide the luxury of hot water or steam heating at economical cost if you use Modine Conectors. Less expensive than cast iron radiators. No special floor construction as with radiant panels. Installed in the wall or free standing Modines conserve floor space, are unobtrusive, provide finest heating comfort.

37. MOR-SUN FURNACE

MORRISON STEEL PRODUCTS, INC.
 MOR-SUN pressed steel furnace (for gas and oil) unique in that it is MASS PRECISION PRODUCED! Every part is die-pressed. Beautiful on the outside and rugged efficiency on the inside are not enough; The MOR-SUN gives more dependability — through use of quality control equipment. MOR-SUN, finest, most beautiful furnace in the world!

* **WEBSTER BASEBOARD HEATING**

WARREN WEBSTER & COMPANY
 Every month in House Beautiful, Webster advertising tells your prospects about Webster Baseboard Heating — true perimeter heating with forced hot water. Proven in service in more than 12,000 installations. Descriptive literature on request! To Warren Webster & Company, Dept. HAB-2, Camden 5, New Jersey.

38. WILLIAMS OIL-O-MATIC OIL BURNERS
WILLIAMS OIL-O-MATIC DIVISION
 EUREKA-WILLIAMS CORP.

39. YOUNG RADIATORS
 YOUNG RADIATOR CORP.
 Young runs an ad showing "How To Eliminate Drafts From Picture Windows." We also point out how Conectors can be used to harmonize with interior decorating of the room.

MAJOR APPLIANCES

40. HAMILTON AUTO. CLOTHES DRYER
 HAMILTON MFG. CO.

44. ST. CHARLES KITCHENS
 ST. CHARLES MFG. CO.

41. YOUNGSTOWN KITCHENS
 MULLINS MFG. CO.

"World's Newest Kitchen Ideas — priced right for you!" includes greatest helpers ever, from Youngstown Kitchens. Beautiful new timesaving units, including revolutionary Youngstown Kitchens Jet-Tower Dishwasher, that completely modernizes dishwashing, keeps homes you build modern for years to come. By Mullins Manufacturing Corporation, World's Largest Makers of Steel Kitchens.

HOME ELEVATORS

42. SEDGWICK RESIDENCE ELEVATORS
 SEDGWICK MACHINE WORKS

43. SHEPARD HomeLIFT & EscalLIFT
 SHEPARD ELEVATOR CO.

HARDWARE

45. NATIONAL TUTCH LATCH
 NATIONAL LOCK CO.

National Tutch Latch is a new innovation in cabinet hardware. Easily applied to interior of wood cabinets, it opens cabinet doors with touch of finger, wrist or elbow. When door is closed, latch holds securely. Beauty, convenience and low cost are described as outstanding features. National Lock Co., Rockford, Illinois.

MISC. EQUIPMENT

34. MAJESTIC INDOOR INCINERATOR
 MAJESTIC COMPANY

LIGHTING

* **KLOZ-A-LITE**
 SLATER APPLIANCES

FENCES

46. DUBOIS WOVEN WOOD FENCE
 DUBOIS FENCE & GARDEN CO., INC.

47. RUSTICRAFT WOVEN PICKET FENCES
 RUSTICRAFT FENCE CO.

GARDENING

A. SEEDS, BUSHES, FERTILIZERS, ETC.

48. BURPEE FLOWER & VEGETABLE SEEDS
 W. ATLEE BURPEE CO.

Burpee Flower and Vegetable Seeds come in full color packets with modern steel counter or floor racks. 100% mark-up; return unsold packets for credit at end of season. Special attention given Garden Departments of Dept. Stores, Variety, Food, Drug, Hardware and Chain Stores. Sell the most-advertised brand!

49. DOWFLAKE
 DOW CHEMICAL CO.

* **JACKSON & PERKINS CATALOGUE OF ROSES**
 JACKSON & PERKINS

Jackson & Perkins, World's Largest Rose Growers, feature their Spring 1951 Catalog in the February issue of House Beautiful. This new Catalog, which is sent free, describes and illustrates — in full color — hundreds of the world's finest roses. Be sure to see the advertisement and send for your free copy.

50. JACKSON & PERKINS CHRYSANTHEMUMS
 JACKSON & PERKINS

Six brand-new September-blooming Chrysanthemums are now being offered by Jackson & Perkins, the world's largest rose growers. These are all hardy, large flowered, early blooming "mums" with excellent plant habits. All guaranteed to live and bloom. Be the first in your neighborhood to display them. Only \$1.00 each.

* **PREMIER PEAT MOSS**
 PREMIER PEAT MOSS CORP.

51. SCOTT'S' LAWN CARE PRODUCTS
 O. M. SCOTT & SONS

Most folks are looking forward to Spring, and thousands are already planning their lawn improvements with the help of LAWN CARE. A free 2 year subscription to these know-how bulletins is offered by Scotts. Display Scotts Seed and Turf Bu'nder now for those who want to benefit by early seeding and feeding.

B. EQUIPMENT & ACCESSORIES

52. CLINTON ENGINES
 CLINTON MACHINE CO.

53. MOTO-MOWER POWER MOWERS
 MOTO MOWER COMPANY

The Moto-Mower Company announces that the new 1951 models of "Moto Boy" and "Scout" will be supplied with a "Weed Topper" as optional equipment. "Weed Topper" is the first fundamental improvement in power lawn mowing, greatly reducing time consumed in trimming weeds.

* **ORLYT GREENHOUSES**
 LORD & BURNHAM CORP.

* No card available.

Send for your
FREE DISPLAY

Send for your FREE House Beautiful Window and Counter Display Card this easy way. . . .

Circle the numbers below which appear beside the advertisements you wish mounted, fill in your name and mailing address and mail coupon to: Merchandising Division, House Beautiful Magazine, 572 Madison Avenue, New York 22, N. Y.

AB FEB.

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	41	42	43	44	45	46	47
48	49	50	51	52	53	87							

NAME _____

ADDRESS _____

CITY _____ ZONE _____ STATE _____





Mr. Donald Orth

Illinois Builder says:

"I prefer **NU-STYLE** cabinets

because they are "tops" in design,
workmanship and simplicity. My

carpenters especially like them. Nu-Style
Cabinets beat making them ourselves."

Mr. Donald Orth
Orth Construction Co.
Washington, Illinois



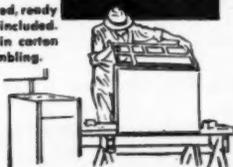
These beautiful kitchens show some of the many practical and decorative arrangements possible with NU-STYLE Cabinets.



NU-STYLE
UNIT WOOD
KITCHEN CABINETS

EASY TO ASSEMBLE!

All parts are completely machined, ready to assemble. All hardware is included. Simple, illustrated instructions in carton guide step by step in the assembling.



AND TO BUILDERS EVERYWHERE...

Do you realize that Bilt-Well Nu-Style Cabinets have been designed around your proven skill and craftsmanship? For over 84 years we have depended on you to assemble and install all Bilt-Well Products. It has definitely convinced us that this is the most economical method.

Therefore, we have designed this Nu-Style K.D. Packaged Cabinet line realizing that the Builder is still the most important factor in assembling and installing Bilt-Well Woodwork.

When we design Bilt-Well Woodwork we always think of the Builder. When you build fine homes think of Bilt-Well Woodwork!

CARR, ADAMS & COLLIER CO.

Dubuque, Iowa

**BILT-WELL
WOOD+WORK**

Manufacturers of the
Famous Bilt-Well Line

UNITS TO
FIT ANY
SHAPE OR
SIZE OF
KITCHEN



CEILING UNITS



UPPER UNITS



LOWER UNITS

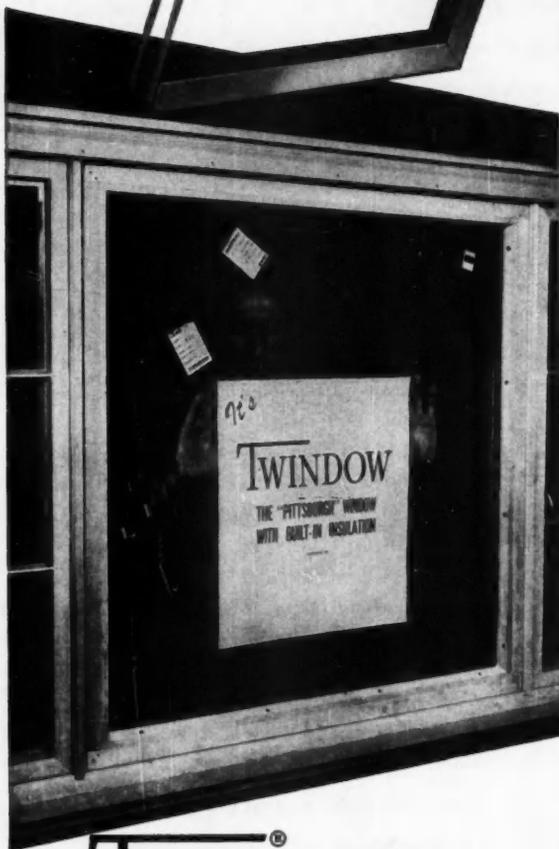


STORAGE UNITS

Mantels & Telephone Cabinets • Multiple-Use & Linen Cabinets • Stair Parts • Nu-Style Cabinets • Superior Unit Wood Windows • Exterior & Interior Doors • Entrances • Shutters • Clos-tite Casements • Carr-dor Garage Doors • Basement Unit Windows • Louvers & Gable Sash • Breakfast Nooks • Combination Doors • Screens & Storm Sash • Corner (China) Cabinets • Gli-dor Cabinets • Ironing Board Cabinets

TWINDOW[®] *has the edge!*

Its stainless steel frame makes it
easier and safer to handle . . .
saves installation time on the job.



WITH larger window areas becoming more and more popular with home buyers all over the country, it is good for the builder to know that he has at his disposal a product like Twindow, Pittsburgh's window with built-in insulation. Here is a quality unit, the result of fifteen years' experience in the manufacture of double-glazed window units by the world-famous Pittsburgh Plate Glass Company.

Twindow affords all the notable advantages of large windows, without sacrificing heating or air-conditioning economy. It saves fuel by keeping cold air out and warm air in. It permits the use of smaller, more economical heating and air-conditioning equipment. Now, folks can sit near their picture windows, even on the coldest days—enjoy the outdoor scene—without the discomforts caused by "cold spots" and downdrafts.

Completely prefabricated (forty-seven standard Twindow sizes are available, adaptable either for steel or wood sash), Twindow has a stainless steel frame which eliminates complex installation problems. This frame protects the seal and glass edges. It's safer and more easily handled; saves time on the job.

You'll want to know more about Twindow. So why not fill in and return the coupon below for all the facts? Do it now, while you're thinking about it.

Pittsburgh Plate Glass Company
2039-1 Grant Building, Pittsburgh 19, Pa.

Without obligation on my part, please send me descriptive literature and installation details on TWINDOW.

Name

Address

City State

TWINDOW[®]

the window with built-in insulation



PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

Letters to the Editor

100 Per Cent Renewal

Sirs: We are enclosing our list of subscribers to the *American Builder*. You will note two names have been cancelled, five new added. In checking with the contractors receiving the *American Builder* through our firm, we find them 100 per cent for renewing the subscription and in a few cases they also wanted to know how and where they could become subscribers if we discontinued this service. This is a compliment to you and the *American Builder* for doing a fine job.

Alvin S. Johnson
Standard Lumber Yards, Inc.,
Green Bay, Wis.

Liked Insulation Issue

Sirs: We were very interested in the complete insulation and ventilation article in the September, 1950, issue of the *American Builder*. This is as complete a treatment on the whole question as we have seen without hunting from page to page through technical books.

J. S. Watson,
Valley Lumber Yards Ltd.,
New Westminster, B. C.

New Subscriber

Sirs: I saw your June 1950 issue and am very enthusiastic over the way you covered the subject of cement and concrete. I consider it the most interesting and informative article I've ever seen on the subject. Would you send me your June, 1950, issue along with a year's subscription. If you cannot send me this back issue, would you please let me know where I can get it?

Jos. Cihlar
Cihlar Concrete Products,
West Sturgeon Bay, Wis.

Precast Floor Units

Sirs: In your June issue of *American Builder* you have "A Report On Cement." Included in this report on page 97 are pictures of precast floor units. I would appreciate it if you will tell me where these are made. Thank you.

Edward J. Fitzgerald,
Winsted, Conn.

EDITOR'S NOTE: Photographs on page 97, June, 1950 issue, *American Builder*, show Flexicore units. You may obtain further information about them by writing to The Flexicore Co., Inc., P. O. Box 825, 1932 E. Monument Ave., Dayton 1, Ohio.

JANUARY 1951

Warm Idea For Cold Floors

Sirs: Your excellent article on insulation appearing in the September, 1950 issue prompts me to present a problem to you. Last year I completed . . . a one story ranch type home with a partial basement. I left several large openings from the basement area to the unexcavated area so that there could be some circulation of warm air. While carpeted surfaces do not present any problem, two of the bedrooms and a playroom have either linoleum or rubber tile over the oak floor and these surfaces are uncomfortably cold for my children because it would take considerably more heat in the basement to reach the unexcavated areas effectively. I wonder if you would be in a position to advise me how to overcome this problem. . . .

A Detroit Builder

EDITOR'S NOTE: We assume the area you speak of as unexcavated is in reality a crawl space, since you mention having left several large openings from the basement into this area for circulation of warm air. The problem you are confronted with is dampness coming up through the ground of the crawl space, offsetting and completely minimizing the value of any heat which might be forced into this area. If it is at all possible it would be better to place a bed of sand upon the present ground of the crawl space then a moisture barrier over the sand, and then a two-inch concrete slab on top of the moisture barrier. This will help seal this area from dampness that otherwise penetrates into it. Warm air being forced into that area would then heat the underside of the floor. If this is not possible then a good grade of mass insulation should be secured to the underside of the floor joists. This will permit warm air in the room to warm the floor.

Several readers have asked about winners of the 1950 Architectural Contest For Women Students sponsored by *American Builder* and the National Association of Home Builders. A recent report from Sonia Albert, 1950 Second Prize winner, is a partial answer. Miss Albert, recently returned from architectural study in Stockholm, Sweden, is now working for Architect Edward D. Stone in New York City. We wish her every success.

—The Editor

NOW

Easier reading,
longer wearing

STANLEY "Green End" RULES



with
Five Star
Features...

- ★ Easier Reading—Large jet-black Gothic numerals and graduations—plastic coated for permanence.
- ★ Longer Wearing—Solid nickel silver joints and strike plates—rustproof, stainless—assure smooth action.
- ★ More Accurate—Concealed joints with "ball socket" action—prevent stretching—hold rule rigid.
- ★ NEW Protective Finish—Extra-tough, water-resistant plastic coating on all sticks—4 times longer wearing.
- ★ Selected Sticks—Straight grain solid Rock Maple—tough and flexible.

By any rule the best buy is Stanley. Your local dealer carries Stanley Zig-Zag Rules in a wide range of sizes, markings and finishes.

STANLEY TOOLS • NEW BRITAIN, CONN.
THE TOOL BOX OF THE WORLD

STANLEY

Reg. U.S. Pat. Off.

HARDWARE • TOOLS • ELECTRIC TOOLS
STEEL STRAPPING • STEEL

**From Maryland to
California and all
stops in between,
builders tell us :**



"It's the realistic way



Mr. J. P. Lenny, President of J. P. Lenny Co., Runnemede, N. J., says:

"Credit restrictions will make the market more competitive . . . impose upon the builder the necessity of producing a product that will invite eager consumer acceptance.

"In planning our new 1951 'Cinderella Homes' we intend to emphasize the use of General Electric Kitchens.

"We used G-E appliances during 1950, and sold 55 of our 137 houses on opening day!"



Mr. M. T. Broyhill made his own private survey in Washington, D. C. to find out what people wanted most. He says:

"83% of the people interviewed said they wanted a General Electric Kitchen. So we built 1000 G-E equipped houses—and sold all of them within 60 days."

Mr. Broyhill also reports: "During 1951 it's more important than ever that we give house-hunters what they want.

"We wouldn't think of not including the G-E Kitchens."



Mr. Frank F. Sebastian, President and Director of Arden Manor Investment Co., Sacramento, Cal., says:

"All 2200 homes in the Arden Manor Community are to be completely equipped with General Electric Kitchens and Laundries.

"More than ever, this major feature gives our homes a distinct advantage over others selling in the same price field.

"We think it's the realistic way to sell houses in 1951."



Mr. H. R. Houck of Houck Realty Co., Houston, Texas, says:

"We sold 170 houses equipped with G-E Kitchens during 1950. This year we again plan on featuring G-E Kitchens because we know it gives our homes an edge over others in about the same price bracket."

Mr. Arthur Oman of Arthur Oman & Sons, Inc., Brockton, Mass., says:

"During 1950 we included G-E Kitchens in our Brook Hill Development houses. We sold 125 houses in just 10 days! Naturally, we expect to capitalize on our success with G-E Kitchens during 1951."





Mr. Thomas P. Coogan, President of the National Assn. of Home Builders, states:

"I have been particularly pleased with the General Electric appliances installed in our exclusive Bal Harbour Manor.

"We all know that considerably greater selling effort will be required during the coming year. And the builders who will profit most are those who use initiative and imagination."



to sell Houses in '51"



Mr. Michel Randal of Randal Associates is planning to include General Electric appliances in his new 350-home project at Richmond Park, Bethpage, Long Island, N. Y.

"In selling houses these next 12 months," says Mr. Randal, "the General Electric Kitchen can be a more potent selling tool than ever!

"We're looking forward to offering these excellent, all-electric appliances in our homes!"

WE DON'T HAVE TO TELL YOU that fewer houses will be built this year.

But the fact remains that hundreds of thousands of houses will be built and sold during 1951.

And, the houses that will sell the *fastest* in this more competitive market will be the very type that sold fastest during 1950 . . . houses with all-electric living . . . houses with the efficient General Electric Kitchen-Laundry!

**MORE THAN EVER—
IT PAYS TO FEATURE
THE GENERAL ELECTRIC
KITCHEN-LAUNDRY**

1951 Planners from St. Louis, Wichita and other cities also agree . . .

Mr. N. R. Schuermann of St. Louis, Mo., says:

"Last year more than 7000 came to see our house on opening day and 109 bought. We sold over 500 houses equipped with General Electric Kitchens.

"During 1951 the home with the General Electric Kitchen will have even a greater appeal and advantage over others in a

similar price range."

Other successful builders from Wichita, Terre Haute, Chicago, and other areas also agree with Mr. Schuermann's basic views.

IMPORTANT NOTE: *Since considerably greater selling effort will be required for your houses during 1951, why not put General Electric on your selling team?*

**SEE
NEXT TWO
PAGES FOR
ADDITIONAL
DATA**

GENERAL  ELECTRIC

Which plan will you



Why not let G-E pre-sell your houses?

General Electric offers you all this:

- Tested merchandising programs that have helped so many other builders enjoy phenomenal sales results.
- The brand of electrical appliances that people prefer to all others.
- One source of supply for matched equipment . . . a full line of cabinets and appliances.
- Assistance in designing and improving kitchen layouts for your houses.
- And most important: G-E equipment is world-famous for its *dependability!*

You can put your confidence in—

GENERAL ELECTRIC

offer home buyers?

◀ This efficient General Electric Kitchen includes: Automatic Dishwasher-Sink and Disposall,[®] Automatic Washer, Range, Refrigerator, and all-steel cabinets.

You can offer this General Electric Kitchen to your prospects for as little as \$5.94 extra a month through a long term "Packaged Mortgage" plan. As so many other builders are planning to do, *feature* the General Electric Kitchen-Laundry in the homes you build.

▶ People must have a refrigerator and a range to live in your house. Just to buy a refrigerator and a range, under present credit regulations, would cost them about \$25.50 a month over and above their regular mortgage payments.

On the other hand, you can give them a complete General Electric Kitchen for only \$5.94 a month! Which plan will you offer home buyers?



TAKE ADVANTAGE OF OUR ARCHITECTURAL CONSULTING SERVICES AT THE CONVENTION

General Electric planning experts will be glad to talk with you about your 1951 projects at the Chicago Convention.

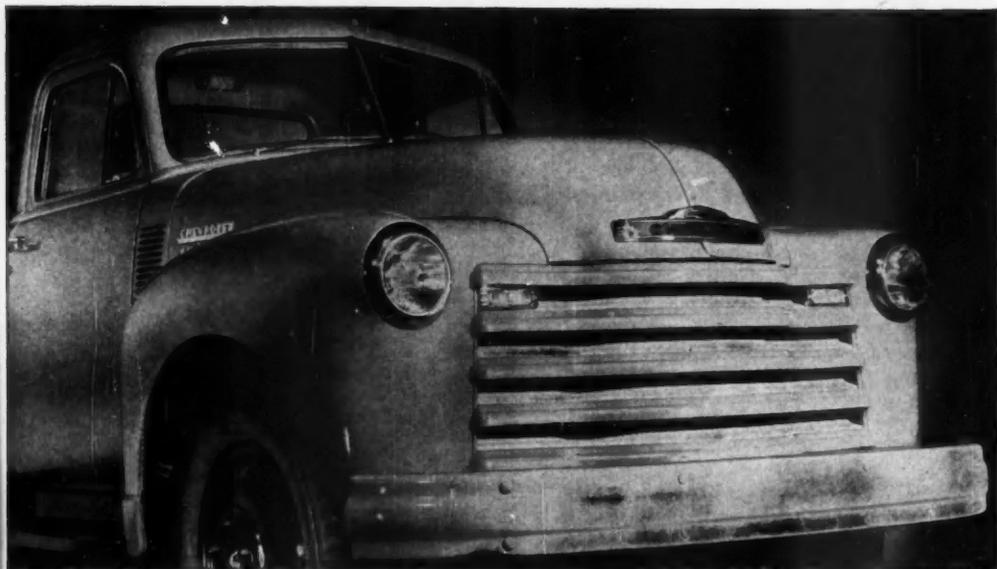
Look for Booths 115 and 116

Our Architectural Consulting Service, we believe, can be of great assistance to you in designing and improving kitchens and layouts for your houses.

So make it a point to bring your house plans to Chicago. However, if you can't be at the Convention, contact your G-E Distributor, or address a note to us and we'll see that you receive all the facts you need. Home Bureau, General Electric Company, Bridgeport 2, Connecticut.



NEW 1951 CHEVROLET ADVANCE- DESIGN TRUCKS



New FEATURES! New QUALITY! New VALUE!

You'll find everything in these new 1951 Chevrolet trucks—everything that has made Chevrolet the world's most popular make *plus* new features and improvements that put them still farther ahead of the field. As a truck user, you'll welcome Chevrolet's new, better designed brakes for their increased effectiveness . . . their thrifty long life and extra safety! You'll recognize important

contributions to trucking in Chevrolet's Dual-Shoe parking brake, the new Ventipanes, and Chevrolet's new cab seats . . . the very tops for riding comfort! See your Chevrolet dealer and take a good look at these 1951 Chevrolet trucks at your first opportunity. The "best in the business" are better than ever today! Chevrolet Motor Division, *General Motors Corp.*, Detroit 2, Mich.

CHEVROLET ADVANCE-DESIGN TRUCK FEATURES

TWO GREAT VALVE-IN-HEAD ENGINES—the 105-h.p. Loadmaster or the 92-h.p. Thriftmaster—to give you greater power per gallon, lower cost per load • **POWER-JET CARBURETOR**—for smooth, quick acceleration response • **DIAPHRAGM SPRING CLUTCH**—for easy-action engagement • **SYNCHROMESH TRANSMISSIONS**—for fast, smooth

shifting • **HYPOID REAR AXLES**—for dependability and long life • **NEW TORQUE-ACTION BRAKES**—for light-duty models • **PROVED DEPENDABLE DOUBLE-ARTICULATED BRAKES**—for medium-duty models • **NEW TWIN-ACTION REAR BRAKES**—for heavy-duty models • **NEW DUAL-SHOE PARKING BRAKE**—for greater holding ability on heavy-duty

models • **NEW CAB SEATS**—for complete riding comfort • **NEW VENTIPANES**—for improved cab ventilation • **WIDE-BASE WHEELS**—for increased tire mileage • **BALL-TYPE STEERING**—for easier handling • **UNIT-DESIGN BODIES**—for greater load protection • **ADVANCE-DESIGN STYLING**—for increased comfort and modern appearance.



On and Off the Record



News, Views and Comments

HARDSHIP CASES—The hardship clause of Section 5(g) of Regulation X is not working. A number of cases have been referred to this office, but local authorities simply point to Section 6(b), and state that it is not possible at this time to rule on anything outside that section.

SECTION 6(b)—This is the one that provides exceptions where certain commitments were made prior to Nov. 11, this year. No other regulations defining or applying to hardship cases had been issued as of Nov. 16.

SECTION 5(g)—At the moment the section is meaningless and useless. Suggestions have been made that an appeals board or something similar to it be set up for considering cases which might come under the section. The system used under the priorities system has been cited as precedent.

VA—The administrator has granted exception to the credit restrictions where two types of conditions prevail.

THE FIRST—Units to be purchased on land where the builder "made a substantial installation of permanent improvements." Such improvements would include streets, curbs, and sewer and water installations, or the delivery of "substantial amounts of materials on the site."

DETERMINATION—What constitutes "substantial installation of permanent improvements" will be determined by the local loan guaranty officer, and application for exception will require an affidavit from the builder. VA had the concurrence of HHFA in making the ruling.

THE SECOND—Where an application for an FHA commitment was filed before Oct. 12. VA requires proof in the form of a letter from FHA or a copy of the FHA commitment.

BOTH TYPES—Exception to credit restrictions in either type of case may be made only if there was exemption from FHA restrictions of July 19 or VA credit restrictions of the same date.

COST INCREASES—VA loans thus exempted from the July 19 re-

striction require no down payment, but if there is an established cost increase over the July 1 level, the increase must be paid in cash by the purchaser.

M4—This regulation, in the main, prohibits the construction of all types of amusement or recreational structures.

DELIVERIES—It should be noted by suppliers that section 22.6 of Regulation M4 provides that, "No person shall accept an order for, sell, deliver, or cause to be delivered material, equipment or supplies which he knows, or has reason to believe, will be used in violation of the provisions of this part."

CO-OPS—Via Gene Ebersole's bulletin comes word from Charles Calloway of Canadian, Texas, that "The Equity Exchange, which is the largest business in Perryton (Tex.) and one of the largest grain dealers in Texas, has just voted through its 600 stockholders to relinquish its Federal Income Tax exemption allowed the firm as a co-operative." Equity Exchange own nine elevators in Texas and three in Oklahoma.

ANOTHER—Last August, according to Gene, the Union Equity of Enid, Okla., voted to do the same thing.

QUIGG—The editor of Wood Industries Weekly. He writes that builders in Washington, D.C. expect to build more one-family units in 1951 than in 1950, but expect total of all types to drop from 29,000 to 23,000. It's an interesting estimate.

DOLLAR VOLUME—This statement from Washington, plus the factors which determined *American Builder's* estimate of total home building starts in 1951, indicate that while unit volume may fall as much as 35 to 40 per cent, dollar volume may fall only as little as 10 per cent.

OBJECT TO M4—New York Building Congress strongly objected to M4, and asked revocation of regulation in its entirety. Called definition of "commence construction" a threat to construction industry. Stated that no one can safely plan any construction while regulation is in force.

STAY TIGHT WITH **KAY-TITE**



KAY-TITE
CONTROLS WATER SEEPAGE
IN POROUS MASONRY

CINDER BLOCK WALLS
CEMENT BLOCK WALLS
STUCCO SURFACES
PUMP AND BOILER PITS
FIELD AND QUARRY STONE
CONCRETE MASONRY
RETAINING WALLS
ROUGH MASONRY
UNGLAZED TILE
SWIMMING POOLS
CISTERNS SILOS
ELEVATOR PITS
CELLARS
RESERVOIRS
COPINGS
BRICK WALLS
BRICK PIERS
FISH PONDS

KAY-TITE CAN BE USED ABOVE OR BELOW GRADE, INSIDE OR OUTSIDE

Available in 50 lb. drums
White and 9 colors. Write

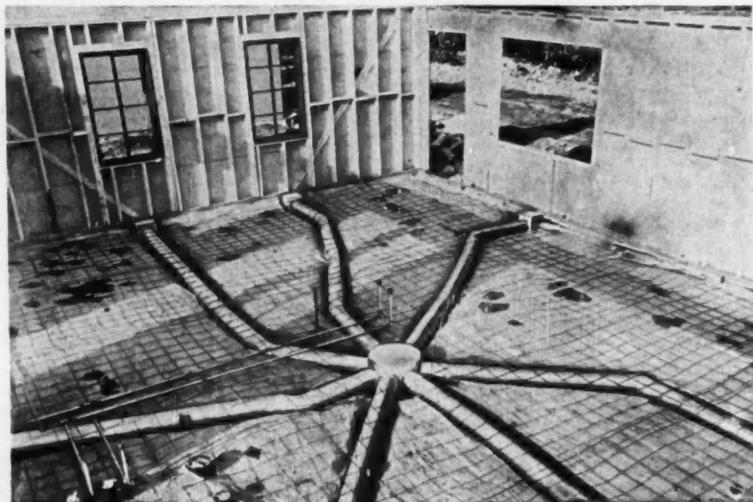
KAY-TITE

COMPANY
Box 550

West Orange, New Jersey



TECHNICAL GUIDE for Builders and Craftsmen



PERIMETER HEATING
system using radial distribution. Drum-shaped warm air distribution pit in center serves as hub of system. Feeders conduct air to registers

Perimeter Warm Air Heating

THE INTRODUCTION and rapid growth of basement-less house construction in the northern area of the United States, together with the prevailing types that include basements, has posed a number of design problems for the warm air heating industry. Some of the problems are due to minor mechanical failures, while others arise from chronic discomfort caused by chilly floors, drafts, temperature differences within a room, and failure of a system to respond quickly to weather changes.

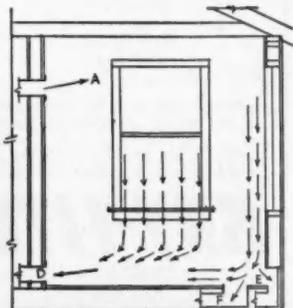
Engineering research has demonstrated that proper construction methods are as important to heating comfort as the design, layout and installation of the heating system. As the system becomes more and more integrated with the structural elements, as in the basementless house, it is neces-

sary that the builder and engineer co-ordinate their efforts in achieving comfort heating.

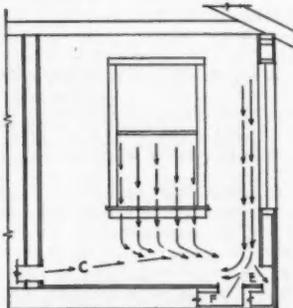
It has been found that the secret of heating a house comfortably is to add just enough warmth to replace the heat which is lost. It is well to remember that the outer wall areas, together with the windows and doors which are directly exposed to the colder outside temperatures, will lose heat more rapidly than the inside walls.

The following table indicates the per cent of heat loss and the heat loss location in a typical one-story house, either with or without a basement, when outside temperature falls below the comfort level:

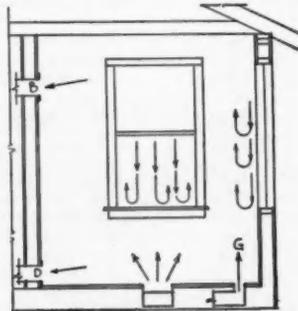
(Continued on page 56)



HIGH WALL delivery at A with return at D, E, or F. Cold air travels down to floor



LOW WALL delivery at C with returns at E or F. Works if warm air can reach wall



PERIMETER floor delivery at G with return at B or D. Warm air covers windows



INFRA-RED HEAT RAYS PIERCE 331 MILES OF DUST & FOG

"Aerial photographs taken by Capt. Albert Stevens . . . With infra-red sensitized photographic plates, views of mountains as far as 331 miles distant from the photographer have been taken, though the mountain itself was invisible to the eye because of the intervening haze and fog." From booklet, "Some Reflection and Radiation Characteristics of Aluminum,"* published by American Society of Heating and Ventilating Engineers.

"A mirror, consisting of glass with a silvered surface on the back of the glass, is an excellent reflector of light but it is a very poor reflector of infra-red radiation corresponding to room temperature. In fact, such a mirror would have about the same reflectivity for infra-red as a heavy coating of black paint. With this in view, it is obviously impossible to judge the infra-red reflectivity or emissivity of a surface by its appearance to the eye." From booklet, "Thermal Test Co-efficients of Aluminum Insulation for Buildings."* published by American Society of Heating and Ventilating Engineers.

Of all heat flowing through building wall air spaces, 65% to 80% is radiation. Multiple sheets of accordion aluminum reflect, even if covered with dust, 97% of the infra-red heat rays. Compartmented with cellular air-spaces, they efficiently retard heat flow by convection and conduction. The commercial form of multiple sheets of accordion aluminum, permanently compartmented with cellular, reflective spaces, is Type 4 and Type 6 Infra Insulation, which cost, respectively, under 7¢ and 9¢ sq. ft., material with labor, between wood joists in new construction.

Get booklets starred (*) FREE from Infra Insulation, Inc. Check coupon below.

THERMAL FACTORS, TYPE 6 INFRA

Down-Heat C.044, R22.75 equals 7 1/2" DRY Rockwool
 Up-Heat C.080, R12.50 equals 4" DRY Rockwool
 Wall-Heat C.073, R13.69 equals 4 1/2" DRY Rockwool

INFRA INSULATION, INC.

10 Murray Street, New York, N. Y.

Telephone: COrtlandt 7-3833

INFRA INSULATION, INC.

10 Murray Street, N. Y. C.

Dept. B1

Please send:

- "Some Reflection and Radiation Characteristics of Aluminum."
 "Thermal Test Co-efficients of Aluminum Insulation for Buildings."
 Price Lists of Infra Insulations. Free Samples.

Name.....
 Firm.....
 Address.....



TECHNICAL GUIDE for Builders and Craftsmen

Perimeter Heating Continued

Heat Loss Location	Per cent of Total Heat Loss
Ceiling	13.2
Floor	7.8
Outside Walls*	30.0
Doors*	16.4
Windows*	32.6

*Note that 79 per cent of the total heat loss occurs at these three points.

Since 79 per cent of the loss occurs at the perimeter of the house, it is obvious that most of the heat should be supplied at that point. The principle of supplying heat at the point of heat loss recognizes the effect of cold temperatures at outside walls, windows and doors, which account for almost 100 per cent of the complaints with regard to discomfort.

Non-perimeter Heating

When heat is not delivered at the perimeter of the house, the following conditions occur:

1. Air in contact with the outside walls becomes chilled.
2. As it is chilled, it becomes heavier and drops like a waterfall.
3. As chilled air reaches the floor it spreads across the room and begins to rise.
4. The floors and living level (the lower half) of the rooms become chilly and drafty, though the room thermostat may be satisfied or raised to a wastefully high temperature.
5. Body radiation to outside walls, windows and doors has a direct cooling effect on the occupants.

It is evident that the waterfall of cool air at the perimeter must be stopped before comfort can prevail. This can be accomplished by using the fundamental law of physics which states that as air is heated it becomes lighter in weight. Hence: warm air rises. By supplying warm air at the perimeter of the house, and also by

discharging it upward, the waterfall of cold air can be stopped. Outside walls, windows and doors are warmed sufficiently to eliminate excessive body radiation to these surfaces.

It is important to recognize the timetable of heat loss. Windows are, by several hours, the first areas to begin losing heat when the outside temperature begins to drop. It is only logical, therefore, to deliver warm air through the ducts in the floor, or under the floor and discharge it vertically beneath windows. Heat is then replaced as fast as it is lost, and at the points where the highest percentage of loss occurs.

Perimeter Heating

This method of heat distribution provides heat at the sources of heat loss in the following manner:

1. Ceiling: Warm air rising from lower room levels nullifies the effects of ceiling loss.
2. Floor: The floor is warmed by heat lost from the ducts installed below the surface.
3. Outside walls and doors: Warmth from the mildly radiant floors and circulation of warm room air, offsets heat loss through outside walls and doors.
4. Windows: The combined effects of high rates of heat loss from surfaces and infiltration are offset by a current of warm air rising vertically at the window surfaces, preventing the normal downdraft of cold air from spreading across a room.

This method of heating is so effective that it has been found comfortable to sit on the floor beneath a window. The method also results in lower fuel costs.

This method of air and heat distribution completely eliminates the presence of cold air. Temperature gradients between floor and ceiling are reduced to a minimum. A complicated system of cold air returns are not necessary. The cold air system becomes a matter of supplying the furnace with sufficient return air at approximately room temperature. In small houses a single return is sufficient, conserving both sheet metal and labor. The absence of cold air eliminates a major source of discomfort.

This heating method is adapted to the latest refinement of warm air heating. Room air cannot stratify under

(Continued on page 190)



WATERPROOF membrane covers the area within foundations and extends on side to slab top



ALL JOINTS of waterproof membrane should be lapped and sealed with waterproof sealer



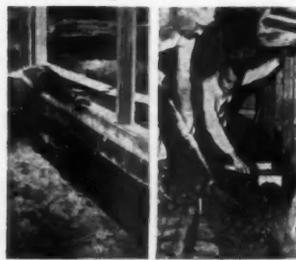
PERIMETER system with loop distribution. Feeder duct runs to "T" connection



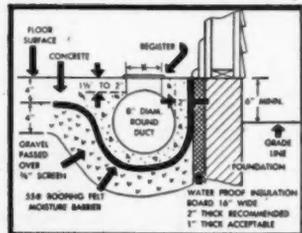
REINFORCING MESH in slab and over ducts adds strength to thin part of slab



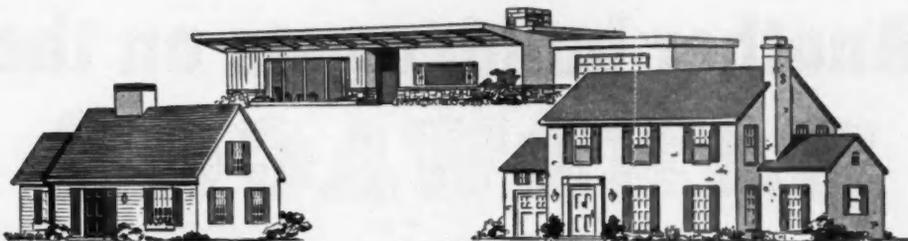
CONCRETE MIX poured over membrane should be dry. Planking protects ducts when pouring



EDGE INSULATION in position at wall 2 inches thick. Concrete to completely encircle wall ducts



CROSS SECTION details of construction units for properly installed perimeter duct



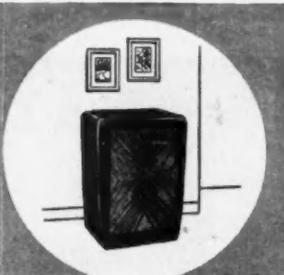
There's a Coleman heating appliance for every type home!

It will pay you to standardize on Coleman quality for every home you build. For Coleman makes heating units for every heating need, for every size and type home. And when you tell a prospect your homes are equipped with Coleman

heating appliances—you'll know right away that you've said the right thing! Coleman "know-how" and consumer acceptance of the Coleman name as a standard of quality will help you sell homes faster.

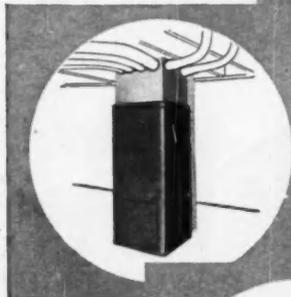
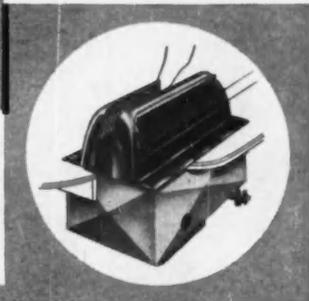
Coleman Automatic Oil and Gas Space Heaters

The very tops in beauty, tops in performance. They have the latest heat engineering features that provide low-cost automatic comfort for homes everywhere. Oil models feature the industry-shaking Fuel-Air Control that saves up to 25% on fuel costs.



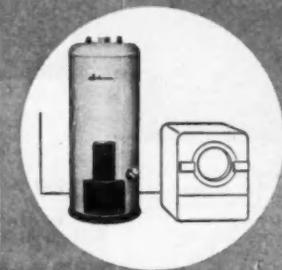
Coleman Dual Wall Floor Furnaces

The ideal low-cost heating plant for all small homes. Gas, Oil and LP-gas. No expensive plumbing—no air ducts—no excavation. Also in flat register models. Heats 3 to 5 rooms.



Coleman BLEND-AIR Central Heating and Ventilating System

Pre-engineered with standardized parts for easy, fast installation. 3 3/4" heat tube system goes in old homes as well as new. Does an incomparable heating job automatically, economically.



Coleman Jet Recovery Water Heaters

For Gas, Oil and LP-gas, 20, 30 and 45 gallon capacities. Automatic Temperature Control and Safety Shut-off Valve.

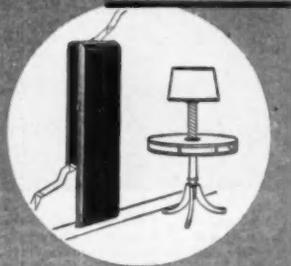


GAS MODELS APPROVED BY A. G. A.; OIL MODELS LISTED UNDER LABEL SERVICE BY UNDERWRITERS' LABORATORIES

COMFORT COSTS SO LITTLE WITH A

Coleman

AMERICA'S LEADER IN HOME HEATING



Coleman Gas Wall Heaters

They fit right in the wall, extend out only 3 3/4". Use no room space. Single and Dual Wall models. Ideal for slab-floor homes, motel courts. The Coleman Company, Inc., Wichita 1, Kansas.

MAIL THE COUPON

The Coleman Company, Inc., Dept. AB-1050, Wichita 1, Kans.

Without obligation, please send me literature on the following:

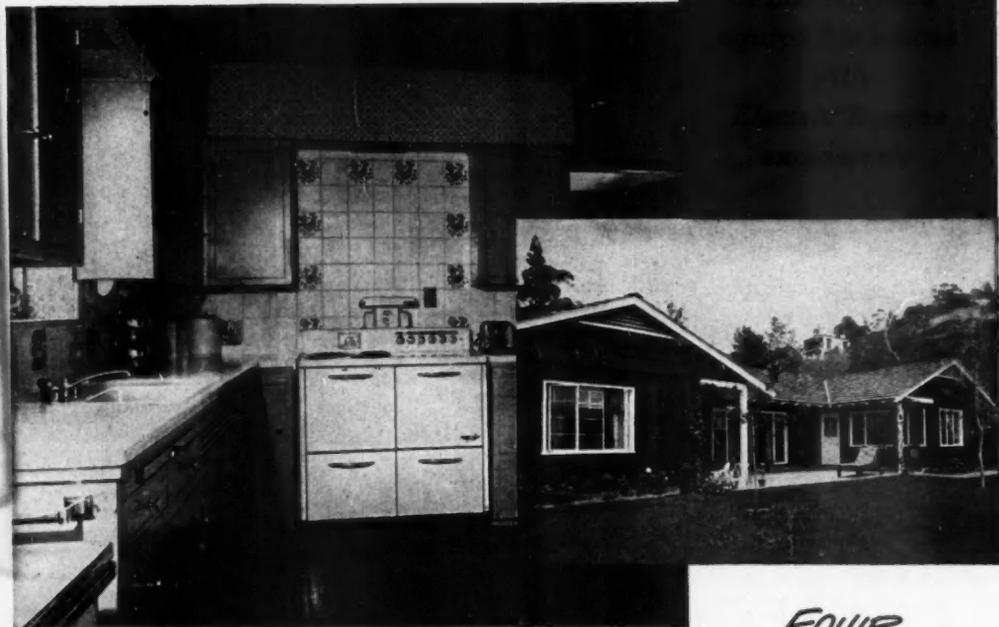
- Space Heaters Floor Furnaces Wall Heaters
 Water Heaters BLEND-AIR

Name _____

Address _____

City _____ Zone _____ State _____

Another builder gets on the **BANDWAGON**



The all-electric kitchen of the Zeh home features not only an electric refrigerator, ventilator, food waste disposer and fully automatic laundry, but the kind of range that's truly automatic, really modern. Of course . . . it's **ELECTRIC!**

This Zeh home in Los Angeles has the kind of architectural lines that makes home seekers become home buyers. Flood lighting and weather-proof convenience outlets make electric convenience available outdoors, too!

"It takes more than looks to sell a house and keep it sold," says Mr. Zeh whose homes in Los Angeles, California, have made a national reputation. "No builder nowadays would think of installing anything but automatic heat and automatic electric refrigerators in his new houses. And just as people take those things for granted, they're looking for automatic electric cooking equipment."

Are you giving home buyers what they want in the houses you build for them—automatic modern *Electric Ranges*?

EQUIP
YOUR HOUSES WITH
ELECTRIC RANGES



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

ADMIRAL • COOLERATOR • CROSLLEY • DEEPFREEZE
FRIGIDAIRE • GENERAL ELECTRIC • GIBSON • HOTPOINT
KELVINATOR • LEDO • MONARCH • NORGE • PHILCO
UNIVERSAL • WESTINGHOUSE

EDITORS'
Round Table

1,300,000 STARTS for 1950 was *American Builder's* prediction. The figure was so far above what anybody else predicted that the staff was afraid of it. With considerable reluctance the figure was released, and in some quarters it was greeted with derision.

IT WAS RIGHT, however, as had been the estimates advanced by *American Builder* for the two previous years. These earlier estimates also were in excess of those made by anyone else.

WHILE THE STAFF has been right for the past three years, not varying in its estimate by more than five per cent in any year from the final count, it finds itself this year on middle ground with its prediction for 1951.

ESTIMATES for the year ahead vary from a pessimistic 300,000 to an optimistic 900,000 to 1,000,000.

THE PESSIMISTS base their figure on suspected crippling effects of Regulation X, and doubt that there will be any liberalization regardless of how much starts are cut.

THE OPTIMISTS are of the opinion that first, Regulation X will accomplish what its objective is stated to be, that is, peg starts at 800,000 to 850,000, or that revisions will be made in the regulation to permit the announced figure.

THEY ADD another 100,000 to 150,000 to the announced figure, believing that upper price houses will increase to make the difference.

THEN THERE is a school of predictors that accepts the government objective of 850,000, and believes that will be the total of starts for 1951.

AMERICAN BUILDER'S estimate of a minimum of 800,000 is explained on the editorial page.

EVERYONE, of course, who is making a prediction for next year is aware of the numerous uncertainties that reduce all predictions to guesses, astute or otherwise.

THE KOREAN WAR could explode into something that would require total mobilization before the end of the year. If that happened, the vol-

(Continued on page 63)

JANUARY 1951

Build
**EXTRA
COMFORT**
into your houses
at low cost!

... with a

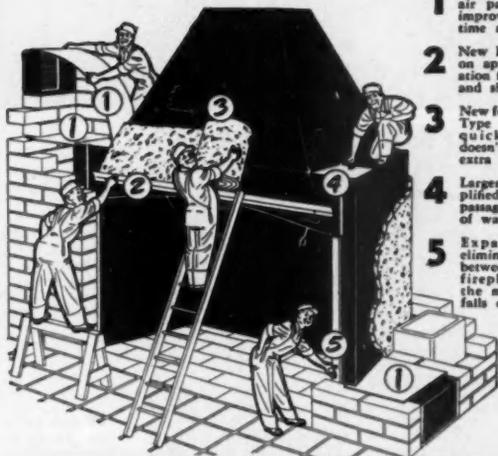
PRICE

Fyro-Place



On bitter-cold winter days or during the first chilly weather of fall, home owners appreciate the extra comfort of a heat-circulating fireplace. You can give them this important "plus" value at low cost, with a Price FYRO-PLACE... while providing them with a heat circulator of top efficiency, as well.

Here are some of the special labor and material saving features you get at no cost with a Price FYRO-PLACE:



- 1** New Ductmakers simplify air passage construction, improve flow of air, save time and materials.
- 2** New Flexible Metal Stop on apron prevents insulation from slipping down and showing in front.
- 3** New feather-light Blanket-Type Insulation is more quickly applied and doesn't fall apart to cause extra work.
- 4** Larger Outlet and simplified construction of air passages increase volume of warm air.
- 5** Expansion Channels eliminate the ugly joint between face brick and fireplace form, when the masonry dries and falls out.



Make Price FYRO-PLACE a Community Habit!

Install Price FYRO-PLACE as a strong added selling point for your houses — then let the home owners help you sell as they "talk up" this real home improvement for you.

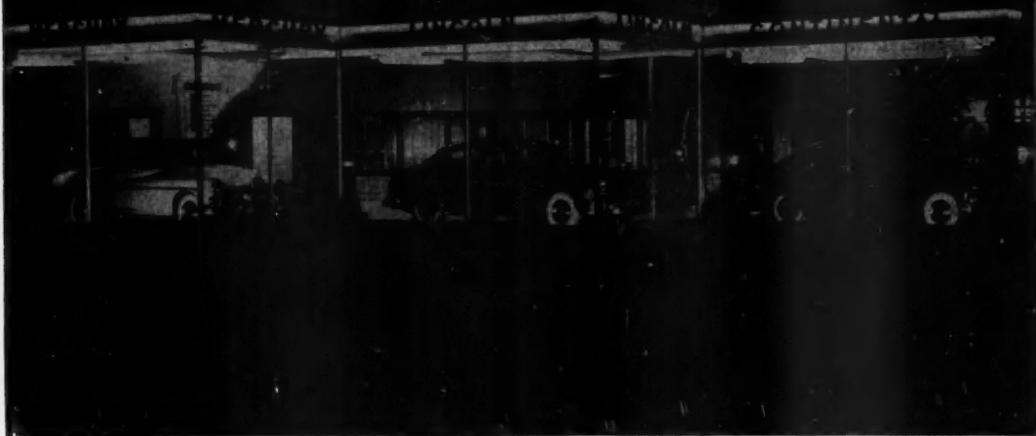
Write for "Book of 100 Fireplace Ideas" — today!

**PRICE FIREPLACE, HEATER &
TANK CORPORATION**

188 W. AUSTIN STREET

BUFFALO, NEW YORK

To make tough building and remodeling
—Pittsburgh Glass can help

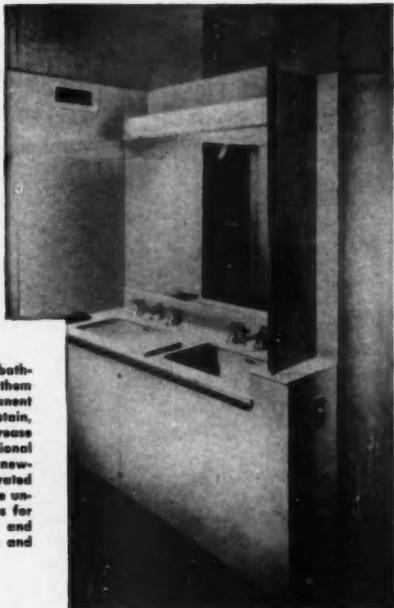


TODAY, merchants in all kinds of businesses recognize the power of an open-vision store front—as a more effective display medium and as a means of attracting more people and producing more sales. Through sustained, extensive advertising and the proven excellence of its products, Pittsburgh has become known as the leader in the store modernization field. You will do the best possible job, with the fewest headaches, when you sell Pittsburgh Products for remodeling or new construction. The showroom above indicates what can be achieved with Pittsburgh Products in the way of effective, sales-winning store fronts. Installations like this one result in satisfied customers and enthusiastic boosters for you. Architects: Erhart-Eichenbaum & Rauch, Little Rock, Ark.

YOU CAN CUT COSTS on the job by installing Pittsburgh Doorways. These completely "packaged" units are factory-assembled to precision standards. They do away with time- and labor-consuming calculations, details of setting and fitting, costly assembly at the site. All you do is unpack the frame, bolt it into the building opening, and hang the Herculite Doors. You can't ask for greater simplicity! Twelve standard and four free-standing Pittsburgh Doorways are available to satisfy every building need.



*jobs easy
you!*



GIVE HOMEMAKERS a beautiful, sparkling bathroom of quality Carrara Glass and you render them the best possible service. For Carrara is a permanent structural material. It won't check, crack, stain, fade or discolor with age. Water, chemicals, grease and pencil marks won't affect it. And an occasional wiping with a damp cloth will keep Carrara new-looking and bright always. The bathroom illustrated here used Carrara for the walls, ceiling and the unusual double-lavatory counter top. Other uses for Carrara are as splash panels behind stoves and lavatories, fireplace surrounds, corner shelves and window sills.

TWO OR MORE PANES of Pittsburgh Polished Plate Glass make up a Twindow unit. There's a layer of air trapped between them which is hermetically sealed to keep out dirt and moisture. The entire assembly is enclosed in a stainless steel frame to protect the seal and glass edges and simplify installation.

BUILDERS AGREE that picture windows have come into their own. Fact is, home buyers demand them. And nearly every remodeling job calls for them. Under normal conditions, Pittsburgh Polished Plate Glass is ideal for bringing outdoor beauty into the home. And for customers who require insulated windows, Twindow, Pittsburgh's window with built-in insulation, is unsurpassed. Twindow reduces heat losses and eliminates downdrafts. It's as easily set as a single pane of glass. Architect: Edward T. Wassell, Wilkes-Barre, Pa.



Build it better with **Pittsburgh Glass**

See the complete listing and descriptions of Pittsburgh Plate Glass Company products in Sweet's Catalog File.

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

PITTSBURGH PLATE GLASS COMPANY

CROSS SECTION
SHOWS SECRET OF
ROLY-DOOR
RIGIDITY and
LIGHT WEIGHT



Because the cold forming of metal increases its strength, each section of the four-sectional Roly-Door is a single panel, cold roll-formed into a pattern to combine maximum rigidity with minimum weight. By using the deep hat-section and the permanently set triple beads, a firm, self-supporting unit is obtained. This panel is then fused by electric resistance welding to the sturdy U-channel which runs the full length of each end. Then, in the field, each panel section is permanently secured to the next by means of a simple, strong spring steel clip, and is interlocked for its entire length to provide a smooth-acting weathertight joint.

WRITE FOR YOUR FREE GUIDE!

A note on your stationery will bring you your free guide to the selection of residential garage doors—and the phone number of your nearest Roly-Door distributor.



What's between you... and your car?

Are you (and the homes you build) happy about your garage doors? Are you "that way" about them?

Are they four-sectional? All steel? Overhead? Do they cost less to buy — to install? Will they last a house-time?

Is there minimum field assembly? Is everything that can be predetermined fixed to the door at the factory? Is every door individually packaged in a single carton — complete with all necessary parts?

Is it factory prime coated and infra-red baked? Is its operation finger-tip — "touch and go"? Is it quiet, safe, weatherproof?

IS IT? IT IS! Then it's the sensational New MORRISON *Roly-Door!*

Roly-Door DIVISION
MORRISON
STEEL PRODUCTS, INC.

649 AMHERST ST. • BUFFALO 7, N. Y.



EDITORS'
Round Table

(Continued from page 59)

ume of home building starts would be cut drastically, because of the need to siphon both men and materials into war work of various kinds.

AS OF mid-November, however, those who are supposed to be in the know, believe that the Korean war will either be concluded, or will continue to be contained in North Korea.

NO ONE, apparently, is inclined to believe that the war can expand before next autumn at the earliest, if indeed then or at any time in the future. Those, also, however, are little more than astute guesses.

BARRING an expansion of the war into a larger theatre, there still remains the possibility of a vastly stepped up program of preparation for war at some time during the year, and such a program could have about the same effect on building as the development of continental or global war.

THAT is a matter that it is assumed the 82nd Congress will determine.

THE INFLICTION of Regulation X is meeting with little determined resistance, and no organized resistance. Its twofold purpose to curb inflation and conserve vital materials generally is accepted.

AT LEAST one economist, however, while taking no issue with the alleged need to conserve materials, argues that money invested in a new home serves rather to halt than to encourage inflation. His point is that paying off a mortgage is a form of saving, and saving is the exact opposite of a cause of inflation. It is a deterrent.

GOVERNMENT spending of taxpayers' money for non-productive activities should, it is alleged, be the focal point of attack against inflation.

EXPANSION of government payrolls takes personnel from gainful and productive activity, increases taxes, and decreases the nation's production of wealth for all purposes.

UNTIL there is clarification or definition of what will be required in the way of building materials for armament purposes, no one can argue

(Continued on page 67)

JANUARY 1951



See Symons forms on display ... NAHB Show



SYMONS CLAMP & MFG. CO.
4261 West Diversey Avenue, Chicago 39, Illinois

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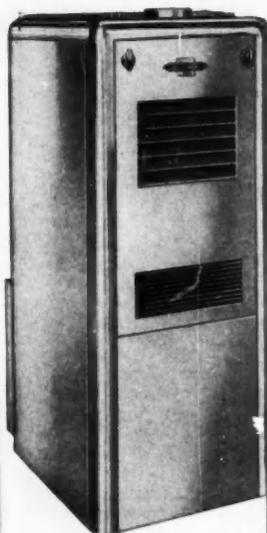
- Information regarding Symons Panel Forms
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Address _____

City _____ Zone _____ State _____



DELCO-HEAT Units

give home buyers the value, dependability and features they want

Check the specifications of these outstanding General Motors products!

"GA" series Gas-fired Conditioners. These forced warm air furnaces feature multi-section heat transfer systems, with electrically welded *Multi-Rad* radiators that completely enclose the flames of

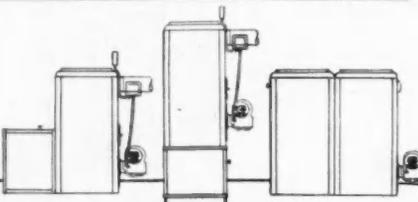
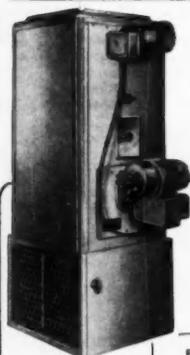
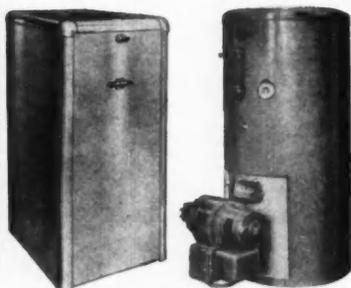
double ribbon-type burners . . . insuring the extraction of maximum heat from the fuel. Delco *Rigidframe* motors on blowers. AGA-approved for all gases and for high altitude installations.

Model (Available with either 12 or 16 gauge heat exchangers)	Dimensions			Blower		AGA-Approved Ratings Btu per Hour (in thousands)			
	Height Inches	Width Inches	Depth Inches	RPM	CFM Max.	Nat., Mfg. or LP-Air Gas		LP-Gas	
						Input	Output	Input	Output
GA 63	55	22	26	350	350	62.5	50	60	48
GA 90	55	22	26	650	800	90	72	90	72
GA 120	35	28½	26	660	1050	120	96	120	96
GA 150	55	35	26	620	1300	150	120	150	120
GA 210	55	48	26	600	1600	210	168	210	168

"S" series Steel Oil-fired Boilers. Here are the perfect units for radiant heating systems in small homes—and for conventional steam and hot water systems, too. Have famous Delco-Heat

pressure atomizing burner, powered by *Rigidframe* motor. Provide year-round hot water for household use. Available in both deluxe and round-jacket models. Also larger capacity, cast iron boilers.

	Capacity			Oil Burner Nozzle GPH	Dimensions			
	Btu per Hour Output	E.D.R.	Net		Round Jacket	Height Inches	Width Inches	Depth Inches
				Steam Hot Water				



"OPC" series Oil-fired Conditioners. Value priced! Blower-filter unit may be mounted *beneath* or *behind* furnace. For basement, utility room or alcove installations. Features Delco-Heat pressure atomizing burner and *Rigidframe* motors. Deluxe model, with matching furnace and blower units, also available.

Capacity Btu per Hour Output* (Plenum)	Firing Rate GPH	Blower				Filter Size Inches
		RPM	CFM Max.	Motor		
				HP	Watts†	
75,000	¾	400-700	800	¾	385	20 x 25 x 1

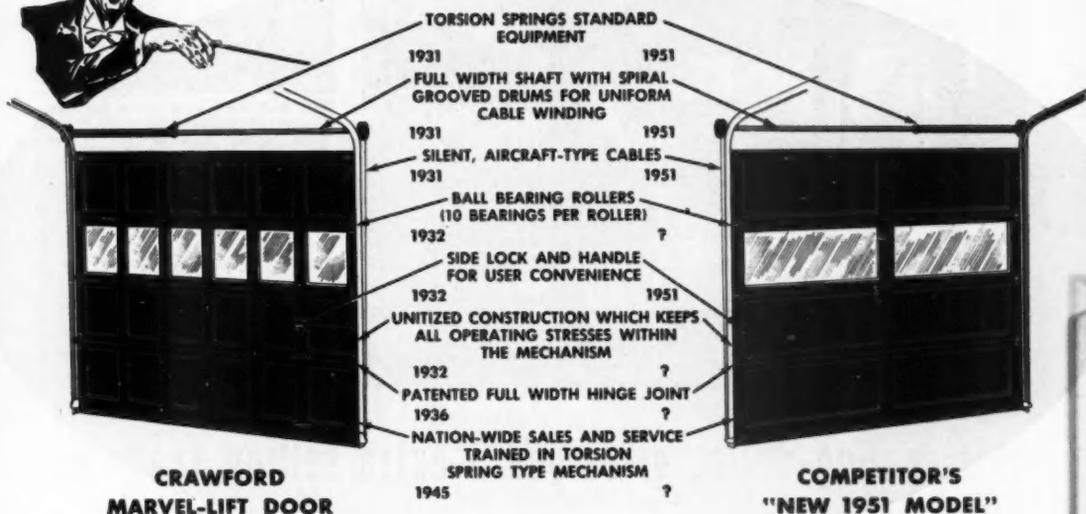
*On basement installations add 15% duct loss to net heat loss—compensate for unusual conditions.
†Maximum watts allowable on motor.

New homes sell better when they're equipped with Delco-Heat!

Delco-Heat manufactures a complete line of automatic home heating products—for all fuels, all heating systems, and all sizes of homes. And our engineering and sales departments will be glad to serve you in any way possible. Also manufacturers of electric water systems for domestic water supply. For information about Delco-Heat products, write to Delco Appliance Division, Dept. AB-20, General Motors Corporation, Rochester 1, New York.



WHEN IS A "NEW 1951 MODEL" NEW?



**CRAWFORD
MARVEL-LIFT DOOR**

**COMPETITOR'S
"NEW 1951 MODEL"**

IN coming months you'll see some of the mechanical features of the Crawford Marvel-Lift Door openly imitated by our leading competitors, and announced in their "new 1951 models".

These imitated features will be announced as "important improvements"—which they are. We know, because they've been **STANDARD EQUIPMENT** on Crawford Marvel-Lift Doors for anywhere up to 17 years—and they are the very heart of a million successful Marvel-Lift installations. They have advantages offered in no other mechanism.

That's why our competition is frankly imitating them. And, that's why the Crawford Marvel-Lift Door has become, openly, the acknowledged **STANDARD OF THE INDUSTRY**.

However, what cannot be imitated is Crawford's wide margin of superiority which results not only from patented features and exclusive details but equally from nearly 20 years' experience in marketing the world's finest doors.

CRAWFORD DOOR COMPANY

Manufacturers of

The Crawford Marvel-Lift Door, the Doormaster, and the Stylist

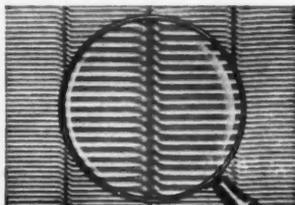
MAIN PLANT: 56-401 St. Jean Ave. • Detroit 14, Michigan

FABRICATING PLANTS in Portland • Tacoma • Los Angeles • San Francisco • Dallas • Kansas City
Chattanooga • Milwaukee • Hudson • Cadillac • Ottawa, Canada

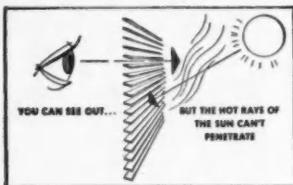
DISTRIBUTING WAREHOUSES in 79 major cities. • SALES AND SERVICE companies everywhere

See our exhibit in BOOTH 39 • NAHB EXPOSITION • CHICAGO





THIS MAGNIFIED VIEW shows the tiny louvres of Kaiser Aluminum Shade Screening that block the sun's hot rays but not the view.



This cooling device gives you 5 extra selling features!

It's low-cost Kaiser Aluminum Shade Screening. And it does five big jobs—gives your buildings five extra selling features:

- 1 It cools.** Tiny, one-inch louvres, set close together at an angle against the sun, deflect the sun's rays. Hottest rooms can be as much as 15° cooler with Kaiser Aluminum Shade Screening.
- 2 It screens.** Pesky flying insects, such as mosquitoes and flies, can't get through the narrow slits.
- 3 It shades.** Kaiser Aluminum Shade Screening keeps direct rays of the sun out of the room.
- 4 It protects** interior upholstery, draperies, rugs from sun fading.
- 5 It gives daytime privacy.** People inside can see out —people outside can't see in!



NEW IDEA FOR PATIOS AND PORCHES!

Porch and patio areas, equipped with handsome Kaiser Aluminum Shade Screening, are more attractive, give more privacy. They're cooler, too.

LONG LASTING... HANDSOME!

Made of tough, high grade aluminum. Can't rust or stain. Never needs painting. No moving parts. Nothing to get out of order.

Low-cost Kaiser Aluminum Shade Screening comes in regular or tension frames from sash and

screen manufacturers, and in 50-foot rolls from jobbers.

Plan now to use it on offices, plants, homes, stores. Send coupon below for complete information, free AIA file and name of nearest manufacturer or jobber.

Kaiser Aluminum

SHADE SCREENING

Kaiser Aluminum & Chemical Sales, Inc.
Kaiser Building, Oakland 12, Calif.

I'd like complete information on Kaiser Aluminum Shade Screening!

Please send me an AIA file and the name of the nearest manufacturer or jobber.

NAME _____

STREET _____

CITY _____ ZONE _____ STATE _____

MAIL THIS COUPON NOW

EDITORS'

Round Table

(Continued from page 63)

against Regulation X on the basis that it is unnecessary from the conservation standpoint.

MATERIAL PRODUCTION in 1950 was up 167 per cent over the 1939 level. Some categories of material were well over the average, of course. It seems, therefore, that until some definite requisitions are made for the armed forces, the spread between the material required for 1,300,000 starts in 1950 and the estimates for 1951, should take care of war or preparedness needs.

REMODELING again looms as an important building activity. Production capacity of some manufacturers of building materials is as much as double that of 1939. If there is a declining market for new houses, the remodeling market will have to be developed to insure balance between production capacity and sales of materials.

WITH REASONABLE exploitation of the market for remodeling a satisfactory volume can be developed. Since 1941 this lucrative field has been forced to lie practically untouched.

REMODELING in 1951 need not be developed on a hit-and-miss basis, that is, taking an isolated residence structure here and there. The run-down areas of many large cities are ripe for re-development into good income-producing sections.

IN DALLAS, TEXAS, there is an excellent example of re-development of a decaying residence area. Nearly a mile of run-down residence structures were remodeled into a street of modern, attractive shops. Behind these, other residences on side streets have felt the influence of the sprightly main artery, and are being remodeled.

IN CHICAGO on the near north side, there is a renaissance taking place. Many old limestone and brown stone front duplex houses have been taken over by commercial entrepreneurs. Faces have been lifted, and attractive shops and eating houses have been created.

WHOLESALE remodeling developments similar to new home developments are more than a possibility in such areas, and hold real promise for operative builders.

JANUARY 1951

FREE Facts on PARKAY



**New Bulletin
Describes Quality and
Economy Features of
This Modern, Ready-Finished,
Hardwood Flooring**

Here's a new, illustrated bulletin giving complete design and installation data on Parkay. Tells you how this 3/16"-thick ready-finished flooring saves time and money on both new construction and remodeling work.

Whether your major interest is homes, apartments, offices or public buildings, this bulletin will show you where and why beautiful, yet practical, Parkay has a place in your flooring plans. Fill out and mail coupon below now! The new Parkay bulletin will be on its way to you by return mail.

WOOD-MOSAIC CO., INC., Dept. ..B, Louisville 9, Ky.

Please send me new bulletin describing Parkay ready-finished hardwood for floors and walls.

Name _____

Company _____

Address _____

City _____ Zone _____ State _____

PARKAY

READY-FINISHED HARDWOOD FOR FLOORS AND WALLS



Building Products on Review

FOR THE sixth consecutive year *American Builder* offers this presentation as a service to builders. On this and following pages throughout the issue are more than three hundred new and recently developed products, selected from literally thousands that will be used by builders in 1951. Obviously, because of space limitation, we could not begin to show all of them.

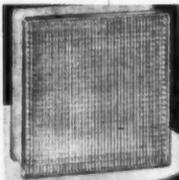
This review offers the builder an opportunity to "window shop." Like window shopping, it is impossible to find all information about a product by merely looking through the display window. To get all the details it is necessary to "go inside," and the reader can do that here by merely writing the manufacturer listed with each product. When writing to a manufacturer, to facilitate a faster reply, refer to the item presented.

Many of the products shown in this issue will be displayed in the 160 or more exhibits at the Annual National Association of Home Builders Convention and Exposition, held in Chicago, January 21-25.

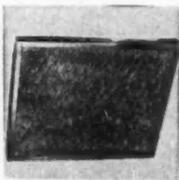
BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Portable Grinder—Among features of "400" bench grinder, by Portable Electric Tools, Inc., 320 W. 83rd St., Chicago 20, Ill., are 110-120 volt, single phase, 60 cycle, 3500 rpm motor; and two fully-adjustable tool rests.



Glass Block—Insulating Light-Directing Glass Block No. 363, made by Owens-Illinois Glass Co., Toledo 1, Ohio, was designed primarily for schools, is also well-suited for needs of commercial and industrial buildings. Provides privacy, daylight.



Permanent Air Filter—Bard Manufacturing Co., Bryan, Ohio. Oil-less filter for forced-air heating washes clean in 60 seconds with plain water. Known as "A-Lum-O," filter is made of aluminum wool fibers. Fits all common size systems.



Blanket Insulation—Roll Blanket Building Insulation, by Owens-Corning Fiberglas Corp., Toledo 1, Ohio, is made of Fiberglas Preformed Insulation bonded to a semi-rigid mass having a density of 1½ to 2 pounds per cubic foot. In standard widths.



New "Overhead Door"—Five section construction is used in new door by Overhead Door Corp., Hartford City, Ind. Top, bottom and center rails are wide; two extra center rails give added strength. Deeply embossed hardware enhances.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Cement Paint—A concrete waterproofing agent. Peerless Cement Paint has a high portland cement content. Contains titanium dioxide. Made in wide range of colors. Peerless Cement Corp., Free Press Bldg., Detroit 26, Mich.



Ratchet Bit Brace—Knob and handle of nickel-plated tool are molded of shatter-proof Tenite plastic. Has ball bearing chuck and head, and boxing ratchet. Manufactured by Peck, Stow and Wilcox Co., Southington, Conn.



Aluminum Scaffold—Ten-foot ladder scaffold is erected from 6-foot, 1-inch ladder sections. Well-suited for locations where working space is limited. Patent Scaffolding Co., Inc., 38-21 12th St., Long Island City 1, N. Y. is the manufacturer.



Doors—Structural features of Paine Rezo door, made by Paine Lumber Co., 73 W. Algona, Oshkosh, Wis., include interlocking air cells, cross banding of strips, and ventilating notches or air channels that extend from cell to cell.



Fixture Hanger—Paine outlet box and fixture hanger consists of two wings, each mounted on a ¾-inch nipple which is 2¼ inches long. A key locks wings when they are open. Made by Paine Co., 2947 Carroll Ave., Chicago 12, Ill.

the
lock
with a
million
friends

DEXTER

THE *Lifetime* LOCK



NATIONAL BRASS COMPANY

Manufacturers of America's Original Tubular Locks

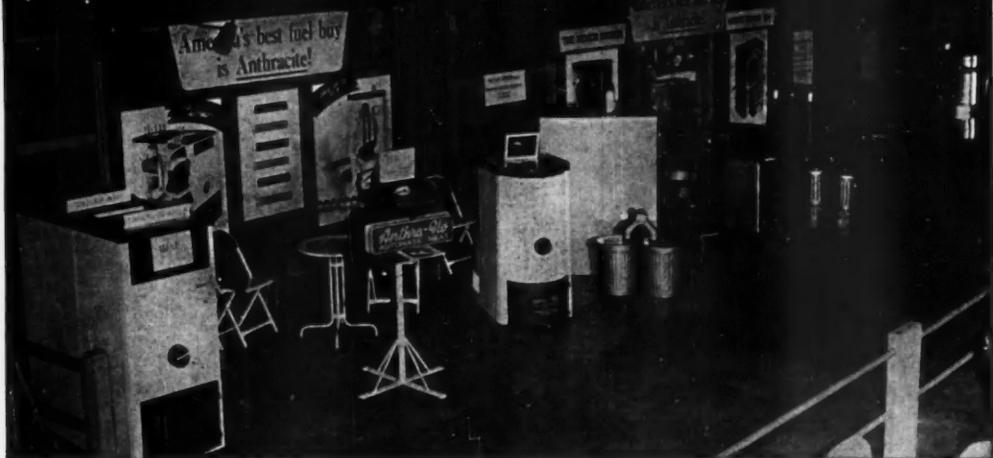
GRAND RAPIDS



MICHIGAN

IN CANADA: DEXTER LOCK CANADA LTD.
Guelph, Ontario

At the 10th Air Conditioning Exposition in Philadelphia . . .



... See these high-efficiency automatic Anthracite heating units America's best fuel buy is Anthracite

With these modern Anthracite-burning units, you can offer your clients and customers the ultimate in clean heat—even heat—economical heat—trouble-free heat in abundance. See the newest models at the show, or write for descriptive literature to Anthracite Institute, 101 Park Avenue, New York City, N. Y.

ANTHRAFLO—An entirely different type of boiler-burner, with many points of design never before found in home burners. Fully automatic . . . the coal feeds direct from bin across the stationary grate. Ashes discharge into container within unit. All working parts are accessible from outside the unit. For steam, hot-water and warm-air systems. Provides year-round hot water.



ANTHRATUBE—The revolutionary design that operates at a *proved efficiency of over 80%*. The "whirling heat" principle, supported by several other field-tested innovations, give Anthratube faster response and superior performance . . . the very peak of fuel-burning efficiency! Provides year-round hot water.



MODERN ANTHRACITE STOKERS—Automatic conversion stokers are available for installation in existing boilers or furnaces—specially designed in complete boiler-burner units, such as *Motor Stoker, Electric-Furnaceman* and others. All offer high efficiency, small size and economical operation. All are completely automatic from bin to ash removal. Provides year-round hot water.

ANTHRACITE (HARD COAL) INSTITUTE

TYPICAL RICHMOND INSTALLATIONS ACROSS THE COUNTRY...

448 Marlene Village homes in Milwaukie, Oregon. Builder and architect: Harry Mittleman Contractor, Inc. Plumbing and Heating Contractor: Rowland Plumbing & Heating Co. Distributor: Gilbert Brothers, Inc.

100 new Woodlawn Park homes in Minneapolis, Minnesota. Builder: Wilkorp, Inc. Plumbing Contractor: Tabaka Plumbing. Heating Contractor: Walter Heating Company. Distributor: Globe Plumbing Supply Co.

1170 Apartments in Fort Lee, New Jersey. Builders: Sarner & Solow. Architect: Max M. Simon. Distributor: Davis & Worslow, Inc. Plumbing Contractor: Formount Plumbing & Heating Co., New York.

648 Veterans Housing Units in Boston, Massachusetts... Building Contractor: C. J. Money, Inc. Plumbing Contractor: Crane Plumbing & Heating Co. Architect: Saul E. Mollis. Distributor: Samuel Hurwitz Co.



121 Units Multiple Dwellings in Los Angeles, California. Building Contractor: N. J. Nielson Co. Plumbing Contractor: Charles C. Lockard, Inc. Distributor: Tri-State Pipe and Supply Co.

100 Apt. Units in Memphis, Tenn. Bldg. Contractor: Owner-Builder Corp. Plumbing Contractor: R. E. Shoak Service. Architect: Faires & Sanford; Chas. Williams, Asso.; Dist.: Gordon Hollingsworth Co.

234 Homes in Phila., Pa. Builders: Broad Construction Co. Plumbing Contractor: Provident Plumbing and Heating Co. Heating Contractor: William G. English. Distributor: Atlantic P. & H. Supply Co.

940 Post Acres Homes in Westbury, Long Island. Building Contractor: Post Acres Corporation. Plumbing Contractor: Central Plumbing and Heating Co. Distributor: Elite Sales Corporation.

When Quality and Economy Count...Count on Richmond

As everyone knows, today's building requirements are more exacting than ever. Plumbing and heating equipment must look attractive...provide quality at reasonable price...with low-cost maintenance and operation to fit your rigid budget. That's why more builders, more

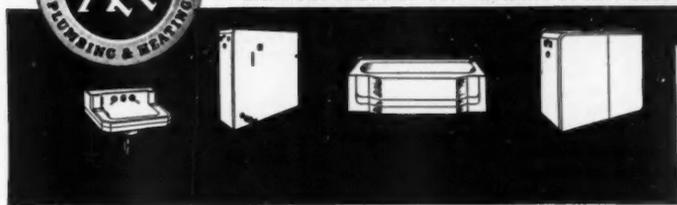
architects, more plumbing contractors nationwide recommend Richmond. In plumbing fixtures of enameled cast iron or vitreous china...in gas or oil-fired automatic heating equipment...always remember—when quality and economy count...count on Richmond.



RICHMOND

RICHMOND RADIATOR CO.—AFFILIATE OF REYNOLDS METAL CO.

AS-1

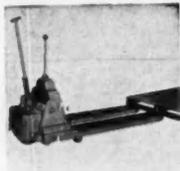


Richmond Radiator Company
19 East 47th Street, New York 17, N. Y.
Please send me information and literature on Richmond heating equipment and plumbing fixtures.

NAME

COMPANY

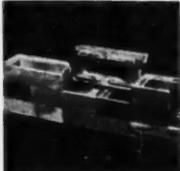
ADDRESS



Pallet Load-Lift—Market Forge Co., Everett, Mass. Made of aluminum alloy, it features special wheels that automatically retract when forks are in lowered position. Truck has short wheel base, will lift wherever man can stand.



Factory-Built Homes—Ivon R. Ford, Inc., McDonough, N. Y. Sold to developers and contractor-dealers who are required to maintain their own crews to perform field work under factory supervision. Homes are conventionally designed.



Building Blocks—Speed-block is interlocking building material of patented design requiring no mortar to bond together the individual blocks. Made by Hydro-Forged Stone Associates, Inc., Bultley Bldg., Cleveland 15, Ohio.



Packaged Chimney—Chimney Sales Co., Fredericksburg, Va. Thulman chimney is approved by Underwriters' for use in one, one-and-one-half and two-story buildings and for installation with zero clearance. Unit sent complete.



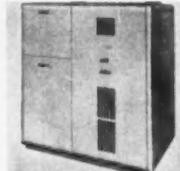
Waste Disposer—Eureka Williams Corp., Bloomington, Ill. Dispos-O-Matic fits any standard size sink and grinds kitchen waste to fine pulp. To prevent jamming, hinged impellers allow heavy pieces to pass through, then breaks them up.



Translucent panel—Corlux Corp., P. O. Box 6524, Houston, Texas. In six colors, has wide use as skylighting, and as decoration. Weighs less than 1/2 pound per sq. ft. In widths up to 42 inches, lengths up to 12 feet. Easy to install.



Small Range—Frigidaire Div., General Motors Corp., Dayton 1, Ohio. Although only 30 inches wide, range oven is large enough to hold six pies or 10 loaves of bread. Will fit into small kitchen. Has large storage drawer. Low price.



Winter Air Conditioner—Niagara Furnace Div., The Forest City Foundries Co., 2500 W. 27th St., Cleveland 13, Ohio. Series 50 Niagara has cast iron heat exchanger, is available in five sizes. Three-speed direct-drive blower.



Flexible Doors—Doors, made of Northern Basswood splints 7/8x1/10 inches thick, are designed for walk-in closets, room dividers, and similar uses. Range of 11 enamel colors. Hough Shade Corp., 1044 Jackson St., Janesville, Wis.



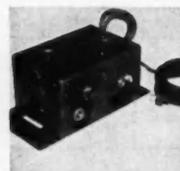
Lavatory—Crane Co., 836 S. Michigan, Chicago 5, Ill. Crane Criterion lavatory introduces new made in styling. Viterous china slab construction with wide flat top and rolled front. Lucite handles. With or without legs.



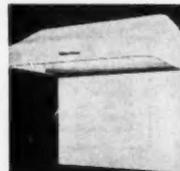
"Disappearing" Bed—Folding bed has complete head rail, appearance of conventional bed. As little as seven square feet of floor space will take care of concealment. Holmes Mfg. Co., 211 N. Madison Ave., Los Angeles 4, Calif.



Power Saw—The Forsberg Mfg. Co., Bridgeport, Conn. Whiz-Saw No. 2 will rip and cross-cut wood, bone, plastic, etc., up to 2 inches thick. Has 1/2 H.P. motor, AC or DC. Forced lubrication. Length, 7 feet. Weight, 6 1/2 pounds.



Combination Unit—Palmer D. Weeks, Inc., 5402 1/2 Lakeside Ave., Richmond, Va. Planes doors and all other wood surfaces up to 2 1/2 inches wide, or can be used as a jointer by passing wood over top of cutter head. Steel Plate with steel head.



Range Ventilator—Comfort Products Corp., Dallas, Texas. Two-speed over-the-range Kitchen Kony fastens directly to wall. Quiet, vibrationless operation. Unit does not affect heating or air-conditioning systems in the home.



Fork-Truck Tire—Clark Equipment Co., Industrial Truck Div., Battle Creek, Mich. Demountable cushion style rubber tire will be standard equipment on Truclader models 1015 and 1024. Tapered hard-rubber base reinforced with wires.



Concrete Block Maker—Fleming Manufacturing Co., 4980 Fyler Ave., St. Louis 9, Mo. FMC model, 33 inches wide, 70 inches long and 66 inches high is factory adjusted for 180 cycles per hour. One man required. Push button controls.



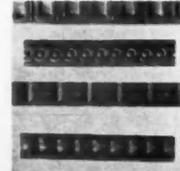
Weatherproof Plate—Cast aluminum plate, with self-closing lift cover and sealing rubber gaskets, is designed for use with 20 ampere 2-wire, 3-wire or 4-wire Twist-Lock caps. Made by Harvey Hubbell, Inc., Bridgeport, Conn.



Nozzle For Wetting Plaster or concrete. Fog-git Sales Co., P. O. Box 383, Downey, Calif. Creates fog-like spray that thoroughly wets without damaging stream of water. Operates on high or low pressure and attaches to standard hose.

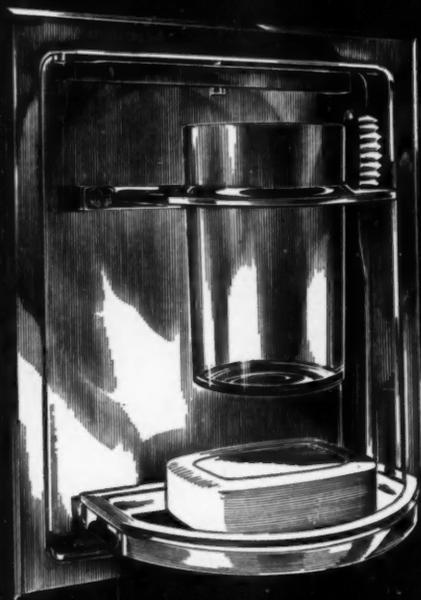


Garbage Disposer—GIVEN Manufacturing Co., Los Angeles, Calif. Waste King Pulverator has "Hush-Cushions" that keep noise and vibration from penetrating through walls, sink tops and house plumbing. Available in three sizes.



Decorative Moulding—Decor-Mould, made by Ho-moulding Co., 192 Lexington Ave., New York 16, N. Y., can be installed with ordinary hammer only, is scored so that it may be broken by hand pressure. Comes in number of colors.

HALL-MACK QUALITY ACCESSORIES



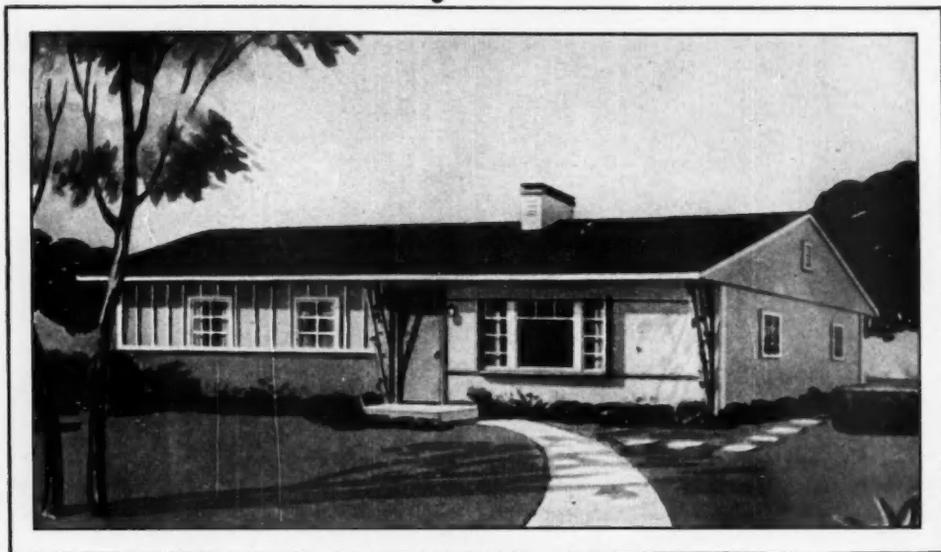
...for every Hall-Mack refrigerator.

...for every Hall-Mack refrigerator.

HALL-MACK®



Gunnison. HOMES, Inc.



• • • SETS THE PACE!

Big things are brewing for 1951! Gunnison Homes, Inc., pioneer home manufacturer, is again leading the way with a tremendously expanded program!

1951 brings two new series of Low-cost Quality homes! The Coronado (pictured), a long, low, rambling ranch style home with sweeping horizontal lines, a big picture window and wide roof overhang, is truly a home with the feel of the wide open spaces!

The new CHAMPION features America's favorite living room "accessory," the 25 square-foot picture window!

With our two new pace-makers, we're planning the biggest year ever!

SEE OUR BOOTH at the
NAHB Convention Exposition
in Chicago January 21-25.

Wherever There's Better Living . . .

Write Dept. A-9 for complete information.



Gunnison Homes

UNITED STATES STEEL  CORPORATION SUBSIDIARY
NEW ALBANY, INDIANA

"Gunnison," "Coronado" and "Champion"—T.M. Gunnison Homes, Inc.

AMERICAN BUILDER

GUNNISON HOMES

Builder of Homes for the Nation Chooses

American Kitchens



"Gunnison Homes incorporate only the finest materials and appliances. That is the reason, of course, that all Gunnison Homes use American Kitchens!"

—General John J. O'Brien, President of the Gunnison Company, wrote us:

"The kitchen is almost the first thing a woman wants to see about a house—and we've found again and again that American Kitchens sell our houses faster."

Builders everywhere have discovered the popularity of American Kitchens—the beautifully designed kitchen that most women want. And they've discovered, too, that American Kitchens increase the value of their homes—without increasing the cost. American Kitchens in the homes you build become a visual sign of quality to give your clients confidence that the hidden materials are top quality too!

American KITCHENS

See us at N. A. H. B. Show, Booth No. 2
Stevens Hotel, Chicago, Jan. 21-25

American Control Div., Dept. AB-1
AVCO Mfg. Corp.
Crownsville, Indiana
Please have my distributor
send me your new 1950
Builders' File.

Name _____ State _____
Address _____
City _____ County _____



ANDERSEN GLIDING WINDOW UNITS: Sash glide open from side to side, can be removed for easy cleaning. Newly improved with stronger frame and more efficient weatherstripping. Screen and double glazing optional. Single light or horizontal glazing.

Windowalls
ANDERSEN

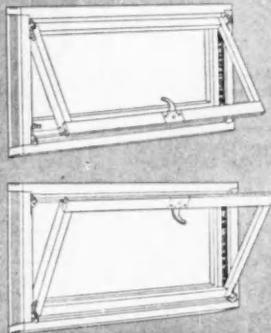
4 COMPLETE WINDOW UNITS

Made of Beautiful, Insulating
 Wood



ANDERSEN PRESSURE SEAL WINDOW UNITS: Sensational new double hung window with instantly removable sash. Unique action of pressure strips in stiles eliminates counterbalances, gives superior ease of operation and weathertightness. Easy to install. Horizontal or cut-up glazing.

Andersen
BASEMENT-UTILITY WINDOW UNIT



ANDERSEN BASEMENT-UTILITY WINDOW UNIT: Attractive, single light basement window comes carton packed ready for installation. Reversible sash hinges either top or bottom. Modular sizes. Storm sash optional. Many economical above-ground uses. Ideal for cabins, garages, utility buildings.



ANDERSEN CASEMENT WINDOW UNITS: Many sizes, including picture window combinations. One light, horizontal or cut-up glazing. Outswinging sash. Inside screen and double glazing optional. Most weathertight window you can buy.

Windowalls
ANDERSEN
COMPLETE WOOD WINDOW UNITS

Andersen WINDOWALLS are complete wood window units precision manufactured by Andersen Corporation, Bayport, Minnesota. See your local millwork dealer or write us for details and further information. WINDOWALLS detail catalog is in Sweet's Builders' File.

*TRADEMARK OF ANDERSEN CORPORATION

Andersen Corporation • BAYPORT, MINNESOTA

WINDOW SPECIALISTS FOR 47 YEARS

BACKING UP YOUR JUDGMENT

The builders of America have wholeheartedly accepted

Auto-Lok

PATENTED

WEATHERSTRIPPED ALUMINUM
AWNING WINDOWS

That this confidence is not misplaced is indicated
by impartial tests of the

PITTSBURGH TESTING LABORATORY

Report No. 408749, dated October 19, 1950 --
dealing with the degree of air infiltration
(possible leakage) through AUTO-LOK Awning
Windows -- states that this air infiltration
amounted only to

"0.095 cfm per foot at a static
pressure equivalent to 25 mph."

You undoubtedly know, from your own experience, that this is an *amazingly low* rate of infiltration. It is the equivalent of a closure at least *ten times* as tight as the generally established requirements for casement and projected windows.

REASONS WHY AUTO-LOK MAKES HOMES MORE DESIRABLE

... HELPS SELL THEM FASTER!

- | | |
|--|---|
| Distinctive Beauty. | Lower Fuel Bills. |
| Ventilation when it's raining. | Maintenance costs at a minimum. |
| No drafts -- air scooped in and upward! | Easily operated and cleaned from the inside. |
| Removable inside screens and storm sash. | Makes interiors more comfortable and livable. |

For complete information about this all-purpose window (utilized on all types of construction in all sections of the country), consult SWEETS, or address Dept. AB-1



See Auto-Lok and Ludman Jalousie
Windows and Doors. N.A.H.B. Convention
Jan. 21-23 -- Booths 27 & 28
CONGRESS HOTEL

LUDMAN CORPORATION

P. O. Box 4541

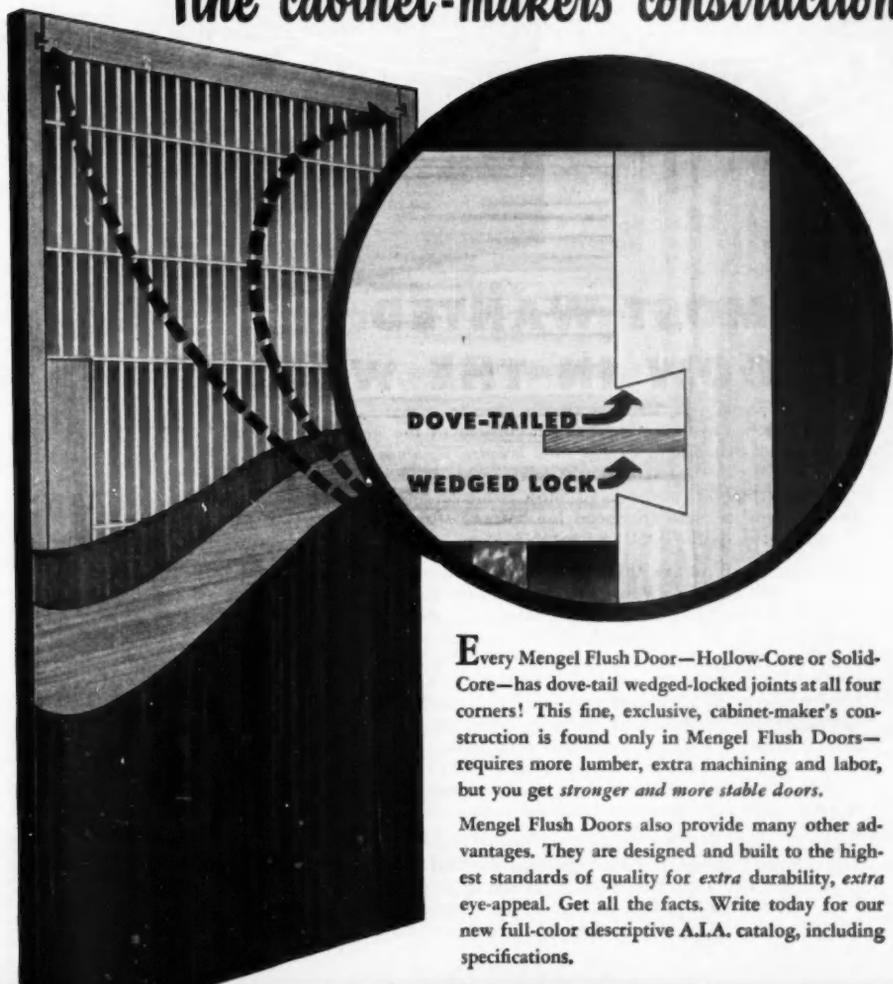
Miami, Florida

AMERICAN BUILDER

MENGEL

Flush DOORS

give you the advantages of this
fine cabinet-maker's construction!



Every Mengel Flush Door—Hollow-Core or Solid-Core—has dove-tail wedged-locked joints at all four corners! This fine, exclusive, cabinet-maker's construction is found only in Mengel Flush Doors—requires more lumber, extra machining and labor, but you get *stronger and more stable doors*.

Mengel Flush Doors also provide many other advantages. They are designed and built to the highest standards of quality for *extra durability, extra eye-appeal*. Get all the facts. Write today for our new full-color descriptive A.I.A. catalog, including specifications.

Plywood Division, THE MENGEL COMPANY, Louisville 1, Kentucky



THE miami AWNING WINDOW

is

THE MOST WANTED WINDOW IN THE WORLD

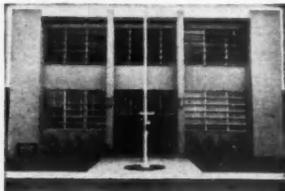
North, South, East, West—from far corners of the globe—comes *proof* that Miami IS *The Most Wanted Window In The World!* And you contractors, architects, future industrial and residential builders at the 1950 Show named it "The Dreadnaught Window" and are specifying "Miami" for *all types* of construction,—with GOOD REASONS:

- Awning vents utilize 90% of window area, yet adjust to exclude driving rain
- Vents double-seal with metal-to-metal contact, against hurricane, blizzard, dust, rain (see Pittsburgh Laboratory Test)
- Aluminum holds its beauty *forever*, no paint, putty, rust or rot
- Window washing, *from within*, is safe, costs less
- Aluminum storm sash and screens go on in seconds—*from within*
- Install in any type of construction, easily and quickly
- Metal glazing strip snaps in, saves time, money and maintenance
- Massive extruded aluminum construction, simple mechanism, eliminate headaches and "come-backs"
- Styling harmonizes with contemporary industrial, commercial and ranch house architecture
- Available in widths to 6'2", heights to 8'2".

Your "rated" projects, plants, government buildings, many institutions and certain residential construction will benefit from Miami Awning Window installations, yet *cost no more*, all told. See our distributor in your area or write for catalog and installation details.



College, Hospital—or arms plant? From every angle, Miami Awning Windows are better in function, appearance, maintenance and cost.



School, factory, apartment or residential? Miami is Wanted because it's Right! See our catalog in Sweet's File—Architectural and Builders.



- miami AWNING WINDOW Div. of Industrial Machine Tool Co., Inc.
Dept. B • 301 S. Oak St., Fenton, Michigan • Also mfd. by Miami Window Corp., Miami Fla.

AMERICAN BUILDER

Why BUILD CHIMNEYS THE SLOW HARD WAY

when you can

CUT COSTS

SAVE TIME

with

accepted
Proved

**Van-Packer
PACKAGED CHIMNEY**

Why hire somebody to build chimneys the expensive, old fashioned way when you can install Van-Packer yourself—saving time and money. And, your buyer gets a more efficient, longer-lasting chimney.

- You install Van-Packer at exact moment it suits you best
- Each package contains complete supplies—nothing else to buy
- Finish chimney installation in 3 hours or less
- Cut chimney cost from 20% to 50%—eliminate waiting and cleanup mess
- Accepted by FHA and national codes
- Proved fire-safe and efficient by Underwriters' Laboratories

HOW DO I ORDER—For exact quotation, take the H-L measurements shown in chimney diagram at left. State quantity of chimneys needed.

WHERE DO I BUY IT—See your lumber dealer, heating contractor or write direct to address below. You can count on prompt delivery.

HOW DO I INSTALL IT

Install and level chimney base in floor or ceiling. Cement sections together. Fit—apply draw bands. Fit housing to exact roof pitch. Set rain cap. You are all done in 3 man-hours or less.

Van-Packer

CORPORATION

136 SOUTH CLARK STREET
CHICAGO 3, ILLINOIS

A FEW OF THE MANY BUILDERS
CUTTING COSTS WITH
VAN-PACKER CHIMNEYS



Robert Bartlett Bldg. Corp.



H. B. Layne, Contractor



Strausman Construction Co.



Lawrence C. Pearce Co.



Private Homes, Inc.



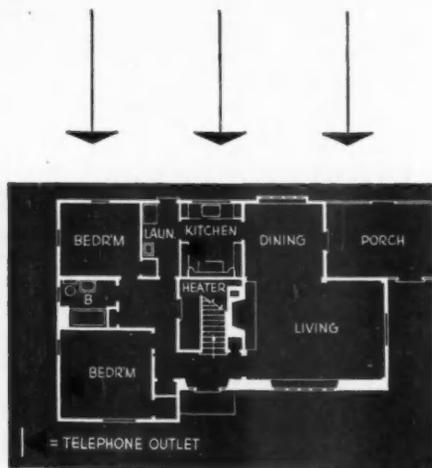
GEORGE R. PAUL, *Architect*

Plan a "disappearing act" for telephone wires

Hidden telephone wiring helps protect the beauty of carefully planned interiors. It helps, too, in selling quality-conscious prospects. For telephone raceways are a sign of thorough planning and thoughtful construction.

It's easy and inexpensive to build in telephone raceways. First, select convenient locations for telephone outlets. Then, during construction, have a few lengths of rigid or flexible conduit placed inside the walls and connected to the outlets. These provide "hidden passages" for wires when telephones are installed later on.

Your Bell Telephone Company will be glad to help you. Just call the local Business Office for assistance in planning telephone service in the homes you build.



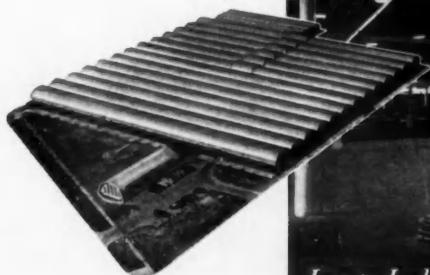
BELL TELEPHONE SYSTEM



STRAN
STEEL

QUONSETS

provide valuable space, quickly and at low cost, as
FACTORIES • WAREHOUSES • MACHINE SHOPS • STORAGE BUILDINGS



Large Industrial Warehouse ... 5 Acres for Storage

ALL-STEEL Quonset buildings offer the ideal solution to America's fast-growing need for quick, economical construction.

For large industrial installations or small, Quonsets give you a variety of sizes . . . in a variety of lengths . . . superior fire-protection . . . lasting durability.

The amazing versatility of Quonsets was first shown in World War II . . . after V-J Day their fast erection and economy of material helped speed the nation's quick return to peacetime prosperity.

Now, more than ever, new and improved Quonsets are your best bet for all-round speedy construction. For full details, see your nearby Quonset dealer, or write direct to—

Proof of the usable floor space Quonsets provide—quickly—for industrial needs is this interior view of National Steel Products Company's new Houston warehouse. It covers five acres (see inset picture).

Built in 12 Weeks . . .

at Half the Cost! ♢

Archie Furr, Lincoln, Neb., wholesaler, needed a new warehouse and office *fast*, at an economical figure. His multiple Quonset was completed for half the amount bid on conventional type building.



To Supplement Existing Structures . . . Quickly!



Quonset Multiple and Quonset 40 were chosen by Twin Coach Co., Buffalo, N.Y., to provide additional storage space and experimental manufacturing facilities. Flexibility of design and speedy construction make Quonsets ideal for factory additions.

GREAT LAKES STEEL CORPORATION
Stran-Steel Division • Escore, Detroit 29, Michigan

PRODUCED BY



STRAN-STEEL AND QUONSET
REG. U.S. PAT. OFF.

NATIONAL STEEL CORPORATION





REMODELING?

Marlite's ideal for these rooms and hundreds more!

You'll quickly solve remodeling problems when you consider the many practical *uses* of versatile Marlite plastic-finished panels. Marlite goes up fast over old walls or new. The exclusive, baked-on plastic finish *seals out* dirt, grease, stains and moisture . . . *seals in* the lifetime beauty. And when you point out to your customers that costly painting and redecorating are eliminated, that the ease of cleaning makes maintenance far easier, they realize the tremendous savings offered by Marlite!

Choose from 63 striking color and pattern combinations to suit any decorative theme. Find out the *many* ways you can modernize with Marlite. Write for literature showing actual Marlite installations in full color. Address Marsh Wall Products, Inc., Dept. 103 Dover, Ohio. Subsidiary of Masonite Corporation.

SEE YOU IN CHICAGO! You're invited to visit Marlite Booth 154 in the Stevens Hotel during the NAHB Convention. We want to answer your questions and show you our new products and literature for builders.

USES

IN EVERY ROOM IN EVERY BUILDING . . .

Residential	Industrial
Commercial	Institutional

FOR WALLS AND CEILINGS AND . . .

Cupboards	Elevator Interiors
Checkout Stands	Store Window
Bars & Back Bars	Backgrounds
Counter Fronts	Meat Cutting Rooms
Candy Cases	Shower Areas
Product Displays	Splash Boards

For creating beautiful interiors



MORE YEARS
FOR YOUR DOLLAR WITH
RUBEROID
BUILDING MATERIALS



*You'll ring the bell
with Ruberoid!*

Yes, Ruberoid helps you ring the bell with home buyers, and home-remodeling prospects.

Ruberoid is right at home with your prospects in the pages of the magazines home owners and home-buying prospects read . . . telling them about the advantages of Ruberoid TITE-ONS, the *original* interlocking shingles, and Ruberoid Asbestos-Cement Siding.

Ruberoid Tite-Ons are famous for their wind-defying, fire-resistant, long-lasting qualities. Their basket-weave beauty and attractive blend of colors give any house added sales appeal.

Ruberoid Asbestos-Cement Siding, too, offers pleasing design possibilities, combined with fireproof, maintenance-free, long-lasting economy that appeals to budget-minded home buyers.

You and your prospects will be seeing these Ruberoid advertisements in such magazines as Time, Better Homes & Gardens, Good Housekeeping, Successful Farming, Country Gentleman, Farm Journal, Capper's Farmer, etc.

When you build or remodel, specify Ruberoid, the roofing and siding materials that have brand acceptance, sales appeal, and are backed by the Good Housekeeping Seal of Approval.



The **RUBEROID** Co.

500 Fifth Avenue, New York 18, N. Y.



LIGHTY—OF "GRIN AND BEAR IT"

*"Comrade Agent send valuable
U. S. Industrial Secret ... in America,*

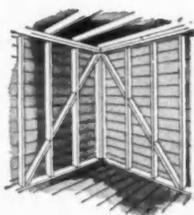
EVERYTHING HINGES ON IT!"

C. Hager & Sons Hinge Mfg. Co. • St. Louis, Mo.
Founded 1849—Every Hager Hinge Swings on 100 Years of Experience

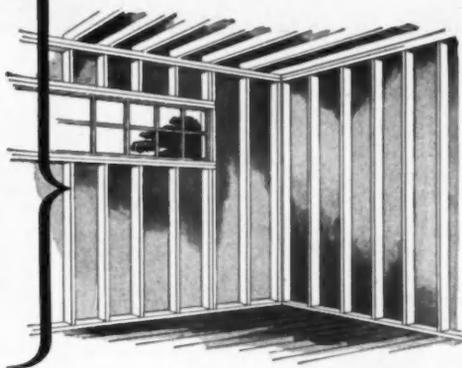


© 1950

ANOTHER ADVANTAGE OF BUILDING WITH HOMASOTE . . .



WITH
**NO
CORNER
BRACING**



... Homasote greatly exceeds F.H.A. strength requirements
... surpasses corner-braced, horizontal wood sheathing

STANDS UP UNDER
HURRICANES,
TORNADOES, TWISTERS

SINCE 1937, Homasote has been eligible for F.H.A. Mortgage Insurance—with no corner bracing—as used in Precision-Built Construction. The F.H.A. standards require bracing strength equal to horizontal wood sheathing with corner bracing. Racking tests—by an independent laboratory—showed that Homasote, without corner bracing, has a 150% margin of safety at 1200 lbs. and a 300% margin at 2400 lbs. over these requirements. Many another test has repeatedly shown Homasote to be the strongest insulating and building board on the market.

No corner bracing is required when Homasote—in 4' widths or in greater widths up to 14'—is used on jobs under F.H.A. supervision.

Homasote is weatherproof—tested for more than 30 years under every weather condition—from the tropical to the antarctic. With its unusually low moisture absorption, low air infiltration and high resistance to water-permeability, Homasote provides the maximum in lasting insulation values and full protection against dampness.

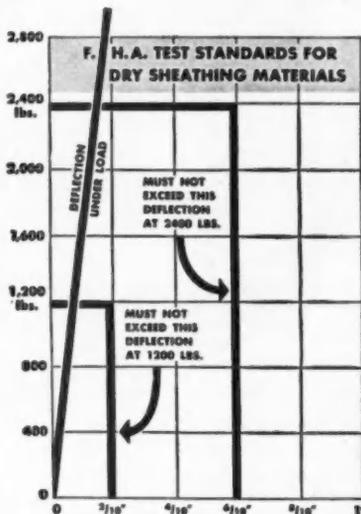
Homasote's Big Sheets require only one third as many nails as do 4' materials. With this lower application cost and the additional savings through the elimination of corner bracing, architects and builders can safely specify Homasote sheathing for the strongest house at the lowest cost.

HOMASOTE COMPANY, Trenton 3, N. J.



... in Big Sheets up to 8' x 14'

... Oldest and strongest insulating and building board on the market



THIS CHART shows the results of racking tests made by an independent laboratory, using 8' x 8' Homasote sheathing on standard wall framing without corner bracing. At 1200 lbs. pressure, deflection could not exceed 2/10 inch; at 2400 lbs. pressure, 6/10 inch. . . . The diagonal line shows that Homasote without corner bracing had a margin of safety of 150% at 1200 lbs. and 300% at 2400 lbs.

Nova Sales Co.—a wholly-owned Homasote subsidiary—distributes the Nova Roller Door, Nova-I. P. C. Waterproofing Products, the Nova Shingle and Nova-Speed Shingling Clip and the Nova Loc-Nail. Write for literature.

Q: Why is Thermopane's Bondermetic Seal important to you?

A:

Because this metal-to-glass seal is *airtight*—hermetically sealed. The clean, dry insulating air between the panes of *Thermopane** is not subject to changes in moisture content. No desiccant is necessary to absorb excess interior moisture. The sealed air space has a uniform ability to insulate against the loss of heat.

OVER 1,500,000
UNITS IN USE

Q: WHAT'S THE SEAL MADE OF?

A: Of a lead spacer and a special copper alloy we developed after more than 2,000 tests with all sorts of organic and inorganic materials. These durable metals will not corrode or rust under normal conditions. They are flexible to withstand strain.

Q: HOW IS THIS SEAL PUT ON?



A: A continuous strip of copper is bonded to the inner surface along the edge of each pane . . . then the lead spacer is heat-bonded to the copper alloy. Glass, copper band and lead spacer are joined into one strong, solid unit.

Q: HOW DO WE GET THE AIR DRY AND ASSURE AN AIRTIGHT SEAL?

A: Following this assembly, filtered, dehydrated air is passed through the unit for a predetermined length of time to remove moisture-laden air. Each *Thermopane* insulating glass from an L-O-F Distributor listed under *Glass* in the yellow pages of your phone book. Or write Libbey-Owens-Ford Glass Company, 1111 Nicholas Building, Toledo 3, Ohio.

Cutaway view of Thermopane Unit

- AA Two panes of glass
- B Space for dry, clean air
- CC Copper alloy band } Bondermetic Seal
- D Lead spacer

For clear vision and trouble-free performance, insulating glass is only as good as its seal. These are some of the reasons it is important for you to insist upon *Thermopane*, made in the U. S. solely by Libbey-Owens-Ford.

Get complete information on *Thermopane* insulating glass from an L-O-F Distributor listed under *Glass* in the yellow pages of your phone book. Or write Libbey-Owens-Ford Glass Company, 1111 Nicholas Building, Toledo 3, Ohio.

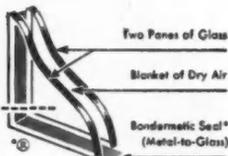


Thermopane

LOOK FOR THE NAME ON THE SEAL BETWEEN THE PANES



FOR BETTER VISION SPECIFY THERMOPANE MADE WITH POLISHED PLATE GLASS



AMERICAN BUILDER

Modernize with Malarkey House Ideas
as advertised in..



Showing your
customers how to
build that extra
bedroom

There are immediate sales to be
had . . . and jobs to be done in
home modernization

Now, when it is difficult to build new homes under credit and building restrictions, people will take another look at their present home with an eye toward remodeling. Your opportunities for new business will come about through their *home modernization*.

We are providing these people through the Malarkey House advertising with up-to-the-minute ideas to make their homes more comfortable, convenient and attractive. Get them to come *into your store* for plans, advice and financing. Ask your distributor for suggestions and sales aids so that you can actively tie-in with this program for new business.

Send today for name of distributors in your area and style sheet "Malarkey Doors". M and M Wood Working Company, 2341 N. Columbia Boulevard, Portland 17, Oregon.



This one feature alone will interest many of your prospects who want to fix up a bedroom for the girl in their family. It can be built with materials that are available, such as quality Malarkey fir panel doors.

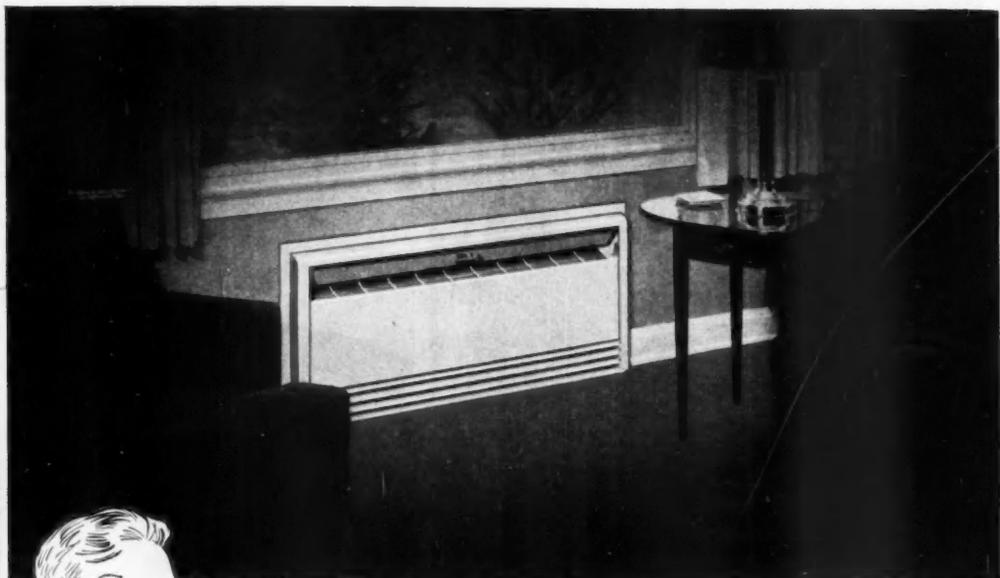
Send 10c for detail plans of this closet.



Malarkey plywoods and doors

Look for the Malarkey red diamond trademark

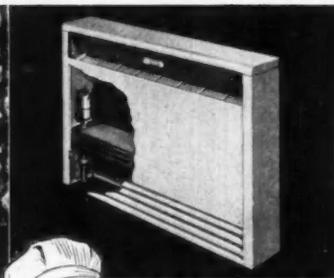
Everybody's happy when you select MODINE CONVECTOR RADIATION



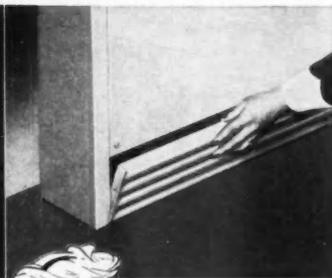
He's happy because Modine Convectors give him truly modern heating — maximum efficiency with either steam or hot water systems. He gets safe, healthful air circulation . . . uniform comfort that's based on a combination of convected and radiant heat. And he goes for the instant response to thermostatic control . . . the individual room temperature control made possible by Modine's adjustable damper.



She's happy because Modine Convectors match her idea of decorative appeal. She appreciates their clean, functional lines . . . the way they can be recessed under windows for unobtrusive beauty, blending perfectly with any interior.



He's happy because Modine Convectors are a snap to maintain. Steel rust-protected enclosures withstand roughest treatment. High-speed, non-ferrous heating units resist corrosion . . . offer peak performance with minimum service.



She's happy because Modine Convectors are so easy to keep clean. Dust can't get a foothold! Snap-in lower grille instantly removable for routine cleaning. And for major sprucing up, front panel can be quickly removed.



For full information call your Modine representative — listed in your phone book classified section. Or write Modine Mfg. Co., 1501 Dekoven Ave., Racine, Wis.

Modine CONVECTOR RADIATION

AMERICAN BUILDER

R-1061

You can win medals (and money) with



MICARTA[®]

PRE-BONDED TO PLYWOOD

Micarta is the quality plastic surfacing material made by Westinghouse, sold by United States Plywood, and advertised in such magazines as The Saturday Evening Post, Good Housekeeping, etc.

It's the surface your customers want on kitchen counters, sinks, dinette tables, in bathrooms and playrooms. It's the surface that is famous because it dares customers to chip, dent or scratch it . . . dares them to stain it . . . even dares them to burn it with cigarettes. And it's so easy to clean!

Now YOU can install Micarta anywhere — and **YOU DON'T NEED A PRESS.** Any carpenter can use Micarta.

- You can buy $\frac{7}{8}$ " Micarta panels, already bonded to exterior grade Weldwood Plywood, from your lumber dealer.
- Pre-bonded Micarta is made in new sizes (less waste) : 24" x 96" 48" x 96" 30" x 60" 30" x 96".
- You can saw, trim, plane or drill these ready-to-use Micarta panels with inexpensive hand tools. (Complete instructions on request.)



Manufactured by **WESTINGHOUSE**
and sold for decorative purposes only by
UNITED STATES PLYWOOD CORPORATION
and U. S. — MENGEL PLYWOODS, INC.

Now, get the better-paying jobs yourself—new installations and modernizations. Discover MICARTA.

1 Ask your lumber dealer to show you Pre-bonded Micarta and samples of the handsome colors and patterns.

2 MAIL THE COUPON for a sample which will prove how Micarta resists scratching, denting, chipping or staining, plus complete data on how *easily* any carpenter can use Pre-bonded Micarta.

Discover

MICARTA[®]

today!

UNITED STATES PLYWOOD CORPORATION
35 West 46th Street, New York 18, N. Y.

A.B. 1-53

Please send me free sample and full information on MICARTA.

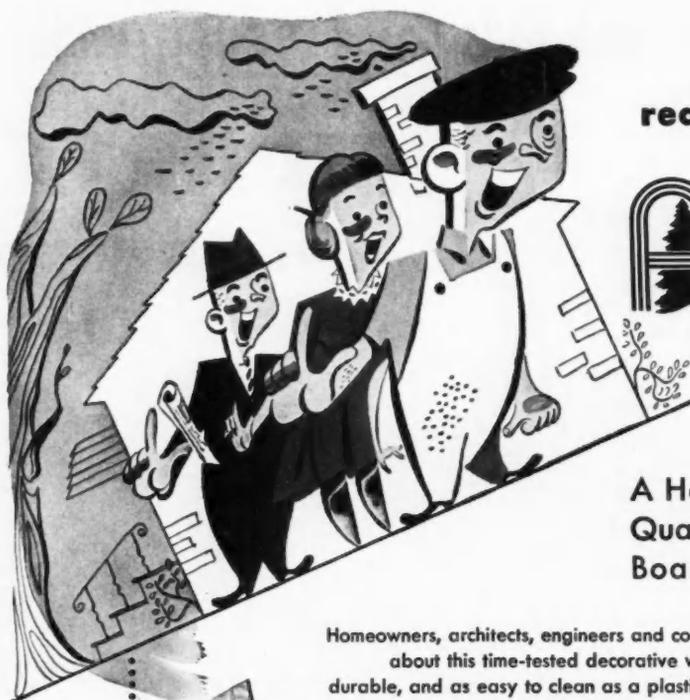
NAME _____

COMPANY _____

ADDRESS _____

CITY _____

STATE _____



here's a
real money-maker
for you!



DECORATIVE WALLBOARD

A Hard-Surfaced, High
Quality, Laminated Plastic
Board Available Now!

Homeowners, architects, engineers and contractors are already enthusiastic about this time-tested decorative wallboard. Its surface is hard and durable, and as easy to clean as a plastic table-top. Beautiful, permanent Arborite is readily installed on the job in new or old construction.

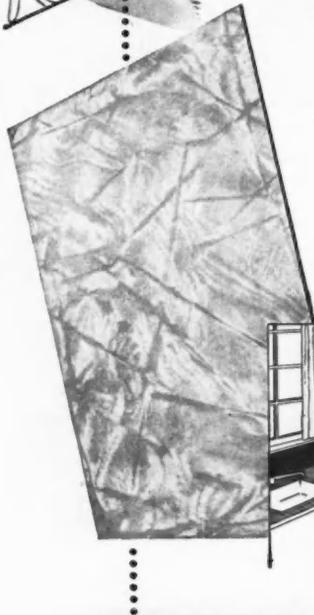
Available in panels 4' x 8' and 2'6" x 8', 1/8 inch thickness, in over 30 different colors and patterns. It does not stain or discolor . . . unaffected by grease, oil, alcohol, mild acids and alkalis . . . cigarette-proof . . . wipes clean with a damp cloth.

Don't miss this big profit opportunity. Ask your wholesale plywood building supply or floor covering distributor for complete information on Arborite—or write direct to us.

**IDEAL FOR KITCHENS, BATHROOMS
AND DOZENS OF OTHER USES**

Arborite is the finest surface material available for kitchen drainboards and counters . . . for wall panels in bathrooms and kitchens . . . for walls and ceilings in homes, clubs, bars, hotels, hospitals, etc. Whatever the color scheme, there is an Arborite pattern to blend and harmonize.

WHOLESALE: *Attractive territories still open.
Write or wire for full particulars.*



J. A. DAVIES & COMPANY

314 STRAIGHT AVENUE, S. W., GRAND RAPIDS 3, MICHIGAN

Sales Representative of

THE ARBORITE COMPANY LIMITED, MONTREAL, CANADA

Start NOW reaping year-round profits with National Lock BUILDERS HARDWARE

BARREL BOLTS

A 65-153



Barrel Bolts are made of steel in 3 sizes ... with 3, 4 and 5 inch bolts. Items are finished with base in black enamel or brass plate. Bolt is brass plate. Packed one dozen in a carton with screws.

One of many quality-made, in-demand hardware
items from NATIONAL LOCK'S complete line . . .



National Lock Builders Hardware provides consistent profits month after month. Items are offered in a wide range of sizes, specifications and finishes to answer every builder and consumer need. Many are attractively packaged. All are shipped in durable, compact cartons. Handsome counter display boards are provided FREE to help you sell. Order a well-rounded inventory NOW, as illustrated in our Builders Hardware Catalog. Write us if you do not have a copy. One will be sent free of charge.

Ask your favorite supplier about National Lock Hinges, Butts, Hasps, Latches, Pulls, Sash Locks

DISTINCTIVE HARDWARE... ALL FROM 1 SOURCE

ROCKFORD, ILLINOIS • MERCHANT SALES DIVISION



WORLD'S BIGGEST

LAKWOOD PARK CALIFORNIA

World's Largest Planned Community Development

Situated ten miles southeast of Los Angeles, Lakewood Park covers roughly ten square miles—will have a population of more than 65,000 within two years. Project calls for over 17,000 homes, a 153-acre shopping center, schools, churches, parks and playgrounds. Lakewood Park Corporation is a joint venture firm composed of two long-established building contractors: Aetna Construction, Inc., and Biltmore Homes, Inc.



OVER 171 MILLION FEET OF ROOF LUMBER will go into Lakewood Park—and SKIL Saws cut all of it. Model 825 SKIL Saw is used in sawing all 2-inch rough lumber for framing members . . . bevel-cutting lumber for jack rafters up to 2½ inches at 45 degrees.

UP THEY GO—6,000 HOMES IN 245 DAYS and Model 825 SKIL Saws set the pace. These popular 8¼ inch SKIL Saws have a 2½ inch depth of cut . . . are favorites with contractors for constant use in general home construction.

MORE THAN 137,000 SQUARE YARDS OF SUB-FLOORING will be used at Lakewood Park and SKIL Saws cut it swiftly, accurately! Here are two of the 350 Model 825 SKIL Saws at work. SKIL Saws are powerful, compact, perfectly balanced—easier to use.

Home Building PROJECT

speeded up with 365 SKIL Saws!

**SKIL Saws used exclusively
to build 6,000 homes in 245 days...
with 11,000 more to come!**

**It's smart to standardize on
SKIL Saws! Performance-proved
to produce under pressure!**

Talk about field-proved performance! Imagine—hundreds of days of steady construction! Hundreds of carpenters working at peak efficiency; against time; under all conditions. Saws constantly changing hands... cutting wet wood and dry... absorbing weeks of punishment in a single day! And yet SKIL Saws stayed on the job—kept delivering day-in, day-out... month after month. *What better test can you think of for any saw?*

Follow the example of Lakewood Park builders and other prominent builders everywhere. *Standardize on SKIL Saws* on your next job! You'll save important time and money through fast, easy interchangeability of parts; minimum blade inventory; quick efficient repair service from a near-by SKIL Service Branch... and *famed SKIL Saw performance.*

Ask your SKIL Tool Distributor to demonstrate these powerful, easy-to-handle, *performance-proved SKIL Saws* today!

*Here's what they say at
Lakewood Park about this
tremendous project*

Lakewood Park

SKILSaw, Inc.,
5033 Elston Ave.,
Chicago, Ill.

Gentlemen:

When we started Lakewood Park, the largest planned community in the world, consisting of over 17,000 two and three bedroom homes, one of our first moves was to order three hundred and fifty Model 825 SKIL Saws and fifteen Model 315 SKIL Radial Saws.

As long users of SKIL Saws, we knew we could depend on them to stand up in the toughest service and help us meet our schedule of fifty homes per day. We knew there would be a minimum of repair service and on a big job such as this, they would take plenty of abuse.

After the construction of six thousand units, our confidence was more than justified and our men prefer SKIL Saw five to one, over any other portable saw.

Sincerely,

LAKWOOD PARK

SKIL Products are made only by

SKILSAW, INC.

5033 Elston Avenue, Chicago 30, Illinois

Factory Branches in Principal Cities

In Canada: SKILTOOLS, LTD., 66 Portland St.
Toronto, Ont.



**FOR TOP PRODUCTION SAWING
AT LAKEWOOD PARK SKIL Radial
Saw pre-cuts and gang-cuts at top speed.
SKIL Radial Saw is engineered for faster,
more accurate cuts; easier control; quicker
job changes. One man operates SKIL Radial
Saw with speed and precision.**



SKIL

*H. M. "Tex" Amberson,
Carpenter Superintendent,
uses radio to direct work
on 3,500 acre Lakewood
Park project.*

Barcol **OVER**doors

WEATHERTIGHT CLOSING

EASY OPERATION

LONG LIFE



THE selection of a garage door should be based on favorable answers to a number of key questions: Does it close tightly, yet operate easily without sticking? Will it continue to work properly for long periods without attention? Is reliable service available when needed? Has the manufacturer earned a reputation for making, and standing back of, a *good* product? . . . On the last question, we must let others speak for us, but on the first three we are sure you can be satisfied. Since 1928 we have applied our best engineering, manufacturing, and organizational skills to see that the Barcol OVERdoor was second to none in quality and performance. Thousands of successful installations indicate widespread acceptance of the Barcol OVERdoor. On your next job involving garage doors, *we invite your investigation.*

RADIO CONTROL

Reliability, based on over twenty years of specialized experience, is the distinguishing feature of the amazing Barcol Radio Control. With this equipment, the home owner has the added convenience and protection of opening and closing the garage door *by simply pushing a button in his car.*



See our Exhibit at the N.A.H.B. Exposition; Chicago, January 21 - 25, 1951

BARBER-COLMAN COMPANY, 104 MILL ST., ROCKFORD, ILLINOIS

30% more insulation for your money and...

it's fireproof!



NOW you can put top-quality, fireproof insulation into even your lowest-priced homes! Gold Bond's new Mat-Thick Rock Wool Sealed Blankets— $1\frac{1}{2}$ inch thick—cost less than 1-inch thick competitive blankets with lower insulation value. That's about 30% more insulation for your money, and it's fireproof! It will save you \$10 or better on the average 1,000 sq. ft. house.



See these new blankets
and other Gold Bond Products
at Booth #17

BUILT-IN VAPOR BARRIER

These Gold Bond sealed blankets are rugged and light-weight, easy to handle. They're completely enclosed with breather cover on three sides, and with a vapor barrier on the fourth side. The 8-ft.

lengths fill the usual 8-ft. wall height from floor to ceiling in one operation. Saves you up to 20% in handling and application costs!

HEAVY-DUTY NAILING FLANGE

Application is fast and easy because of the heavy-duty nailing flange on each Mat-Thick Rock Wool Sealed Blanket. Meets F. H. A. and Building Code requirements in nearly all areas. Sold by your local Gold Bond lumber and building material dealer. Sample for your inspection gladly supplied without charge.

You'll build or
remodel better with
Gold Bond

NATIONAL GYPSUM CO.
BUFFALO 2, NEW YORK

Fireproof Wallboards, Decorative Insulation Boards, Lath, Plaster, Lime, Sheathing, Wall Paint, Rock Wool Insulation, Metal Lath and Sound Control Products.

Easy to
Lay

Speeds
Your Jobs

Brings
Your Money
in Faster

HARDWOOD FLOORING

from *Higgins*
WORLD-FAMOUS BOAT BUILDERS

There's a lot behind the rich beauty of Higgins Bonded Hardwood Block Flooring that doesn't meet the eye — features that give you a decided advantage on any quality hardwood flooring job.

1. You buy Higgins Hardwood Blocks by NET measurement—each one precision cut to 9" x 9" face. No dimensional loss allowance to make for tongues and grooves.

2. You install Higgins Blocks quickly and easily over steel, concrete, or any type subflooring. Can be laid in adhesive—or blind nailed.

3. No "lefts" or "rights" to slow you down; pick any Higgins block at random, and it fits. No waste by splitting when blind nailed; tongues are integral part of block, cross-grain-reinforced.

4. Blocks come with final luxury finish—no on-the-job finishing. Housewives like the easy, low-cost maintenance of a Higgins floor. These are just a few of the many profit features.

HIGGINS FLOORING

Will Not Warp, Buckle, Cup, or Crack • Rot-Proof
• Termite-Proof • Water-Repellent • Climate-Proof
• Stain-Proof • Resists Abrasion • Easy to Lay • Money-Saving.



MAIL THIS COUPON FOR
SAMPLE BLOCK AND LITERATURE

Higgins, Incorporated
Dept. 122
New Orleans, Louisiana
Gentlemen: Please send sample of Higgins Bonded Hardwood Flooring block, together with detailed literature.

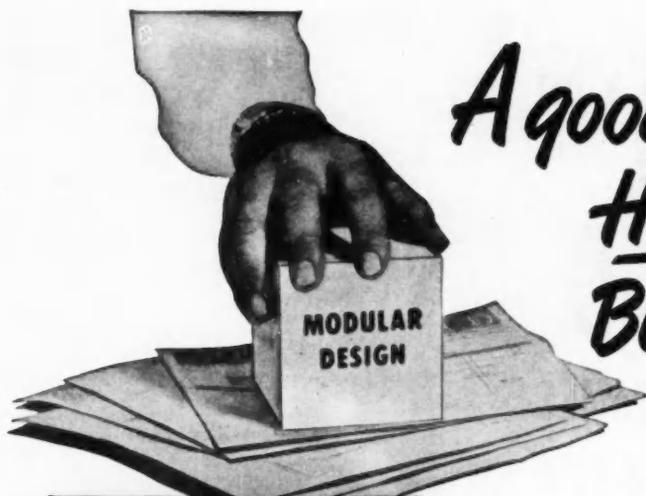
Firm Name _____
Address _____
City _____ Zone _____ State _____
Your Name _____

Higgins
INCORPORATED NEW ORLEANS



BONDED HARDWOOD BLOCK FLOORING

AMERICAN BUILDER



A good way to HOLD DOWN Building Costs!

These five popular wood window designs



Two Light

are all readily available in the 25 most widely used modular sizes.



Four Light High



Top Six Light



Twelve Light



Sixteen Light

Yes, many builders have found *modular design* a simple, workable way of reducing their construction costs. It can do the same for you.

Modular design is simply an orderly way of coordinating all plans and building materials to a 4-inch unit of measurement—called a "module." It involves no change from conventional building practices—works equally well for small homes or large commercial or industrial structures.

SAVES TIME—LABOR—MATERIALS

Because modular designed materials are sized to fit into a modular planned building—they are ready to use when delivered to the building site. Cutting and trimming time are sharply reduced—and costly waste of materials is all but eliminated.

LET'S SEE HOW IT WORKS... WITH WINDOWS, FOR EXAMPLE
Your purchasing problem is easier when you order modular-size windows, since one national standard for wood window sizes now replaces the ten or more regional standards. Your jobber or dealer can carry a better assortment of standard stock items. You save hours of cutting and trimming time on the job, too. The standard opening sizes take *any* design of modular-size wood windows, whether plans call for two-light, four-light, eight-light, twelve-light, top-divided or some other style.

ASK YOUR LUMBER DEALER to tell you more about modular design and how it can help you build for less. Or, mail the coupon for our free folder.

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION

332 SOUTH MICHIGAN AVENUE • CHICAGO 4, ILLINOIS

These seals of approval identify woodwork products which meet NWMA minimum standards for preservative treatment.



National Woodwork Manufacturers Assn.
332 South Michigan Avenue
Chicago 4, Illinois

Gentlemen: Please send me your folder, "New Savings for Builders."

Name.....

Address.....

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

Builders sure make a hit
when they use

AMWELD

STEEL DOORS & FRAMES
and SLIDING CLOSET
DOOR UNITS

All over the country, builders are receiving the praises of homemakers on the attractiveness of AMWELD Steel Doors & Frames and Sliding Closet Door Units. Builders also know that they cut building costs, blend with all types of architecture, require less installation time, and are competitive in price with other types of both wood and steel products. Send for new 12-page catalog.

K-D UNITS, TOO!

Sliding Closet Door Units are also available in packaged, knocked-down form, complete with header, jambs, track and hardware. Suitable for new construction and particularly adaptable for remodeling.

See us at the
NATIONAL HOME BUILDER SHOW
STEVENS HOTEL, CHICAGO
JAN 21 TO 25 • BOOTH NOS. 186-187



GEORGIA



FLORIDA



NORTH CAROLINA

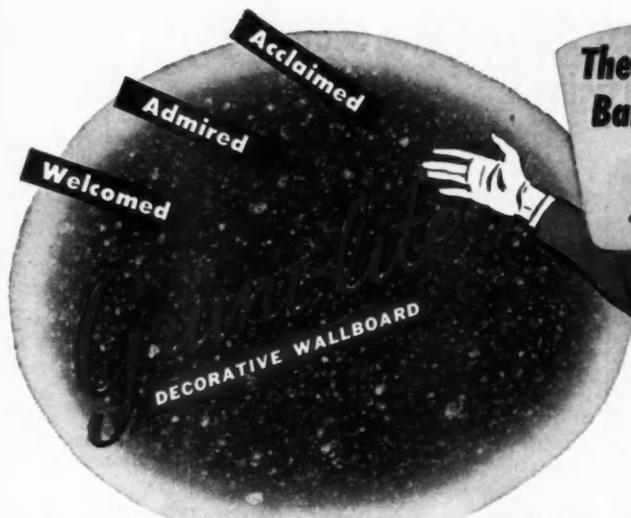


MICHIGAN



BUILDING PRODUCTS DIVISION
THE AMERICAN WELDING & MANUFACTURING CO.

310 DIETZ ROAD • WARREN, OHIO



The **NEW** and **DIFFERENT**
Baked Finish Wallboard

Looks like **REAL**
GRANITE

After only two months of production we are justified in repeating—
"Grani-lite is a hit, a sensation, it's going to top them all." Jobbers and
dealers everywhere have **ADMIRING** Grani-lite's new and different multi-
color tones. They have **ACCLAIMED** it as being the only truly new
development in baked finish wallboard panels in many years. They have
WELCOMED Grani-lite because it has that "something different" their
customers have been looking for. And they are buying it in ever increas-
ing numbers because it sells better . . . at a dandy profit. If samples are
not available from your jobber use the coupon below.

Standard Sizes—4'x8', 4'x6', 4'x4'
Packaged 192 Sq. Ft. per crate in all sizes.

**YOU'LL GET MORE WALLBOARD
BUSINESS WITH Grani-lite**

Don't Delay Seeings? Get Our **FREE SAMPLES**



Write or Mail Coupon for
FREE SAMPLES

Name _____
Company _____
Street _____
City _____ State _____
Jobber _____ Dealer _____ **AB**

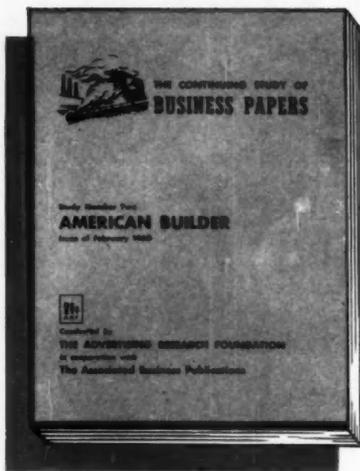
WALLACE

MANUFACTURING CO.

Art. Grani-lite Division

10th & Fayette • North Kansas City, Mo.

Results of the latest A.R.F. study show high readership of advertising



AMERICAN BUILDER

*advertisements
are read
and
remembered . . .
and by the key
buying influences, too.*

This readership study is the first survey conducted by The Advertising Research Foundation for any publication serving the light construction industry.

Readers of AMERICAN BUILDER are located in nearly every community throughout the country; and they are the factors who control specifications and buying in construction, modernization and maintenance in the residential, commercial, and farm fields.

This second in a series of A.R.F. studies of Business Papers examines primary advertising media values. It was designed to determine three factors about and for AMERICAN BUILDER and its readers: actual readership, potential audience, and specific data about the readers.

The results gathered in this study demonstrate the amount of attention devoted to advertisements in AMERICAN BUILDER. In this way, the study reflects the selling power of each manufacturer's sales message.

- 99% of the qualified readers interviewed recalled seeing one or more of the advertisements measured.
- 81% of the readers who claimed to have purchasing influence stated that they specify or recommend makes or brands.
- 89% of the home subscribers interviewed stated that they read every issue of the publication.
- 76% of the readers interviewed remembered seeing one particular black and white advertisement.

Attention NIAA Chapters

A colored strip-film presentation illustrating the results of this study, as was presented at the NIAA national meeting in Los Angeles, is available for individual chapter showings. Chapters interested should contact their New York headquarters office.

AMERICAN BUILDER

A BUILDING-INDUSTRY PUBLICATION

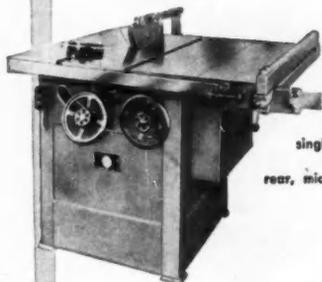
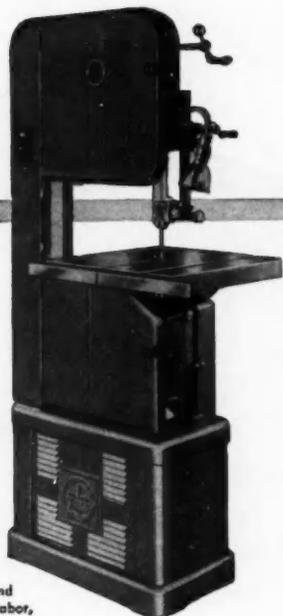
77 West Monroe St., Chicago 2, Ill. - 60 Grand St., New York 7, N. Y.

Yearly subscription price
\$1.00 (single copies 10¢)
Advertising rates
Available on request
Yearly circulation 100,000
Yearly advertising revenue
\$1,750,000



NEW 16' BAND SAW

Speed construction of your buildings with this fast, accurate machine for wood and plastic cutting. Big capacity — 16" blade, 18" x 17" table. 8 blade speeds — meets practically any requirement. Easy to operate and completely safe. Saves time and labor, cuts woodworking costs.



NEW 12" TILTING ARBOR SAW

Capacity 4½". Table 48" wide x 38½" deep. 5 h.p. 3 phase motor or 3 h.p. single phase. Dado capacity 1½" wide. Saw speed 3600 r.p.m. New rip fence locks front and rear, micrometer adjustment "T" slots for miter gauge. New improved safety guard and splitter. Exclusive "Synchro Belt Drive".

2 SPEED, VERTICAL SPINDLE SHAPER

Cutter spindles are interchangeable and fully protected by adjustable guards. Two speeds: 7000 and 11,000 r.p.m. Spindle 17" long, journaled on two pre-loaded ball-bearings. Guides quickly adjusted or easily removed. For heavy duty operation.



3 ways

Walker-Turner Designing can help you to cut building costs

Builders are more aware today, in a buyer's market, of Walker-Turner designing. For *design* is at the bottom of the high operating efficiency of Walker-Turner woodworking machines. And the more *efficiently* you can build, the lower your building costs.

Actually, this emphasis on design is nothing new with Walker-Turner. New machines (such as those shown) are constantly being added to the line. But the safety, accuracy, ease of handling and economy of Walker-Turner machines are due to the fact that they've *always* been built with the building industry's needs in mind.

For full information about these and other cost-cutting machines in this complete line, see your local Walker-Turner dealer, or mail coupon for catalog.

SOLD ONLY THROUGH AUTHORIZED DEALERS

WALKER-TURNER



KEARNEY AND TRECKER CORPORATION
PLAINFIELD, N. J.

Walker-Turner Div., Kearney & Trecker Corp.
Dept. AS1, Plainfield, N. J.

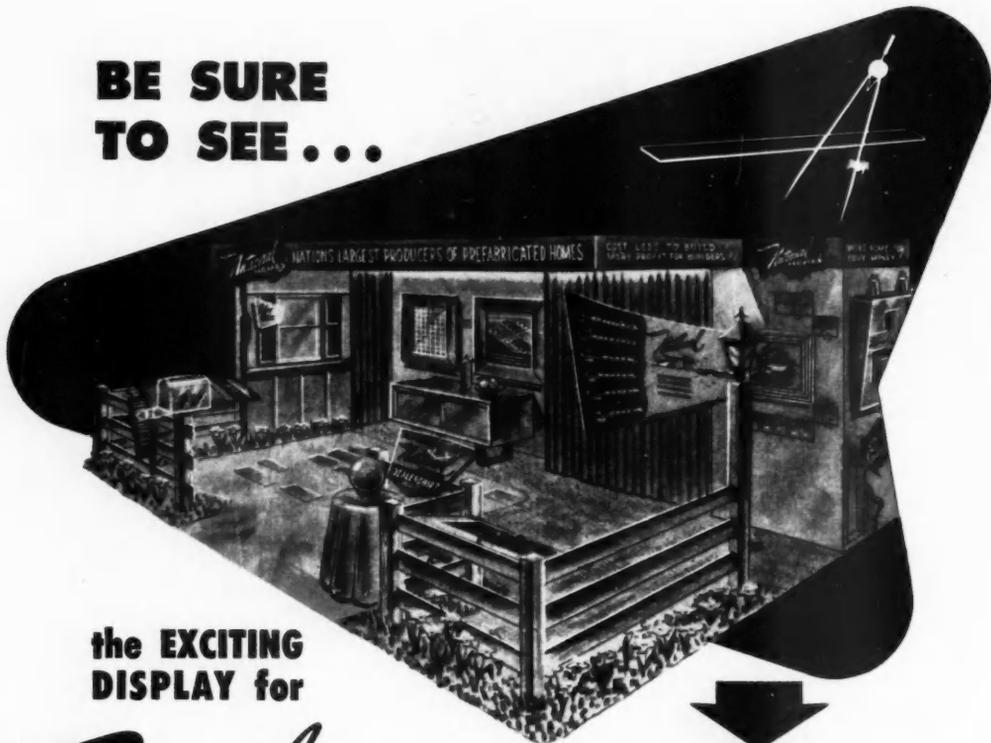
Please send me a copy of the Walker-Turner Catalog.

Name _____

Firm _____

City _____ Zone _____ State _____

**BE SURE
TO SEE . . .**



**the EXCITING
DISPLAY for**

National
HOMES

... at the NAHB Convention!

Remember last year's Home Builders Show? The magnet was the National Homes booth, jammed constantly with people eager to get the facts about the nation's largest producers of prefabricated homes. This year's display will be even more interesting. Don't miss it. See why National Homes are the leaders in sales, in satisfied customers, in enthusiastic dealers!

*Nation's Largest Producers
of Prefabricated Homes . . .*

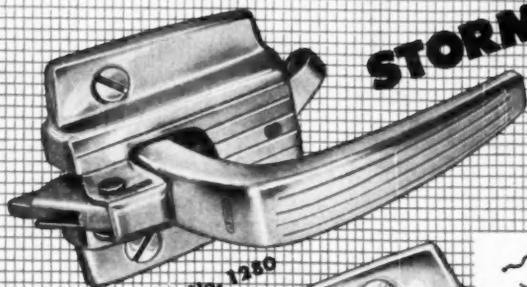
SPACES 94-95
at the STEVENS

NATIONAL HOMES Corporation • Lafayette, Ind.

EASTERN PLANT . . . HORSEHEADS, NEW YORK

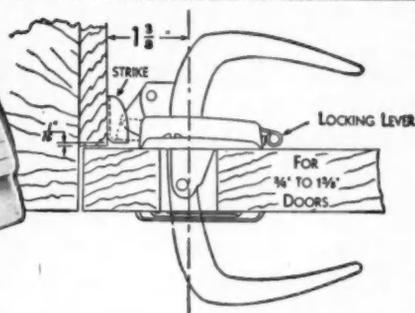
NEW!

A SCREEN AND STORM DOOR LATCH



No. 1280

- Attractive design
- Push-Pull action
- Latches with finger tip touch
- Can't lock you out
- Easy to install—drill one 1" hole



STANLEY
screen hardware
meets every need

You can save time by getting all your screen hardware from the complete Stanley line. Here are just a few of the many Stanley items that win customer approval in new construction or modernization work.

An exclusive locking device on this new Stanley Screen and Storm Door Latch makes it a latch that *can't lock you out!* Surface applied, available in steel or brass with wide choice of finishes, it's a year-round item that you can start selling right now!

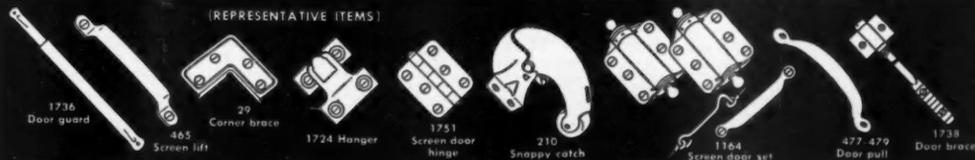
STANLEY

Reg. U.S. Pat. Off.

THE STANLEY WORKS, NEW BRITAIN, CONN.

HARDWARE • TOOLS • ELECTRIC TOOLS
STEEL STRAPPING • STEEL

(REPRESENTATIVE ITEMS)



1736
Door guard

465
Screen lift

29
Corner brace

1724 Hanger

1751
Screen door
hinge

210
Snappy catch

1164
Screen door set

477-479
Door pull

1738
Door brace

Ask your customers this...

why take 5.....



when you can get 7.....



Roddiscraft Housemart Doors feature 7-ply construction

Seven ply construction gives Roddiscraft Housemart Hollow Core Doors greater strength, greater resistance to distortion and prevents core pattern showing through face veneers after finish has been applied.

Three ply face panels are bonded under heat and pressure with water-resistant Urea Resin glue. Face panels are then bonded in electronic presses to both sides of the core assembly to form a rigid 7-ply unit.

The Roddiscraft Housemart Door is generously made throughout. Extra wide top and bottom rails allow for trimming—ample edge strips provide a firm foundation for hardware—lock blocks both sides with inner edge 5 inches from door's outer edge after factory trimming.

Designed and priced for homes and apartments, the Roddiscraft Housemart Door is a beauty with brawn in all types of installations.

See SWEET'S BUILDERS FILE, No. $\frac{3b}{Ro}$ for the complete Roddiscraft Door line.

Your RODDISCRAFT Warehouse is a Supermarket for Dealers

(Check the Warehouse Nearest You)

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

Cambridge 39, Mass. 229 Vassar St.	Louisville 10, Ky. 1201-5 S. 15th St.
Charlotte, N. C. 123 E. 27th St.	Marshfield, Wis. 115 S. Palmette St.
Chicago 32, Ill. 3865 W. 41st St.	Milwaukee 8, Wis. 4601 W. State St.
Cincinnati 2, Ohio. 437 E. Sixth St.	New York 53, N. Y. 920 E. 149th St.
Dallas 10, Texas. 2800 Madill St.	Port Newark 5, N. J. 103 Marsh St.
Detroit 14, Mich. 11855 E. Jefferson St.	Philadelphia, Pa. Richmond & Toga Sts.
Houston 10, Texas. 2425 Sabine St.	St. Louis, Mo. 3344 Morganford Road
Kansas City 3, Kan. 35-53 Southwest Blvd.	San Antonio, Texas. 727 N. Cherry St.
Los Angeles 58, Calif. 2620 E. Vernon Ave.	San Francisco 24, Cal. 343 Williams Ave.
New Hyde Park, L. I., N. Y. Plaza Ave. & S. 15th St.	

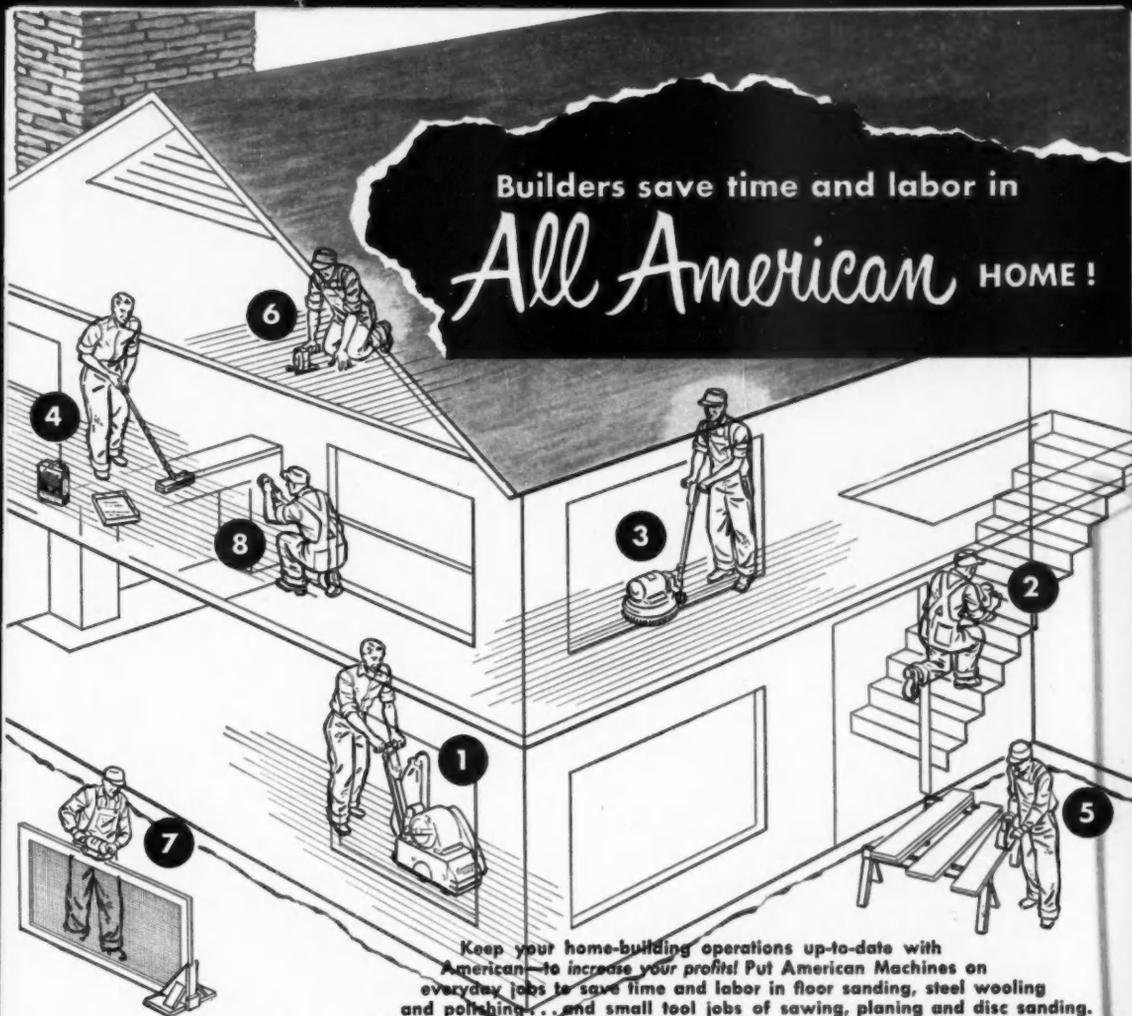
Your nearest Roddiscraft warehouse can simplify your buying with the wide variety of materials on hand ready for immediate delivery. You'll have the advantage of dealing with one company — one call will take care of all your needs.

Roddiscraft

RODDIS PLYWOOD CORPORATION, Marshfield, Wis.

Builders save time and labor in

All American HOME!



Keep your home-building operations up-to-date with American—to increase your profits! Put American Machines on everyday jobs to save time and labor in floor sanding, steel wooling and polishing... and small tool jobs of sawing, planing and disc sanding. These machines have what it takes—advanced design, precision construction and rugged dependability—quality features to increase your efficiency and bring costs down! For a perfect finish on any floor—specify American... a complete new line of finishes, maintenance and cleaning materials for wood, cork, concrete, terrazzo, asphalt, rubber, linoleum or plastic. Send coupon for more details.



1 FLOOR SANDERS
Five models: *Super 8*—high speed, 8" drum; *Standard*—widely used by contractors, 8" and 12" drums; *AMR*—a good auxiliary 8" sander; *Little American*—economical, 8" drum.



2 FLOOR EDGERS
Two models, 7" and 5 1/2" discs—for sanding edges, closets, stairs, small halls.



3 FLOOR MAINTENANCE
American Deluxe, for all floors—polishing, waxing, steel wooling, disc sanding. 19", 16" and 14" sizes.



4 FLOOR FINISHES
New complete line for all floors—seals, finishes, waxes and cleaners.



5 PORTABLE ELECTRIC SAW
8 1/2" blade cuts 2 1/4" plank at 45°, or 3" straight cut. Motor develops 2 1/2 H.P. Cuts fast, any position, one-hand operation.



6 SCINTA SAW
Portable electric jig or saber saw for scroll work, dovetailing, cutting openings, etc. Two models—3/4" and 1 1/4" capacity.



7 BELT SANDERS
Portable... many uses, roughing to final finish... *Sanderplane* is ten times faster than hand plane.



8 SPEEDY SPINNER DISC SANDER
Good cutting control in disc sanding or polishing... curved or flat surfaces... wood or metal.

AMERICAN FLOOR MACHINES • PORTABLE TOOLS

SEND COUPON

The American Floor Surfacing Machine Co.
511 So. St. Clair St., Toledo 3, Ohio
Please send latest catalog on the following, without obligation.

- Floor Sanders Floor Edgers Portable Electric Saw
 Floor Maintenance Machines Floor Finishes Belt Sanders Scinta Saw Speedy Spinner Disc Sander

Name _____
Street _____
City _____ State _____

CRANE

the preferred plumbing



CONSULT YOUR CRANE BRANCH OR
CRANE WHOLESALER FOR INFORMA-
TION ON THE COMPLETE CRANE LINE.

The Neuday Lavatory

of porcelain enameled cast iron. Large rectangular basin, broad shelf back. Chromium-plated trim includes Crane *Dial-ese* controls, conveniently located on beveled panel. Twin towel bars and legs available if desired. Sizes: 19 x 17 and 24 x 18. Made in regular white enamel, acid-resisting white enamel and 8 colors.

CRANE

108

CRANE CO., GENERAL OFFICES:
836 S. MICHIGAN AVE., CHICAGO 5

PLUMBING AND HEATING
VALVES • FITTINGS • PIPE

AMERICAN BUILDER



"BILDRITE* SHEATHING Saved Us \$200 on this job!"

Says E.R. Daleen, Purchasing Agent & Sec., Sauers Construction Co.



"Recently we were informed that 4 ft. Bildrite Sheathing had become the first insulating sheathing to meet the rigid requirements of FHA without use of corner bracing. We were at that time erecting Rose Vista Apartments in St. Paul, Minnesota, a \$1,500,000 project, using 2x8 ft. insulating sheathing. We immediately changed to 4x8 ft. Bildrite

Sheathing and realized a saving of \$80—\$100 per apartment building. Bildrite in the larger size cut both our labor and material costs and we also gained the greater bracing strength inherent in the 4x8 ft. sheet.

Insulating Sheathing has been used almost entirely on the 54 apartments erected during 1950 by the Sauers Construction Company in the Greater Minneapolis-St. Paul metropolitan areas. We prefer insulating sheathing because our cost studies prove that it costs \$75—\$100 less than wood sheathing on the average building. Frankly, we just can't afford to use conventional wood sheathing.

Simple addition shows that we can save up to \$200 per average building when we specify Bildrite Sheathing exclusively. Eliminating corner bracing and the lower cost of applying insulating sheathing is a worthwhile contribution that saves money during a critical period for the building industry. While it's important to us that Bildrite reduces costs, we also know that it means better wall construction. We've used Bildrite for many years and its strength, moisture resistance and over-all high quality make it definitely superior."



NO CORNER BRACING saved about \$100 in time and materials. BILDRITE—the first insulating sheathing to meet F.H.A. requirements without using additional corner bracing.



LOWER APPLIED COSTS of Bildrite saved another \$100. Bildrite handles easily, leaves no waste, and goes up in about half the time of wood sheathing. In addition, Bildrite offers extra resistance to moisture and extra insulating value.

USE BILDRITE for better construction at lower cost.

INSULITE DIVISION



Made of Hardy Northern Wood

MINNESOTA AND ONTARIO PAPER COMPANY
MINNEAPOLIS 2, MINNESOTA

1-51

* Reg. T.M.U.S. Pat. Off.
See Sweet's File for Builders' 28-1a.

Take it from
this **SUCCESSFUL**
builder!



He's M. M. Robinson, Prominent Detroit Builder—
Whose Three Current Apartment Projects Will
Feature a Grand Total of 486 Kelvinators!



HAMPSHIRE HOUSE, 885 Coventry Drive
Detroit, Michigan
56 Kelvinator Refrigerators installed!



HUNTINGTON GARDENS, Oak Park, Michigan
374 Kelvinator Refrigerators installed!
Theo. N. Barthel, Designer, Jos. E. Wassell, Engineer



GROSSE PT. WOODS
Michigan
56 Kelvinator Refrigerators installed!

A BIG FACTOR in Detroit builder M. M. Robinson's outstanding success is his experience. He bases his choice of kitchen equipment on that long experience—and so chooses Kelvinator. He says he especially likes Kelvinator *dependability*, *lower cost* of ownership and universal *popularity* with tenants. Be sure to look into the cost-saving, trouble-free advantages of using Kelvinators in *your* next project. For full information, write to Dept. AB, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.

See Kelvinator
Booth No. 1
National Home
Builders Show!
Stevens Hotel, Chicago
January 21-23.

Kelvinator

DIVISION NASH-KELVINATOR CORPORATION, DETROIT 32, MICHIGAN

ELECTRIC REFRIGERATORS • ELECTRIC RANGES • ELECTRIC FREEZERS • ELECTRIC WATER HEATERS • ELECTRIC AIR DRIER



Kelvinator featured exclusively,
nation-wide, in the
Good American Home Program.

AMERICAN BUILDER

What about 1951?

FULLY AWARE of all the uncertainties of war and government regulations, *American Builder* predicts that there will be a minimum of 800,000 new home starts in 1951. This figure was reached by two staff groups working independently and using different approaches. One group projected statistical information, with certain modifying factors based on the probable effect of Regulation X as it exists at present, and came up with an answer of 800,000. The other drew on its extensive acquaintance with leaders among home builders, manufacturers, distributors and financing institutions, and arrived at the same answer.

In advancing the prediction *American Builder* recognizes that Regulation X as it stands now probably will make drastic cuts in the starts of houses costing up to \$10,000, and probably will not advance the volume of houses in the \$10,000 to \$15,000 class over the total for 1950. Unless there appeared to be strong likelihood that the loss of volume in the low-cost houses in some measure would be compensated by increases in other price classes the estimate would stand at 600,000.

In arriving at the 800,000 figure, however, it is estimated that there will be an increase of at least 200,000 units in the \$15,000 and over class. This is based on the fact that the emphasis since the close of the war has been on the lower cost houses, and that in many communities neither labor nor materials have been available for most of the upper price market, which has been and still is a demand rather than a need market. The year 1949 saw 1,019,000 starts, and little if any delay in completions according to reasonably fast schedules. A very small part of this market, however, was upper price houses. This year probably will close with a total of nearly 1,300,000 starts, but far from that many completions. The year proved that job-site capacity for a year is about 1,000,000, and that material manufacturers' capacity, with a few notable exceptions, is about the same. With the emphasis in both these years on low-cost houses, and the industry producing at capacity or over-capacity, the upper income prospect who wants but does not need a house, has stayed out of the market. With a cut-back, under Regulation X to 600,000 next year, the upper-income prospect will shop and build to the extent of a minimum 200,000 units.

The market will be healthily competitive with a maximum of 80 per cent of the industry's capacity salable without effort. Builders will be required to search harder for buyers as will producers and distributors. There should be a more plentiful flow of all classes of material to smaller and more isolated communities, and a consequent more even distribution of building activity. Production capacity and probably supply of some materials, notably lumber, should exceed demand. There should, as a result, be a general but slight softening of prices. There is no good economic reason for more control, or even Regulation X, but that is another story. There is little likelihood of war on a continental or inter-continental scale during 1951. It will not be an easy year, but it should be a good one for home building.

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Selected Homes Exhibited During— NATIONAL HOME WEEK

THE House on this page and those of the following pages have been selected from the thousands presented in the special newspaper supplements issued in connection with National Home Week. Subsequent issues of *American Builder* will present and describe others equally attractive and salable. The success of National Home Week in 1950 eclipsed that of its two predecessors both in quality and quantity of houses exhibited. Also, for the first time in the three-year history of the Week, it was observed in numerous small cities and rural communities.

Aside from immediate sales traceable to National Home Week demonstrations which, this year, were reported to have reached record proportions, builders state that the interest aroused in home building is incalculable. Many local newspapers were slow to see the opportunities for service to their communities and profit to themselves offered by the Week, and 1950 saw a general awakening in smaller cities. In at least one community which does not have a chapter of NAHB, a local retail lumber dealer, cooperating with the local real estate board, went into action, and the newspaper produced a record-breaking special building supplement. That was Kankakee, Illinois.

Builders, dealers and realtors confidently predict that, barring further defense or war regulations on home building, 1951 will see an even greater observation of the Week. *American Builder*, therefore, proposes to continue presenting examples of the types of houses which were most successful from a standpoint of crowd interest, and consequently from a standpoint of salability.

Readers are invited to submit houses which were successfully demonstrated for presentation in future issues of *American Builder*. Material submitted should include complete working drawings, glossy photos of the exterior, sales price, and a list of materials and equipment used, along with any other information of particular interest.



Designed with 10 Exteriors To Sell for Less Than \$9,000

DESIGNED by Matern & York, architects of New York, and built by Matthews Const. Co., Babylon, L.I., New York, the house has 10 different exterior styles, and sales prices vary from \$7900 to \$8700. Has unpartitioned full basement. Meant for lot of minimum 60x100 dimensions. Specifications include 1x8 t&g sheathing and asbestos shingles; interior walls of Sheetrock; bathroom and kitchen floors asphalt tile, others #1 birch; 2x6 rafters and pine roof boards; 210 Ruberoid asphalt shingles; steel casement windows; flush fir plywood doors; cotton batt insulation; hot water heat; American Standard and Crane plumbing; Port-Mar boiler and tankless coil; Revere copper tubing; Murray switches and receptacles. Kitchen has breakfast bar and glass checkerboard serving counter.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



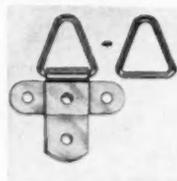
Automatic Washer—Blackstone Corp., Jamestown, N. Y. Model 150 washer has precision-built driving mechanism, with hardened steel gears, rubber-mounted on welded steel chassis. Stainless steel tub is 20 inches in diameter.



Sink Frame—S & T Metals Co., 425 West Town St., Columbus 16, Ohio. Sink-Lok frame for cabinet-top sink installations combines advantages of finishing trim, sealing joint and support. Designed to avoid mortising, rabbeting or special work.



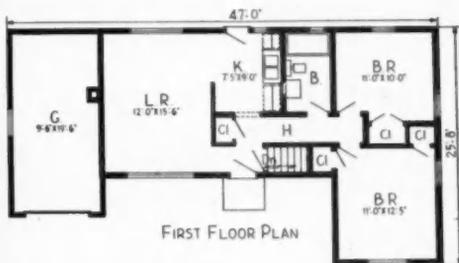
Thread Restorer—Buckingham Mfg. Co., Inc., Binghamton, N. Y. This thread restorer is especially suited for reconditioning closely spaced studs and bolts that are battered, distorted or rusted. Cutting jaws fit 1/4 to 1-inch diameters.



Mirror Hanger—Bull Dog Lock Co., 4636 N. Ravenswood Ave., Chicago 40, Ill. Extra heavy duty mirror hanger has solid one-piece ring. Double vertical hanger strap and elimination of cut-out areas provide top strength.



Pneumatic Hammer—Burgess Thomas Co., Dept. R., Box 287, Bloomfield, N. J. Appton super hammer measures 9 1/2 inches over-all. Operates when pressed against work with no kick. Works on pressures of from 30 to 100 pounds.



TEN variations in exterior retain economies, relieve monotony



SIMPLE exterior given character with door design, short picket fence and flower box

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



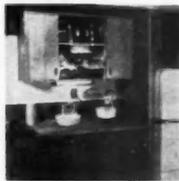
Heating Unit—Delco Appliance Div., General Motors Corp., Rochester, N. Y. Model GA Conditionair is made in 5 models ranging in B.T.U. input capacities from 62,500 to 210,000 per hour. Gas-fired unit has steel radiators, ribbon burners.



Heating Unit—Burnham Corp., Irvington, N. J. Pace-maker oil-fired boiler-burner unit has vertical flue travel and two crown sheets which absorb heat. Made in wide variety of sizes for steam and hot water installations, unit is quickly set up.



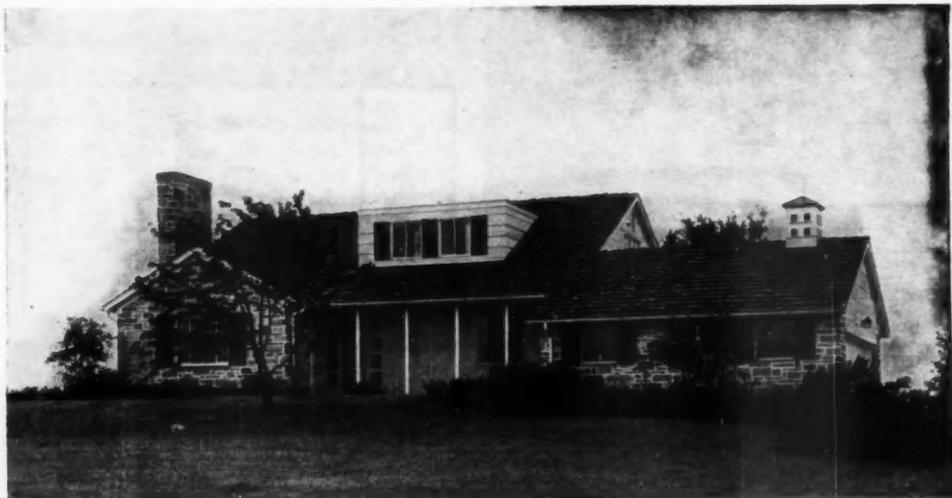
Ornamental Iron—Belson Mfg. Co., Iron Works Div., 111 Franklin St., Aurora, Ill. Wrought iron interior or exterior railings, porch columns, grills canopy brackets, etc., are custom-built to specifications for all types of architecture and decoration.



Kitchen Cabinets—Bel-Wood Mfg. Co., Ackerman, Miss. Kitchens are custom-styled in beautiful woods. Baking unit shown above is designed to house all baking equipment and supplies. Center doors slide open. Additional storage at sides.



Brace Lock—Bil-Jax, Inc., Archbold, Ohio. Scaffolding brace lock is designed for use on tubular scaffolding. Braces attach to end frames by placing slotted ends onto studs, are held in place by lug. Wing nuts not removed for erection or dismantling.



DIGNITY AND MASS are apparent in this view of first of 350 similar houses in Pepper Pike Village near Cleveland



Built for Luxury Living on a Small One-acre Rural Estate

BUILT by Keyes-Treuhart Co., home builders of Cleveland, and designed by Maxwell Norcross, this house was exhibited during National Home Week to demonstrate the kind of country living being made available in the company's new development, Landerwood Estates. All of the 350 houses planned for the development will be individually designed, and prices will range from \$25,000 to \$35,000. Lots are all one or more acres, and have a minimum of 125 feet on the building line.

Specifications include complete General Electric kitchens and laundries, American-Standard plumbing fixtures, Armstrong floors, Tracy sinks, Hope's steel casement windows, Rusco combination storm sash and screens, Amweld sliding steel closet door units. The roof is hand-split cedar shakes. A setback in the rear wall of the garage permits storage of garden tools. Note that the den can be entered from both the garage and the outside, and that a second door from the garage leads to the front porch.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Wall Covering—Baltimore Porcelain Steel Corp., Box 928, Baltimore 3, Md. Mirawal is a porcelain-on-steel facing for interior and exterior applications. Has 1/8-inch Masonite backing. Surface is stainproof, fireproof. Application is simple.



Weatherstrip—Robert N. Baltz & Co., Inc., 1009 Harvard Terrace, Evanston, Ill. All-metal interlocking E-Z-On weatherstripping is designed for surface installation on double-hung windows of wood or metal. Requires no rabbeting.



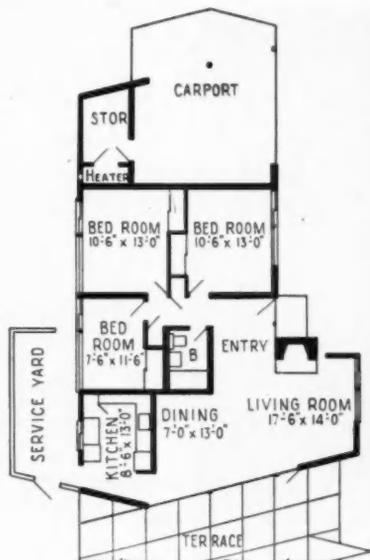
Garage Doors—Barber-Colman Co., Rockford, Ill. Four-section model 31 economic, light, commercial and residential garage door has ball bearing rollers, automatic latch and continuous vertical track brackets. Steel cables support door.



Gas Range—A-B Stoves Div., Detroit-Michigan Stove Co., Battle Creek, Mich. Model 50-420 range features include center simmer burners, extra large oven, drop front broiler and built-in fluorescent light. Outside surface is titanium porcelain.



Cellar Drainer—The Deming Co., Salem, Ohio. Fig. 4613 unit is designed to protect against flooded basements or for draining water from pits. Operation is completely automatic. Capacity varies with head from 1200 to 2200 gallons per hour.



NOTE angles of the front wall elements



NOTE lantern fixture and head-high kitchen partition with service bar

California House for Outdoor Living

STYLED for the best California living at a moderate price, this house designed by Anshen and Allen, San Francisco architects, was built by Eichler Homes, Palo Alto, Calif. It is priced at \$12,850 complete with land, and includes three Hotpoint appliances—an automatic clothes washer, a refrigerator and a range.

An unusual feature, and one which is slowly gaining popularity, is the use of walls placed at obtuse angles instead of right angles. Here, the two elements of the front wall are placed at approximately 110 degrees to the side walls. End of the storage room, and the two lines of the carport ramp slab are at about the same angle off 90 degrees. Open beams, plywood walls and board ceilings feature the interior, and lend a rustic, but tidy appearance. The beam at the dividing point between the dining and living areas is continuous beyond the wall, and acts also as a support for a widened roof overhang at this point. The terrace at the front carries out the obtuse angles, and is artistically lined.



OPEN beams and board ceiling in natural finish together with plywood walls and common brick fireplace lend rustic look

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



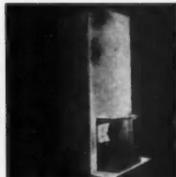
Door Hardware—Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. New latch-type door hardware is intended for installations in apartment buildings, stores or anywhere where light is needed. Shown in Fenestra door.



Window with Trim—Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. Fenestra residence casement window unit is now available with steel outside and inside trim of galvanized and banded sections coped and fitted.



Refrigerator—Admiral Model 1090 Dual-Temp electric refrigerator has storage capacity of 10.6 cubic feet. Includes new and improved features for greater convenience. Admiral Corp., 3800 W. Cortland, Chicago 47, Ill.



Fireplace Casing—Fireproof Casing prefabricated by Hearthaire Conditioning Co., 3126 Scarborough Rd., Cleveland, Ohio, permits placing of fireplace unit directly over 3/4-inch marine board as a hearth on wood or other flooring.



Finisher—Detroit Surfacing Machine Co., 1333 East Eight Mile Rd., Detroit 20, Mich. Easy finisher is a vibrationless, reciprocating, straightline action sander for wet or dry, curved or flat work. Available in sturdy steel-carrying case.

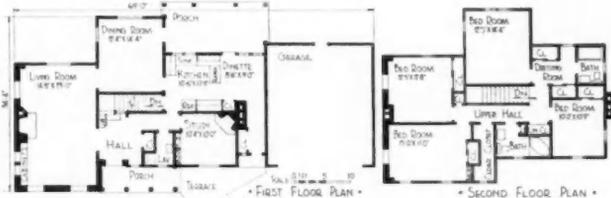


A LARGE, well-landscaped lot and graceful shade trees furnish setting for this Pennsylvania farm-type home designed for comfortable living

Pennsylvania-Type Farm House

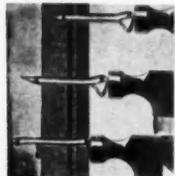
FOUR bedrooms, two baths, screened porch and an abundance of closet space feature this roomy Pennsylvania farm house of Wells-ville stone and clapboard, built by D. W. Frazier in Rochester, N.Y. Selling price without lot was \$34,000.

There are paneled fireplaces in the large living room and den; picture window in the colonial dining room overlooks garden and porch. Powder room is in colored tile.



PLAN for both floors stresses roominess, with plenty of space for family use and storage

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Clinching Nail — Elastic Stop Nut Corp. of America, 2330 Vauxhall Rd., Union, N. J. Self-clinching stainless steel ES-nail is used for face-nailing asbestos shingles directly to 1/2-inch or 25/32-inch sheathing. Works when used over studs.



Oil Burner — Williams Oil-Matic Div., Eureka Williams Corp., Bloomington, Ill. Model Fifty-Ten low pressure oil burner meters down to as low as two quarts of oil per operating hour. Unit mixes oil thoroughly with air, will burn catalytic oils.



Utility Roller — Gabb Mfg. Co., Div. of E. Horton & Son Co., Windsor Locks, Conn. General purpose roller for use on bituminous surfaces has heavy-duty reverse gear and forward clutch assembly designed for constant operation. Water ballast type.



Awning Window — Gate City Sash and Door Co., Ft. Lauderdale, Fla. New operating gear enclosure on wood awning window assures smoother lifting and lowering of horizontally opening sash. Available with Thermapane or Twindow.



Radial Arm Saw — DeWalt Inc., Lancaster, Pa. Improved model GR power saw features a recently perfected low-dead rise, direct motor drive. Motor is totally enclosed with grease-sealed-for-life bearings. Allows 4 1/2-inch cut with 14-inch blade.



NEATLY-DESIGNED home with simple, unbroken roof lines attracted many visitors in Beloit, Wis.

Appeal with Simple Lines

THE MODERN trends to greater privacy and fuller use of rear yards are exemplified in this home built in Beloit, Wis., by Glenn Webermeier. Selling price was \$18,000.

Living and dining areas are in

rear, overlooking opening to terrace; and eye-level windows in bedrooms and den afford privacy without loss of light and also permit convenient placement of furniture.

A combination of roman brick,

horizontal siding and symmetrical fenestration accent the simple, trim lines of front elevation.

The kitchen lies in a straight line between dining area and breakfast corner and has access to front and side entrance.

Other features are a natural stone fireplace and a full basement.



DESIGNED for middle income family. Memphis home has many plus features



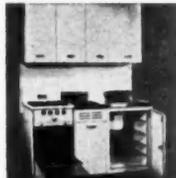
Planned for Extra Convenience

PRICED at substantially under \$25,000, this Memphis, Tenn., home offers three bedrooms, two

baths and a den. John B. Goodwin Realty Co. is the builder and Faires and Sanford the architects.

Separate entrance hall gives access to bedrooms without going through living room. Bathroom layout was planned with den entertaining in mind. Kitchen has a separate food service area. A number of large closets are another feature.

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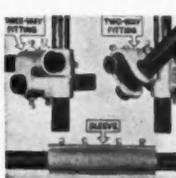
Efficiency Kitchens—Douglas Distributing Corp., 901 Girard St., N. E., Washington 17, D. C. Unit has six cubic feet refrigerator, baked enamel on steel wall cabinets, stainless steel sink-top and chrome-plated brass sink fittings. Five feet wide.



Faucet Washer—Economy Valve Co., 5919 Tireman Ave., Detroit 4, Mich. Washer for valves and faucets has ball bearing unit to absorb twisting motions. Unit reduces costs of maintenance. Fixtures also available with Belco washer unit.



Boat Kits—C. R. Dillabaugh Co., 7928 N. E. Mallory Ave., Portland 11, Ore. Knocked down boat kits are designed for retailing by lumber dealers. Kit contains all necessary parts for complete boat except some lumber and paint.



Scaffolding System—System developed by Amidon Sales Co., Elyria, Ohio, consists of standard steel pipe fastened by one or more three-way fittings; two-way fittings; and sleeves, for joining pipe lengths and attaching casters.



Sink—Special features of Triwell sink, manufactured by American Radiator and Standard Sanitary Corp., P. O. Box 1226, Pittsburgh, 30, Pa., include perforated garbage container, with metal cover, between two compartments.



SCREENED PORCH acts as barrier to direct sunlight in living room, and can be used as extension of interior

Low Priced House Makes Hit in Chicagoland

C. E. BLOMGREN, builder, of Northbrook, Ill., selected this house from a number of similar ones in his current development for demonstration during National Home Week. One of the particularly interesting features of the house is the use of three pairs of French doors on the side of the living room leading to the front porch. The doors are all glazed with adjustable awning type glass slats. Thus, any desired degree of ventilation can be obtained, and in warm weather the doors can be opened to include the screened porch in the living-dining area. Austerity of the porch is relieved by the use of narrow fixed shutters at the end and corner. Floors are asphalt tile throughout except in the utility room. The utility room is unusually large to permit construction of shelves and cabinets for storage of off-season garments. There is a 34x34 inch rough opening in the ceiling for future installation of an attic fan. A large storage area is provided for garden tools at the end of the garage.



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Aluminum Window—Per-Fit windows are pre-glazed with B. F. Goodrich Koroseal, have no glass-to-metal contact. Simple group assemblies, easily installed. Per-Fit Products Corp., 1200 E. 52nd St., Indianapolis 5, Ind.



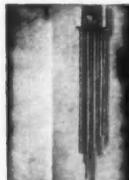
Patterned Glass—Textured Flutex, made by Libbey-Owens-Ford Glass Co., Toledo 3, Ohio, is used for decorative interior and exterior glazing. Finish is midway in obscurity between clear and Satin. In thicknesses of 1/4- and 7/32 in.



Bathroom Cabinet—Series "80" fluorescent lighted cabinet is manufactured by F. H. Lawson Co., 801 Evans St., Cincinnati 4, Ohio, with frameless mirror or stainless steel mirror frame. Made from one-piece drawn steel body.



Intercom System—Executone, Inc., 415 Lexington Ave., New York 17, N. Y. Two-way communication system permits contact with all parts of home. Each station can call four other stations, receive calls from all other stations. Entrance outlet.



Door Chime—Edwards and Co., Norwalk, Conn. Westminster four-tube chime has eight-note melody, two-note sequence, or solitary chime. Combination may be switched in any manner. Dust-proof shield is in gold and wine on gray.



SCALE 0 10 20
 * FIRST FLOOR PLAN *

USE of vertical planks and battens on front door and brackets at side, with planting box at front gives distinction to this moderately priced house



Glass Areas Dominate Front and Side

DESIGNED and built by Don Ganser and Associates, Milwaukee builders, and included in the Milwaukee Parade of Homes during National Home Week, this house sells for \$18,800 including the lot, \$17,000 without the lot. The house features Thermopane windows in the living room, a built-in dressing table and tile bathroom. The wardrobe closets and guest closet just inside the entrance are equipped with sliding doors. Kitchen floor is linoleum, and others, except the bath, are oak. The house has a full basement and a large fireplace equipped with a concealed screen. A built-in magazine rack is a feature of the small bedroom.

Skilful Use Made of Exterior Materials



ATTRACTIVE small house is expensable by developing electrically wired attic

BUILT by The Dafo Co., Dayton, Ohio, and designed by Highland & Highland of Buffalo, this 1½ story house can accommodate two bedrooms on the upper story. The house includes a Bendix washer dryer, a Mullinaider garbage grinder, tile bath and shower unit. An unusual heating system has a horizontal stainless steel furnace in the attic. It is a gas blower type with Amnestat registers in the ceiling and cold air ducts in the floor and risers in the walls. Installation is more expensive, but does away with ducts and eliminates practically everything but the water heater from the utility room.

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Wood Gutter—“Wolmanized” pressure-treated wood gutter is manufactured in 3x4, 4x4, 4x5 and 4x6-inch sizes for use in varying roof areas. American Lumber and Treating Co., 332 S. Michigan Ave., Chicago 4, Ill. are the manufacturers.



Floor Sander—Super 8 model of American Floor Surfacing Machine Co., Toledo 3, Ohio, features variable speed pulley arrangement which gives operator any selection of drum rpm from 1600 to 2800. Has 2 HP motor.



Twin Attic Fan—Unit is produced in four capacity ratings by American Coolair Corp., Jacksonville, Fla. Especially suited for installation in cramped spaces, such as narrow hallways. Incorporates patented Coolair features.



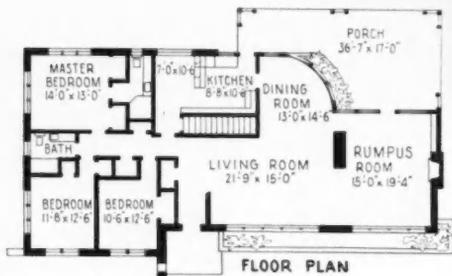
Translucent Sheets—Alsynite, made of Fiberglas with resin binder, is used for windows, skylights, patio roofs and other decorative purposes. Alsynite Co. of America, 4654 De Soto St., San Diego, Calif., are the manufacturers.



Diesel Tractor—HD-20 introduced by Tractor Division, Allis-Chalmers, Milwaukee, Wis., weighs 41,800 pounds, has new 2-cycle GM 6-110 Diesel engine. Three-stage hydraulic converter eliminates most gear shifting. All steel construction.

Blends with terrain, wooded background

NOVEL and interesting use of the large space divided into living, rumpus and dining areas, and glass walls on two elevations, plus the inclusion of three bedrooms and two baths are outstanding features of this plan. Outside, the ventilated wing-wall near the entry provides mass and breaks long horizontal line. Designed by Robert G. McMahon and built by Burt Wenneker, Clayton, Mo., house is priced at \$45,000.



TO OBTAIN three bedrooms, and a bath and adequate closet space for the master bedroom, the latter is smaller than usual. Note the very large porch off the living and rumpus rooms, and entrance to porch from kitchen for convenience in outside dining. Also, note planting boxes outside the front rooms and dining room. Short wingwall is effective in providing an entryway just inside the front door. Roof pitches are interesting.

House for a Growing Family



ATTIC SPACE permits future development of one or two bedrooms. Note artistic application of dark vertical siding on front

BUILT in Ridge-wood, N. J., from plans by Maniscalco & Hecker, this house is for sale by Reliable Homes, headed by Ralph Carletta. Price is \$10,990. House includes full basement.



Construction is dry-wall with papered walls and painted ceilings. Specifications include Copco steel windows, both Schlage and Yale & Towne hardware, Timken oil burner, Flintkote roofing, Standard Sanitary fixtures, Dutch Boy paint, and Busch Bros. ventilating fan. Bathroom floor is tile, kitchen is linoleum, and other floors are oak. Millwork and trim are white pine, doors are flush type, and insulation is two inches of mineral wool.

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Packaged Attic Fan—Ventura attic fan is designed especially for vertical operation in homes with low-bridged attics. Has aluminum grille which opens and closes automatically. American Blower Corp., Detroit 32, Mich.



Glass Door Lock—Series 0161 of the Adams Rite Mfg. Co., Glendale, Calif., takes place of two locks. Can be installed in any tempered glass door top or bottom channel. Handle operates bolts in sequence; cylinder locks handle.



Door Grille—Grille and knocker combination has "one-way vision"—achieved with set-in mirror. Person outside can be identified, but can't see in. Ajax Hardware Mfg. Corp., 4351 Valley Blvd., Los Angeles 32, Calif.



Aluminum Poles—Light poles, constructed of Alcoa aluminum alloys by Union Metal Mfg. Co., 1400 Maple Ave., N.E., Canton 5, Ohio, are of tapered octafute design. Bracket arms, bases and fittings are also aluminum.



Boiler Burner—"Bantam," produced by the Aldrich Co., Wyoming, Ill., has ratings of 100,000 B.T.U. per hour; 440 square feet hot water standing radiation; 285 square feet steam standing radiation. Forty-three inches high.

Variety thru roof and window changes

BUILT to sell for \$10,700 including the lots, these houses, designed by Donald D. Bolinger and built by W. A. Finns in Dayton, Ohio, have identical floor plans. The difference in appearance was accomplished by a major change in the roof, and minor changes in the entrance and some of the windows. Two different kinds of brick were used.

The houses are without basements, and heat is supplied by 100,000 B.T.U. Lennox furnaces installed in the attics above the storage closet, located between the kitchen and the living room. An interesting touch is a card table slot under the book shelves in the living room. The rear entrance to the garage is an aid in the storage of garden hose and tools.

Interesting wrought iron patterns for the front porch railings were developed to give individuality to the entrances of the houses. When desired the fireplace can be located at the end of the room, with the chimney in the garage.



COMPACT plan places particular emphasis on efficiency in the layout of area used for kitchen, utility and storage



BEDROOM windows in house at left are shorter than those in one above. Horizontal lines of roofs are accentuated

BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



Refrigerator — General Air Conditioning Corp., 4542 E. Dunham St., Los Angeles 23, Calif. Four-cubic-foot General Executive refrigerator with flame grain mahogany finish is ideal for hotel rooms, apartments, name bars, offices, etc.



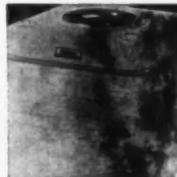
Floor Sander — Hilco automatic "8" and "12" machines feature two operating speeds; "undercutting" principle with upstroke action; forward-backward "shift." Convert to manual operation. The Hilger Co., St. Cloud, Minn.



Automatic Nailer — Magnetic-feed, hand-driven nailer is simply adjusted for different types of nailing. Flat head, common nails or brads are loaded in hopper. Made for heavy duty. Holt Mfg. Co., 651 20th St., Oakland, Calif.



School Buildings — Steel-ox buildings are prefabricated by Armco Drainage, Inc., Middletown, Ohio, of patented 18- and 20-gage steel, two to three times heavier than ordinary galvanized roofing. Painting is only maintenance.

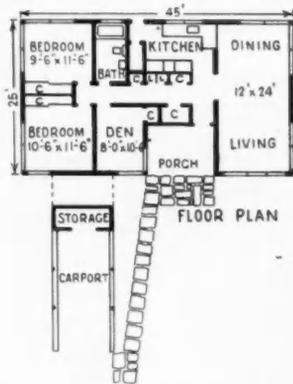


Washer — Standard Model 3006 of Apex Electrical Mfg. Co., Cleveland 10, Ohio, is equipped with fibreglass "Bouncing Basket" agitator. Designed for low-cost installation on cement floors, self-service laundries, utility rooms, etc.



RUSTIC fence, glass front wall, shoulder-high sliding sash and good roof lines combine to give attractive exterior appearance

Modern House for Conventional Neighborhood



FRONT entryway and adequate closet space are features of this compact plan

BUILT and exhibited at Seaford, L.I., N.Y. by Norman Zaret, this is one of 22 houses in Seaford Woods, 19 of which were sold. Roof construction is standard Teco trusses, spaced two feet, o.c. Interior partitions all non-bearing. Specifications include

Kwikset hardware, Chase copper plumbing, Portmar boiler, Flintkote asphalt roofing, Reynolds reflective and U.S.G. mineral wool insulation, Briggs bathroom fixtures, Kentile flooring, Pratt & Lambert paint, Hotpoint range and refrigerator.



VIEW FROM other side of front shows artistic plan and location of carport

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Store Awnings—Store front awnings manufactured by The Astrup Co., 2937 W. 25th St., Cleveland 13, Ohio, feature installation method using lateral type arms. Firm's awnings are made in a wide variety of colors and patterns.



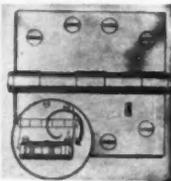
Defroster Unit—Improvements in De-Frost Automatic unit, announced by Automatic Controls Corp., Ann Arbor, Mich., include a "Skip Defrost" adjustment and an adjustable defrosting cycle of from one to 10 hours.



Aluminum Awning—Awn-air unit has adjustable louvers, operated by small knob inside window. Macetene finish washes clean and also reflects light and heat. Produced by Awnair Corp. of America, 303 Monroe St., Passaic, N.J.



Plastic Wall Tile—Hako Coronet is a 4 1/4 x 4 1/4-inch Polystyrene wall tile with "pillow" face design. Wide, slow bevel on all edges terminates .002-inch in flush fitting built edge. Hachmeister, Inc., 2332 Forbes St., Pittsburgh, Pa.



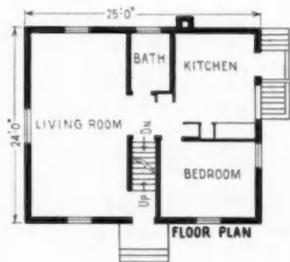
Steel-Bushed Hinge—Door weight on Hager hinge swings on case-hardened, cadmium-plated steel bushings, extending full length of each knuckle. Has steel pin with brass tip. C. Hager & Sons Hinge Mfg. Co., St. Louis, Mo.

Horizontal Lines Broken By Color Accent



WITH a garage 13 feet, 7 inches wide, Pitman Home Building Co., Tacoma, Wash., was able to include three bedrooms in about 1050 square feet of living area by locating utilities and the chimney in the garage. The house sells for \$11,950, and includes automatic sprinkling system, Modernfold doors, Lennox air conditioning oil-burning heater, automatic garbage disposal, full landscaping, tile bath.

Easy to Sell



ONE OF the fastest selling houses exhibited during National Home Week in Chicago is this expansible studio-living room model designed by William Parker Whitney, and built by W. C. McLennan & Co. Stairway leading up from first floor is to open gallery between knee walls



WHAT would otherwise be a monotonous unrelieved front is broken and given character with the use of dark color tones and protruding wing lattices



FIXED SHUTTERS, wrought iron rail, decorative facia make front attractive

above kitchen and bedroom. Ceiling of living room follows contour of roof. Added bedroom can be provided by closing gallery. Third bedroom can be added by extending first floor ceiling across living room. House has full basement. Studio window in living room is plus feature.

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Gas Range—Among standard features of Hardwick Model 5506 is extra storage capacity provided by oversize storage bin with convenient swing door; and roll-out broiler drawer. Manufactured by Hardwick Stove Co., Cleveland, Tenn.



Buildors Hardware—New line announced by Harloc Products Corp., New Haven, Conn., features precision-built tubular latch. Included in the line is the Harloc, a completely reversible push button set which is fully automatic.



Aluminum Paint—A new general-purpose, ready-mixed aluminum paint with a high chrome luster, "Alumichrom," has been introduced by Hastings and Co., Inc., 2316 Market St., Philadelphia 3, Pa. Has good coverage; is quick-drying.

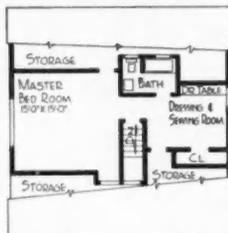


Water Cooler—Newest addition to line of Haws Drinking Faucet Co., Berkeley 10, Calif., is electric cooler for restaurant and cafeteria use. Cabinet is of white enamel with stainless steel top, trays, water stations.



Thermostat Cover—Cover redesigned for The Heil Co., Milwaukee 1, Wis., is finished in golden harvest color, with front panel of simulating unit it serves. Will be standard equipment for all Heil KF-O, KF-1 and KF-2 units.

House Adapted to Site



• SECOND FLOOR PLAN •



• FIRST FLOOR PLAN •

UNIQUE architectural styling fits house for location in wooded, rolling terrain in lake country. Large lots assure owner of privacy



COMBINING conventional and modern design features, and using modern materials and appliances, the Silver Lake Construction Co., Oglethorpe University, Ga., created this house to exhibit during National Home Week. Partial basement includes a two-car garage, heating unit and laundry. Second floor includes master bedroom, sewing room and full bath. Storage for outdoor furniture is provided at the end of the sun deck, and a novel feature is recessed desk space in the living room.

Bungalow Ranch Type Proves Popular Exhibit



DESIGNED by Laurence Schwall & Associates, Evanston, Ill., and built for exhibit and sale by the B. Stromberg Construction Co., this house has a number of unusual features which made it one of the most popular exhibits during National Home Week. Chief among these is a metal flower container in the living room, fireplace set at an angle to the living room wall and hearth in line with wall, Revolvador closet, flower box in the entry, outside Majestic fireplace and grill on the porch, tile bathrooms and engineered wardrobes. The house has a full basement, and walks are unconnected precast slabs.



• FIRST FLOOR PLAN •

ACTIVITIES ROOM with accordion door can be used as extension of living room or third bedroom. French doors lead to porch

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Gas Range—Odin Stove Mfg. Co., Erie, Pa. Model A1164 deluxe six-burner, two-oven Beautyrange Aristocrat has two separate broiler drawers, electric combination clock-four-hour timer, polished aluminum pancake griddle.



Textured Siding—Olympic Stained Products Co., 1118 Leary Way, Seattle 7, Wash. Sidewall material 3/4-inch thick, in six and eight-inch widths and random lengths, is tongue and grooved for use on interior or exterior walls.



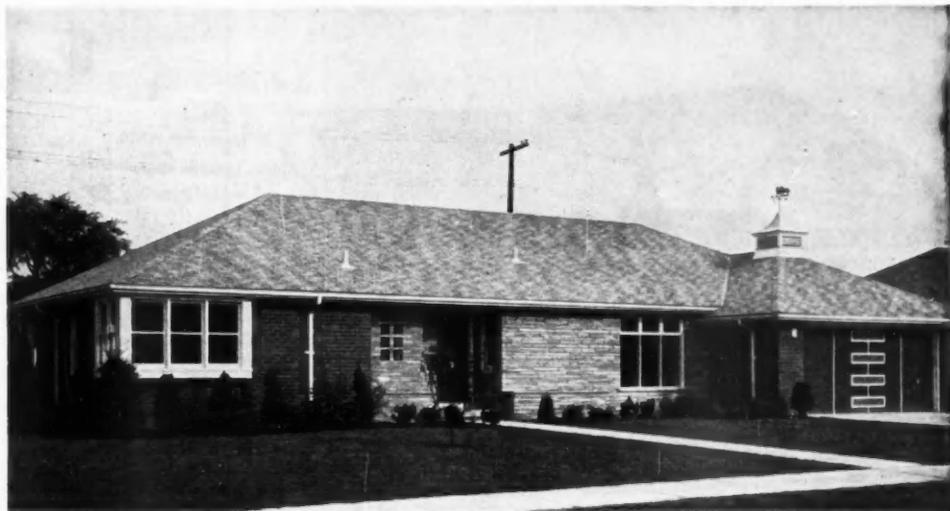
Kitchenette Door—Orchard Brothers, Inc., 63 Meadow Rd., Rutherford, N.J. Alumaroll aluminum roll-up kitchenette door has fingertip control. Unit is supplied to builder's dimensions ready to install. Has baked enamel colors, easy to clean.



Garbage Disposer—Plumbing Equipment Div., National Rubber Machinery Co., Akron 8, Ohio. Model 35-CS National Disposer has split-section construction to facilitate installation. Disposer stops when safety cover is removed.



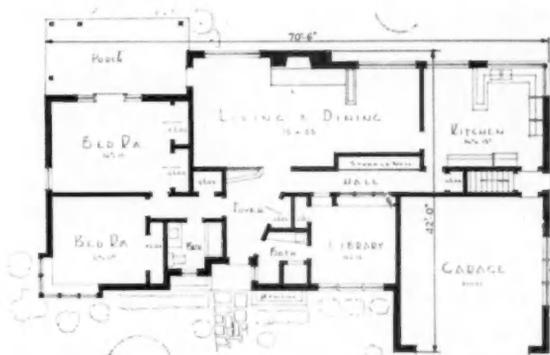
Ventilated Awnings—National Ventilated Awning Co., Dallas 1, Texas. Zephyr awnings are made of aluminum with baked-on enamel finish or from California redwood. Units are custom built. FHA approved, awnings admit light and air.



MOST NOTABLE characteristic of exterior is trim appearance. Note how cupola and weather vane help roof lines

Detroit's 1951 House Beautiful

TYPICAL of the houses in the Grosse Pointe Farms development, near Detroit, Mich., is this one designed and built by Cox & Baker. The exterior combines artistic use of stone and pressed brick. Since the attached garage is a prominent architectural feature the door was designed with care so that it would add to the effectiveness of the front. Laundry and kitchen are completely equipped with Hotpoint appliances. Walls and ceiling of the garage are cement plastered. The foyer is enlarged by using an angled front for the guest closet. This also permits use of a planting box in the foyer. Large glass areas of the 35-foot living room look out over landscaped gardens. Hearth is slate and fireplace is stone.



INCREASINGLY popular is use of planting box between living and dining space

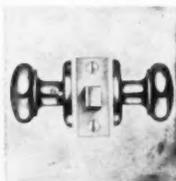
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Electric Range—Six unit double oven Lectro-Host range, made by A. J. Lindemann and Haverson Co., Milwaukee 7, Wis., features Vari-Speed surface cooking control, allowing unlimited heat intensities without fixed stops.



Balcony Railing—Locke Miniature railing is 15 inches high; available in four styles and complete range of sizes. Matches wrought iron porch columns to produce attractive decorative effect. Locke Mfg. Co., West Salem, Ohio, are the manufacturers.



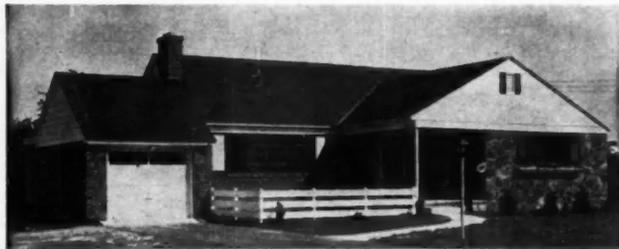
Lock—Bar-A-Lign lock, designed for low-cost housing by Lockwood Hardware Mfg. Co., Fitchburg, Mass., features quick installation. Aligning unit is incorporated into set. Complete assembly is held together in door with machine screws.



Roofing Tile—Made in various designs, textures and colors this type of tile is especially adaptable to medium-priced small home design, both modern and conventional. Ludowici-Celadon Co., 104 S. Michigan Ave., Chicago, Ill.



Winch-Hoist—Improved Lug-All 1½-ton alloy hoist, with 30-to-1 power ratio and fully tested to a 100 per cent overload, has weight of only 8½ pounds. Wide variety of uses. The Lug-All Co., 331 E. Lancaster Ave., Wynne-wood, Pa.



INEXPENSIVE but effective are the wired lamp post and formal white fence

Cape Cod with Modern Influence

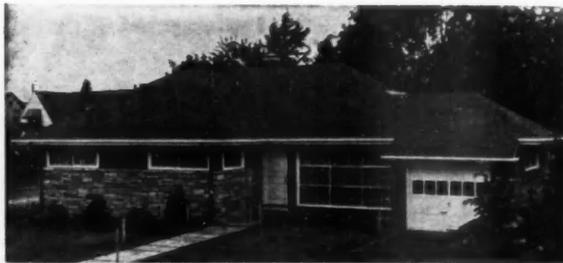
FEATURING brick, fieldstone and vertical paneling exterior, three bedrooms, two tile baths (one with glass stall shower), leather breakfast lounge, sliding closet doors, a side porch, baseboard convector heat, and

a full basement, this house was designed by Herman H. York, architect of Jamaica, N.Y. It was built and exhibited by Bytner Construction Corp., Loudonville, N.Y., and sold for \$23,500. Among the numer-



ous convenience features is an entrance from the garage to the porch. V-grooved planking around entrance porch has eye-appeal. Fixed shutters flanking large window areas, and flower box under front bedroom window relieve coldness of stone and brick exterior. Note also effectiveness of contrasting color of shutters flanking attic louvre.

Conventional with a Distinct Modern Flavor



WINDOW DESIGN and exterior materials distinguish this house

LOCATED in Phelps Manor Country Club, this demonstration house was designed by Fredrick W. Harsen, architect of Tenafly, N.J., and built by John Medico and Charles Costanza, Teaneck, N.J. Specifications include Schlage locks, Chase copper

tubing, Rheem water heater, Flintkote and Philip Carey roofing, Lightolier fixtures, Miami ventilating fan, American-Standard and Kohler plumbing fixtures, Crawford garage doors, Twindow glass in picture and bow windows, A.B.C. aluminum casement sash, Thatcher gas or oil heater, Cellulite and cotton

wool insulation. Wall finish is three coats of plaster on Rocklath. Exterior walls are native stone, brick and pre-dipped wood shingles. Base of the short partition between living and dining rooms is brick two feet, six inches high. Top is a flower box, and fluted glass extends to receptacle for concealed lights above.

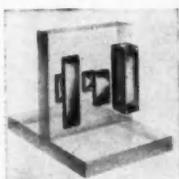
BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



Water Repellent—Kay Tile Co., West Orange N. J. or 1717 Westlake Ave., North Seattle 9, Wash. Used to protect porous masonry against water seepage, above or below grade. Available in yellow, cream, buff, green, and other colors.



Plaster-Mortar Mixer—Kwik-Mix Co., Port Washington, Wis. Kwik-Mix 6 cu. ft. capacity has a semi-power tilt arrangement to cut down manual effort in tilting the drum. Single cylinder air-cooled gasoline engine, or electric power.



Modern Handles—Laboratory Equipment Corp., St. Joseph, Mich. Leco handles are made of die casting, require one screw for attaching. Will not turn or twist. Chrome or gold type finish. Easily installed, new in design.



Aluminum Nail—Nichols Wire & Aluminum Co., 1725 Rockingham Rd., Davenport, Iowa. Made in accordance with FHA requirements, nails are etched to remove grease and oil and increase holding power. Strong and rust-proof.



Oil or Gas-Fired Furnace—Ko-Z-Aire, Inc., Red Oak, Iowa. Model 90-CFO unit, counter-flow, has B.T.U. input of 106,300. Discharges warm air through opening in base of cabinet into warm air pit or plenum for perimeter heating. AGA-approved.

Small City Lumber Dealer Spearheads Local Home Week

Demonstrates that National Home Week can be a great success in community with no permanent building industry organization



W. H. TROUP, Kankakee, Ill., dealer

TWO COMPLETELY furnished new houses visited by 10,000 people in a city with a population only several times that figure is the sparkling contribution made to National Home Week by Kankakee, Ill. The little city, located about 60 miles southeast of Chicago, has no strictly local organization of builders, dealers or realtors. The nearest approach is the county real estate board.

Interest was generated to such an extent by William H. Troup, who spark-plugged the event, that two local builders, many realtors, the local American Legion Post, and very importantly, the Kankakee Daily Journal, all lent tangible support.

When Troup, who heads H. H. Troup & Co., lumber and building materials dealer in Kankakee, heard about National Home Week through *American Builder* and inquired for further information about how to proceed, he was sent a manual of operation. First, he contacted two of his builder customers, H. P. Jensen and Wesley Johnson, and explained the idea to them. He exhibited two plans, one which he designed himself, and the other a Weyerhaeuser 4-Square plan. Jensen agreed to take Troup's plan, and Johnson the Weyerhaeuser plan.

Troup then went to the county real estate board. Acceptance by the board was instantaneous. They agreed to promote the event with radio and newspaper advertising. Among the outstanding results were more than a score of pages about



KANKAKEE Daily Journal photo of first of 10,000 visitors to demonstration homes

building in eight issues of the Journal. The agreement with the real estate board was that while no effort was to be made to sell the houses during the Week, if they were sold during that time the entire commis-

sion would go to the board. If the houses were sold after Week closed one-half the commission would go to the board and the other half to the agent. The Troup house was sold during the week.

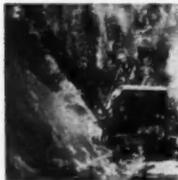
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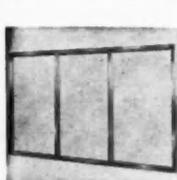
Gas Furnace—New model 68 by Perfection Stove Co., Cleveland 4, Ohio, has 3-stage fire and 2-speed blower. Input of 125,000 B.T.U. Compactly constructed, furnace is 45 inches deep, 38½ inches wide and 53 inches high.



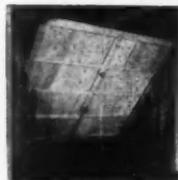
Electric Range—Cooking top of 36-inch Model 1036 range of Perfection Stove Co., Cleveland 4, Ohio, is one-piece turret type. Work space is in center, with two fast-heating double-coil Chromalox units on each side. Has automatic controls.



Log-Loading Crane—Osgood Model 825 machine is powered by GM 6-71 diesel engine with torque converter. Has firm's standard air control and air cushion clutches; is equipped with independent boomhoist. The Osgood Co., Marion, Ohio.



Aluminum Window—Horizontal sliding window by Peterson Window Corp., 1377 E. Mile Rd., Ferndale 20, Mich., is made of Alcoa 635-15 alloy. Consists of fixed sash and sliding sash supported on two stainless steel rollers. Easily installed.



Upward-Acting Door—E-Z Swing No. 800 garage door requires no overhead clearance. Made of grained exterior plywood by Phenix Mfg. Co., Milwaukee 12, Wis. Has metal weather-stripping, automobile-type lock in the door handle.

Lots for the houses were purchased from W. J. Charlton, real estate board president. The houses were designed to demonstrate plus values in houses priced to the low-income pocketbook.

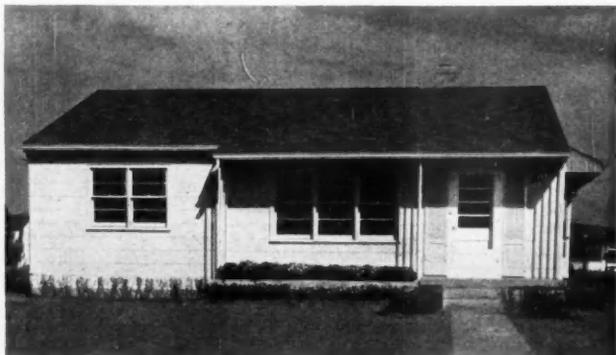
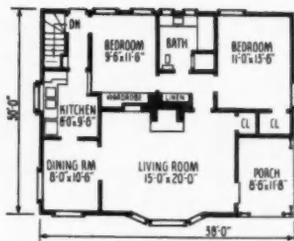
Specifications for the houses included Eljer fixtures, Morgan sash-type trim, Yale & Towne hardware, A. O. Smith water heater, Dura-Seal windows, Formica counter tops, Andersen utility type windows in the

corners and Macklanburg-Duncan sliding door hardware. Heat is from an oil-fired furnace. The houses were priced at \$12,400.

Actually, the population of Kankakee is only about 25,000, with an added 15,000 living in adjacent smaller towns. The success of the venture in Kankakee proves that National Home Week is a practical and beneficial demonstration of sound home building in any community.

The Weyerhaeuser house was the first demonstration house of any kind ever built by Wesley Johnson, who is already planning to participate in 1951.

The Chamber of Commerce, the furniture dealer, Troup, the builders and realtors and all others agree that the event was well worth while both as to immediate results and long-range public relations for the home building and furnishing industry.



WEYERHAEUSER 4-Square home on exhibit as photographed by Kankakee Daily Journal

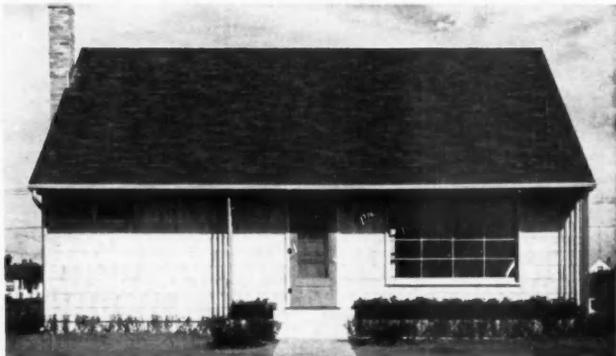
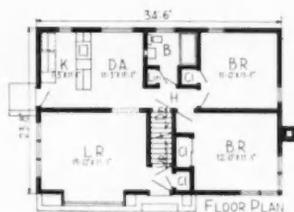


EXHIBIT home designed by W. H. Troup, lumber dealer. Photo by Kankakee Daily Journal

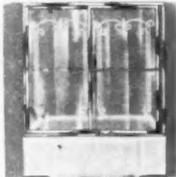
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Electric Range—Universal "Select-A-Range" provides flexible planning with three complete units—oven, surface cooking unit, and storage cabinet—which can be installed separately. Landers, Frary & Clark, New Britain, Conn., are the manufacturers.



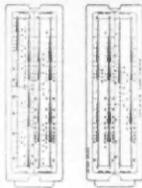
Aluminum Window—Double hung window by Les-sud Engineering Co., Clayton, Ga., has new type frame with a flange about the complete periphery. Installation is especially adapted to concrete block, jumbo brick and frame wall.



Shower Enclosure—Improved "Roll-Door" enclosure, developed by Lehman Sprayshield Co., Philadelphia 40, Pa., has chromium-plated solid bronze frames, and can be glazed with a choice of clear, obscure or decorated glass.



Gravity Gas Furnace—Lennox GNT series for basement installation comes in 60,000, 80,000 and 105,000 B.T.U. sizes, is of all-steel construction. Body and radiator are welded gas-tight. AGA-approved. Lennox Furnace Co., Marshalltown, Ia.



Slide Rule—7 x 2 1/4-inch rule for designing reinforced concrete beams and slabs, sets graduated slide on known quantities. Applicable for all design stress values. Seymour Lester, 7906 Santa Monica Blvd., Hollywood 46, Calif., is the manufacturer.



CORRECT nailing is one of the essentials of any good framing job

CORRECT NAILING IN FRAMING

A good framing job not only means selecting the right grades of material and good craftsmanship in cutting that material to fit, but also requires the use of the right types, sizes and number of nails at all points



IN FRAMING any wood structure the strength of the building is dependent on how well the parts and elements are fastened together. It is important to know the sizes of the nails to use, the number to use and where they should be placed to fortify the structure to withstand the forces that the parts must resist to keep the whole rigid and plumb.

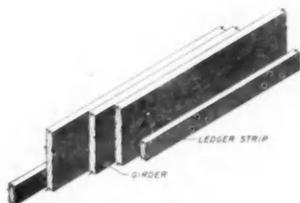
When nails are driven into green wood and pulled before any drying takes place, the withdrawal resist-

This is the second in the series on Construction Lumber. Glued laminated framing members will be discussed in February, and recommended framing practices in farm buildings will be covered in the March issue.

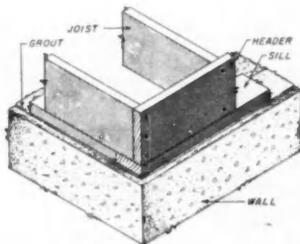
Much of the source material and all of the drawings for this article on Correct Nailing in Framing were obtained from the U.S. Forest Products Laboratory and the Housing and Home Finance Agency.

ance for practically all species of wood will run somewhat higher than that for nails driven in seasoned wood and pulled immediately. However, if nails are driven into green wood and seasoning takes place before they are pulled, most types of nails lose a large part of their holding power in the common softwoods. This is another very important point in favor of using well-seasoned lumber for framing structures.

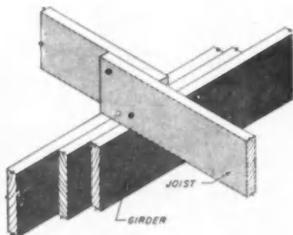
A good quality coating will in-



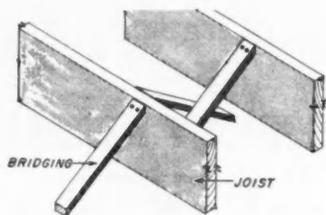
LEDGER strip is nailed to girder with three 20-penny nails near each joist position. With accepted spans and joist spacing, this will support a concentrated load of 300 pounds at any point, or a uniformly distributed load of 50 pounds per sq. ft.



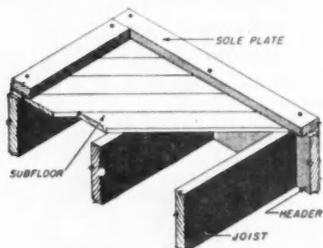
THE HEADER joist should be nailed to the other joists with 20-penny nails—three to the end joist and two to the others. The end and header joists also should be toenailed to the sill with 10-penny nails spaced approximately 16 inches on center



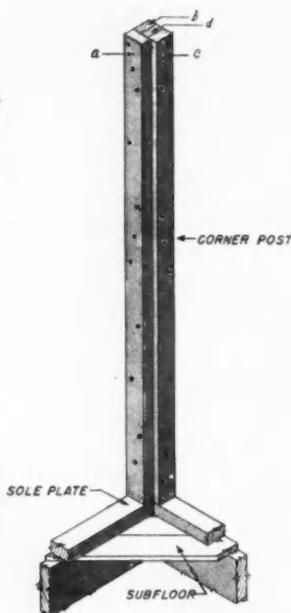
JOISTS bearing on a girder or a partition should be nailed together with two 10-penny nails. Where the joists rest on a wood girder, the joists should be toenailed to the girder with one 10-penny nail on each side of the pair of floor joists



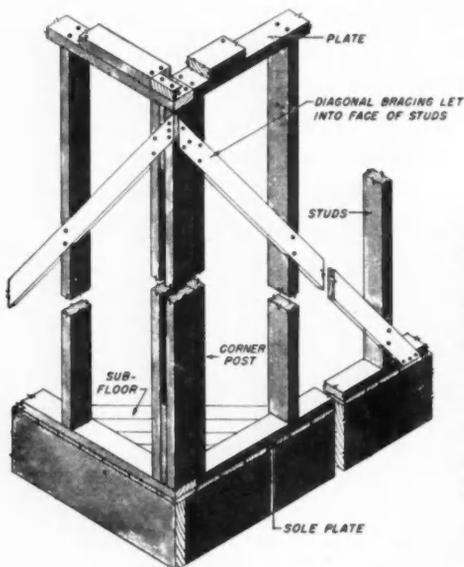
EACH piece of bridging is nailed at each end with two 8-penny nails. Nailing of bottom ends is deferred until after placement of subfloor and, if possible, until after placement of the finished floor because then the tops of the joists are firmly set in their permanent alignment



THE SOLE plate is nailed through the subfloor to header joists and regular joists with 16-penny nails staggered as shown. The sole plate over the end joist is nailed through the subfloor to the joist with 16-penny nails spaced 16 inches on center. For nailing plates on which rafters bear, see drawing on the next page



CORNER post nailing is important. Stud (a) is nailed to studs (b) and (c) with 10-penny nails staggered 12 inches and to each filler block (d) with one 10-penny nail. Studs (b) and (c) are each nailed to each filler block with three 10-penny nails. The corner post is toenailed to the sole plate with two 8-penny nails on each of the faces

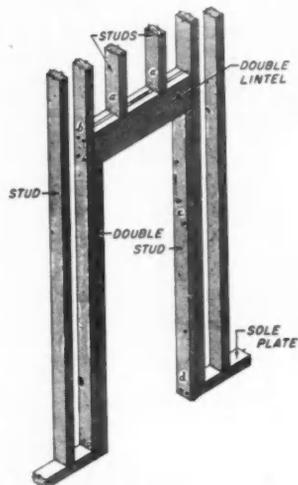


THE LOWER part of the top plate is nailed to each stud and corner post with two 16-penny nails. The upper half of the plate is nailed to the lower with 10-penny nails, two near the end of each piece, the others staggered 16 inches apart. Corner braces are fitted into notches in faces of framing members and nailed at each stud with not less than two 10-penny nails, and at ends with three 10-penny nails

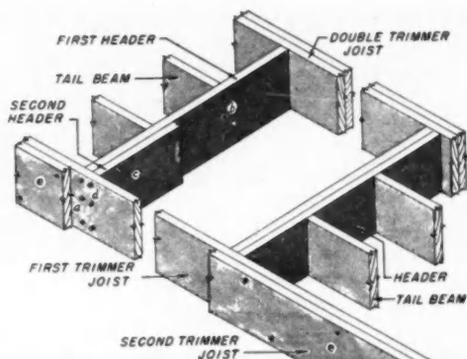
crease the resistance of nails to withdrawal immediately after driving 85 to 100 per cent or more as compared with plain nails. This percentage runs higher in lighter woods than in the heavier species. Research shows, however, that after a coated nail has been in a piece of wood for a month or so it has only about one-half as much resistance to pull as it had when it was first driven.

Generally a nail with a long sharp point will have a higher holding power than one with the common point. This is particularly true in softwoods. If a species has a tendency to split, however, this tendency is accentuated by a sharp point with a consequent possible reduction in holding power. It is good practice to use the common nail with ordinary species of framing lumber.

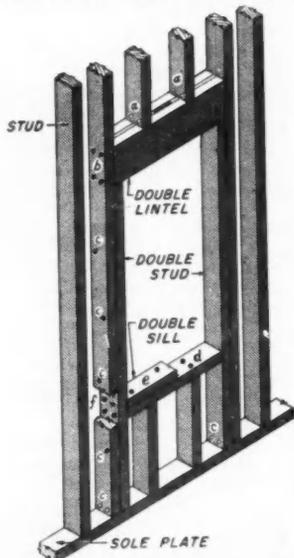
In regular pulling tests nails have a maximum resistance to withdrawal when driven perpendicular to the grain of the wood. As the angle becomes less, the resistance to pull in softwoods decreases until, when it is driven parallel to the grain, (into



IN FRAMING the door opening of a wall or a partition, studs (a) above the opening are toenailed to each part of the lintel with 10-penny nails. The long studs (b) are nailed to ends of each part of lintel with two 10-penny nails and toenailed to the sole plate with two 10-penny nails. The double studs (c) are nailed together with 10-penny nails spaced 16 inches and staggered as shown. Studs alongside the opening (d) are nailed into the end of the sole plate with two 10-penny nails. Note that studs supporting the lintel do not rest on sole plate but set on subfloor and joists

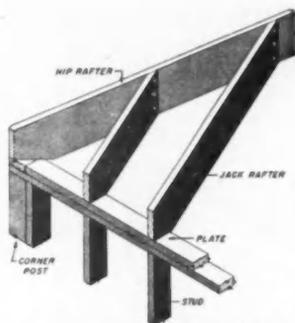


FLOOR opening nailing with headers and trimmers is as follows: (a) Nail through first trimmer joists into ends of first headers with three 20-penny nails. (b) Nail through first headers into ends of tail beams with three 20-penny nails. (c) Nail second headers to first with 16-penny nails spaced six inches longitudinally and placed near top and near bottom, alternately. (d) Nail through first trimmer into ends of second header with three 20-penny nails. (e) Nail second trimmer joist to first

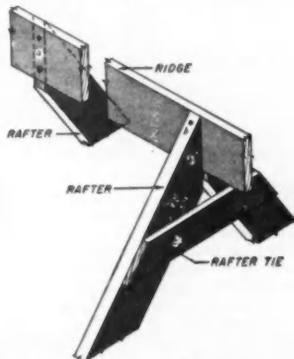


IN WINDOW opening, studs (a) above are toenailed to lintel with 10-penny nails. Long studs (b) are nailed to ends of each part of lintel with two 10-penny nails. Double studs (c) are nailed together with 10-penny nails spaced 18 inches, staggered, and toenailed to sole plate with four 10-penny nails, two from each side. Lower part of sill member (d) is nailed to each stud below it with two 10-penny nails. Upper part of sill (e) is nailed to lower part with 16-penny nails, staggered 8 inches apart. Studs (f) alongside opening are nailed to each part of sill member with two 10-penny nails

JANUARY 1951



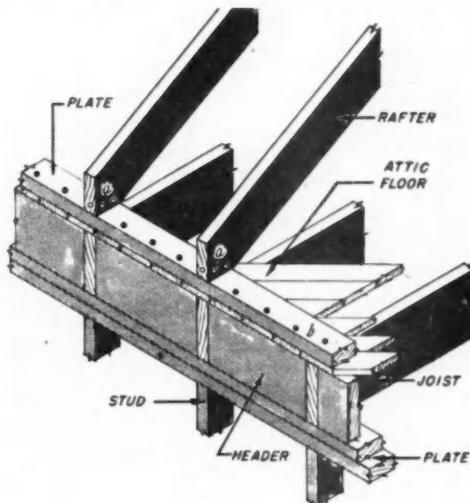
ORDINARY 2x6 jack rafters should be nailed to hip rafter with three 10-penny nails



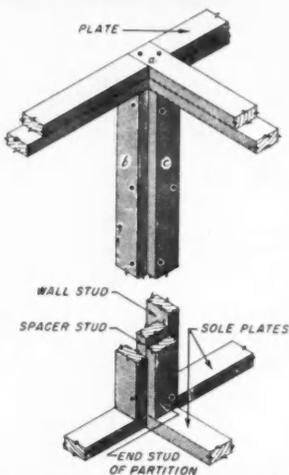
with 16-penny nails spaced six inches longitudinally and placed near top and near bottom, alternately. This nailing will support a concentrated load of 300 pounds at any point on the floor, or uniformly distributed load of 50 pounds per square foot with spacing and span of tail beams ordinarily used in house construction, provided length of floor opening is parallel to length of joists. If length of opening is at right angles to joists, excessive loading may be brought to the junction of headers and trimmers

BEVELED rafters (a), below, resting on plate are toenailed to the plate with five 10-penny nails, two on each side and one through the vertical cut of the rafter. The plate (b) is nailed through the attic floor to each joist with one 16-penny nail and to headers or header joist with 16-penny nails spaced four inches on centers. Additional security against uplift, if needed, may be obtained by use of steel straps, well nailed

THE RIDGE (a) is nailed to the first rafter of a pair with two nails (10-penny for 1-inch ridge or 16-penny for 2-inch ridge). The second rafter (b) of a pair is nailed through its top edge to the ridge with one 10-penny nail and toenailed to the ridge with one 10-penny nail. The rafter tie or collar beam (c) is nailed to each rafter with four 10-penny nails



LUMBER Construction LUMBER



IN CONNECTING a partition to a wall, the upper member (a) of the partition plate is nailed to lower (continuous) member of wall plate with two 16-penny nails. Wall studs (b) are nailed to the spacer stud with 16-penny nails 12 inches on centers. The end stud (c) of the partition is nailed to the spacer stud with 10-penny nails staggered with about 12 inches between the nails

the end of a piece) the holding power drops to between 50 and 75 per cent of that obtained when the nail is driven perpendicular to the grain. The results of tests at the U. S. Forest Products Laboratory, however, on slant driving as compared with straight driving show, when a piece attached is pulled directly away from the other, that: (1) When driven into

green material and pulled immediately, straight driving is superior; (2) When driven into dry material and pulled immediately, slant driving is superior; (3) When driven into green or partially dry material and allowed to season for a month or more, slant driving is decidedly superior. Cross slant driving of groups of nails is better than parallel slant driving when the strain or load tends to pull two pieces apart.

For resistance to lateral displacement or shear, laboratory tests show that nails driven perpendicular to the grain give maximum resistance. Nails driven parallel to the grain (into the end) have only about 65 per cent of the resistance to lateral displacement of nails driven perpendicular to the grain.

The aftermaths of high winds and storms illustrate dramatically the importance of correct nailing and fastening for frame structures, particularly houses. Many well-nailed and well-constructed wood buildings have survived for decades the severe weather cycles and the occasional storms of hurricane proportions that occur in many parts of the country. On the other hand, under severe storm conditions, houses with inadequate nailing often separate into parts or even into individual pieces of framing, few of which are actually broken. This demonstrates that the weakness was in the nailing rather than in the wood parts themselves. Surveys following storm damage show that houses standing intact and plumb amid broken trees and the wreckage of neighboring houses are invariably those which, in addition to other features of good construction, are adequately nailed.

There is considerable variation in

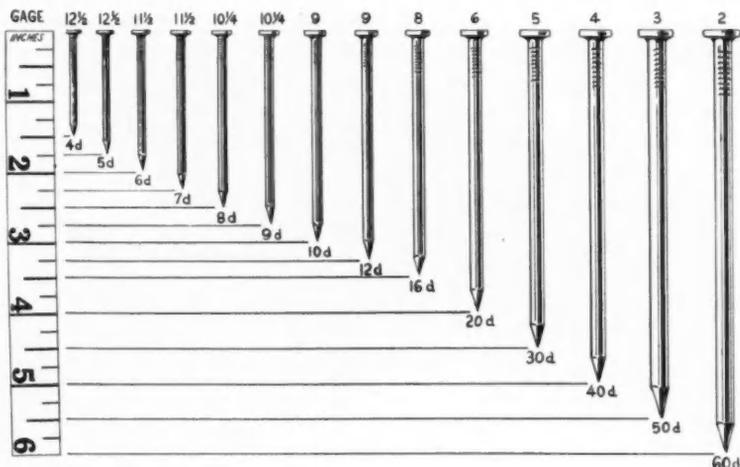
nailing practices because of the difference in opinion as to what constitutes correct nailing on frame houses, even within limited areas. The species of wood used in framing will require no change in nailing except at the more critical joints. In those places, if woods of comparatively low density such as Engelmann spruce, northern cedar, and cottonwood are used, an increase in the number or size of nails is necessary to compensate for their lower nail-holding power.

In most joints in house construction one piece tends to slide on an adjacent one because of the loads or forces met. Resistance of nails to such forces is lateral. Nails through trimmer joists into the ends of headers, nails through headers into the ends of tail beams, nails attaching ledger strips to girders, are subjected to such loads or forces.

Lateral resistance of nails attaching wall sheathing or interior wall coverings of sheet materials to the frame comes into action in resisting forces that tend to rack the wall and in carrying the weights of such materials. Lateral resistance of nails also works against the horizontal thrust of rafters attached to ceiling joists or to plates.

The other manner in which nails are stressed or loaded is in direct pull or withdrawal. Nails attaching covering materials to the lower edges of joists or rafters are stressed in direct pull by the weights of those materials. Similar stress is induced by warping, by vibration, and by wind suction. Ordinarily, when sufficient lateral resistance has been provided, ample resistance to direct pull will be present.

No matter how well a house is nailed, however, it is not adequately protected against unusual pressures from storms and high winds unless it is firmly attached to the foundation. This was discussed and illustrated on page 122, December *American Builder*.



COMMON wire nail sizes—length and gage. The nails shown are drawn to exactly one-half size

What's Ahead For Building?

**A cross-section
of opinions
from the industry**



**E. M. SPIEGEL, Builder,
New Brunswick, N.J.**

"Our industry can be expected to face innumerable problems during the year 1951. It will be a critical year in which we will first have to determine the true impact of Regulation X. Evidence already at hand in our area indicates that few new projects are being started and those only on very modest scales.

"Many thousands of units will be started in early spring which are exempt from Regulation X and I believe that these will be priced slightly higher than our 1950 prices, because of higher material and labor costs, and delays in construction because of shortages of certain items.

"Material limitation orders already issued by the National Production Authority indicate that there will be great need for development of substitute materials for the industry.

"It is to be hoped that our government will be receptive to evidence which the industry will offer to substantiate our contention that Regulation X is unduly severe, and that relaxation of the regulation will avoid a serious breakdown of the housing program."



**MRS. HENNY MOLLGAARD, Builder,
Milwaukee, Wis.**

"U.S. Labor Dept. reports all time high in employment. Stock market highest in 20 years. Curtailment of use of metal for private industry. All industries receive wage increases. With these important factors to guide us, it is impossible to conceive anything but a continued increase in building activities for 1951. The prospective home owner remembers well the critical shortages of material, the terrific increase in prices and the lack of homes available. In his words—'He doesn't want to be caught this time.' The investor is worried about the diminishing buying power of his dollars and is scrambling to purchase rental units, preferably new ones.

"This prophecy holds true, however, only without additional government controls. If the government establishes controls, the demand for housing of any kind will be only slightly reduced as the investor still has his money and would then be even more anxious to buy at any price, and there are many such investors. Only the G.I. and the young couples starting out will be eliminated from the market."



**A. O. ALDRICH, Builder,
Franklin Park, Ill.**

"Our industry is facing a most critical period and builders are proceeding with caution. The question in every builder's mind is—will there be sufficient materials and labor to complete their scheduled program?

"Credit restrictions for the speculative builder will cut deeply into the total. Whether or not the Korean War is ended soon, commitments being made by our Federal government will use a tremendous amount of scarce materials. The Armed Services will cut deeply into the man-power. Surveys indicate that the purchase and development of land for home building purposes is at a low mark.

"The Chicago area is short on living quarters. We are in a high cost area and the larger down payment required under Regulation X will reduce the output of homes. While the desire for home ownership is strong and much needed, I can only conclude that the 1951 production of homes will be much less than our share of the maximum of 850,000 as indicated for the country at large by the Federal government."



**WALTER J. SHAPTER, JR., Builder,
Columbus, Ohio**

"The small wage earner's great dream of home ownership paid out of income has been destroyed.

"The full force of Regulation X will not be felt in this area during the first six months of 1951, because of the large volume of 608 Rental Units already under construction, and the GI 5 per cent down on small homes committed and started before October 12, 1950.

"There has been an 80 per cent drop in FHA applications since October 12, as compared to the same period last year.

"Advanced planning of new subdivisions has practically stopped, and the supply of improved building sites has disappeared.

"As I see it now, we will carry full activity into the first six months of 1951, then in the absence of advanced planning, home building will come to a halt.

"We in the Columbus area have produced 5,000 units in 1950, will produce 2,500 units in the first half of 1951, and after that our great industry (the second largest in the country) will be crippled."

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Bevel Trim Tool—North American Products Co., 3100 W. Cherry St., Milwaukee 8, Wis. For finish operations on laminated plastic tops. Up to 15 times faster than hand finishing. Guide prevents marring finished strip. Has carbide-tipped blades.



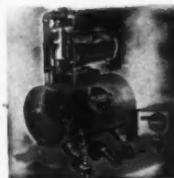
Circulator Fireplace—The Majestic Co., Huntington, Ind. Delivers heat in constant even flow. Cool air drawn in at floor level, heated as it circulates inside unit. Warm air is expelled through grilles at top. Use any mantle design.



Metal Drawer Support—The Extension Drawer Support Co., 3727 Broadway Place, Los Angeles 7, Calif. New Standard unit consists of four right-angle pieces of metal. Drawers can be fully opened. Eliminates need for center or side guides.



Pallet Racks and Shelves—American Sales Engineers, Dept. 96, 141 W. Eight Mile Rd., Detroit 3, Mich. Prefabricated racks and shelves eliminate bolting and welding in joining beds and uprights. Wide variety of deck material available.



Packaged Water System—The Lancaster Pump and Mfg. Co., Inc., Lancaster, Pa. Operates in either deep or shallow wells. In 1/4, 1/3 and 1/2 H.P. sizes with capacities up to 840 G.P.M. Mounted on 15 or 30 gallon horizontal or vertical tanks.



LOUIS C. BURGNER, Builder,
La Jolla, Calif.

"I believe that the Federal government should be supported in its material and credit controls program. However, the credit controls imposed by Regulation X are too drastic, and it is the consensus among the builders in San Diego that these controls should be modified.

"It is my opinion that the effect of Regulation X will not be drastically felt in the San Diego area until March or April of 1951. Quite naturally this Regulation at the moment has given speculative builders, who are developing large tracts of land, great concern.

"At the present time, we feel that in San Diego there will be a constantly increasing and healthy demand for new houses, especially in the \$10,000 to \$15,000 brackets, which has to a degree been more or less neglected in the past."



A. H. M. GRAVES, Builder,
Indianapolis, Ind.

"The builders in our area are in a state of confusion. The first ten months of this year 5,500 dwelling units were built, a 28 per cent increase over the same period of last year. Plans were made to continue this through 1951, but now that the building business is being controlled and will possibly be controlled more, most planning for the future is at a standstill until the full effects of the controls can be ascertained. Since July the applications for FHA and GI loans have decreased about 50 per cent, which would indicate that the smaller home has been penalized by the controls.

"The medium and higher priced homes should not be affected too much by the controls as most of them have been financed with conventional loans and the down payment required was more than the present control payment."



C. A. THOMPSON, Retail Lumber Dealer
Champaign, Ill.

"My comments are based on the assumption and very real hope that our United States will be engaged in no more of a shooting war than we are at the present time. Otherwise so comments are needed. With the tightening of financing controls as we have at the present time, I would guess that new home construction in this area would be cut approximately 20 to 30 per cent. With this decrease it is questionable if a further reduction will occur due to scarcity of materials. I anticipate that shortages will be in certain key materials, and will not directly affect our supply to a marked degree. For this reason our over-all volume may not be reduced in like ratio to the reduction of new housing.

"I look on Regulation X as an alternative to price control such as we had under OPA, though I am against such price control except in the strictest emergency."



JOHN W. DAIN, Retail Lumber Dealer,
Mahopac, N.Y.

"Of course today's appraisals of the 1951 outlook for residential construction may have to be later modified. Under present conditions however, it is likely that large housing developments which made use of the maximum credit terms during 1950 will be seriously curtailed in volume through the operation of Regulation X. However, it does not appear that out around the country away from the large centers the maximum terms were generally applied. It is my opinion, therefore, that a very substantial volume of residential building will continue in 1951—and under terms of financing which in my judgment are more nearly sound. I think business, judged by prewar standards, will be excellent, indeed, in 1951. There seems to be little reason to believe that building costs can be very much reduced in 1951; in fact costs may work out slightly higher."



LESTER HARRIS, JR., Builder,
Cheshire, Conn.

"Certainly it seems, we will be building less houses than in 1950. With more stringent credit controls being enacted and materials becoming more and more difficult to obtain, plus the fact that the potential home-buyer doesn't know which way to turn it looks at this moment to be a mystery year. In our area, Cheshire, Conn., we have been producing at the rate of about 50 homes per year, half of which are in the luxury \$30,000 bracket. This priced home is presently outselling our smaller \$12,000 to \$15,000 house, probably because the people in the luxury bracket have the cash required and will spend it regardless of price provided the home is what they want.

"We do not at this time look for any price increases in homes in 1951, mainly because with lower production there will be more mechanics and more rough lumber available."

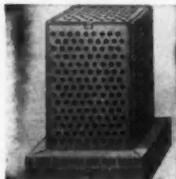


RUSSELL H. WILLIS, Builder,
Closter, N. J.

"No one with sureness can see twelve months ahead in the North Jersey area, but, in our view, warning signals are flying. Right now existing VA regulations have not been seriously felt because so many builders qualify under prior rules. However, when existing commitments are used up, it is our opinion that speculative builders selling above \$15,000 are likely to find tough sledding. We found it so in 1937-1938 when we were selling in the \$16,000-\$18,000 bracket. We found the same situation in 1948 with a two-story house that had been our bread and butter throughout 1945-1946 and 1947. Peoples' ideas changed in favor of ranch type, and hesitation about the \$15,000 level.

"When we are forced to shift to about 30 per cent down and twenty year payments, we look for a sharp reduction in veterans' sales."

BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



Chimney Top—The Perma-Top Co., 410 Shadyhill Rd., Pittsburgh 5, Pa. Perma-Top unit prevents down drafts and pilot flame failure caused by excessive drafts. Keeps out snow, ice, rain. Available for flues up to three feet.



Rotary Corner Cabinets—Mullins Manufacturing Corp., Warren, Ohio. Youngstown units make full use of usually lost corner space. Unique revolving shelves provide abundance of storage space for canned goods and other items.



Carry-All Truck Body—Morrison Steel Products, Inc., 601 Amherst St., Buffalo 7, N. Y. Mass-produced, all steel construction. Has 48 1/2-inch reinforced non-skid floor and extra wide compartments. Wide range of accessories.



Medusa Cements in new eye-catching bags—Medusa Portland Cement Co., Cleveland, Ohio. Re-designed bags feature large Medusa head, and are designed to be quickly identified. White portland cement is packed in blue and white bags.



Tile Board—Miratile Mfg. Co., Inc., 604 W. 81st St., Chicago 20, Ill. Low-cost Miratile, for bathrooms, powder rooms and kitchens, has appearance of real ceramic tile. Finish is non-fading, unaffected by humidity or live steam.



JOHN WEINHART, President.
Builders Association of Metropolitan Detroit
 "An analysis made by a research of developers, builders, mortgage lenders, VA and FHA requests for normal processing indicates a decline of 42½ per cent in 1951 home building below the 1950 figure in metropolitan Detroit. A decline of 1,100 units a month below the same months in 1949 were recorded late last year. The research shows 5 per cent declines because of increased down payments, unemployment, and expectation that Regulation X will cause a price drop; 10 per cent decline because of ill-advised statements by government bureaus that if Regulation X is too severe it will be relaxed; 15 per cent because of need of time for people to adjust to new conditions; 3 per cent because of enlistments and draft; 2 per cent because of fear and uncertainty; 2½ per cent because of material shortages."



ALAN E. BROCKBANK, Builder.
Salt Lake City, Utah
 "The outlook for building in the inter-mountain area for 1951 is seriously affected by these factors: The elimination of 408 financing; the elimination of F.N.M.A. take-out financing; the elimination of combination F.H.A., V.A. 505 financing; the establishment of limits of service charges to the builder and/or the owner occupant; the failure of the Veterans Administration to take a realistic viewpoint on the increase rates from 4 per cent to 4½ per cent; the untimely decrease in F.H.A. interest rates to 4¼ per cent. In addition to these factors [including Regulation X] there is a serious shortage of money available for mortgage financing in the west . . . interest rates are going up. Banks are having to pay more interest on savings, even government rates are increasing. There will be more building in the higher brackets in 1951."



CLYDE FULTON, Retail Lumber Dealer.
Charlotte, Mich.
 "In expressing an opinion as to the coming year, I am assuming that there will be no serious intensifying of the tension in foreign affairs during the twelve months ahead. On this basis, I am looking for good business, not quite the volume enjoyed by the industry this year, but comparing very favorably with 1949. In this area, the need for homes is far from satisfied. Our farmers are prosperous and they have always provided an excellent outlet for building material when financially able. It does not appear that we will be faced with shortages of material sufficiently serious to cause postponement of building plans. Credit restrictions will reduce the volume to some extent, but there are still great numbers of prospective home owners who have the funds necessary to meet the present requirements."



R. F. FRITZ, Builder.
Minneapolis, Minn.
 "With the uncertainty of general conditions and prospect of material and labor shortages for 1951, most builders in this area are not planning too far ahead. Dwelling starts for the last months of 1950 held up remarkably well, which means work that will carry along well into 1951.
 "Builders who have ground that is suitable are including more of the better class homes in their programs for 1951. The sale of this type of housing does not seem to have been affected as much by Regulation X as the lower priced housing. At the present time the market for three bedroom homes seems to be particularly good, with a preference for the rambler type.
 "Our program for 1951 is being set up on a basis of about 75 per cent of our 1950 operation."



N. P. NINNEMAN, Builder.
Harrisburg, Pa.
 "House construction will drop at least 50 per cent because of the abrupt credit restrictions recently imposed upon the small home buyer. This is very unfortunate and will make it more difficult for the man in the lower income bracket to house his family. If these restrictions continue they will create a more serious curtailment in construction, causing more of a scarcity than has existed.
 "This curtailment helps to create higher prices for old properties that are definitely on a down-grade as to their life-expectancy, affecting economical soundness that is far from healthy for our country. These existing restrictions help to encourage the construction of higher-priced homes, leaving the small home buyer struggling to find a decent place to house his family."



FRANK J. JOHNSEN, Builder.
Park Ridge, Ill.
 "Despite newly imposed credit curbs and prospects of continued material shortages for the coming year, the residential building picture appears favorable in our area for 1951.
 "This winter season we are having as many inquiries from prospective homeowners as in the past few so-called 'boom' years. We feel this is due in part to those people who restrained themselves for several years in the hopes of a more settled market and are now facing the possibility of not being permitted to build at all due to further emergency curbs by the government. Consequently, many in this group are now being spurred into decisions to act in order to get under the wire before a halt of new building starts becomes a reality forcing their plans to remain in the plan stage."

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Flush Door Booths—Plywood Div., The Mengel Co., Louisville 1, Ky. For local shows and exhibits, booth displays Mengel Hollow-Core flush doors. Booth is 20 feet wide, 10 feet deep and 8 feet high. Shipping weight, 3,265 pounds.



Perimeter Insulation—W. R. Meadows, Inc., Elgin, Ill. "Corktite" is semi-rigid material of selected cork granules impacted under heat and pressure with asphalt between asphalt saturated felt liners. High insulation factor.



Convactor—Madine Mfg. Co., Racine Wis. Type F-12 is 12 inches high, for free-standing or recessed installation under picture windows. Available in 6 and 8-inch depths, in 8 lengths from 40 to 96 inches. Clean, modern appearance.



Gas-Fired Winter Air Conditioner—L. J. Mueller Furnace Co., 2005 W. Oklahoma Ave., Milwaukee 15, Wis. Compact high boy Climatrol Type 110 now has enclosed diverter, which permits simplified installations. Green or white enamel.



Gas Range—The Maytag Co., Newton, Iowa. Dutch Oven models have 18x19x15-inch ovens, one-piece tops, broiler that can also be used as a serving tray, and special flame control on some models. Controls are out of child's reach, easy to see.



J. B. HAVERSTICK, Builder,
Dayton, Ohio

"It appears that three factors will result in at least a cut of one-third in the number of housing units started in 1951 as against the production of 1950.

"1—Regulation X with its high down-payments and a reduction of five years in the amortization period of FHA and VA loans will eliminate many of the marginal buyers.

"2—Difficulties which will result in materials shortages brought about by demand of the defense program will discourage many builders.

"3—Increased wages in the building trades and in factories manufacturing building materials will increase housing costs. These factors coupled with the effect of Regulation X will put prices of many houses out of the reach of a considerable number of possible buyers."



ROBERT P. GERHOLZ, Builder,
Flint, Mich.

"Residential building in this area is extremely sensitive to government controls. Even the moderate July credit controls decelerated new starts by 33 1/3 per cent. Regulation X slashed the volume by another 1/3. Right now it looks as though the 1951 volume will be about 45 per cent of the 1950 mark. The total devastating effect of Regulation X on mortgage credit will become increasingly apparent in the months ahead. I am not counting on the relaxation of any controls. The Defense Production Act of 1950 provides for a completely controlled war economy. Regardless of what happens, and when, in Korea, the defense program has top priority. From my corner it looks as though additional controls, limitations and restrictions although not needed are inevitable."

CONSENSUS

WITH few exceptions key figures and typical operators in the home building industry are reluctant to advance firm opinions about the outlook for 1951. Almost without exception, where predictions were made with any degree of certainty, they were accompanied with reservations that whatever was said was contingent on the situation as it appeared in late November.

About the only point of unanimous agreement contained in the statements which appear here is that the low-cost home market will suffer under Regulation X because of the inability of most young families and other low-wage earners to amass the increased down payments required under the regulation. Generally, builders and distributors reporting for specific areas, predict a decline of one-third in the number of new homes in 1951 compared with the totals for 1950.

Almost without exception, anticipated scarcity of building materials is looked upon as a contributing factor to declines next year. One correspondent, however, stated that he believed the decline in new starts next year will offset possible material shortages.

Another advanced the opinion that home building outside the metropolitan areas will be unaffected by Regulation X, since cutbacks in large centers will produce surpluses of labor and materials which will be absorbed outside the cities. Another inclined to the view that surplus labor in the cities will drift back to rural areas, and for the first time since the close of the war, make it possible to develop a large farm remodeling and repair market.

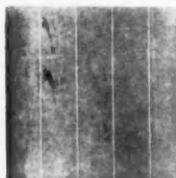
Builders and distributors alike in the metropolitan areas were almost unanimous in terming 1951 a mystery year, one that cannot be predicted accurately until late spring. They predicate their views on the as yet untested effect of Regulation X, and the fact that it will not be clear what the effect will be until present commitments, most of them due for completion in the spring months, have been disposed of. Caution is urged, and while some state that 25 to 50 per cent of last year's activities might be safe operation, many mention no percentages, and simply urge every home builder to feel his market cautiously, and not get more units under way at any time than he feels he can sell and complete.

One builder of luxury houses anticipates no decline in sales, but does predict that shortages of materials, appliances and equipment will permit him to offer less variation in his homes. He believes it will be necessary to go in for more standardization, less selectivity in color, particularly in appliances, in order to conserve all of the tools of construction.

Higher cost houses, in the opinion of most observers, will not decline in volume. Some go so far as to predict sizeable gains in volume in this class.

There is no unqualified optimism in any of the predictions, and at the same time, little outright pessimism. There is a pronounced feeling of wariness, and a not too great hope that in some way the need for restrictions will disappear. Mixed with this is an occasional expression of distrust in the motives behind government credit controls.

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Asphalt Tile Flooring—Mastic Tile Corp. of America, Newburgh, N. Y. Parquet tile simulates wood flooring. In 9x9-inch size with straight-line indentations spaced about 1 1/4 inches apart. Designed to be decorative, long-wearing.



Portable Woodworking Mill—The Master Woodworker Mfg. Co., Detroit 26, Mich. Several machines in one, this unit is equipped with overhead cross cut radial saw, knife round head jointer and underslung rip saw. Gas or electric motor.



Sliding Door Hardware—Jay G. McKenna, Inc., P.O. Box 677, E. Jackson Blvd., Elkhart, Ind. Series 250 Kenatrack using Nylon wheel for quiet operation allows door to be flush mounted with track completely hidden. For 3/4-inch doors.



"Mighty Mouse" Tractor—Mead Specialties Co., Dept. HKM-4, 4114 N. Knox Ave., Chicago 41, Ill. Used as power mower, for bulldozing, grading, and other work. Power mower attachment is available in 4-foot width with 5 H. P. motor.



Dumpcrete—Maxon Construction Co., Inc., 131 N. Ludlow St., Dayton 2, Ohio. Hauls regular or air-entrained concrete, maintaining load-to-load uniformity with no agitator to change air content. Truck has 90-degree dumping angle.



ROMAN TILE, cedar siding, redwood gable ends, green roof and light green windows give building color and character

Motel for a Narrow Lot

Designers use area effectively and provide for easy conversion to kitchen apartments

COMMISSIONED to design a motel for a lot 66 feet wide and 160 feet deep, Wallace & Graham, building consultants of Eugene, Ore., found that the lot was too narrow for a U-shape, and too wide for economical use to contain a single row of one-room units. Their solution is the plan below.

Since it was considered desirable to provide for conversion of the units into housekeeping quarters at some possible future date, each unit was planned with a separate room or with space for such a room to be turned into a kitchen. Plumbing and wiring were roughed in the walls for such a change, but no fixtures were installed. As shown on the plan, the first two units to the left of the owner's apartment have small rooms for conversion into kitchens. These are kept locked now.

The next two units have bedrooms marked for possible future conversion, and the units at the extreme

left are large enough for kitchens to be built in.

By adding extra rooms to all units except the first two, full advantage of the lot area was taken. The extra rooms are equipped with two beds, and when one of these units is rented by only two people, the extra room is locked.

Exterior of the building is natural finish cedar paneling, applied vertically. It is Olympic Texter treated with two coats of Fuller Logwood Oil. A corner wainscot and flower boxes of Roman tile add character to the office entrance. The underside of the four-foot roof overhang is painted yellow. Asphalt shingles are green, and Trimset steel windows are painted a lighter green. At the front end of the building, the cedar siding extends to the gable line, and the gable end is horizontal redwood boards.

The pylon carrying the sign rests on a 4-inch concrete base, and is 20

feet high, 14-inches wide and 36 inches deep. Two 3-inch steel pipes were set in the concrete, two feet apart, and bolted together with 3x3 angles, which also hold the furring for the paneling.

Construction is 2x4 studding covered with sheathing. Floors are 3/4-inch shiplap, plywood, then carpeting. The rear of the building is asbestos shingles, conforming to the fire ordinance. Sound deadening between apartments is accomplished by using staggered 2x3 studs with Kimsul woven between them. Plates are 2x8.

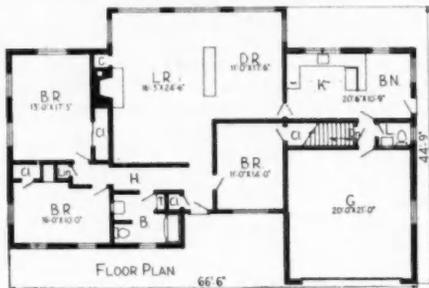
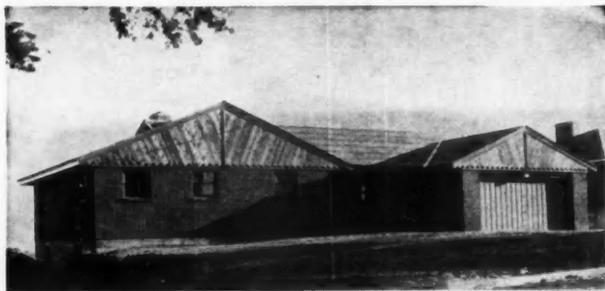
Materials used are Kohler fixtures, Olsonite toilet seats, Lawson Medicine cabinets, Hall Mack accessories, Schlage locks, Trane convectors, Wizard shower heads, and Capitol boiler. Flexalum aluminum blinds, Simmons metal beds and Beautyrest mattresses were installed.

There is space above the owner's apartment for two bedrooms.



PLUMBING AND WIRING roughed in for rooms and areas designated as future kitchens. Wide parking area is black top

BUILDING FOR QUALITY—NOT FOR PRICE



TOP and above show front and rear of dream house designed and constructed by builder on select site in Yakima, Wash. Note unusual treatment of gable ends. At left is main floor plan

Unique and novel effects obtained through control of plans, specifications and job site alterations

WITH A free choice of location and no restrictive specifications or fixed details, R. W. Gordner, home builder of Yakima, Wash., is able to express his own ideas as they occur to him in the course of building quality houses. The results are novel, and lend a high degree of individuality to each house.

For his dream house, illustrated on these pages, he selected a site commanding a view of a broad valley, with snow-capped Mt. Adams in the distance. The lot, 85x200, is in a select residential district. Exterior walls are Roman brick with black mortar. The effect is striking. Gable ends are varnished t&g rustic cedar panels set about 30 degrees off vertical. This treatment is exceptionally interesting. It serves to reduce the actual height on the front, and accentuate the horizontal lines on the rear.

To give character to the roof, without using hand-split shakes, Gordner used red cedar shingles laid double at every seventh course. This requires 14 per cent more shingles, but provides interesting shadow lines. In the recessed entry he used resawed cedar boards with 1 1/2-inch battens, also treated with linseed oil. The garage door is Stran Steel, and the front entrance door is of mahogany equipped with new Schlage Astra roller bearing lock.

Interior doors and woodwork are Baylawn-White Lauran ribbon-grained mahogany finish with sealer, finish and three coats of varnish. The

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Fireplace Tile—Warner Prins, 36 E. 22nd St., New York, N. Y. New designs in washable tile are made with pictorial scenes, Chinese landscapes in a multitude of colors and patterns. Similar tiles are also made, designed for wall coverings.



Water Repellent—Protection Products Mfg. Co., Kalamazoo 99, Mich. Invisible Raincheck is completely colorless when applied to masonry surfaces. Does not discolor after exposure. A silicone product, it will not evaporate or wash out.



Garage Door—Raynor Mfg. Co., East River Rd., Dixon, Ill. Wood sectional upward-acting doors with graduated seal are made in widths from 8 to 16 feet, or in odd sizes to specification. Douglas fir rails, stiles and muntins are used.



Special Sink—American Central Div., AVCO Manufacturing Corp., Connersville, Ind. Model SS-4200 is low cost, has full-width storage compartment, new modern faucet assembly, with wide work space in bowl. Right or left drainboard.



Garbage Disposer—In-Sink-Erator Manufacturing Co., Racine, Wis. In-Sink-Erator rotor shredder is equipped with milling impellers on top surface and pumping impellers on lower surface to increase velocity of shredding, flow of water.

rear wall of the living room, framing the windows which provide a view of the mountains, is rotary-cut mahogany in 16-inch squares, which were cut from 4x8 sheets. The squares are divided by five-sixteenths-inch round mahogany dowel stock. Each tile is set with the grain at right angles to the squares abutting it. Tile above the fireplace is ribbon grained, and a ceramic tile fireplace forms part of one wall. The island dividing the living room from the dining space is built of 3/4-inch solid mahogany. On the living room side there are book shelves below the counter, with ledges for knick-knacks above. On the dining room side there are grooves for the display of dishes, and below are cabinets for the storage of linen.

All cabinet doors throughout are 1/4-inch plywood. Kitchen cabinets of the same thickness are birch Malarkey plywood, finished with two coats of sealer, one coat of spar varnish, and two coats of marine spar varnish. The sink top is Formica with a rubber base tile on the return, which is also used as cove molding over a floor of Armstrong linoleum. To take up a dead space on the south wall of the kitchen, Gordner built a storage cabinet with a pull-out shelf. Since the space is four feet deep, the shelf is on rollers, permitting it to be pulled out. The breakfast nook is separated from the kitchen by the range and a cabinet overhead, hung from the ceiling.

The bath is particularly colorful, with red Alumiwall used as wainscoting up five feet from the floor. The wall over the bath tub has a checkered effect, provided by using both red and white tile. Armstrong Splat pattern linoleum and colored American Standard fixtures together with a lavatory faced with mahogany and topped with Formica, are among the chief features of the room. Gordner wanted a large medicine cabinet,

so he provided a recess 24 inches square, and faced it with a 1/4-inch hinged plate glass mirror, flanked by fluorescent tubes.

An interesting window detail was developed for use with R.O.W. windows, which are weather-stripped and removable for cleaning. Use of Windtite Sash Locks provides leverage for pulling the sash tighter together for additional weather-proofing.

The entire house is insulated with Simpson Insulating Board. Plaster is over Rocklath, and Zonolite Insulating plaster was used. There is a full basement, wired and heated, with walls finished in cement plaster, and equipped with a fireplace. An oil fired hot water system heats the house, and domestic hot water is provided by a Rheem tank. The house is priced at \$27,500.

Gordner is a relative newcomer to the home building industry in Yakima, having started there after his release from the Navy, following the war. He began building popular price houses, but derived little satisfaction from this. Both he and his customers were unhappy because it was impossible to build into the houses all of the design and convenience desirable. The limitations imposed by price restricted Gordner's design ability.

He, therefore, decided to abandon the popular price field, and build houses to sell for about \$25,000, feeling that this price class would provide ample opportunity to achieve individuality and quality.

A survey of the Yakima market bore out his early conviction that there was a good market for houses in that price class.

The results have been gratifying both to him and to the people for whom he builds.

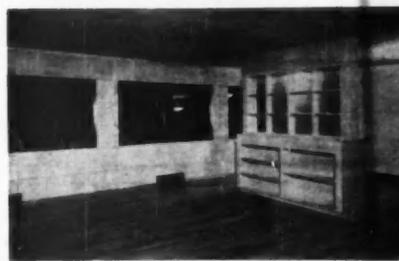
Gordner in the short span of a few years has earned a reputation as a creative and sound builder.



DIVIDED bathroom. Note lavatory enclosed with mahogany and Formica top



KITCHEN with natural finish birch plywood cabinets. Note cabinets above range

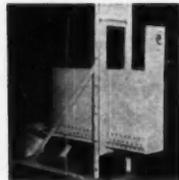


LIVING room features glass areas, mahogany squares in walls and cabinet island

BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



Aluminum Fencing—Nichols Wire & Aluminum Co., 1725 Rockingham Rd., Davenport, Iowa. Never-Stain Chain Link fencing, with new "Lustre-Brite" finish is climb-proof and rust-proof. Requires no maintenance. Heights 3' to 10'.



Corner Utility Drawer—American Central Div., AVCO Manufacturing Corp., Connersville, Ind. Utilizes space under base corner top. Sliding bin offers convenient storage for large trays or other articles, with provision for air circulation.



Shallow Well Pump—Everite Pump and Mfg. Co., Inc., Lancaster, Pa. Figure 1950-10 Everite water system has capacity of 250 gallons per hour. Unit is available with 10, 15 and 30 gallon horizontal galvanized tanks. Has one-piece rubber piston.



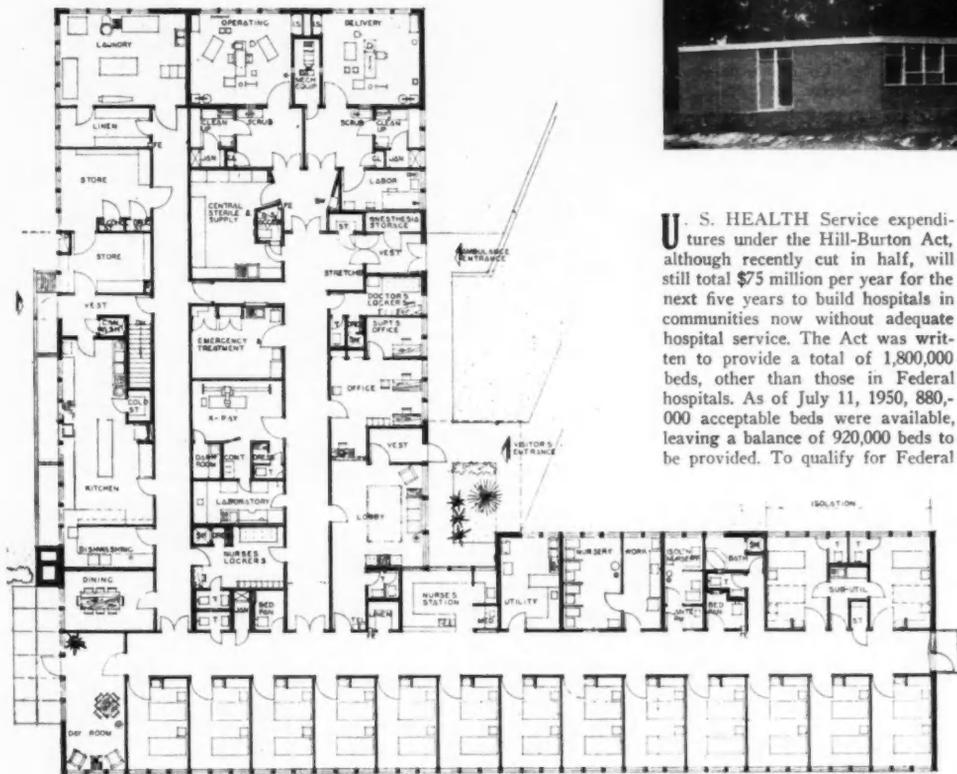
Floor Finish—Pierce and Stevens, Inc., 710 Ohio St., Buffalo 3, N. Y. Fabulon floor finish is waterproof, skidproof, chip-proof, stain-proof. Easily applied floor covering requires no stirring, settling, skinning, is transparent, brush-applied.



Door Opener—Pittsburgh Plate Glass Co. 632 Duquesne Way, Pittsburgh 22, Pa. Pittomatic invisible door opener for heavy glass doors has double-acting automatic power hinge actuated by microswitch in door handle. Adjustable to varying needs.

Hospital for Rural Area

Thoroughly modern hospitals can be built in small and remote mediocre farming areas having no industry and few medical facilities

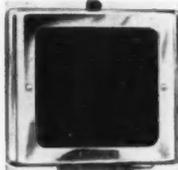


U. S. HEALTH Service expenditures under the Hill-Burton Act, although recently cut in half, will still total \$75 million per year for the next five years to build hospitals in communities now without adequate hospital service. The Act was written to provide a total of 1,800,000 beds, other than those in Federal hospitals. As of July 11, 1950, 880,000 acceptable beds were available, leaving a balance of 920,000 beds to be provided. To qualify for Federal

BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



Steel Access Panel—Knapp Brothers Manufacturing Co., Rossmaxne, Ohio. Combines rugged construction features with utility. Built-in plaster flange. Made of galvanized steel with prime coat of paint baked on. Wide range of sizes.



Bathroom Heaters—Electromode Corp., 45th Crouch St., Rochester 3, N.Y. New style fixed louvered grille gives heat downward direction for greater comfort. Automatic or manually controlled. Ideal for any small room in the home.



Oil Floor Furnace—Kresky Manufacturing Co., Petaluma, Calif. Kresky "50-30" has B.T.U. output of 52,700, commercial standards, from a maximum oil consumption of less than 2 pints per hour. Listed with Underwriters Laboratories.



Aluminum Moldings—Marsh Wall Products, Inc., Dover, Ohio. Color matched, plastic finish. Dirt, grime, grease and moisture are sealed out. Blend perfectly with Marlite panels. Available in 11 Marlite colors, moldings cleaned easily.



Automatic Electric Dryer—Hotpoint, Inc., 5600 W. Taylor St., Chicago 44, Ill. Model LD-3 does not give off moisture, heat or lint into room. Moisture is condensed from heated air by means of cold water spray. No piping, venting.



MAIN ENTRANCE. Clearwater County Memorial Hospital, Bagley, Minn. Brick wall screens ambulance entrance from view

aid, the community must assume a certain percentage of the construction cost, and be able to maintain the hospital once it is built.

That even small villages are tremendously interested in this unprecedented opportunity is shown by the new 30-bed Clearwater County Memorial Hospital, recently opened in Bagley, Minn. Bagley, about 25 miles west of Bemidji in the northern part of the state, has a population of only 1,650, is in a relatively poor farming area, and has no major industry. But so great was the wish of the community for modern hospital facilities that its people raised two-thirds of the \$335,000 needed for the building and its equipment.

Fireproof and ultra-modern, this one-story structure has all the facilities of a large general hospital on a reduced scale. Patients' rooms are the central point of the design, to capitalize on the unusually choice site: a wooded promontory overlooking Lake Lomond. One wall in each patient's room is glass from within 3 feet of the floor to the ceiling, giving

bed patients an effortless, unobstructed view through a grove of pines to the lake beyond.

The hospital was designed by Edward H. Noakes of Long and Thorshov, Inc., architects, Minneapolis, and received "The Hospital of the Month" award from Modern Hospital magazine. H. L. Stavn Co. of Hibbing, Minn., were the builders.

The hot water radiant heat floor system, unusual in so small an institution, is the first of its kind in the area and embodies the approved principles of efficient, economical radiant heating. This is a slab-on-ground construction, for there is no basement under the main portion of the building. The entire floor area is insulated with a 3-inch thickness of vermiculite concrete, 1:6 mix (1 part portland cement to 6 parts vermiculite concrete aggregate), placed over a waterproof membrane covering a gravel fill. The soft copper radiant tubing rests on the vermiculite concrete slab, and is embedded in a sand concrete topping, 4 inches thick. The floor is finished with as-

phalt tile, except for the surgery, where it is conductive terrazzo.

Heat is thermostatically controlled, with the rooms set up in banks, depending on their exposure and use. The surface of the slab will be carried at a temperature of not more than 85 degrees. The boiler and other mechanical equipment are housed in a basement under the kitchen area.

Pointing out the advantages of radiant heat in hospital construction, the architect said, "It reduces cleaning requirements and adds useable floor space. From an operating standpoint, we expect to save from 20 to 30 per cent in fuel over other types of heating."

The basic structure of the L-shape building is lightweight steel; the outside skin, brick. The roof deck is also steel with 2-inch insulation. Interior walls and partitions are plaster. Doors have steel frames. All windows are double-glazed. A long, low, brick wall screens the ambulance entrance from patients, and provides privacy

(Continued on page 211)

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Insulation Tacker—Markwell Manufacturing Company, Inc., 200 Hudson St., New York 13, N.Y. Uses staples ranging in length from 1/4 up to 9/16-inch without adjustment of tacker. For applying batt, blanket and foil type insulation, etc.



Cord Take-Up Reel—Appleton Electric Co., 1701-59 Wellington Ave., Chicago 13, Ill. Reel lets pay out and automatically retracts up to 25 feet of extension cord for lighting in shops, garages, or storerooms. Eliminates cord tangling.



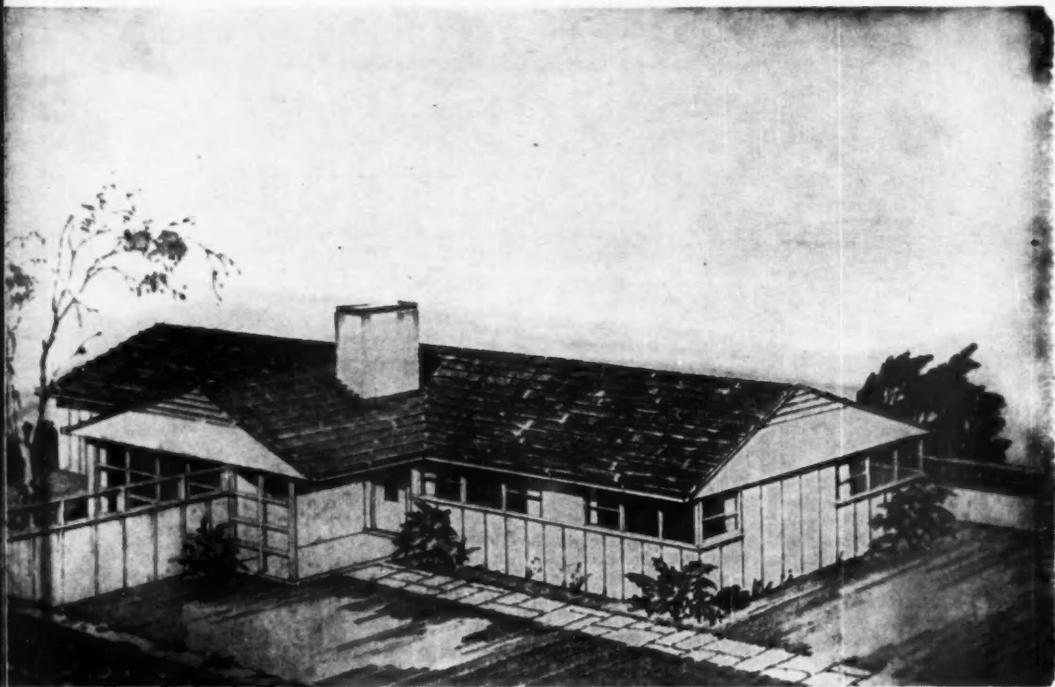
Wall Furnace—Stewart Warner Corp., Indianapolis 7, Ind. Gas-fired Saf-Aire Model 991-14 will comfortably heat 11 x 16-foot room, or Model 992-20 will heat 14 x 18-foot room. All air for combustion is drawn from outdoors. Automatic.



Brick Conveyor—Mar-Rail Conveyor Co., 560 York Ave., Pawtucket, R.I. Lightweight Brick-Toter safely handles brick, glazed tile and other materials. Two men can move. Length, 20 feet; width, 14 1/2 inches. Load capacity, over 1200 lbs.



Power Saw and Table—The Mall Tool Co., 7740 S. Chicago Ave., Chicago 19, Ill. Portable Guide-Master, Model 71, 7-inch blade saw and table, permits precision angle and bevel cutting. Saw attaches to table, or can be used without.



POPULAR RANCH TYPE HOUSE with three bedrooms has all the elements of pleasant living

Sound Planning for Good Design

BASIC ideas behind the design of this house are: 1. To design a popular "Ranch" type house for a narrow lot. House can be placed on a 50 foot lot with driveway at side and garage in the rear.

2. If additional site width is available breezeway and garage can be placed at side of house as indicated on plan.

3. Privacy at rear accentuated by fence from house to lot.

4. House can be built with or without a basement.

5. Stair to attic can be installed over basement stairs and pitch of roof increased if additional rooms are required.

6. Plan has a simple perimeter outline.

7. A single bearing partition through the center of house. Maximum span of joists and rafters 14 feet.

8. Compact plumbing. Fixtures of lavatory and bathroom are placed back to back.

9. All rooms compactly arranged with a minimum of hall space, no waste area.

10. Approximately 1250 square feet of living area within the perimeter of house.

11. Bedroom No. 3 can be used as a study with entrance door to this room leading directly to reception hall.

12. Exterior facing of house can be either plywood, horizontal or vertical wood siding or a combination of all three materials.

AMERICAN BUILDER

Blueprint House No. 49

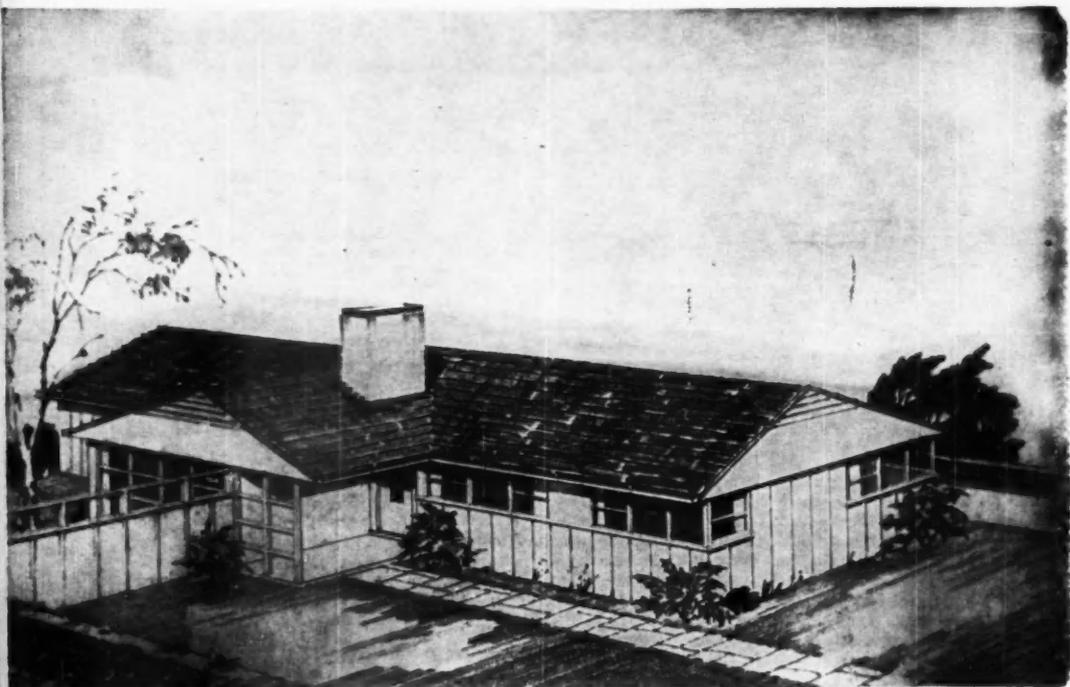
Walter T. Anicka, Architect



RIGHT SIDE ELEVATION



LEFT SIDE ELEVATION



POPULAR RANCH TYPE HOUSE with three bedrooms has all the elements of pleasant living

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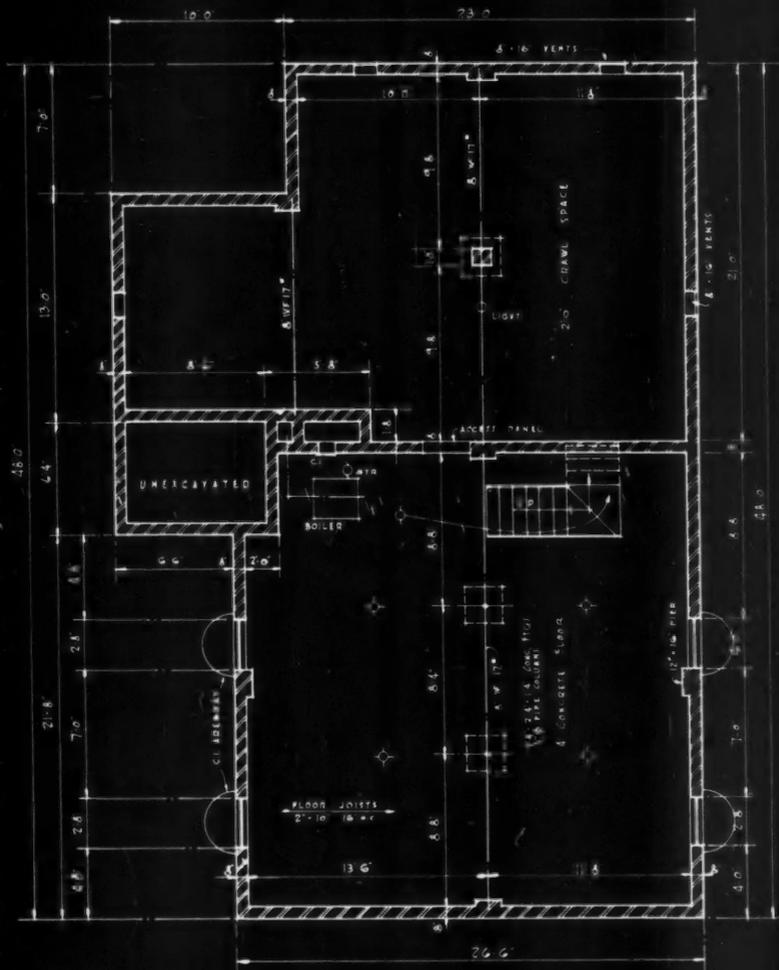
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AMERICAN BUILDER

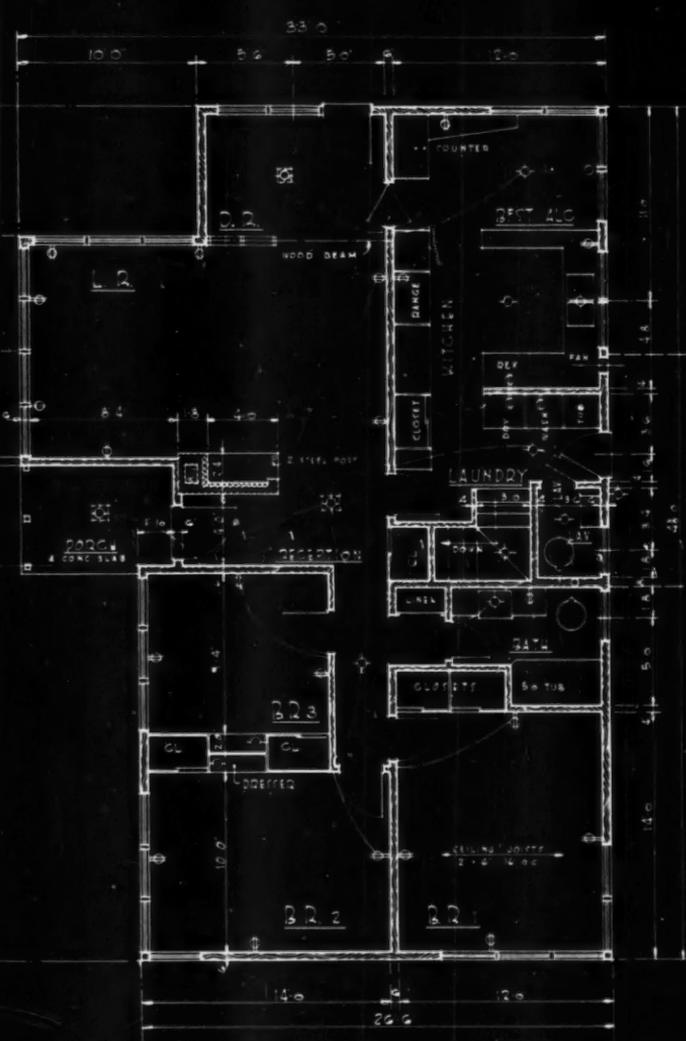
Blueprint House No. 49

Walter T. Anicka, Architect



FOUNDATION PLAN

SCALE: ALL DRAWINGS 1/4" = 1'-0"

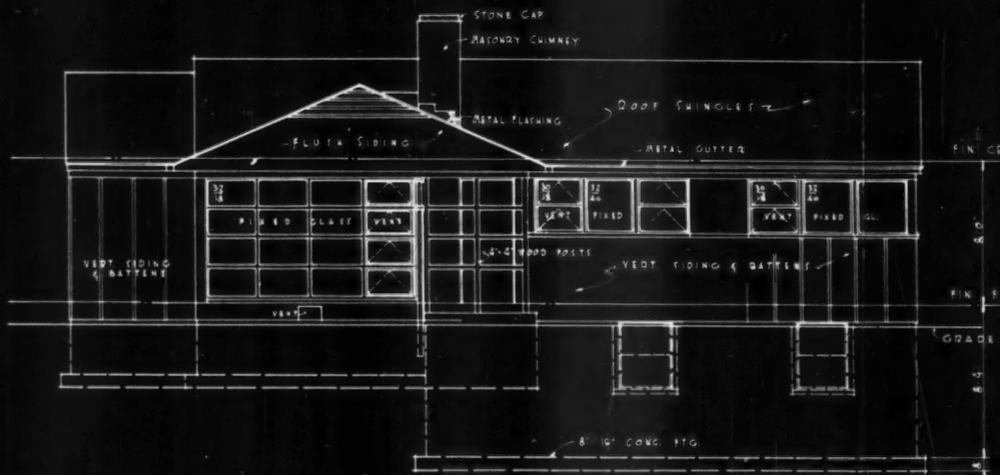


ALTERNATE UTILITY ROOM
BASEMENTLESS DESIGN

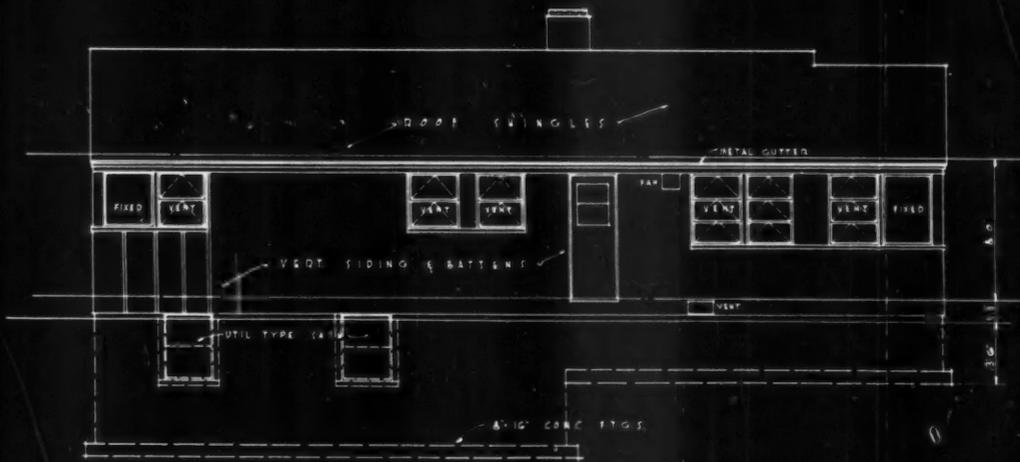


FIRST FLOOR PLAN

DESIGN No A B 163
 AMERICAN BUILDER BLUE PRINT SERIES
 Designed By
 WALTER T. ANICKA, ARCHITECT,
 Ann Arbor, Michigan
 Simmons Boardman Pub Corp. 179 W. Monroe St. Chicago 3-1111

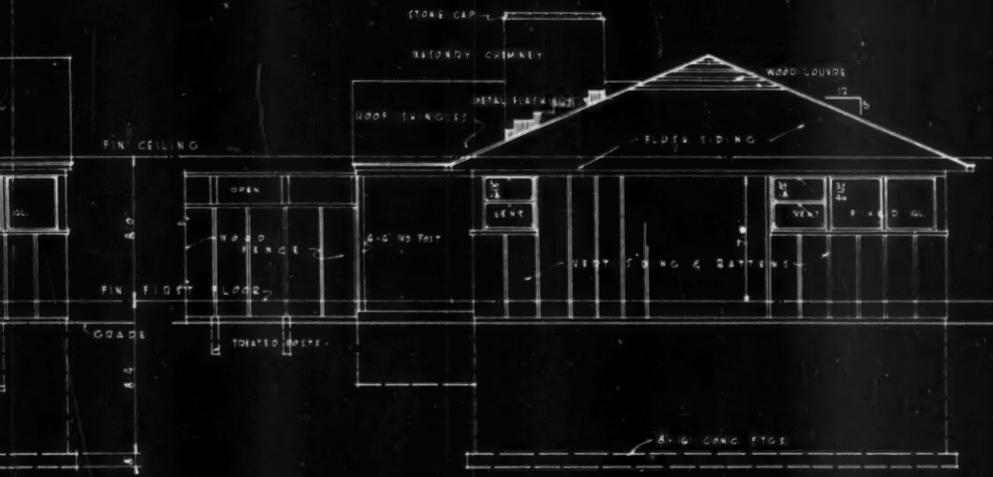


RIGHT SIDE ELEVATION

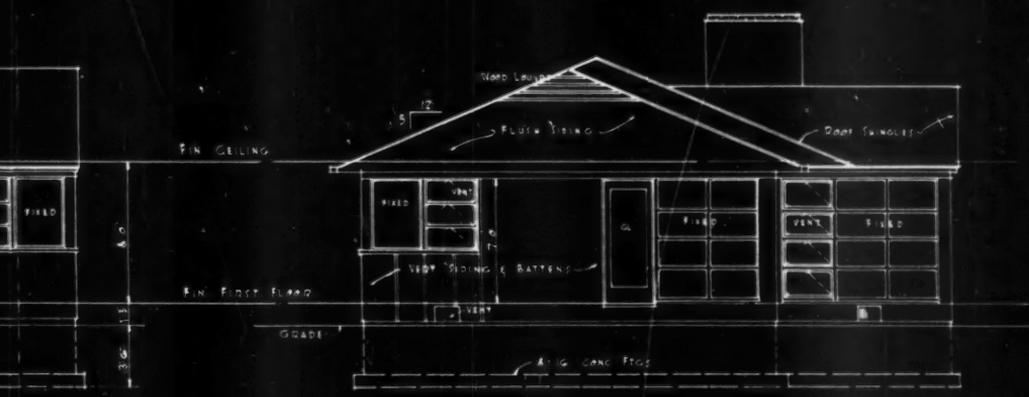


LEFT SIDE ELEVATION

ALL DRAWINGS

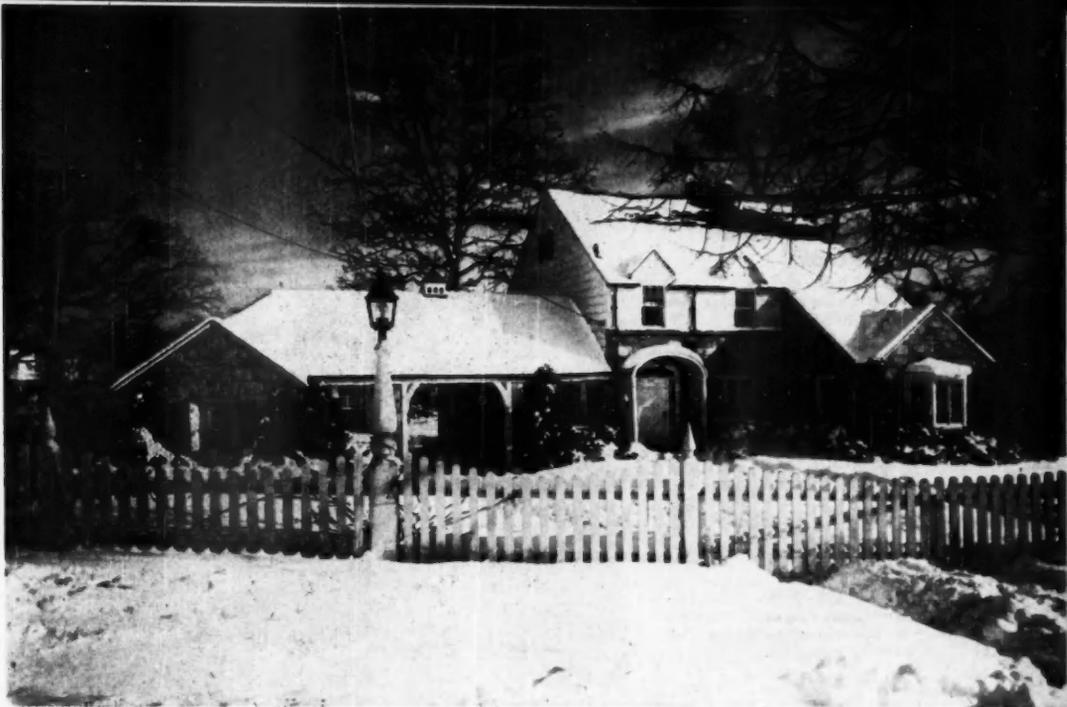


FRONT ELEVATION



REAR ELEVATION

DRAWING SCALE 1/8" = 1'-0"



MAXIMUM winter comfort in a home is assured with a good heating plant operated by properly installed automatic controls

Basic information for Builders and Dealers concerning residential and small commercial

Automatic Heating Control Systems

THE BUILDER, architect, and client are normally inclined to leave all heating matters up to specialists in this field—the consulting engineer or the heating dealer. That is as it should be. However, in dealing with the heating man, there is an advantage in understanding the basic functions of the various controls, and how they can be combined to provide maximum *safety, comfort, convenience, and efficiency* with present-day heating systems.

First of all, just a word about what we are controlling—that is *heat*. The fuels commonly used to furnish this heat are *gas, coal, and oil*. In addition to the types of fuel used, there are essentially three types of heating systems—*warm air, hot water, and steam*. Distribution of heat may be through *gravity* or *forced* circulation. These classifications (obvious as they may seem)

By *Lloyd H. Johnson*

Merchandising Division
Minneapolis-Honeywell Regulator
Company

are mentioned because the type of fuel and heating medium used determine what control devices are required for a given system.

Gravity Systems

A gravity system is designed to take advantage of the natural tendency of heat to rise. In this way,

This is the first of two articles dealing with the fundamentals of automatic heating controls for homes and small commercial structures. The February article will deal with indoor-outdoor control systems, zoned heating control, individual room control and controls for panel heating installations.

heat from the furnace or boiler distributes itself throughout the system. As heat is given off, the cooler air or water gravitates back to the heating plant through the returns. As heated vapor in a steam system is distributed through the radiators, it cools and condenses back to water. This condensate may flow back to the boiler through separate return mains (such as on a two-pipe system), or gravitate back through the supply mains (as is the case with a one-pipe system).

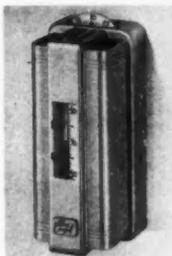
Forced Systems

To facilitate distribution of the heating medium (warm air, hot water, or steam), a mechanical means is used. *Forced Warm Air* systems have a blower on the return side of the furnace. This creates a slight suction on the return registers, quickly drawing off the cooler air as

Room Thermostat

STARTS THE ACTION

Senses room temperature. Starts and stops the burner according to heat requirements



Manual



Semi-Automatic
Day-Night Control

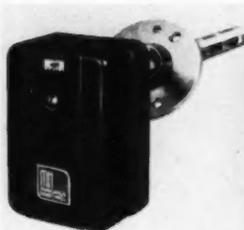


Fully Automatic
Day-Night Control

Limit Control

POLICES THE ACTION

Mounts on the heating plant. This serves as a safety switch that stops the burner whenever it senses excessive temperatures



Warm Air



Hot Water



Steam

Combustion Control

PERFORMS THE ACTION NECESSARY TO PRODUCE HEAT

Starts and stops the burner according to thermostat demand. On oil or stoked-fired systems, this device is the primary relay. On a gas-fired system, it is the gas control valve



Oil Burner Relay



Stoker Relay



Gas Valve

Combustion Safety Control

INSURES PROPER COMBUSTION BEFORE BURNER CAN OPERATE

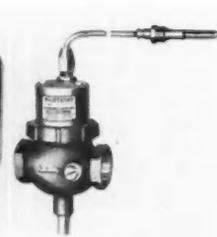
Prevents burner operation in the event of flame or ignition failure. This control function may be built into the Combustion Control (as in the case of stack-mounted oil burner relays) or as a separate device, such as the safety pilot control on a gas-fired system



Oil
(Stack Switch)



Stoker
(Hold-Fire)



Gas
(Safety-Pilot)

BASIC control sequence of a domestic temperature control system where the thermostat operates the burner

it settles to the floor. A *Forced Hot Water* system utilizes a pump on the return main to speed circulation. Larger steam systems also employ a pump to speed up the return of condensed steam to the boiler.

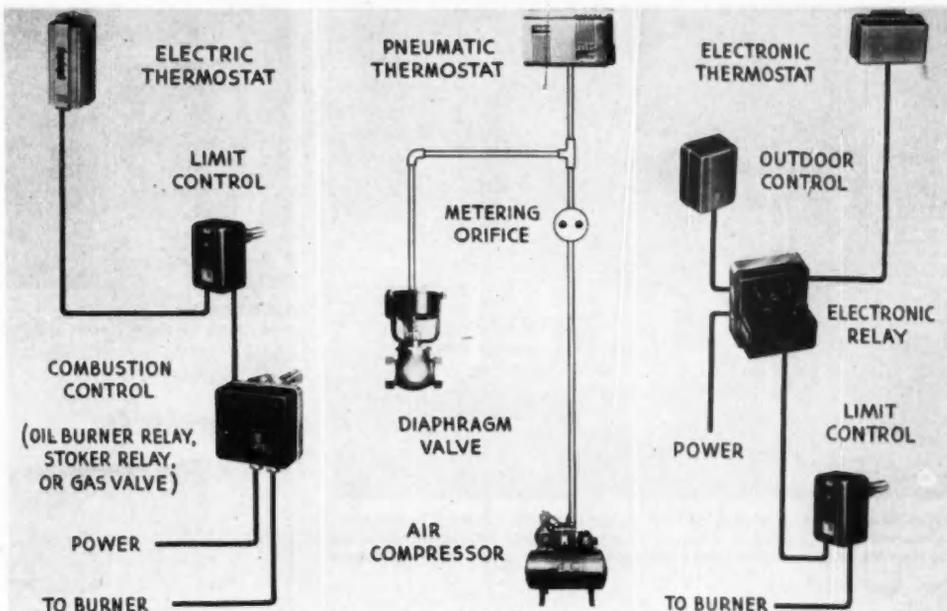
Supplementing these broad classi-

fications are numerous variations in types of heating systems. Each type of heating requires controls specially adapted to its needs.

The Room Thermostat

The thermostat is the key instru-

ment on all domestic heating controls. The end result, regardless of the complexity of the control system, is dependent upon the thermostat's ability to meter heat to the living area at nearly the same rate that heat is being lost to the outdoors. It should



THREE basic types of heating plant control—electric, pneumatic and electronic—are outlined above

be mounted approximately five feet from the floor on an inside wall, in a representative point of the living area. Much control difficulty can be prevented if the following locations are avoided: near an outside door or a large window, any point where radiant heat could effect operation (heat from fireplace, sun through window, kitchen stove, warm air ducts or hot water pipes in the wall, electric lamps, television sets, etc.).

For residential heating, the room generally most suitable for the thermostat is the living room. This is the area in which occupants are usually inactive, and are most sensitive to variations in room temperature. Occasionally a dining room or den located on the north side of the house is preferable to the living room as a location for the thermostat. This is especially true where a living room has a fireplace or is subject to considerable solar radiation.

All heating thermostats serve as temperature-sensitive switches which close the control circuit to start the heating equipment when room temperature drops below the point at which the control is set. As soon as the temperature rises sufficiently to satisfy the thermostat, the control circuit opens and stops the burner. On forced hot water systems, the thermostat may operate the circulating pump, and a water temperature control operates the burner to

maintain a steady supply of hot water in the boiler.

There are basically three types of control . . . electric, pneumatic (air operated), and electronic. Most common of all, are the electrically operated "on-off" controls that start and stop the heating plant according to temperature needs. Pneumatic controls may also operate as an "on-off" system. Then there are *modulating* controls that can modulate or proportion the opening or closing of valves and dampers in relation to heating requirements. Modulating controls are available in either electric, electronic or pneumatic systems. They are particularly desirable for zone heating and other applications where a refinement of control is desirable.

Thermostats most commonly used for residential and small commercial heating are designed to operate on a low-voltage circuit similar to that which is used for a door bell. This has three advantages. First of all, the switching mechanism can be designed with more precision and sensitivity when it is built for low-voltage current. This results in more accurate temperature control. Secondly, because most localities do not require low voltage wiring to be run in conduit there is a considerable saving on cost of installation. The third, and perhaps most important advantage in designing a thermostat to operate on low voltage, is the fact

that a small electric heating element can be built into the device.

This feature, commonly referred to as *Heat Leveling* or *Heat Anticipation*, uses a very small heater to artificially raise the temperature within the thermostat each time there is a call for heat.

In this way, the thermostat is satisfied much sooner and the burner is stopped before an over-heated condition develops. On thermostats using a flash-type heater commonly referred to as "TM," a minute particle of heat is applied directly to the temperature-sensitive element whenever heat is called for. The result is that, rather than being merely a device that senses room temperature, the thermostat serves as a variable *timer* that automatically cycles the heating according to heat requirements. It maintains a series of relatively short, steady firing periods in which heat is portioned out at approximately the same rate as it is lost from the building. This eliminates the "too hot" and "too cold" cycles that are frequently present in the "on-off" type of heating control.

The controls discussed here pertain to residence and small commercial heating. Generally speaking, the most basic electrical "on-off" control hook-up is usually associated with domestic installations. There are numerous exceptions where a commer-

(Continued on page 193)



ENTRANCE of house designed by Gerhard W. Brandhorst, Minneapolis, Minn., architect, is recessed within the perimeter of house. Further protection from the elements is obtained by the wide, splayed overhang that forms a canopy over stoop and adjoining windows



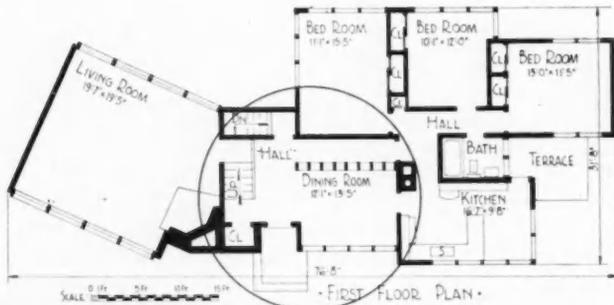
RECEPTION HALL of Brandhorst house from dining room. Note open planning

Trends in Entrances

DOMESTIC residential architecture, commonly referred to as home design, has, in recent years, undergone sweeping changes in the general concept of planning and in exterior treatment. This change is particularly true with reference to the front, or main entrance to the home.

In years past when the traditional or colonial style was predominantly popular, entrance features were applied to the surface of the wall, using the established orders of architecture as the motif. This type unquestionably called for a vestibule to act as a buffer from the elements, particularly in those areas where the weather is severe.

In today's homes the influence of the ranch type of dwelling is felt in all phases of house design, especially with regard to entrances. The examples of design in this article show three types of houses; the one-story or ranch type, the split-level, and the

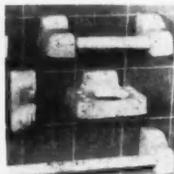


FLOOR PLAN of house shown above. Entrance door opens directly into reception hall without benefit of vestibule. This can be done in northern climates by recessed entrance

BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



Steel Closet Doors—The American Welding & Manufacturing Co., Warren, Ohio. Amweld sliding door units offer increased accessibility to closet contents, savings in initial construction costs. Firm also has steel door and frame units.



Bathroom Fixtures—Columbus Plastic Products, Inc., Columbus, Ohio. Lustra-Ware line is available in large variety of beautiful colors. Precision molded of Styron plastic. Practically non-breakable. Easy to install on any wall.



Multi-Breakers—Cutler-Hammer, Inc., 315 N. 12th St., Milwaukee 1, Wis. MO-12 plug-in unit provides up to 12 S.P. circuits; MO-20 up to 20 S.P. circuits. Four single or two double pole breakers. Flush or surface mounting, optional.



Gravity Furnace—Conco Engineering Works, Mendota, Ill. New pressure oil gravity 70,000 B.T.U. unit in Town & Country line features ease of installation, economical operation, and long life. Also gas-fired. Full Conco quality.



Radiant Glass Heating—Continental Radiant Glass Heating Corp., 1 East 35th St., New York, N. Y. Infra-red rays from this unit warm objects directly, heating by electricity passing through aluminum element fused in glass.



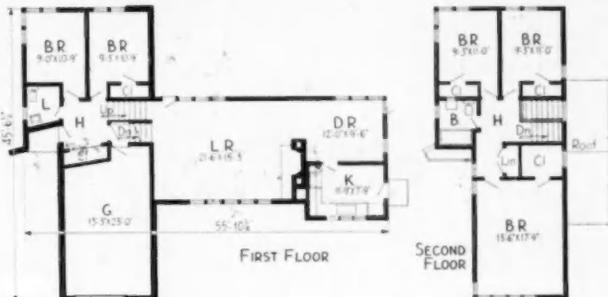
VIEW OF ENTRANCE HALL from living room of split-level house shown at right

normal two-story arrangement. While the entrance treatment, design-wise, is entirely different in each case, the plan pattern is similar. Each entrance is recessed into the perimeter of the house. In this manner protection from the elements is provided. This is especially true in the case of the one-story house where the wide, sweeping overhang forms an additional canopy.

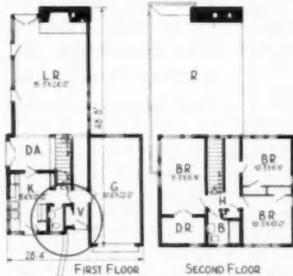
The recessed entrance has established a new concept of planning through the elimination of the small, cramped vestibule, and the introduction of the hall which becomes a literal part of the living room. In the case of the two-story house the entrance is a part of a deep recess extending more than half way across the front, with front wall extending upward from the extreme projection. Entrance is defined by the projecting stone wall.



ENTRANCE AT SIDE in split-level designed by Jones & Cerny, Minneapolis architects



PLAN of house above. Protection from elements obtained by placing door at side of recess



PLAN of both floors of house at right



ENTRANCE on another Jones & Cerny house is submerged into the design pattern of front

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Packaged Windows—Fleet of America, Inc., Bladell, N. Y. Fleetlite windows are completely prefabricated, glazed and assembled, arriving on the job in corrugated containers. Extruded aluminum frame, storm sash and screen.



Tractor and Wagon—Caterpillar Tractor Co., Peoria 8, Ill. Caterpillar DW20 tractor and W20 wagon offer a powerful solution to heavy earth moving problems. Equipment is made for long wearing, and powered by diesel engine.



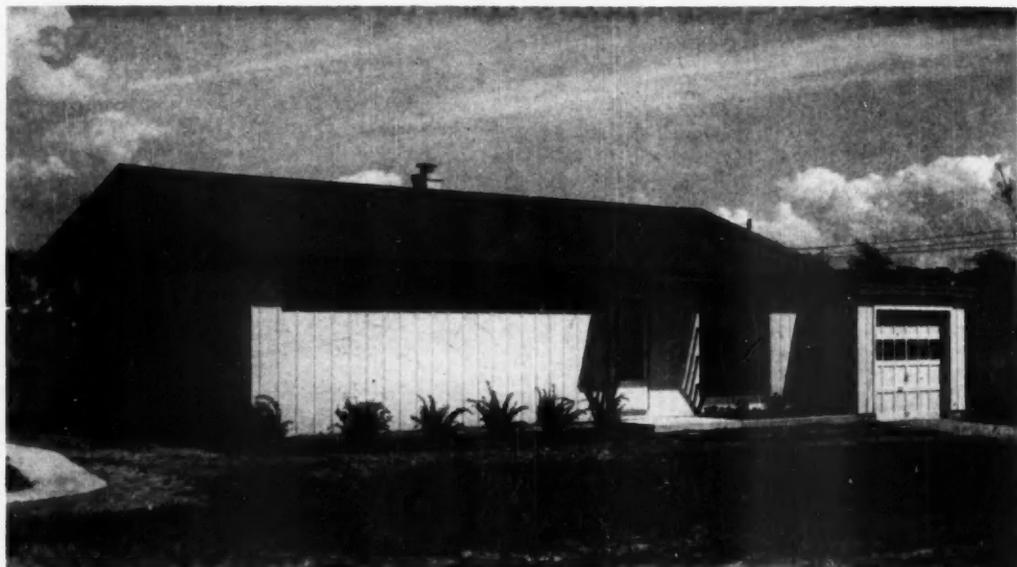
Shampoo Spray—T & S Brass & Bronze Works, Inc., 121 E. 2nd St., Mineola, Long Island, N. Y. For permanent installation on wall of bathroom. Unit has four-foot polished stainless steel hose. Controlled from wash bowl fixtures.



Rain Cap—Condensation Engineering Corp., 3511 W. Potomac Ave., Chicago 51, Ill. Rain cap and housing top used with Vitroliner type E chimney. Rain cap with baffle ring is welded to housing top to form one unit. Keeps out wind, rain.



Wall Panels—The Firestone Tire & Rubber Co., Inc., 350 Fifth Ave., New York 1, N. Y. Wonderwall Velon plastic wall panel insulates and decorates. Can be applied directly over cinder block walls, wood, plaster, brick or concrete.



POPULAR home in Madison, Wisconsin, during 1950 National Home Week, was this Cemesto home, built by Space, Inc.

Objective: More Floor Space



PORTABLE wardrobe closet separates two rooms in Space, Inc., home

Materials and design used by two young builders in Madison attracted a lion's share of attention from 13,000 National Home Week visitors

NEAR the top in popularity among 12 homes displayed during National Home Week last fall in Madison, Wisconsin, was a home built by Space, Inc. In Madison, where average home costs are comparatively high, it drew attention with an attractive price tag, a clean, fresh design, and the incorporation of a rela-

BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



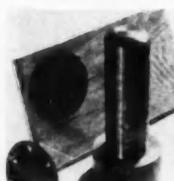
Fireplace Units—Superior Fireplace Co., 1708 C.E. 15th St., Los Angeles 21, Calif. Heatform Model S. Swedish design for corner fireplace is made in three sizes for right or left openings. Design of throat, downdraft prevents smoke troubles.



Garage Doors—R. L. Taylor, Inc., Dept. 6, 12490 Evergreen Rd., Detroit 28, Mich. Taylor-Made doors made of Galvannealed steel have door face as integral part of door frame to reduce weight. Company makes standard and special sizes.



Gas Range—Tappan Stove Co., Mansfield, Ohio. Model DD-72 range has Tappan Visiminder, combination oven heat control and valve, Flexo-Speed oven, Fiberglas insulation, large porcelain storage compartment and storage pull out drawer.



Form Hole Covers—Triel Companies, Inc., 839 Channing Way, Berkeley 2, Calif. Ply hole covers are used to cover holes in concrete forms. Covers are placed over hole, driven flush into wood with one blow on setting tool.



Sash Balance—Pullman Mfg. Corp., Rochester, N. Y. "Powerful Pigmy" balance is mounted in window sash. Window is perfectly balanced at any position. Requires 1 1/4-inch depth and 3/4-inch width. Lightweight. Requires no adjusting.

tively new material for that locality.

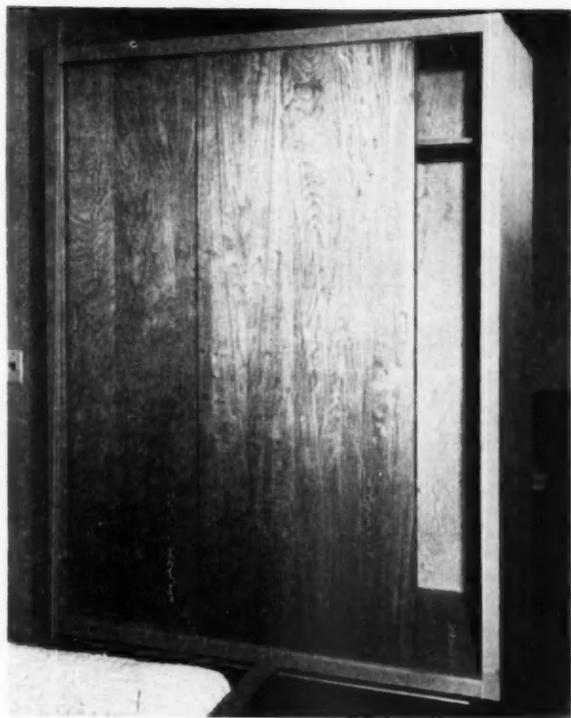
The home, a three-bedroom contemporary ranch style with over 1,000 square feet of floor space, was priced at less than \$10,000, without lot. Plus planning features of the home are a dining-living room combination ingeniously separated from a broken L type kitchen with a short partition, and a portable wardrobe closet used to separate a bedroom from another room which may be used as a den, game room or bedroom.

Other popular features of the home are a 6x11-foot breezeway, kitchen cabinets, a washing machine, copper plumbing, and complete interior decoration. It is equipped with a 72,000 B.T.U. forced warm air, oil-fired furnace, a 40-gallon hot water heater, and a tiled bathroom with shower and tub. The home is built on a concrete slab floor, insulated with Vermiculite, with asphalt floor covering throughout.

Material used for walls and partitions in the home is Cemesto, a structural, insulating panel, 4 feet wide and 1 $\frac{9}{16}$ inches thick. These are used in conjunction with 4x4 posts to form outside walls. Ceilings are insulated with Rockwool blankets, while the outside walls are self-insulating.

Space, Inc., is composed of two former G.I.'s, Builder Ivan D. Gregory and Architect Jack W. Klund, who, about four years ago teamed up with an idea that homes in Madison could be built in the low price bracket with more floor space. Members of the recently formed Madison Builders Association helped them work out some of their ideas, and now place them high among Madison's qualified builders.

While number of visitors to Madison's 12 homes displayed during NHW totaled more than 23,000, Gregory estimated that more than half that many visited his home.



WARDROBE closet, used as partition to separate two bedrooms or bedroom and den. Is easily constructed



KITCHEN has Kitchen-Maid cabinets, Bendix washer, and copper plumbing equipment

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Vitrified Bond—Chicago Wheel & Mfg. Co., 1101 W. Monroe St., Chicago 8, Ill. New bond, "79," assures smooth, fast cutting action for vitrified grinding wheels operated at speeds up to 6,000 surface feet per minute. For portable grinding.



Bolt Cutter—Manco Mfg. Co., Bradley, Ill. Said to weigh 60 per cent less than conventional cutters of same capacity, 15-inch cutter has tough jaws that cut music wire without appreciable damage. Jaws are also easily replaced.



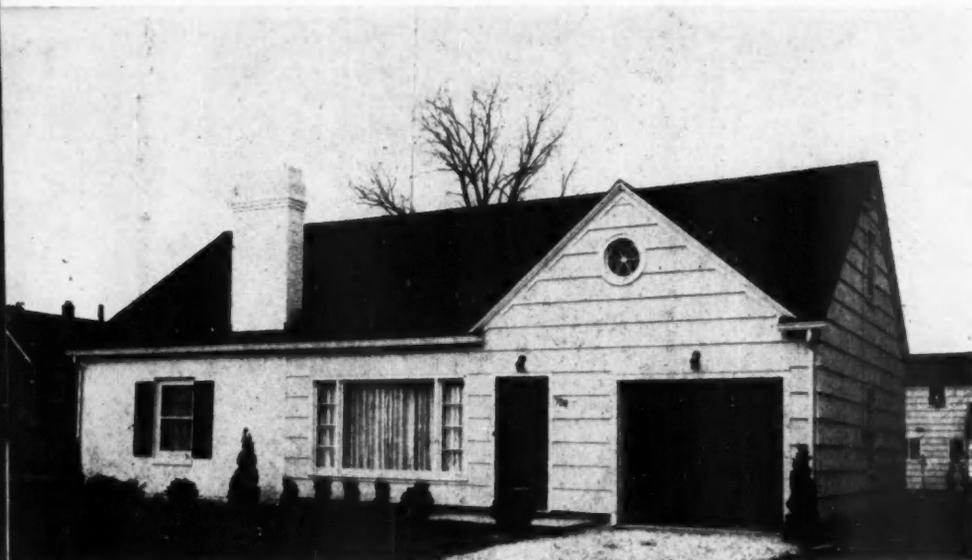
Block Man—Masonry Equipment Engineering Co., 325 E. Mich. Ave., Three Rivers, Mich. Helps one man handle 6 conventional or 12 light weight blocks easier than handling one manually. Over-all length, 52 inches. Pneumatic tires.



Modular Kitchens—Long-Bell Lumber Co., Longview, Wash. Made on 3-inch module, designs offer additional toe and knee space. Features include two sliding shelves in base units, adjustable, removable shelves, curved drawer fronts.



Spring Sash Balance—Master Metal Strip Service, Inc., 1720 N. Kilbourn St., Chicago 39, Ill. No-Draft units have springs of proper tension for various sizes of windows, and springs are housed with stainless steel for weather protection.



FRONT elevations of all Fred Schmitt Construction Co. houses are different, though each has basically same floor plan

An Argument For Basementless Houses



RECTANGULAR floor plan and simple design of homes make them economical to build

A Mansfield Ohio builder converts money saved with concrete slab floors into more house for the money

BUYER resistance to basementless houses still prevails in many sectors of the country, though their popularity is steadily increasing. A builder in Mansfield, Ohio, is overcoming this resistance with good construction and design; and by converting money saved in basementless house construction into more house for the money.

At first, Builder Robert F. Schmitt met tough resistance. Mansfield home

BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW—BUILDING PRODUCTS ON REVIEW



Westinghouse Range—Westinghouse Electric Corp., Appliance Div., Mansfield, Ohio. Commander deluxe model has Color Glance controls, Super Speed Corox unit, Two-Level speed cooker, and Miracle Sealed oven. Fast surface cooking.



Building Panel—Masonite Corp., 111 W. Washington St., Chicago 2, Ill. Tempered Presdwood, all-wood panel, is used as lap siding. Panel comes in widths of 4 feet; is durable and free from grain, knots. Holds paint exceptionally well.



Impactor—Wayer Impactor, Inc., 12 N. Third St., Columbus 15, Ohio. Tamps and smoothly finishes 45 to 60 sq. ft. of material per minute. Finishes flush to rails, curbs, manholes, or walls where rollers cannot reach. Self-propelled.



Sill Sealer—The Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill. Flexcell, 8-inch wide, 1/2-inch thick, forms excellent seal between foundation and sill plate to minimize heat loss and wind infiltration. Not affected by termites or fungus.



Roof Protection—Grem's Mfg. Co., Klamath Falls, Ore. Permalume inhibits oxidation and depreciation of asphalt and composition roofing. Stops rust and waterproofs metal, concrete, fiberboard, canvas and many other surfaces.

buyers did not feel that slab floors could be properly heated; that a basementless house usually did not have enough storage space. Schmitt, co-partner of the Fred Schmitt Construction Co., armed himself with ideas that had been successful to other builders.

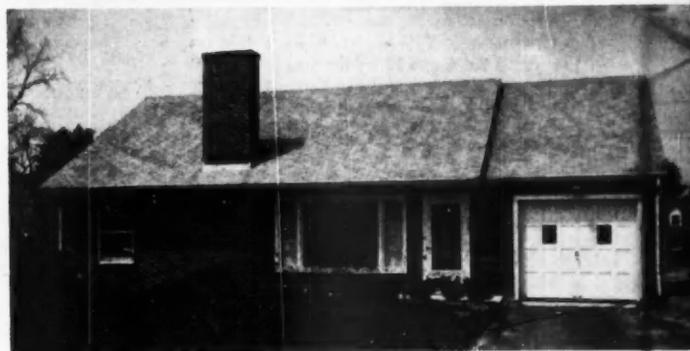
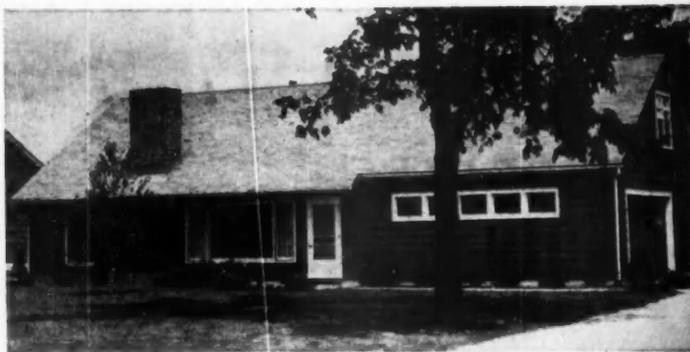
Now, Schmitt homes offer more than 900 square feet of free storage space in attics; warm floors obtained with proper insulation, and 100,000 B.T.U. capacity attic-type furnaces, using continuous air circulation. His three-bedroom houses, with garage, kitchen, utility room, dining-living room combinations and bath, sell for less than \$9 a square foot. "There is no difference in walking upstairs to attic storage area than walking down to a basement for it," Schmitt says, "and I can provide the space in attic for less."

Reinforced concrete slab floors in Schmitt homes are insulated around the perimeter with 2-inch thick rigid type insulation dipped in tar extending down 2 feet from the top of the slab.

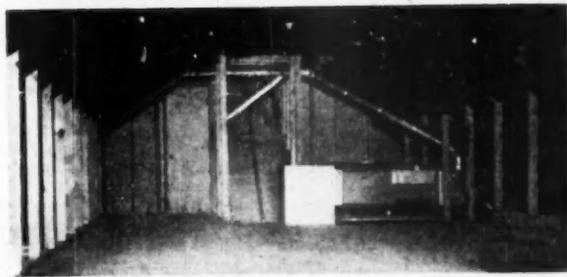
As a supplementary heating device, Schmitt has developed a hot water system that comprises a $\frac{3}{4}$ -inch copper pipe imbedded in the concrete slab around the perimeter 4 inches from the edge. Fresh hot water is fed into the tube from the domestic hot water tank, going first through a water softener to take out minerals harmful to copper tubing. A circulating pump is used.

Schmitt homes are conventionally framed; fully insulated. A simple (yet attractive) rectangular plan has permitted more economical construction. Interior finish of the homes is lath and plaster. Floors are asphalt tile throughout, except in kitchen and bath where linoleum is used.

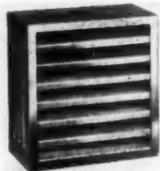
MORE than 900 square feet of storage space, besides one bedroom, are accessible by two stairways to second floor



SCHMITT homes have fireplaces, attached garages. Square foot price: about \$9



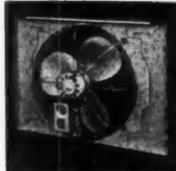
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Glass Block Ventilator—Air Rectifiers, Inc., 3734 Southport Ave., Chicago 13, Ill. Standard Weather-Bloc units have adjustable glass louvers inside, permanent stainless steel louvers on outside. In 6, 8 and 12-inch sizes.



Exterior Wall Panels—American Bildrok Co., 2001 W. Pershing Rd., Chicago 9, Ill. For loadbearing walls, fireproof partitions in homes or other buildings. Lightweight, insulating, fireproof. Units may be sawed, drilled or nailed.



Window Fan—Seco-Lite Manufacturing Co., 4916 Easton Ave., St. Louis 13, Mo. Model W203, 20-inch unit, is direct driven with quiet motor. Has aluminum blades, spiral safety guard. Adjustable side panels. Weighs 29 pounds.



Folding Door—Holcomb & Hoke Mfg. Co., Inc., 1545 Van Buren St., Indianapolis 7, Ind. Plastic fabric covered "Foldar" has formed cornice which conceals top edge of closure and overhead track, giving it a modern, finished look.



Dehumidifier—The Walter Hoertel Co., 2840 4th Ave., So., Minneapolis, Minn. Junior commercial model "50" powered with $\frac{1}{2}$ -H.P. unit has 24-hour capacity of 50 pounds of water removal from air. Operates for as little as 10 cents a day.

Promotion Ideas Boost Sales For Dealer

Toledo lumber company appeals, directly to the home buyer, who is encouraged to visit its yards. Results are better business

SALES promotion aimed at the home buyer is building a better business for the Hixon-Peterson Lumber Company in Toledo, Ohio. It is also contributing better services to local builders, to architects, and to home owners.

Bases for the promotion, which tells Toledo citizens the company is at their service, are an "Idea Room" in the lumber company main office building, and sales promotional literature that tells about it. One brochure, "How to Get Closer and Closer to Home," explains best procedures to be followed in starting a home, presents a table of costs and payments under financing plans, facts about selecting lumber and millwork, and details of Hixon yard and mill facilities. Object of the book is to bring potential home buyers into the yards.

Carrying through with their sales promotional idea, Hixon-Peterson went through a thorough house cleaning of all their yards and buildings making the entire layout as spic and span and as orderly as possible. Then the Idea Room was set up; invitations (in the form of promotional literature) issued. Once at the yards, a home buyer can browse through



IDEA ROOM is conveniently near entrance of Hixon-Peterson main office

enough materials samples, house plans and construction pointers to develop his own needs. Few clerks are needed, since the Idea Room is set up on a help-yourself basis.

On hand, however, as soon as a buyer reaches a decision, are Hixon-Peterson men who can suggest builders and architects who will do the job. Results of their efforts: the home buyers remember that Hixon-Peterson helped them develop their ideas; they were impressed with the Hixon-

Peterson courtesies, and incidentally, with their materials. In fact, they have usually selected materials from the firm's yards before they leave the Idea Room, though they were in no way obligated to do so by taking and getting assistance in their home planning.

The Idea Room, near the main building entrance, contains attractive displays of almost all materials needed in the construction of a home, including built-in ironing boards (and

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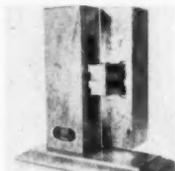
Radial Saw — Skilsoo, Inc., 5033 Elston Ave., Chicago 30, Ill. Model 450, designed to serve as complete woodworking machine, is delivered complete with welded steel table, with either 14- or 16-inch blade. Guard is self-adjusting.



Water Heater — A. O. Smith Corp., Kankakee, Ill. Automatic Ferngloas gas water heaters have glass-surfaced steel storage tanks to prevent rusting. Made in 20, 30, 45, 60 and 75-gallon capacities, units have thermo-electric gas controls.



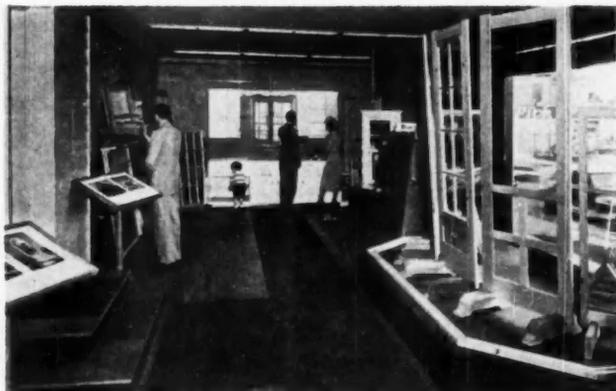
Column Forms — Sonoco Products Co., Hartsville, S.C. Sonotubes for forming concrete piers, columns and posts are made in diameters from 3 to 24 inches. Also used for forming ducts in concrete floors, lamp posts. Lightweight, cut by hand saw.



Invisible Hinge — Soss Mfg. Co., 21775 Hoover Rd., Detroit 13, Mich. Soss invisible hinge has no protruding hinge butt, making possible a complete flush door installation. Requires no special tools or skills for on-the-job installation.



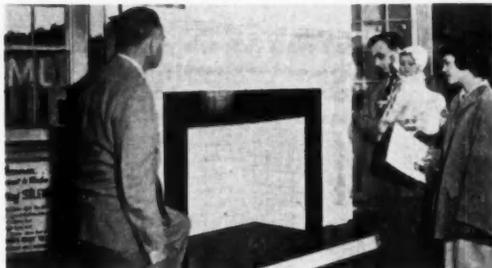
Syphon Preventer — Speakman Co., Wilmington, Del. New back-syphon preventer or vacuum breaker has simple construction—with only three parts: body, water valve and washer. Three-inch high brass body is chrome plated.



FEW CLERKS are needed in the Idea Room, where potential home buyers can browse around at will to select materials and planning ideas they want for their home



LARGE SELECTION of doors can be displayed in entrance by push of a button



SEVERAL FIREPLACE ideas are demonstrated in the Idea Room



DOORS which slide on track are shown in entrance above

other kitchen items that appeal to female tastes), and entrance doors that can be changed in a full size entrance-way by the push of a button. Planning service books are placed strategically around the room on convenient stands. Visitors are encouraged to take a complete tour of the yards to look at lumber and millwork.

All publicity is handled for Hixon-Peterson by a local publicity firm. They conduct a sustained program of advertising in local newspapers.



BROCHURES, like one left, are made for Hixon-Peterson by local publicity firm. Hixon-Peterson yards are kept clean at all times, with high-grade lumber displayed

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Attic Fan—V. E. Sprouse Co., Inc., Columbus, Ind. Verco vacuum fans for attic installation, called "Economy Models" are offered in three fan sizes: 30-, 36- and 42-inch. Made in two models for horizontal or vertical installation.



Shower Enclosures — Standard Building Products Co., 621 McDonald Ave., Brooklyn 18, N. Y. Model S122 shower and bath enclosure is constructed of sturdy brass sections, triple chrome plated. Also furnish with oxford or scroll grille.



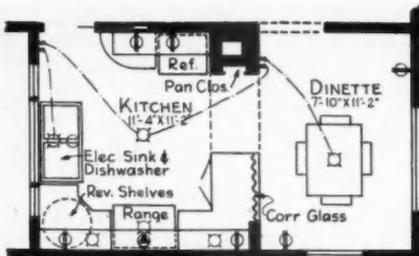
Translucent Panels — Victor Stanzel & Co., Schulenburg, Texas. Glaslite, jewel-like paneling, is rigid, has smooth surfaces and is lightweight. Used for interior partitions in homes, apartments, etc. Made knocked down and assembled.



Sliding Door Hardware —Sterling Hardware Mfg. Co., 2345 W. Nelson St., Chicago 18, Ill. No special header construction is needed to install model 630 hanger since standard door frame is used. Unit requires only 1-inch headroom.



Vertical Blinds—Sun Vertical Blind Co., 1632 S. Division Ave., Grand Rapids, Mich. Sun Vertical blinds are made of vertical strips of Celanese Multicord which are available in colors to harmonize with many color schemes. Easily hand washed.



NOTE utility and convenience of basket weave translucent glass used to separate the kitchen from the dining area

ABOVE LEFT is corner of kitchen with set of revolving shelves under worktop. Below is general view of same corner. Note wide fixed sash and valance above the sink

Use of well known materials and equipment expertly placed and augmented by novel conveniences makes kitchens easy to operate

Kitchens with Planned Conveniences

THE TWO kitchens discussed here were planned by Robert H. Ebenreiter, retail lumber dealer of Sheboygan, Wis. The photographs on this page illustrate the kitchen in the new home of his mother. Those on the opposite page illustrate the kitchen in his own new home.

One of the principal features of the first kitchen is the set of revolving shelves in the corner below the work top. This was designed and

produced in the company's own large custom millwork plant. Other cabinets are Kitchen Maid.

The list of products used in this kitchen designed for efficiency reads like a section of a blue book of nationally known brand names. It includes a Kohler sink, Dishmaster dish washer, Hotpoint range, Kelvinator refrigerator, Blow Fan ventilator, Formica worktops, Armstrong linoleum and Washington hardware.

Trim is birch, a product of the Ebenreiter company. It is called fluted casing.

A wide fixed glass pane over the sink provides ample daylight from that side. On the side opposite the sink, the partition dividing the kitchen from the dining area is made with cabinets up to work top height, and above these a basket weave translucent glass, attractively mounted to stop about one foot above

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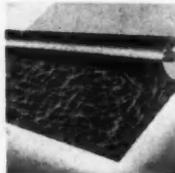
Tilting Mixer—Jaeger Machine Co., Columbus 16, Ohio. "Speedy" 3 $\frac{1}{2}$ -S side-discharge concrete mixer has patented V-bottom. Drum turns on two Timken roller bearings, is chain driven by 3 $\frac{1}{4}$ H.P. Wisconsin gasoline engine. Balanced for towing.



Light Fixture Hanger—Guth U-D-T Hangers feature a stem attachment that will not permit turning, twisting or up and down movement at ceiling. Have adjustment for leveling up to 2 $\frac{1}{4}$ inches. Edwin F. Guth Co., St. Louis 3, Mo.



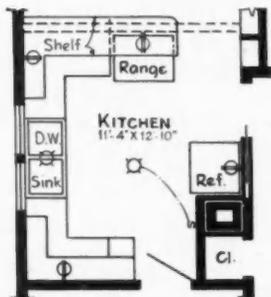
Refrigerator—G. E. Model NCS-8H has sealed-in refrigerating system powered by AC-82 mechanism. Convenient temperature control. Stainless steel freezer. General Electric Co., Appliance and Merchandise Dept., Bridgeport 2, Conn.



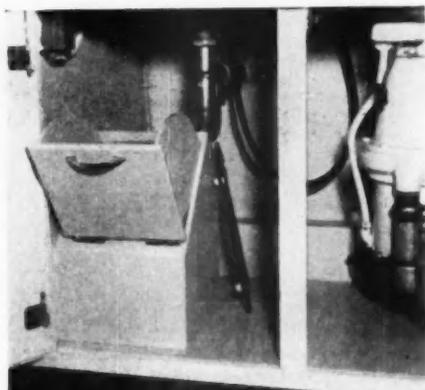
Waterproof Paper—"Glas-Kraft" has all-directional reinforcement which comes from bonding with continuous glass fibers. Used in construction for vapor barriers, sidewall sheathing, floor coverings. Glas-Kraft, Inc., Lansdale, R. I.



Prefabricated Homes—The Coronado, selling in \$7,000-\$10,000 range is newest house of Gunnison Homes, Inc., New Albany, Ind., subsidiary of United States Steel Corp. Made in 2- and 3-bedroom sizes with variety of exteriors.



SPECIAL convenience in this plan is the service facility between the kitchen and the dining area



HINGED TOP rectangular chute installed under sink discharges tins and other refuse in waste can in basement

the worktop and one foot below the ceiling. The whole assembly extends about five feet beyond an 18-inch wingwall. It permits direct passage of light from the dining area window, and direct serving from the kitchen over the worktop.

Aside from the expertly placed equipment, chief features of Ebenreiter's own kitchen are a refuse chute below the sink, and design of the service facility between the kitchen and dining area. The waste chute is a hinged-top rectangular section placed in the cabinet under the sink in the compartment opposite the garbage disposal. It discharges into a refuse can in the basement. Top of the can is hooked to the chute when the can is removed for emptying. It eliminates collections of empty cans on the worktop. A cook book rack, recipe file, crisper over the oven, spice rack, and lights behind the window valance are other conveniences.

Equipment includes a General Electric dishwasher, Admiral refrigerator, Thermador cooking units and

Williams garbage disposal. Materials include Curtis Silentite windows, Kennatrack sliding door hardware, Washington hardware, Formica tops, Armstrong linoleum.

Height of the ceiling is seven feet, six inches. Effective use was made of the partition abutting the Thermador units, by installing shallow shelves for spices.



THERMADOR COOKING UNITS conveniently installed in worktop and in wall at right

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Mortar-Plaster Mixer—Model 3-P-ED of Gilson Brothers Co., Fredonia, Wis., is built for fast trailing on wide-wheel tread; has breadth of only 30 inches. Three cubic foot mixer uses gasoline engine or electric motor. Quality construction.



Barbecue Unit—Grillcraft unit in fireplace is made of heavy gauge steel with baked aluminum finish. Unit can be used both in fireplace, indoor and outdoor, and with portable cart. Grillcraft Co., 120 W. 6th St., St. Paul 2, Minn.



Automatic Washer—Model AW 584 of General Electric Co., Appliance and Merchandise Dept., Bridgeport 2, Conn., has tub capacity of nine pounds of assorted dry clothes and 17 gallons of water. Driven by G-E 1/3 H.P. motor.



Safety Valve—A chain-suspended ball which automatically drops down to seal off the gas line in event of severe explosions or earthquakes features a new valve made by Guardian Valve Co., P. O. Box 465-E, Redwood City, Calif.



Plywood Doors—General Plywood Corp., Louisville, Ky., produces exterior and interior flush doors in both hollow and solid core construction. Thin veneer and plies are bonded with American Cyanamid Co.'s plastic adhesives.



CONCRETE is placed in forms developed by Adam F. Pollman of Milwaukee. Forms are made in 34-inch-wide panels

New Economies For Concrete Houses

Faster construction and lower fuel bills were objective of Milwaukee builder-manufacturer's research

Photographs by The Milwaukee Journal

FASTER erection and lower fuel bills were two objectives a Milwaukee builder-manufacturer had when he began experimenting three years ago with concrete homes. Today, Adam F. Pollman, the manufacturer, believes he has contributed substantially to both his objectives, with new developments in concrete forms.

Much of Pollman's system of forms is conventional, varying in small details. It is in these finer details, however, where he believes his forms represent improvement.

The Pollman forms (patents ap-

plied for) are set up by beginning with inside wall forms, made in 34-inch sections. These sections are composed of four pieces of 2x7-inch fir, held together with four pieces of angle iron. Space is left at two points in each section for furring strips, which occur 16 inches o.c. in the finished concrete wall.

Furring strips are held in the wall by spike nails, driven partially into the strips, so that concrete is placed around them when the walls are poured. The strips are not attached to inside form sections, but protrude

through vertical openings in them.

When the inside form sections are in place, a waterproof building paper is placed over them to form a vapor barrier between the concrete wall and the furring strips. Reinforcing wire mesh is placed over the paper, and is held in place between the forms by the spike nail heads.

Wood window frames, developed by Pollman, are suspended between inside and outside wall forms with a special hanger system developed which automatically aligns them. The window frames are trimmed with a 1x2-inch

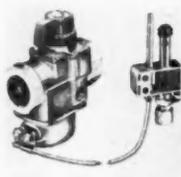


BUILDING paper forms vapor barrier between concrete and furring strips in Pollman system. Window frames held in place with hangers

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Frost-Free Refrigerator
—Westinghouse Electric Corp., Appliance Div., Mansfield, Ohio. New 10 cubic-foot 1951 line will freeze and store frozen foods and freeze chest has 41-pound capacity. Has Butter Keeper, Meat Keeper, Humidrawer.



Safety Valve and Pilot Burner—General Controls Co., 801 Allen Ave., Glendale 1, Calif. Series 260 burner has removable filter screen to help stop lint plugging. MR-5 valve, 3/4-inch, has 100 per cent safety shut-off feature.



Fan Circulating Heater
—Bryant Heater Div., Affiliated Gas Equipment, Inc., 17825 St. Clair Ave., Cleveland 10, Ohio. Model 528 has concentric louvers with propeller fan to give draft-less circulation. Input, 65,000 B.T.U. per hour.



Electricians' Bits—Acra-bore Co., Inc., Mill St., Webster, Mass. Precision made, full polished bits are now available in heavy red paperboard tubes with metal ends to protect them. Attractive tubes lengthen usability of each bit.



Blanket Type Insulation
—The Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill. Rock Wool Blankets are available in 8-foot lengths, and in either full-thick or semi-thick types. Provide unbroken vapor barrier from floor to ceiling.



CORNER form developed by Pollman can be handled by one man, and adjusted to any angle from 30 to 90 degrees

wood key which goes around them. This key is tarred to stop moisture or draft. A $\frac{1}{4}$ x 4-inch expansion strip is placed around the frame to keep moisture from the concrete away from the wood frame. The frame can be removed easily from the wall for repair purposes if necessary, Pollman says.

Outside wall form sections are made of 2x4's, spaced at 8-inch intervals, faced with $\frac{1}{2}$ -inch marine plywood. These are held to inside forms by ties fastened between form sections, and are secured at corners by a special corner form developed by Pollman. The corner form is adjustable to any

point between 90 and 30 degrees by taking out bolts and resetting them for the new angle. A corner form can be handled by one man.

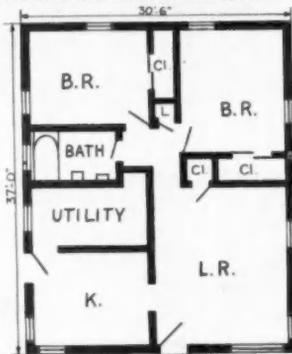
After the forms are stripped, Pollman uses sand and mortar to fill in small holes in the wall where form ties have been taken out (using about half mortar and half cement). He then places Terra-Tone cement over the outside wall surface. One recent home built by Pollman (illustrated here), with two bedrooms, metal kitchen cabinets, and lot, sold for \$9,400. All concrete work for it was done in 10 days by four men.



MORTAR-CEMENT mix is used to fill small holes where ties are removed



THIS concrete home built with Pollman's forms sold for \$9,400



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Easily Removed Window —RCS Tool Sales Corp., Joliet, Ill. "Kwik-Out" balancers provide simple means of maintaining constant pressure between window and jamb, yet window may be moved up and down easily or easily taken out.



Adjustable Shower — Milwaukee Flush Valve Co., 301 E. Reservoir Ave., Milwaukee 12, Wis. Adjusto, combination tub-filling spout and adjustable shower, is easily installed with one set of valves. May be put on after bath is tiled.



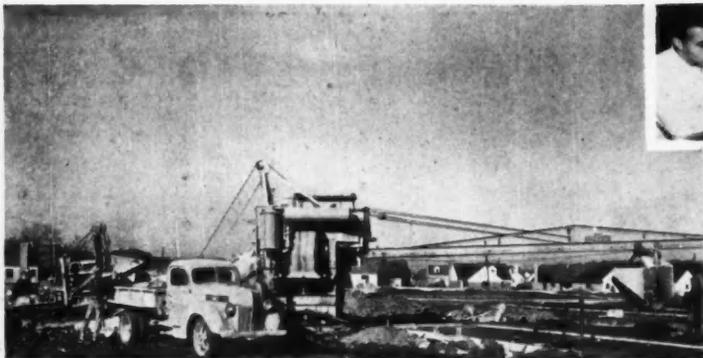
New Ford Trucks—Ford Motor Co., Dearborn, Mich., feature automatic Power Pilot carburetion-ignition control, providing economical power by metering and firing correct amount of fuel at right instant. Offers many other improvements.



Band Saws—Boice-Crane Co., 966 Central Ave., Toledo 6, Ohio. New models mounted on open type floor stands enlarge to 12 the total number of 14-inch band saws in this firm's line, plus complete line of light duty drill presses.



Earth Handling Machine —Sherman Products, Inc., 3200 W. 14 Mile Rd., Royal Oak, Mich. Power digger has below ground reach of 8 feet, and 10 foot digging reach behind tractor. Can load into standard dump truck using hose-type shovel.



BUILDING TEAM is comprised of two sons Charles H. Donald L. and father Herbert C. Huber

MULTIFOOTE PAVER is used for pouring slabs, sidewalks and curbs. Large bucket on extended arm allows concrete to be placed quickly in position, saving time and effort

Under Roof in Two Hours

New design, new equipment, and new techniques speed construction and reduce cost for Ohio builder



HEAVY equipment quickly levels site



LUMBER moving into shed to be cut to size



RACKED CUT lumber for use on jig tables

THE INTRODUCTION of mass building methods into all their projects has completely changed the operations of the H. C. Huber Construction Co., of Dayton, Ohio. By adopting site fabricating and assembly methods in 1945, the company has, through continuous improvement, set up a complete production line for the manufacture of house units. New cost cutting techniques and equipment enable them to produce a better house faster and for less money than would have been possible by the conventional method.

One of the most important factors behind the speed and economy of this home building operation is the Multi-foote Paver which overcame the bottleneck that existed in the pouring of foundation, slab, walks and curbs. Heretofore the speed with which the

building operation could proceed was determined by the number of foundations available. The other crews were always far in advance with the cutting and assembly of units. With the aid of this large concrete mixing machine with its horizontal boom extending to all portions of the slab, the concrete mix was quickly deposited where necessary and then the machine was moved to the next building site where the same performance was repeated. In this manner the speed of the operation was considerably stepped up.

The smooth running, economical system which characterizes the Huber operation begins with the design of the houses. All follow a single basic plan which is a simple 24x46½ foot rectangle containing five rooms and attached garage. Each house is placed

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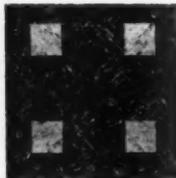
Combination Window—F. C. Russell Co., 1100 Chester Ave., Cleveland 1, Ohio. All-metal self-storing combination screen and storm sash has glass and screen panels easily removed from inside for cleaning. Magic Panel has automatic locking.



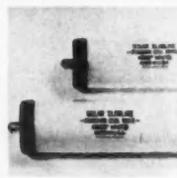
Fork Lift Truck—New series of heavy-duty Lifttrucks by Silent Hoist and Crane Co., Brooklyn 20, N. Y., have capacities of 5, 7½ and 10 tons. Dual pneumatic traction tires permit travel over soft ground and absorb impacts. Easy to manipulate.



Level—New 78-inch all-metal level for setting door jams and window casings and other uses has adjustable, replaceable, metal mounted spirit vials—only tool needed is screw driver. Product is made Simplex Level Co., Detroit 7, Mich.



Plastic Floor Covering—Sandran is produced by photogravure process, with colors locked in a durable, stain-resistant vinyl plastic. Wide range of colors in 6-foot and 9-foot widths. Made by Sandura Co., Inc., Philadelphia, Pa.



Fluorescent Lamps—New Instant-Start line of Solar Electric Corp., Warren, Pa., consists of 48-inch T12 40 watt tubes, 72-inch T12 65 watt tubes and 96-inch T12 75 watt tubes. Tubes are made with a single-pin base.



JIG for gable ends. Ribbons, gussets set in struts and rafters for added strength

upon a 55 foot building lot. The basic unit is subdivided with a minimum of partitions. Closets, cabinets, counters, trim, doors and all built-in units are fabricated in their own mill on the building site. The low-pitched roof, which helps give the house its contemporary look, is framed with trusses, mass produced on the site. They relieve the interior partitions of any structural function and thus permit the house to be quickly enclosed.

With the exception of ornamental railings at entrances, attached flower-boxes and the restrained use of shutters, the exterior design of the house wastes no money on applied ornamentation. On the contrary, the well organized fenestration, simple detailing, and variety of surfacing materials give the houses a well scaled ap-



WALL PANELS completed and placed on racks ready to be moved to site by truck

pearance. These are actually contributions toward economy.

The Huber production line system carries far beyond the methods employed by other builders. Huber cuts all materials and assembles all parts of the house, including interior partitions and roofs on jigs, in the mill. Entire wall sections are built in one unit with sheathing, paper and exterior facing in place. All studs are notched in the cutting shed to receive two rows of horizontal 1x4 inch ribbons. Corner posts, door jambs and heads are solid 4x4 members housed into each other. Roof sheathing and trusses are completely assembled on one large jig. Before being transported to site, roof is cut into four sections for easy handling. Shingles are applied after roof is in place.

Huber has three large cranes, 12



CRANE placing wall panels on trucks



PLACING PANEL in position on foundation



WALL PANELS in assembly process on site



PLOT PLAN of Plat No. 18, the latest project in Oakwood section of Dayton

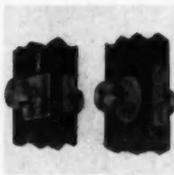
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Trailer-Mounted Saw—Delta Multiplex unit is equipped with double 360 degree radial action to give full saw stroke at any angle from 0 to 90 degrees right or left. Power Tool Division, Rockwell Mfg. Co., Milwaukee 1, Wis.



Stair Climber—Escalift is essentially a comfortable chair with foot rest which is self-propelled along a small rail installed on staircase. When not in use, chair folds against wall. Is easily installed. Shepard Elevator Co., Cincinnati 14, Ohio.



Locks—Two new lock models by Sargent and Co., New Haven, Conn., are the integralock (left) for residential use, featuring the positive protection of a deadbolt; and a new model of the Sargent 4500 line lockset. Attractive designs.



Waterproof Paper—Sisalcraft paper in wide rolls is lapped and sealed to serve as waterproof membrane between subfill and concrete slab in basement-less house. The Sisalcraft Co., 205 W. Wacker Dr., Chicago 6, Ill.



Oil Burner—United States Burner Div., The Carlin Co., Wethersfield, Conn. New 4005 model has high temperature head and electromagnetic fuel control. Exclusive Verni-flame control. Simple to adjust and easy to service.



ROOF OF HOUSE built complete on jig in assembly yard. Before removal to site roof is cut in four equal panels for easy handling by crane. Note metal rings for hooks



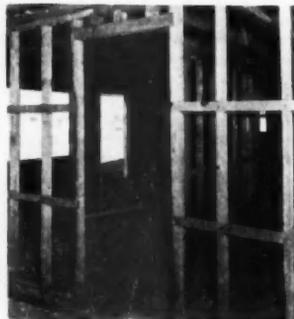
ROOF TRUSSES designed to obtain maximum storage in attic. Stairway provided



ROOF SECTION lifted on trailer by crane



ROOF SECTION in position on house



WALL FRAMING: 4x4 members at head and jamba. Bracing cuts into studs



UNDERCOATING applied by spraying



COMPLETED HOUSE, lawn and shrubs



DESIGN VARIED in roof, wall and color



PRACTICAL DESIGN, ample storage

trucks and four trailers that he uses for transporting the sections from mill to site. Cranes are used for loading trucks and trailers at the mill and for placing wall and roof units in position on the building site. In this manner three men working with the crane can assemble one house and have it under roof in less than two hours. Dry wall is placed on walls and ceiling.

This firm, one of the most enterprising in Dayton, is comprised of a father and two sons, 18 and 21 years old. Despite their youth and inexperience Charles and Donald in the short time they have been associated with their father, have entered into the spirit of this new building method with vigor and enthusiasm. Many of the innovations used, particularly in

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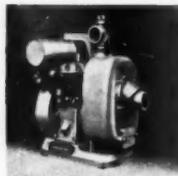
Electric Saw—Independent Pneumatic Tool Co., Aurora, Ill. New, low price six-inch Thor portable electric saw has built-in saw blower which blows from inside, keeping cutting line clear and motor free from dust. Fingertip control for cuts.



Access Door—Inland Steel Products Co., Box 393, Milwaukee 1, Wis. Improved Milcor steel access door has no-sag, spring hinges with removable pins. Covered with rust-inhibitive gray paint. Doors are shipped ready to install. In 11 sizes.



Gas Furnace—International Oil Burner Co., St. Louis 10, Mo. Model M7G gas-fired unit is designed for heating basementless homes. Warm air is circulated from bottom of furnace into ducts underneath floors. Has thermostat, limit, gas controls.



Pump—Jaeger Machine Co., Columbus 16, Ohio. Bantam 1½-inch aluminum pump weighs only 60 pounds, pumps up to 5100 gallons per hour. Fits seat or trunk of auto. Features Jaeger "Sure-Prime" priming action. Has 1½ H.P. engine.



Concrete Form Tie—Tie, made by Gates and Sons Inc., 80 S. Galapago, Denver 9, Colo., is a twisted galvanized spreader with loop at each end. Loop goes through form, and a steel rod slides through loop to hold the form in place.



TYPICAL of the many design variations that characterize houses in this project. All adapted to a single plan arrangement

the designs and layouts, can be attributed directly to them. The project now under construction and herein illustrated is designated as Plat No. 18.

This development will contain 100 houses when completed, each to sell for \$12,000 to \$13,000.

Through building houses by the production line method, Huber estimates that he establishes a saving of at least 10 per cent in materials and 15 per cent in labor. He also figures that he can increase his production in cutting, assembly and erection by 100 per cent without increasing personnel in these departments. Huber expects to complete six houses every 24 hours when they are operating at maximum capacity.



TYPICAL FLOOR PLAN for all houses in sub-division. The basic five room arrangement with attached garage, placed on a concrete slab, is offered for sale at \$12,000 and \$13,000

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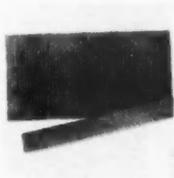
Lamp Posts—Jay Metalcraft Co., Box 35, Houston, Pa. Aluminum posts have copper lantern tops. Available in many styles, including old Boston glass tops. Post height is seven feet. Stands six feet when mounted, plus lantern height.



Tile Cutters—J.M.J. Products Co., Belleville, Ill. Model FT-1 tile cutter cuts all resilient floor tile. Makes even "bite" across tile with shearing action. Arm pivots are of cold-rolled steel cadmium plated. Company sponsors rental plan.



Sump Pump Switch—Kenco, Inc., Elyria, Ohio. New, Kenco floatless liquid-level control switch for sump pumps is completely submersible. Actuated by air pressure on diaphragm. Pumping continues after water is pumped below switch.



Siding Shingles—Johns-Manville, 22 E. 40th St., New York 16, N. Y. Improved Smoothgrain Permatone asbestos siding shingles have deep-grained appearance of weathered wood but have smooth surface to stay cleaner. Wide range of colors.



Heating Unit—S. T. Johnson Co., 940-950 Arlington Ave., Oakland 8, Calif. Aero-Lux 65U heating and air conditioning unit for small homes measures 25 inches square, is 52 inches high. This forced-air unit has Minneapolis-Honeywell controls.

"Houses in Uniform"

Monotonous appearance in housing can be avoided, and charming individuality achieved by planning over-all color harmony

THERE are a lot of good reasons for uniformity of appearance in the houses in many developments that have been built in the past five years. But, there are many better reasons for avoiding it, and at least one very practical way of achieving individuality of appearance without adding to cost. While using many variations of exterior materials, the most economical and effective way was cited by John Bonforte, head of the Bonforte Construction Co. of Colorado Springs, Colo., recently, when he said, "The simplest, most noticeable, and most economical variations we have obtained are with color."

Color consultants say that people are afraid to use color—are afraid of being noticeably different. They prefer to copy the accepted standard of the neighborhood and "play it safe." The result is monotony. They ask, "What happens when a builder refuses to give buyers a free choice of colors, but sells his houses in accordance with a pre-determined color scheme worked out by a color specialist, whose job it is to assure individuality of each home with an eye to over-all color harmony and integration."

Bonforte reports an interesting personal experience. He has two proj-



PLANNED color harmony gives this house individuality

BY: BONFORTE CONSTRUCTION CO.
Colorado Springs, Colo.
March 23, 1950
104 EAST 72nd STREET
NEW YORK, NEW YORK
Trafalgar 9-4706

Estrie West
INTERIOR DESIGNER
COLOR CONSULTANT
EXTERIOR COLOR SCHEME #3

COLOR LOCATION	MATERIAL	SPECIFICATIONS
ROOF		DARK SLATE BLEND Asphalt Shingles
SHAKE SHINGLE OR SIDING		ROSE BEIGE Stain or Paint
OR ADJUSTED SHINGLE		GOLDEN TAN
STUCCO		VIKING GRAY
TRIM		SAME
ACCENT COLOR - (Front door & shutters)		MINT BLUE (1) OR BRIGHT NAVY (2)

COLOR SCHEME number three applied to house above

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Gate Operator—Model-SW series, by Robot Appliances, Inc., 13165 Prospect Ave., Dearborn, Mich., will operate all types of sliding gates. Safety features include stopping at any desired point while opening or closing.



Ironing Board—Adjustable built-in ironing board can be lifted into desired position while open or closed, locked in one of 18 notches by automatic catch. Pushbutton controls. Rieter Woodwork Specialty, Cedarburg, Wis.



Excavators and Cranes—Schilder Bantam Co., Waverly, Iowa, Model M-49 is interchangeable for shovel, trench hoe, dragline, clamshell, crane, magnet or pile driver. Can be mounted in any 1½ ton or larger tandem axle truck.



Interior Finish—Water-mixing Dramex one-coat finish colors and re-surfaces wallboard, plaster and other surfaces, covering blemishes. Dries in four hours. Made in white and eight colors. The Reardon Co., St. Louis, Mo. Easily applied, long lasting.



Revolving Closet—Revolvador, combination closet and dressing room made by Revolvador Corp., 1520 E. Stouson, Los Angeles, Calif., is operated by pushing slightly to move inside around. The door swings easily on pivots.



ects under way. The project in Colorado Springs consists of 333 houses. Work was begun early in 1948. Completion is scheduled for January 1, 1951. The second project in Pueblo consists of 96 houses. This development started early in 1950, is scheduled for completion this year.

The houses in both projects are virtually the same. Material specifications and architecture are practically identical. While constantly striving to obtain variations in exterior appearance by varying the roof framing, by staggering the houses at different distances from the curb line, and by changing the exterior finish through alternating stucco, siding and combinations of both, Bonforte was not satisfied that he was doing everything that could be done.

"In Colorado Springs," said Bonforte, "we allowed our buyers to choose their own exterior colors. This was possible because Bonnyville homes have been sold out for six or more months in advance, ever since the project was started more than two and one-half years ago. Unfortunately, buyers have chosen white overwhelmingly as their favorite color, and the result is a drab appearance.

"When we planned the project at Pueblo, we decided not to give buy-

BROWN BLEND asphalt shingles are the basic factor in color scheme number 7. Combined with antique white gables, flamingo stucco side walls and trim, and a front door of copper brown or ming blue, this scheme gives distinctive harmony

ers a free choice, but to sell the houses in accordance with a color scheme planned by Beatrice West. Even though the Colorado Springs project has the advantage of being older, and therefore, has lawns, shrubs and individual variations added by the buyers, the Pueblo project has more eye appeal and buyer appeal."

"Not one buyer," added Bonforte, "has raised any objection to the colors or the color plan of the project, or has insisted on the right to choose the colors of his own home. On the contrary, buyers welcome the individuality provided by color, and readily recognize the importance of community integration and over-all harmony which intelligent pre-planned color scheming assures."

Ten color schemes were developed by Beatrice West Studios for the Pueblo project. In each case, the first color selected was that for the asphalt roof. Color experts agree that the

roof must set the color pace and the color tone for an individual house, and particularly for a community of houses, as the roof is the largest unbroken visible area. Starting right with color means starting right with the right asphalt roof colors, according to Beatrice West.

The color scheme for an individual house does not "jell" and color planning for a community lacks integration unless roofs are in harmony with each other.

Asked why she selected nine roof colors for the Bonforte project where 96 homes were to be built, and only two roof colors for Levittown with 9,000 houses, Miss West explained, "The Levittown houses may be described as modern or ranch-type Cape Cod. Because it is less costly to expand upward rather than outward to provide additional rooms, the Levitt houses have over-sized attics. Consequently, the roof line is high.

(Continued on page 202)

Beatrice West Studios INTERIOR DECORATION COLOR CONSULTANT		16 EAST 75th STREET NEW YORK, NEW YORK Telephone: 7-4704	
Color	Material	Color	Material
ROOF	BROWN BLEND ASPHALT SHINGLES	FRONT DOOR	COPPER BROWN
FRONT GABLES	ANTIQUE WHITE STUCCO	TRIM	ANTIQUE WHITE
WALLS	FLAMINGO STUCCO	FLOORING	ASBESTOS
TRIM	ANTIQUE WHITE	SCREEN DOOR	ANTIQUE WHITE
SCREEN DOOR	ANTIQUE WHITE	SCREEN DOOR	ANTIQUE WHITE

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Heat Waste Alarm—Sambeky Mfg. Co., Fidelity Bldg., Cleveland 14, Ohio. Low-cost visual device indicates when a furnace or boiler needs adjustment or cleaning. Automatic Watchman, calibrated for each fuel, is easily attached to pipe.



Screen Door Hinge—Stanley Works, New Britain, Conn. New adjustable tension screen door hinge has spring adjustable to regulate speed of closing. Spring is in barrel of hinge. Made of wrought steel for half- or full-surface applications.



Kitchen Equipment—St. Charles Mfg. Co., St. Charles, Ill. Custom-built St. Charles steel kitchen has morning blue units with forest green vinyl counter tops with maple wall paneling. Two-level counter serves as desk and snack bar.



Prime Window—F. C. Russell Co., 1100 Chester Ave., Union Commerce Annex, Cleveland 1, Ohio. Rusco double-hung prime window is made of Arco hot-dipped galvanized ingot iron Zincrip, bonderized for paint adherence.



Floor Material—Roc-Wood Flooring, 364 E. 23rd St., Chicago 16, Ill. Roc-Wood flooring feels like wood, looks like cork, goes on with a trowel. Material of hardwood fibres is chemically treated, bonded with chemical hardening binder.

All Is Not Lost

By R. E. Saberson

I AM FOR homes. Of that you may be sure. This means I am for any sound program that will make it possible for the greatest number of families to own their own homes. That, of course, excludes subsidization and all things pertaining thereto. It rules out Government ownership of homes as well as any of the several other devices thought up by ingenious bureaucrats to take the play away from the home building industry that has well demonstrated its ability to build homes, perhaps even faster than they may be needed.

But I am against inflation first, last and all the time and I have been concerned greatly during the past several months as I watched the inflationary spiral creeping higher and higher in the building material industry.

The same observation goes for labor, especially in residential construction, for it so happened that there simply wasn't enough of materials or labor to meet the greatest demand for both that ever had existed in the history of the nation.

Whenever we encounter a situation where there is more money (or credit) than building materials and labor you promptly begin to see the inflationary flames threatening the destruction of the very homes that are under construction.

That perhaps is tangling with the English language a bit in order to try and get across the simple point that it is not going to do anybody one whit of good if in demanding methods for maintaining our 1950 level permanently we should pull down on our heads the disaster of inflation which unfortunately not only would destroy the homes themselves but our free enterprise system and all that goes with it.

Yet month after month during the past summer, I saw price advance piled on price advance until there simply weren't half a dozen home buyers in a hundred who could readily afford to pay the price that they had to pay if they wanted to buy the home they wished to own or to finish the one they had under way. While they couldn't afford it, they bought it just the same.

Perhaps I fear inflation too greatly.

It's possible, after all, that the reduction in new homes estimated to result from current controls may throttle the price spiral and be a good thing in general for the health of the home building industry

Frequently I have tempered my criticism of higher and higher prices simply because it seemed there never was going to be any other way than up. Then I would get to thinking of how quickly business men are wont to take to their heels when the downward turn finally comes and they try to pro-

I am fully aware that it wasn't long ago when I related the story of the happy young couples who were living snugly in their small but cozy and exceedingly high priced homes. So far so good. It now looks as though a great many of these couples will be able to pay out unless their incomes go to pot.

But isn't there something else to the story?

I'm thinking particularly of what too-easy credit terms did to prices and the perfectly outrageous deals that were perpetrated by certain individuals and companies in order to get badly needed materials away from somebody else.

If you will take time out to trace the 1950 upswing in the price of at least half a dozen principal building materials in short supply you will promptly come to the conclusion that all reason vanished from the building material industry and that nothing but the wildest kind of speculation was left in its place.

On the other hand, was the building material industry really at fault? Actually it didn't set the price at all but reflected what someone

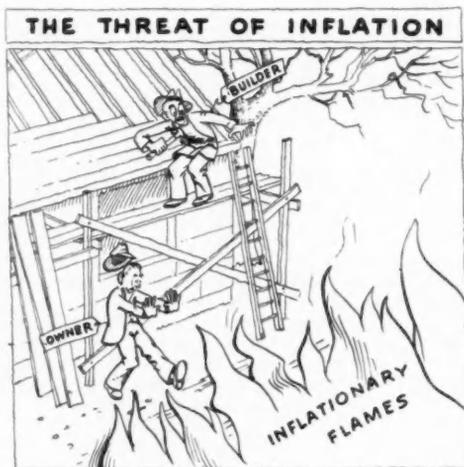
was willing to pay. Therefore, the man who was sent to the Pacific Northwest or to the South or anywhere else with a checkbook in his pocket and with instructions to "pay whatever is necessary" is the fellow who really made the market.

But what about the man who was going to buy the home after it had been completed? Well, he didn't care much about an extra \$1000 or \$2000 either, since there was little risked in "nothing down," especially when the monthly payments still were considerably lower than a bewildered neighbor was paying for rent.

Sooner or later people quit trying to make it all add up until a war came along to tighten up the credit terms. Then all hell broke loose.

Everybody now seems to believe in

(Continued on page 204)



tect themselves by getting out from under.

Frankly I can't make myself believe that we are geared up properly to build and sell as many homes annually as we built in 1950.

However, we seemed to get away with it in pretty good shape as long as we enjoyed (I hope that's the word for it) free and easy credit terms that made it possible for large segments of our population to buy a home without paying a cent down and in liquidating the debt in monthly payments running as long as 35 years after purchase.

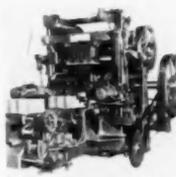
It was all very wonderful as far as buyers and sellers were concerned, but nevertheless plain common sense steps in persistently and raises the question as to whether there isn't something dangerous about such a situation permitting free and easy shenanigans.



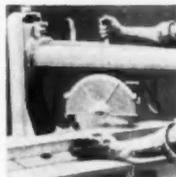
Portable Elevator—Sam Mulkey Co., 1621 Locust, Kansas City 8, Mo. Elevator is of all-steel, bridge-type construction, electric-welded. Can be handled and operated by one man. Extensions easily applied in a few minutes.



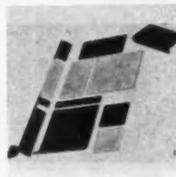
Convecter—John J. Nesbitt, Inc., State Rd. and Rhawn St., Philadelphia 36, Pa. Radiates heat moderately. Principal mode of heating is convection of air from floor level, through fin-and-tube heating element and out grille.



Automatic Block Machine—Besser Mfg. Co., Alpena, Mich. Super Vibrapac will produce concrete masonry units in all sizes and shapes. No machine operator required. Unidirectional vibration provided from two 5 H.P. motors.



Radial Saw—J. D. Wallace & Co., 136 S. California Ave., Chicago 12, Ill. Five HP motor weighs only two pounds more than regular two HP motors. Completely "radial"—motor unit travels 19½ inches in straight line in radial arm.



Plastic Wall Tile—A-1 Plastic Molder, Inc., 1415 Diversey Pkwy., Chicago 14, Ill. Twelve plastic tile pieces; 30 uniform colors—solid, pastel, marbled and pearlescent. Deep returns, laid easily over rougher walls. Blunt edges.



Bonding Plaster—Nu-Wall Mfg. Co., 923 N. 19th St., Milwaukee 3, Wis. Used over poured concrete. Applied directly on concrete; no wire lath or base coats needed. Only ¼-inch Nu-Wall coat and ½-inch finish coat required.



Sash Balance—Allmetal Weatherstrip Co., 2241 N. Knox Ave., Chicago 39, Ill. Sash balance and weatherstrip unit has coil spring enclosed in one-piece flexible metal housing. Sash clips hold spring at bottom of stile groove of each sash.



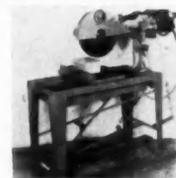
Utility Kit—Cummins Portable Tools, Division of Cummins Business Machines Corp., 4740 Ravenswood Ave., Chicago 40, Ill. Has 20 pieces—for sanding, polishing, drilling, cleaning, buffing. Power unit is Model 160 Cummins electric drill.



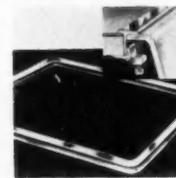
Trucks—Chevrolet Motor Div., General Motors Bldg., Detroit 2, Mich. Driver comfort is one of many features of 1951 models. Adjustable Ventipane provides cab ventilation. Seat springs are double-decked for durability and strength.



Steel-Braced Forms—Symons Clamp and Mfg. Co., 4261 W. Diversey Ave., Chicago 39, Ill. Panels with steel cross members every 12 inches are recommended for heavy pouring. Brace plates can also be furnished for use on 2x4-inch braces.



Masonry Saw—The Construction Machinery Sales Co., Waterloo, Iowa. CMC model, for wet and dry cutting, utilizes cutting head, arm and motor to permit alignment adjustments off the rigid column. Mounted on steel frame.



Nosing and Edging—R. D. Werner Co., Inc., 295 Fifth Ave., New York 16, N. Y. Fold-down type straight faced nosing and edging is in 12-foot lengths to match fold-down sink frames now made by this company. For 1/16 or ¼-inch linoleum.



Laminated Plastic—Service Products Div., Woodall Industries, Inc., 2035 Calumet Ave., Chicago 16, Ill. Lamidall panel for kitchens and other uses has decorative pattern impregnated on tempered Presswood with plastic surface.



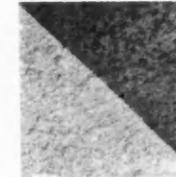
Basement Hose Reel—The Zierden Co., 3815 S. Kinnickinnic Ave., Milwaukee 7, Wis. Rollaway reel can be installed by anyone in a few hours, and is guaranteed for 10 years. Holds 125 feet of hose. No need to disconnect in winter.



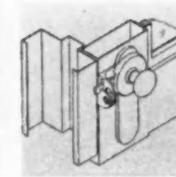
Screeding Machine—Whiteman Mfg. Co., 3249 Casitas Ave., Los Angeles 39, Calif. Model "RS" eliminates labor of hand screeding and greatly speeds operation. Rods slab to level, puddles and vibrates entire depth and area of concrete.



Finish Aggregate—Zonolite Co., 135 S. La Salle St., Chicago 3, Ill. Composed of unfibred gypsum and vermiculite aggregate, it eliminates mixing lime and gauging plaster. Offers smooth, hard finish over vermiculite or sand base coat.



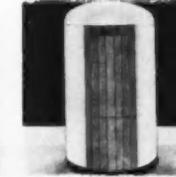
Masonry Wall Covering—Tuff-Kote Co., St. Charles, Ill. Tough soy bean oil Condura protects masonry with ground undercoat that hides irregularities, pores and mortar joints. Excellent for dry wall construction or plaster.



Surface Latch—Ceco Steel Products Corp., 5601 W. 26th St., Chicago 50, Ill. Standardized with firm's line of mortised cylinder locks. Steel latch bar is spring loaded. Latch body and guide are of malleable iron. Positive latching.



Compact Gas Furnace—Economy Gas Furnace Mfg. Co., 10 S. LaSalle St., Chicago 3, Ill. Modulated flame system, new jet type burners and circulated heat assure efficient heating in large or small homes. Simple to operate, service.



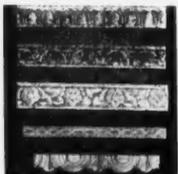
Gas Water Heater—Servel, Inc., Dept. AB, Evansville 90, Ind. Copper ball-shaped tank stores water in this smartly styled heater. Fiberglass insulation averages 3 inches thick around tank. Small 20 and 30 gallon models, and 45 gallon units.



Wall-Hung Lavatory—Alliance-Ware, Inc., Alliance, O. Shelfback unit is addition to line of porcelain-on-steel sanitary ware. Deep apron at sides and front creates smart style in keeping with modern bath design. Size 20x18 inches.



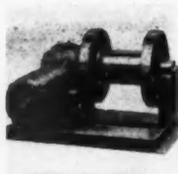
Radial Saw—American Saw Mill Machinery Co., Hackensack, N. J. Monarch model TNT Uni-Point radial saw has capacities of 3x16 inches cross-cutting and 20½ inches ripping. Blades enter wood at same point regardless of angle.



Decorative Moldings—Bendix Mfg. Co., 192 Lexington Ave., New York 16, N. Y. Chair rails, door moldings, trims etc. are available in variety of attractive non-warping woods. Can be ordered either from stock or to individual design.



Stapling Hammer—Bo-stitch, 929 Mechanic St., Westerly, R. I. Self-feeding H4 hammer enables user to drive home heavy ¼-inch galvanized staple with one follow-through blow, using just one hand. Loads with nail-sized staples.



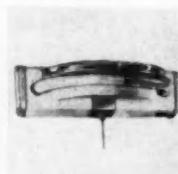
Electric Hoists—King Mfg. Corp., 3142 W. Chicago Ave., Chicago 22, Ill. New 800 series models are fully automatic, in five sizes from 2 to 10 H.P. and capacities from 600 to 3,000 pounds. No skilled operator is required.



Windows—Solar Air-Flo, Inc., Elkhart, Ind. Fits into wood, brick or stone construction. Modular design suitable to all types of architecture. Need not remove storm sash or screen. No screen wire to look through. Many sizes.



Double Hung Casements—Curtis Companies, Inc., Clinton, Iowa. Silenite units, used on both sides of picture windows, provide excellent weather tightness, and add to architectural appearance. Units are easy to install.



Light Fixture—Side-wall fixture, 14½ inches long, uses Westinghouse "Cir-clarc" bulb. Baked white enamel finish. Suitable for variety of applications. Homecraft Electronic Products, 1208 S. Kedzie Ave., Chicago 23, Ill.



Colored Cement—Color-undum, a dry powder composed of coloring agents, fused aggregates, water-repellent compounds, hardening elements and binders, forms integral part of cement finish. A. C. Horn Co., Long Island City, N. Y.



Basement Window—Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. Packaged basement unit includes window, full glazed, screen and storm sash insert with screws and clips for installing. Also shipped unglazed and unpackaged.



Power Exhaust Fan—"Airmax" unit of The Galloway Co., 4108 Dodge St., Omaha 3, Neb., features low silhouette, weather-proof outlet, full blackout. Designed to move maximum of air, uncontaminated air at minimum horsepower.



Double Oven Range—Crosley Corp., 1329 Arlington St., Cincinnati, Ohio. High speed 7-heat surface units. Illuminated "Color-trol" for surface units. Clock timer for large oven and one of two appliance outlets. Infra-red broiler.



Garbage Disposer—Hot-point, Inc., 5600 W. Taylor St., Chicago 44, Ill. Has simple lock ring arrangement so that plumber can rotate unit to line up with existing plumbing when he makes installation. Clean styling, all wires concealed.



Prefabricated Door—"Fits-All" design is featured in prehung and fitted door and jamb produced by William R. Lutz Co., 18 Bergen St., Brooklyn, N. Y. Adjustable to any wall thickness and suited to any wall composition.



Galvanized Windows—Detroit Steel Products Co., 3101 Griffin St., Detroit 11, Mich. Factory galvanized Fenestra windows will help reduce window maintenance costs. Photo shows galvanized Fenestra steel window installation 23 years ago.



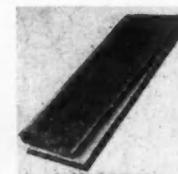
Folding Doors—New Castle Products, New Castle, Ind. Accordion-type folding door with pantograph steel frame and vinyl coverings eliminates obstructions, saves floor space. Modernfold doors are available in 22 decorator colors.



Window Screen—New York Wire Cloth Co., 445 Park Ave., New York 22, N. Y. Low cost Durall aluminum tension screen eliminates need of side frames. Windows easily washed by removing screen bottom rail held by thumb screws.



Kitchen Equipment—Kitchen Maid Corp., Andrews, Ind. Long, peninsular kitchen arrangement includes two Kitchen Maid peninsular bases and Thermador unit. Opened base shelves and other cabinets are made in modular dimensions.



Rock Wool Blanket—National Gypsum Co., Buffalo 2, N. Y. Fireproof, mat-thick, sealed blanket of rock wool insulation is produced in 15-inch widths eight feet long. Other sizes also available. Vapor barrier on one side. Has "K" factor of .27.



Asbestos Shingle Cutter—Specialty Tool Manufacturers, Belleville, Ill. Lightweight "Improved Handy" asbestos shingle cutter, model A-32, has 32-inch cutting capacity and weighs only 31 pounds. Made of aluminum alloy; treated for strength.



READY TO ROLL—FAST

With the Oldest Volunteer Fire Company

Ro-Way OVERHEAD TYPE DOORS

When Rainbow Fire Co. No. 1 is ready to roll, they *have* to get out fast. And the garage doors of their fire house have to operate dependably, easily, and quickly—regardless of weather. That's why this Reading, Pa. volunteer company, the oldest in existence, chose a Ro-Way Overhead Type Door for their new building.

Ro-Way Doors are exceptionally smooth and easy to operate. Thanks to Ro-Way's friction-reducing track, double-thick-tread ball-bearing rollers, and springs power-metered to the exact weight of the door. Ro-Way Doors can't freeze shut . . . won't jam or bind from frost-raised floors or moisture-swollen jambs.

So whenever your commercial, industrial or residential plans call for garage doors, specify Ro-Way Overhead Type Doors for fast, easy, dependable operation.

There's a RollWay for every Doorway!



Nationwide sales and installation service. See your classified telephone directory for names and addresses of Ro-Way Distributors.

ROWE MANUFACTURING COMPANY
778 Holton Street • Galesburg, Illinois

NEW!

OIL WALL FURNACE

by *H.C. Little*



KEY TO ILLUSTRATION:

1—FURNACE is 80" high, 20" deep, 30" wide. 2—PARTITION wall cut away shows how furnace is set in wall to extend out equally each side (7" for a 6" wall) 3—FURRED OUT wall above furnace both sides provides ample room (20" x 30") for a 4—PATENT FLUE, which comes down from above. (Or brick chimney constructed at side may be used) 5—WARM AIR discharge grilles, 8" x 27", both sides. 6—RADIANT PANEL, 12" x 49", one side. 7—COLD AIR intake grilles, 10" x 27", both sides.

**Perfect for
Small Homes
Without Basements—
Saves Valuable
Floor Space—
Automatically
Lights Itself—
Burns Low Cost
Furnace Oil**

Important Home Selling Features

Fully automatic operation, electric ignition and controls (manual control also available) . . . burns low cost furnace oil . . . occupies minimum space, permits wall to wall carpeting radiant panel one side and large grilles both sides assure excellent heating job . . . ample capacity—over 60,000 BTU output per hour.

For full information, write Dept. A-1

Baltimore, Md.
Belmont, Mass.
Boise, Idaho
Chicago, Ill.
Columbus, Ga.
Detroit Lakes, Minn.
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H.C. Little
Burner Company

SAN RAFAEL,
CALIF.

Newark, N. J.
Portland, Ore.
Prescott, Ariz.
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Salt Lake City, Utah
Seattle, Wash.
St. Louis, Mo.
St. Petersburg, Fla.

No. D-74 — Entrance Door with Side Panel

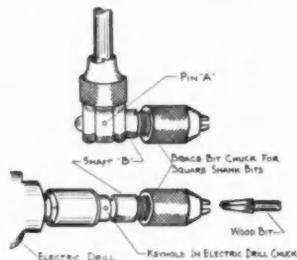
The combination unit of door and sidelight detailed on the opposite page is an entrance feature that is adaptable to either home or apartment. The photograph indicates its use with a large rental duplex apartment project where each rental unit has its own entrance.

The frame as detailed can be used with either wood siding, plywood, asbestos or wood shingle surfacing. In the case of brick veneer surfacing the wood frame is extended in depth and a brick mould is substituted for wood casing.

Sections 3 and 8 on Detail Plate shows the horizontal muntins and sill member extended to the back face of wood frame. This added width is convenient for plants or other decorative ornaments as shown in photograph.

In sill sections it is noted that the stud wall extends below entrance slab, and that concrete finishes against the wood sheathing. To prevent premature rot a moisture barrier should be placed between the sheathing and slab.

How to Use Taper Square Shank Bits with Electric Drill



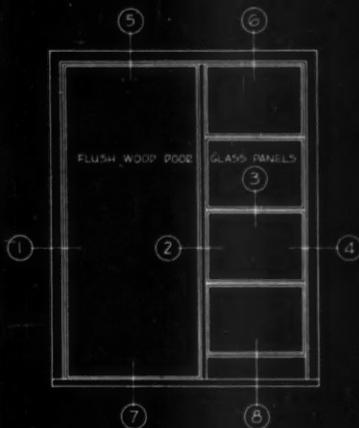
To use old bits with electric drill take bit brace apart at the ratchet. By placing the round shaft through the ratchet of drill chuck and placing the square bit shank in the brace chuck, it is possible to use square and round shank bits in the drill.

To change, remove pin A in sketch from old brace which releases shaft B, which in turn fits securely in three jaw electric drill chuck. This allows square shank bits to be used with drill. Since the three jaw chuck of electric drill will not hold square shank, a brace bit chuck is used as shown in sketch.—Submitted by Euclid G. Proper, Downsview, N.Y.

AMERICAN BUILDER'S BETTER DETAIL PLATE

Detailed by K. Roderick O'Neal A.I.A. for *American Builder*

NO. D-74 ENTRANCE DOOR WITH SIDE PANEL . . .



Elevation . . . 0 1 2 FEET

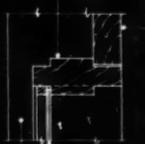
GYPSUM LATH & PLASTER
2-2"x4" AT JAMB



WOOD SILL
1-3/4" FLUSH DOOR

①

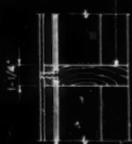
1-3/4" FLUSH DOOR
JAMB



GLASS PANEL
WOOD SILL

②

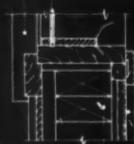
WINDOW MULLION SERVES
AS SHELF



GLASS PANEL

③

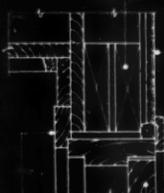
WOOD SILL
GLASS PANEL



2-2"x4" AT JAMB
GYPSUM LATH & PLASTER

④

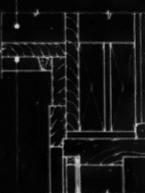
GYPSUM LATH & PLASTER
2-2"x6" AT LINTEL



EXTERIOR TRIM
1-3/4" WOOD DOOR

⑤

INSIDE TRIM
JOIST OVER PORCH



GLASS PANEL
PORCH CEILING

⑥

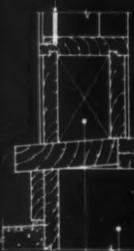
1-3/4" FLUSH DOOR
METAL THRESHOLD



WOOD SILL
CONCRETE PLATFORM

⑦

FINISHED WOOD FLOOR
GLASS PANEL



BLOCKING
FLOOR JOIST

⑧

Sections . . .

0 3 6 9 12 INCHES



W. A. CARSON, Builder, says

"MODERNFOLD" DOORS

cost less per opening — create more interest

Fifteen houses already completed and sold! Starts made on thirty more! "Modernfold" doors used throughout in all openings—by Carson Construction Company, Helena, Montana.

"And," says W. A. Carson, "the 'Modernfold' doors caused more comment than any other feature of our house. We selected 'Modernfold' doors because we felt our customers would appreciate the space-saving features as well as the decorative value."

Mr. Carson further reveals that cost of "Modernfold" doors per opening was less than using conventional wood doors. No wonder he plans on *always* using "Modernfold" doors wherever possible!

Cost saving! Space saving! Sales appeal! Yes, that's why builders have insisted on "Modernfold" doors since 1936. Get the full *profit* story today. Look up our installing distributor under "doors" in your classified phone book . . . or mail coupon.

See our exhibit at the Home Builders Show, Booths 89 and 90

NEW CASTLE PRODUCTS, New Castle, Indiana
In Canada: Modernfold Door Company of Canada, Limited, Montreal



Rooms are actually bigger in this house because "Modernfold" doors' accordion-like action saves 20% space which ordinary doors would have wasted. By opening the "Modernfold" doors, the entire closet becomes entirely accessible, completely visible.



Sold and Serviced Nationally

New Castle Products
P. O. Box 836
New Castle, Indiana
Gentlemen:
Please send me full details on "Modernfold" doors.

Name.....

Address.....

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



COPYRIGHTED NEWCASTLE PRODUCTS, 1961

No. G-15 — Store Modernization

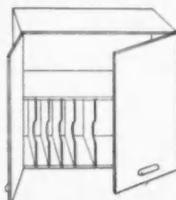
The problem involved in the alteration of the store front for the Judith Rochelle ready-to-wear store was to create a two-story effect with a minimum budget. The method used is indicated in the details and photograph shown on the opposite page.

To accomplish this change in an old building without extensive changes to the area above the first floor the store portion was extended about 3 feet 6 inches beyond the old front wall of building. From the top of the first floor deck to a point below the third floor windows solid wood fins were extended. These were placed in position in front of the existing wall above first floor ceiling. These fins are placed 12 inches apart and secured to old wall with two sets of clip angles for each fin. Expanded metal mesh is secured to the back face of wood fins and extends across the entire second floor. The wall surfaces behind the metal mesh, including the windows, are painted a jet black. With the fins painted a light buff and the metal mesh painted white, the area behind the fins and mesh are completely lost from view.

The extended portion of the first floor ceiling is supported by 3x10 wood beams. Wood deck above is covered with metal flashed into brick wall above. Wood slats, placed diagonally between the horizontal portion of wood fins, are intended for protection against the sun.

The bulkheads, pilasters at each end, and valance extending from first floor ceiling line to underside of deck are covered with Permatone facing. The colors of the facing are orchid, tan and rose. The ceilings of the vestibule and show windows are made of oak plywood panels finished in a natural tan. The vestibule floor is terrazzo made up of red verona chips with white portland cement and red pigment added.

Installing Dividers



Installation of Masonite 1/8 inch tempered Presdwood in cupboards can be done quickly by cutting grooves in shelves as noted.

AMERICAN BUILDER

AMERICAN BUILDER'S STORE FRONT DETAILS

Designed by Louis J. Gluskin for American Builder

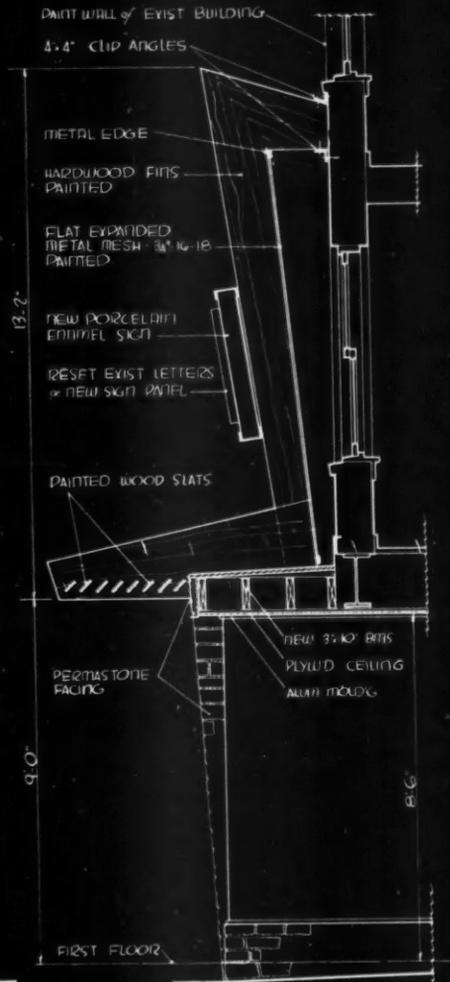
N° G-15 - STORE MODERNIZATION



Judith Rochelle - New Rochelle, N.Y.



Front Elev.



Section AA



McFarland home built by Schulenberg Construction Co. in St. Louis' Glendale area

Walking on Warm Air

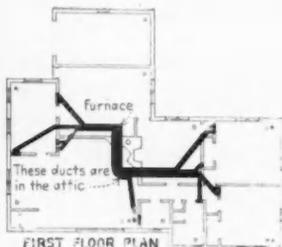
Basementless house employs floor of two thin concrete slabs, and channels of brick between to circulate warm air throughout large area and make radiator of upper slab

WARM air coursing through brick channels between two thin concrete floor slabs is the source of radiant heat in the basementless house of H. C. McFarland in the Glendale section of St. Louis. Forced warm air is delivered to insulated attic ducts from a gas-fired Janitrol Winter Air Conditioner located in a utility room. From the ducts, laid between the joists, air is carried down through vertical stacks to baffled passages between the two slabs.

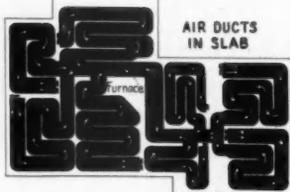
As in conventional hot water radiator "slabs," a relatively low temperature is needed to make the massive floor an effective radiator. Floor temperatures are never over 85 degrees, but heat is well distributed, and higher surface temperatures make comfort possible at reduced room temperatures.

Floor area of the house is about 2300 sq. ft. The bottom slab, 3 inches thick, is laid above grade on a 6-inch slag base. Then 5½ inches of brick withes, separated and baffled by air space, minimize the possibility of moisture penetration and floor condensation. The top slab is supported by corrugated steel laid directly on the brick baffle structure. The slab is reinforced with steel laid in both directions. The thinness of the top slab allows fast heating and cooling in response to quick changes in outside temperature. The floor is finished with a synthetic material manufactured by Armstrong. Following along curved channels sandwiched between the slabs, warm air is snaked back and forth across the width of the room's subfloor, to the end of the room, where

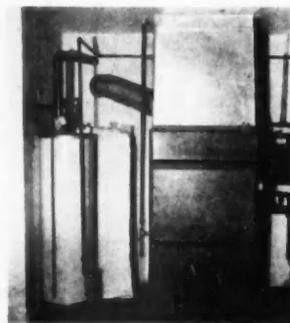
(Continued on page 260)



FIRST FLOOR PLAN



ATTIC ducts (heavy black) carry warmed air down wall stacks, shown in partitions. Brick baffles direct flow of warm air under floor and back to the heating unit



JANITROL Winter Air Conditioner installed in utility room is gas fired. Domestic hot water is supplied by Rheem heating and storage unit in same room

BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW — BUILDING PRODUCTS ON REVIEW



Power Saw—Black & Decker Mfg. Co., Towson 4, Md. Eight-inch heavy-duty Lectro-Saw has depth of cut adjustment from 0 to 2 13/16 inches. Unit is equipped with carbide tipped blades. Saw weighs 14½ pounds and works on A.C. or D.C.



Fuel Tank—Black, Sivalls & Bryson, Inc., 720 Delaware, Kansas City, Mo. Obround basement tank of minimum width can be easily carried through doorways but stores enough fuel oil for average family needs. Unit holds 275 gallons of fuel oil.



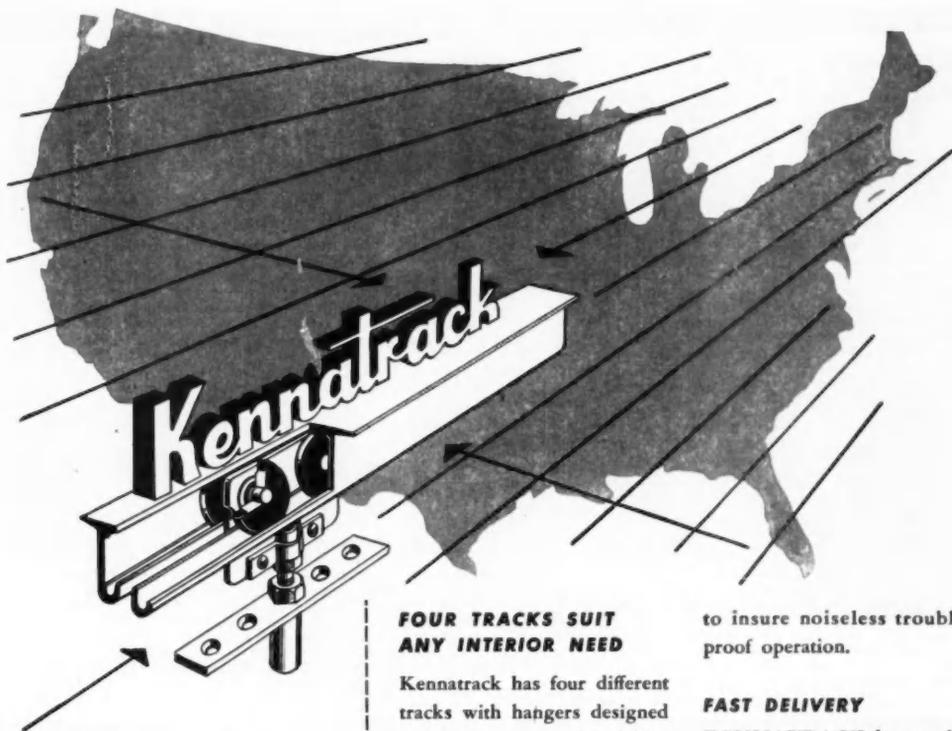
Wall Register—G. E. Air-Wall unit directs air upward in fan-like pattern along cold wall of a room, warming cold surface so that it radiates heat. Air Conditioning Department, General Electric Co., Bloomfield, N. J.



Combination Window—Ingersoll Koolshade Stormshade Div., Borg-Warner Corp., 321 Plymouth Court, Chicago 4, Ill. All-aluminum combination storm window is equipped with Koolshade sun screen with louvre-like mesh of thin bronze strips.



Concrete Forms—Universal Form Clamp Co., 1238-56 N. Kostner Ave., Chicago 51, Ill. Uni-Form completely assembled units with Uni-Form ties require alignment on one side only. Inside, outside corners, fractional forms also available.



Here's why
KENNRACK
SLIDING DOOR
HARDWARE
 has
Coast-to-Coast
Acceptance!



**FOUR TRACKS SUIT
 ANY INTERIOR NEED**

Kennatrack has four different tracks with hangers designed to meet every interior sliding door need. Series 250 for bypassing cabinet and wardrobe doors; Series 300 for communicating and bypassing doors; Series 325 for bypassing and open pocket installation and Series 400 for heavy closed pocket construction.

**NYLON- AND
 NEOPRENE-TIRED WHEELS**

Hangers for Series 300, 325 and 400 roll on neoprene-tired wheels—long wear, smooth silent operation assured. New Series 250 hangers have moulded nylon wheels

to insure noiseless trouble-proof operation.

FAST DELIVERY

KENNRACK has maintained an enviable record for prompt shipment. Ask any Kennatrack jobber about Kennatrack's record in delivery and service. It just can't be beat!

**COMPLETE LINE
 OF ACCESSORIES**

The Kennatrack line is complete—locks, latches, cups and pulls . . . "one-source" supplying all your sliding door hardware.

SEE KENNRACK
 IN BOOTH 96



JAY G. McKENNA, INC.

ELKHART, INDIANA

Specializing Exclusively in the Manufacture of Sliding Door Hardware



Heating Panels — United States Rubber Co., 1230 Avenue of Americas, New York 20, N. Y. Uskon radiant heating panels have inner element of conductive rubber. Panels are installed as regular wallboard, take finishes of paint, texture plaster, etc.



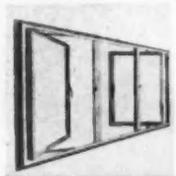
Gas-Fired Boiler — United States Radiator Corp., 300 Buhl Bldg., Detroit 26, Mich. New US-16 gas-fired boiler features operating efficiencies and minimum service requirements. Extension jacket to cover controls also available.



Smoke Alarm — Valley Forge Safe-Eye Alarm Service, Valley Forge Rd., Lansdale, Pa. Photo-lectric cell, sensitive amplifier and light beam projector units detect smoke in areas up to 200x30 feet. Burglar alarm also available.



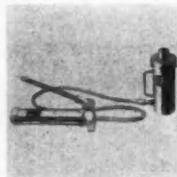
Glass Knob Sets — Shurlak No. 803 Pushbutton bedroom set features automatic alignment block, an emergency release in center of outside knob and "Anchor-Tite" glass knobs. Made by Technical Glass Co., Los Angeles 58, Calif.



Aluminum Windows — Universal Window Co., 950 Parker St., Berkeley 10, Calif. Donovan-Universal aluminum windows, including awning, projected and casement types, feature Alcoa hollow extruded aluminum sash sections, protective coating.



Winter Air Conditioner — Oil-fired 82,500 B.T.U. Hi-Boy No. 503 counterflow unit is especially designed for perimeter heating. Uses principle of warm air flow from bottom. Has front flue. Thatcher Furnace Co., Garwood, N. J.



Hydraulic Ram — Re-Mo-Trol hydraulic rams and pumps, by Templeton, Kenly and Co., 1022 S. Central Ave., Chicago 44, Ill., are designed to operate where limited space makes use of self-contained jacks impossible.



Kitchen Ventilator — Trade-Wind Motorfans, Inc., 5725 S. Main St., Los Angeles, Calif. Super Clipper ventilator, designed for installation in cabinet above range, has adjustable hood and ceiling grille. Filters are easily removed.



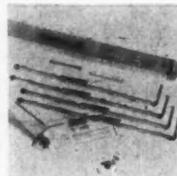
Sander — Toolcraft Corp., Springfield 1, Mass. Model 325 belt and disc sander has cast iron frame with steel platen, 8-inch disc and 4 1/2-inch belt. Cast aluminum drums ride on pre-lubricated bearings. Disc table tilts to 45 degrees.



Glazing Compound — Tremco Mfg. Co., 8701 Kinsman Rd., Cleveland 14, Ohio. Tremglaze mastic glazing compound requires no painting. Made in ten colors for use on wood, steel or aluminum. Compound retains resiliency for long period.



Sharpening Fixtures — Treycos Products, 264 Hartford Ave., Buffalo 23, N. Y. Grinder stand with Model 160 base is designed for sharpening saws from 2- to 16-inch diameters. Other available items include saw swage, all-steel saw set.



Sash Balance — Turner and Seymour Mfg. Co., Torrington, Conn. Hoidalgit concealed balance with cup type or "L" type bracket is adjustable after installation without special tools. Units fit in groove in stile, 1/4 inch wide, 1/4 inch deep.



Sliding Door Hardware — Washington Steel Products, Inc., Tacoma, Wash. "Washington Line" door tracks and hangers require no detail millwork or bottom tracks. For double, single doors, top or bottom mounted. Installation is simple.



Dome Skylight — Wasco Flashing Co., Cambridge, Mass. Prefabricated skylight unit consists of Plexiglas dome attached to trim copper frame. Made in ten standard sizes with three types of Plexiglas. Shatterproof.



Casement Windows — Union Aluminum Co., Inc., Sheffield, Ala. Ualco aluminum casement windows feature flash-welded corners, trust-type hinge, roto-type hardware. Units are given satin finish by chemical treatment and special dip.



Oil-Fired Furnace — Wayne Home Equipment Co., Inc., 801 Glasgow Ave., Fort Wayne 4, Ind. Winter conditioner filters, heats, humidifies and circulates air. Capacities of 112,000, 160,000 and 210,000 B.T.U. at bonnet. Extra-size filters.



Casement Storm Sash — Weather Products Corp., Room 106, 248 Lincoln Ave., Syracuse 4, N. Y. Wepco inside-sliding storm sash for casement windows has frame with shallow bottom track to allow clearance for operating handles.



Round Louvre — Webb Mfg., Inc., 211 East Main Rd., Conneaut, Ohio. Model 252 Roundlouvre has bronze screen backing, requires rough stud opening measuring one foot, nine inches square. Company also makes line of round windows.



Baseboard Heating — Warren Webster & Co., Camden 5, N. J. New baseboard units have optional addition of manually operated damper to reduce heat flow in some rooms. Magnesium alloy damper fits into groove in Webster metal molding.

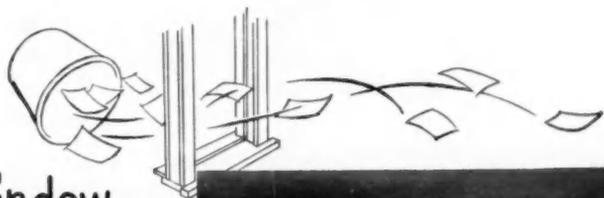


Kitchen Ventilators — Vent-A-Hood, 1907 Plantation Dr., Dallas 9, Texas. "Magic Lung" power exhaust unit draws up and expels cooking heat, vapors and odors, liquefies and extracts grease in filter tray. Can be vented in any direction.

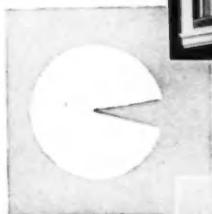
Out the window went all existing ideas!

"Throw away all existing ideas about casements. Start from scratch and develop a unit that is better than anything else on the market."

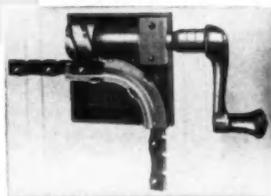
That was the order we gave our engineers and research men. The result: the Curtis Silentite Casement. Here's why we believe no other casement can match it:



● **A COMPLETE UNIT**—with all parts pre-fitted—consisting of frame, sash, all operating hardware, insulating glass, screen and Mitertite trim. The illustration shows small unit with part of trim cut away to show how operating mechanism holds sash firmly in any position without rattling, swinging or vibrating.



● **MORE WEATHERTIGHT**—repeated tests show that Silentite wood casements cut total heating costs in a house about 16%—thanks to scientific weatherstripping and insulating glass, which serve as storm sash.



● **EASY OPERATION**—this special Curtis hardware provides 15 times the operating force available with the ordinary lever-type casement sash adjuster. There is no hardware on outside of frame or sash when casement is closed and the minimum of exposed hardware inside. Adjuster is removable.

● **PLUS**—Toxic water repellent treatment of all wood parts—reduced condensation—no sticking, binding or warping—quick, easy installation.

Curtis makes a complete line of woodwork for homes of all types and sizes. Make your next house "all Curtis."



Mail the coupon for full information

Curtis Companies Service Bureau AB-18
MB-15 Curtis Building
Clinton, Iowa
Gentlemen: I want to know more about Curtis Silentite casements, basement units and Silentite double hung windows.

Name.....

Address.....

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

**BRIGGS LAUNCHES NEWEST IDEA IN
HOME BUILDING AND HOME SELLING!**

TWO COMPLETE BATHROOMS
in every home

WITH
BRIGGS
Beautyware
IN COLOR

It's the modern trend—the sales packed feature that will make your homes sell faster!

Two Bathrooms—instead of one! Here's a modern convenience that everybody wants.

Is it a sound idea? You bet! Because with new and proven installation economies, you can install two bathrooms *in any size house* at a minimum increase in over-all cost.

Your homes are automatically boosted into the deluxe class—making them sell faster at a higher margin of profit.

But the proof of any idea is in the doing. Let Alfred S. Levitt, Vice-President of Levitt & Sons, Inc., tell

you what he thinks of the 2-bathroom idea.

"Our new community on Long Island, New York, to be known as 'Landia' will have 1,700 beautiful new homes. Each of these homes will have three bedrooms and *two complete bathrooms in color*. They will sell for under \$14,000. I heartily endorse the Briggs '2-bathrooms in every home' idea."

Take a tip from the world's greatest builder. Find out for yourself how you can build this extra value into your homes at surprisingly low cost.

BRIGGS MANUFACTURING COMPANY
3001 Miller Ave. • Detroit 11, Michigan



BRIGGS Beautyware IS
AVAILABLE IN 4 BEAUTIFUL
COLORS AS WELL AS WHITE!



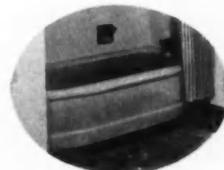
IVORY—Many decorative schemes match perfectly with Briggs Beautyware in Ivory. Walls of light yellow, aquamarine or chartreuse are suggested.



SANDSTONE—A popular shade because it harmonizes so perfectly with a wide range of decorator colors. Walls of pale green or chartreuse, ceiling in dark green, floor in yellow is a suggested combination.



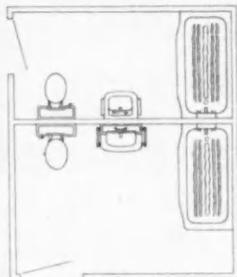
SKY BLUE—Many builders have found that a decorative combination such as walls in ivory, pale lavender, dusty rose or other pastel shades lends a soft, pleasing effect.



SEA GREEN—This beautiful shade easily blends with many decorator colors. Walls of ivory, peach or light rose with ceilings in gray or pale pink is often used.

BRIGGS PASTEL COLORS were scientifically planned and developed to blend easily and harmoniously with the widest possible range of color combinations. All are basic "decorator" colors, utilized in home planning by some of the nation's most prominent interior decorators.

BACK-TO-BACK INSTALLATION OFFERS
TWO BATHROOM VALUES
AT UNBELIEVABLY LOW COST!

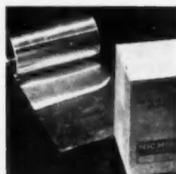


You'll be pleasantly surprised when you learn how reasonable it is to install two baths instead of one . . . how your customers will react when they learn that the addition to the monthly mortgage payments is so extremely small. In "Back-To-Back" installation where the same rough piping serves both bathrooms, greatest economies are realized . . . second best is the adjacent type of second story bath over one on the first floor utilizing the same "stack."

Don't take our word for it . . . check figures . . . check your prospects. You'll agree this is the most timely idea for by-passing competition since the inauguration of Colored Bathroom Fixtures at only 10% above White* by Briggs!

*10% extra charge for colored ware applies to complete sets including brass fittings.





Aluminum Roofing Accessories—Nichols Wire & Aluminum Co., 1725 Rockingham Rd., Davenport, Iowa. Never-Stain products include valley, flashing, ridge roll, gutters and other items that eliminate defacing stains and offer long life.



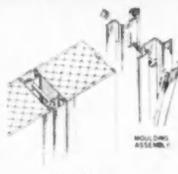
Two-Car "Overhead Door"—Two-car door No. 402 in line of Overhead Door Corp., Hartford City, Ind., features heavy duty hardware, torsion springs and steel reinforcement. Available in all sizes; manual or electrical controls.



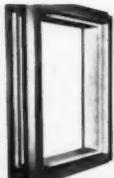
Aluminum Casement Windows—The Maco Corp., Huntington, Ind. Cast as a single unit, muntins and mounting flanges are formed as one without joints or welds. Permanent Koroseal gasket forms weathertight seal.



Range with lighted push-button controls—Hotpoint, Inc., 5600 W. Taylor St., Chicago 44, Ill. Model RC-16 is medium priced. Fluorescent light illuminates cooking area. Time measure. Chromium brailer grids. Large oven.



Metal Moldings for Cemetex Panels—The Celotex Corp., 120 S. LaSalle St., Chicago 3, Ill. Snap-on fastenings make these insulating structural panels easier and quicker to put up as partition walls. Also eliminate unsightly battens.



One-Piece Metal Window Frame—One-der Frame Corp., 2109 Third Ave., N. Birmingham 3, Ala. Works easily with frame, brick veneer, brick, and concrete block. Buck is built around rigid frame and set in stud wall.



Plastic-Faced Plywood Panel—West Coast Plywood Co., Aberdeen, Wash. Welchboard panels for exteriors are immune to effects of moisture, and have high resistance to checking and cracking. May also be used for interiors, if desired.



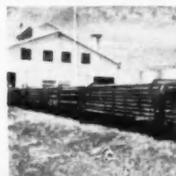
Aluminum Awning Windows—Window Div., Industrial Machine Tool Co., Inc., Fenton, Mich. Sashes are operated by simple system of levers with all linkage concealed in channel jams. Motion is smooth and quiet. Sashes are weathertight.



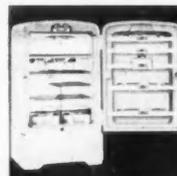
Residence Steel Casement—The Steelcraft Mfg. Co., Rossmoyne, Ohio. Made of heavy hot rolled solid steel sections with butt welded mitered corners. Outswinging ventilators provide maximum ventilation, and are easy to operate.



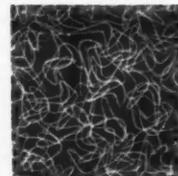
Gas-fired Forced-air Furnace—Williamson Heater Co., Cincinnati 9, Ohio. Filters, humidifiers, heats and circulates without drafts ample air for most houses. Carries approval by AGA. Flo-Warm units supplied for all types of gas.



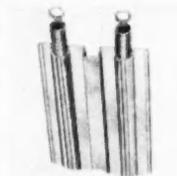
Pressure-Treated Wood Gutter—American Lumber & Treating Co., 332 S. Michigan Ave., Chicago 4, Ill. Walmanized wood gutter is clean and paintable, and offers durability against rot. Easy to install and maintain. Various sizes.



Refrigerator, Model CAC-9—Crosley Corp., 1329 Arlington St., Cincinnati, Ohio. Shelvador 9.5 cu. ft. unit fits in space formerly required for 6 cu. ft. model. Freezer holds up to 50 pounds of frozen foods. "Soft-Glo" inside finish.



New Farmica Color Patterns—The Farmica Co., Cincinnati, Ohio. "Skylark" pattern for plastic laminates employs abstract designs in modern vein, as illustrated. Another pattern, "Ferglo," reproduces a natural decorative motif.



One-Piece Jamb Member—Zegers, Inc., 8090 S. Chicago Ave., Chicago 17, Ill. Duro-seal combination metal weatherstrip and sash balance is now available as one-piece jamb member. Can be easily installed in six minutes per window.



Bell-Ringing Transformer—The Rittenhouse Co., Inc., Honeoye Falls, N. Y. For 10-volt chimes, doorbells or buzzers. Can be mounted anywhere. "Quik-Lok" method of mounting is simple and positive. Guaranteed 10 years against burn-out.



Adjustable Basement Post—The Sawhill Mfg. Co., Sharon, Pa. "Red-I-Post" has patented Ring-Lock which bears upon full circumference of two telescoping columns, distributing load uniformly, preventing spreading or mushrooming.



Automatic Door Operator—H. W. Crane Co., 1147 W. Lake St., Chicago, Ill. Low cost unit works either by remote control from car or by direct contact from garage to house. Also controls driveway and garage lights simultaneously.



Sink and Laundry Tray Combination—Kohler Co., Kohler, Wis. Westover unit may be built into counters and cabinets. Made of iron, coated with acid-resisting enamel. Ledge is 3 inches wide. Size, 42x 21 inches.



Frameless Window Screens—The Columbia Mills, Inc., 428 S. Warren, Syracuse, N. Y. Aluminum units can be used on all types of double hung windows. Fine mesh aluminum screening. Automatic tensioning device keeps screen tight.



Factory-Made Homes—Hornschlager Corp., Houses Div., 301 Spring St., Port Washington, Wis. P & H homes are designed to give small builders the controlled costs, volume sales and turnover and low prices of largest site builders.



**Things to Look For
When Buying A
Radial Power Saw**

Ease of Operation

Because they are easier to use, Comet Radial Power Saws decrease operator fatigue, increase accuracy, and boost production on your job. Here are some reasons why—

EXCLUSIVE SAFETY RETURN SPRING
Aids in returning saw to starting position and acts as a safety stop. Actual field tests prove this feature minimizes cutting effort and greatly increases production.

EASY TO REACH CONTROLS
All Comet saw controls are conveniently grouped in front and to the right of the operator. Easy to reach—easy to adjust, settings for all cuts made with minimum effort.

FULLY RETRACTING ARM
Rolling smoothly and easily on 8 ball bearings, the radial arm retracts with the saw assembly. Work always in plain view, operator is not hampered by the obstruction of a fixed arm.

Other Features That Make Comet Saws Your Best Buy.

For maximum safety, Comet Saw guards are fully adjustable with anti-kick-back dogs at point of entry. All weather exposed parts are chrome or cadmium plated or heavily enameled to prevent rusting. The radial arm is of seamless tubular steel with precision milled tracks and operates on eight permanently lubricated ball bearing rollers. This assembly is sealed from dust and dirt by heavy oiled felt wipers. Comet saw motors are rated for 100% overload capacity. External wires protected by flexible metal conduit.

With all these features, Comet Saws cost no more, yet do more work and last longer. Over 50 different combinations to fit your requirements. See your building machinery dealer or write for further information.

THERE'S A COMET SAW DESIGNED FOR YOU



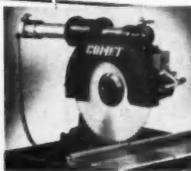
THE JUNIOR
Up to 1½ h.p., cuts 4" deep, 19" wide, rips material 25" wide.



THE COMET CLIPPER
Up to 5 h.p., cuts 4¾" deep, 19" wide, rips material 29" wide.



THE COMET SENIOR
Up to 7½ h.p., cuts 6" deep, 22" wide, rips material 40" wide.



THE SENIOR 8"
Cut off Saw—up to 10 h.p., cuts 8" by 10" timbers.



THE TIMBER CUTTER
Up to 10 h.p., cuts 16" by 16" timbers.

Send coupon for free information and literature on the Comet that fits your need.

COMETS Cut Quicker

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2031 Santa Fe Avenue, Los Angeles 21, California

Please rush me prices and data on:

- Comet Junior Comet Clipper Comet Senior
 Comet Senior 8" Comet Timber Cutter

Name _____

Firm _____

Address _____

City _____ Zone _____ State _____

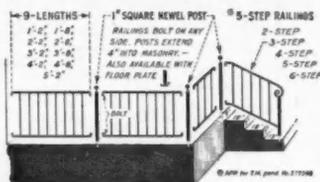
CROSS CUT ★ RIP ★ MITRE ★ COMPOUND MITRE ★ BEVEL ★ PLOUGH ★ SHAPE

JANUARY 1951

How to Use Standard Railings on Any Small Home

Standard railings are a time and money saver for the builder who wants to "dress up" the front of a small home easily. Among the advantages of this type of railing is (1) custom appearance and beauty; (2) immediate availability; (3) easy installation; (4) low cost.

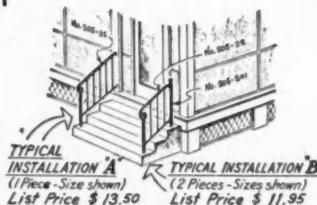
Standard railings manufactured by the R. G. Coffman Company come in assorted Modular lengths, so that combinations of straight and step railing can be made to fit almost any stoop conditions. The drawing shows various lengths of #205 railing and how they may be used.



* NO. 205 "SEVEN-IN-TWELVE" STEP RAILINGS ARE MADE FOR STANDARD SIZE, STEPS WITH 7" RISERS AND 12" TREADS. (ALSO FITS OTHER STEP SIZES)

Low Cost Installation

The second drawing shows two methods of installing the #205 step railing. "A" shows the top end fastened to the wall; "B" shows the top fastened to a newel post when wall construction is not suitable. List prices are F.O.B. Orlando and are for complete installation except labor.



Write Department AB, P.O. Box 1113, Orlando, for free catalog of designs, sizes and prices.

Manufacturers of the Original "Complete Builders Line" of Hand-Wrought Ornamental Iron

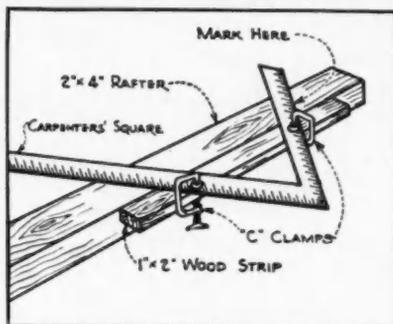
The R. G. Coffman Co. Inc.
ORLANDO, FLORIDA



TECHNICAL GUIDE for Builders and Craftsmen

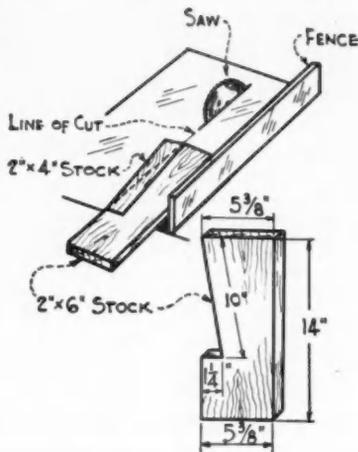
How to Make an Improvised Square

Laying off rafters and stringers speedily, yet accurately is a simple matter when a length of 1 x 2 inch wood strip is clamped to the square as indicated. Two C-clamps are used for securing wood strip to square, placed so not to interfere with work. The cuts on the rafters will be uniform.—Herbert E. Fey, New Braunfels, Texas



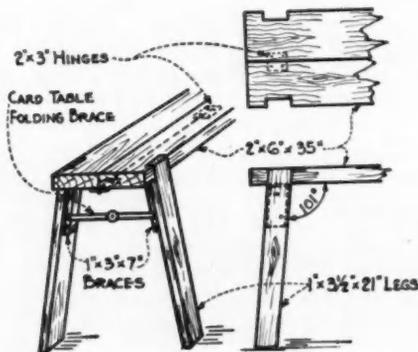
How to Cut Tapered Wedges on a Table Saw

In the process of shoring cement work a large supply of wood wedges are needed. These can be quickly supplied by using a wood guide or hook to steer the work to be cut on the table saw. The 2x4, 4x4 or 4x6 stock to be cut is placed in the diagonal cut of guide with the opposite face placed against the fence of saw. Stock is then fed into the saw in the manner shown in sketch. The result an abundance of wedges supplied quickly.—Submitted by Edward G. Lachapelle, Canterbury, Conn.



How to Make a Folding Saw Horse

The saw horse indicated in sketch is the type that can be quickly dismantled, folded and placed in an automobile and carried to various jobs. To assemble open 2x6 top at hinge. Place wood legs in slots on each side of top. Wood braces on side of legs hold legs in position. Folding brace on sides is opened clamping legs in position.—Elmer E. Scott, Washington, D.C.



Again in 1951...



Your Best Bet in Insulation!

Now—more than ever, you'll want to insulate your new homes with Fiberglas® Building Insulation. Home buyers, architects, lending agencies and building men alike, *know* Fiberglas, recognize it as a sign of good construction. An important sales advantage in today's market!

But—you get other advantages, too. Fiberglas Roll Blankets are longer. You have less cutting and fitting, fewer packages to handle. You provide a better continuous vapor barrier. Strong, and tough, it more than meets FHA's latest, rigid requirements.

Fiberglas Building insulation is the year 'round, all-climate insulation for summer or winter—upward or downward heat flow—in cold or in warm climates. Compression packed, it's fast and easy to install. And—it's competitively priced!

AVAILABLE IN THE FULL RANGE OF TYPES AND SIZES YOU NEED!

	Thickness	Length	No. Pcs. Per Pkg.	Coverage per Bag in Sq. Ft.
ROLL BLANKETS 15" WIDTH	Thick	32'	1	40
	Medium	48' 80'	1 1	60 100
ROLL BLANKETS 23" WIDTH	Thick	21'	1	40
	Medium	31' 47'	1 1	60 90
BATT BLANKETS 15" WIDTH	Thick	48"	8	40
	Medium	48"	12	60
	Thick	24"	16	40
	Medium	24"	24	60
UTILITY BATTS 15" WIDTH	Full Thick	10 3/4"	27	30
POURING WOOL	Packed approx. 40 lbs. per paper bag.			20-24

Include Fiberglas Insulation in all your plans this year. Standardize on it. You'll gain a selling advantage—you'll provide a better home—and you'll save money on every installation! Owens-Corning Fiberglas Corp., Dept. 62-14, Toledo 1, Ohio.

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FIBERGLAS
THE WORLD'S BEST INSULATION

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THE FLINTKOTE
COMPANY
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MINNESOTA AND
ONTARIO PAPER CO.
Minneapolis 2, Minn.



KELLY ISLAND LIME
& TRANSPORT CO.
Cleveland, Ohio

Catalogs and HOW-TO-DO-IT INFORMATION

851—SPLIT-RING CONNECTORS AND FRAMING ANCHORS—Origin, development and acceptance of wood frame Teco trussed rafters for roof construction are set forth in a new booklet published by the Timber Engineering Co., 1319 Eighteenth St., N.W., Washington 6, D.C.

852—WINDOW STOOLS—New Kerco molded laminate window stools are presented in literature from Kerco Products, P.O. Box 414, Hastings, Neb. Installation drawings, specifications and illustrations are shown.

853—DOZER-SCOOP COMBINATION—The "Duo-Way" scoop, a rugged versatile unit that performs the functions of a loader, dozer, truck and tractor, is graphically presented in literature offered by Mixermobile Manufacturers, 8027 N.E. Killingsworth St., Portland 20, Ore.

854—AIR MOVING EQUIPMENT—Bulletin 110, "Standards, Definitions, Terms and Test Codes For Centrifugal, Axial and Propeller Fans," covers classification of air-moving equipment, standards, terms and definitions in use by the fan industry, and standard codes for air and sound measurements. National Association of Fan Manufacturers, 2159 Guardian Bldg., Detroit 26, Mich.

855—CLAY CHIMNEY TOPS—The Perma-Top fire prevention clay chimney tops are presented in a new catalog available from The Perma-Top Co., 410 Shadyhill Rd., Pittsburgh 5, Pa. Units are for all types of gas and oil heating equipment.

856—BUDGET BATHROOM PLAN—Complete, detailed drawings of a new Universal-Rundle bathroom plan are available from the Universal-Rundle Corp., New Castle, Pa. Plan is for a master bedroom, drawn by Ernst Payer, A.I.A., Cleveland, Ohio.

857—WATER REPELLENT FOR MASONRY—One-application Silicone water repellent, which also acts as stain resistant, is described in detail in new literature available from Wurdack Chemical Co., 4977 Fyler, St. Louis 9, Mo.

858—PLUMBING FIXTURES—Condensed 22-page catalog contains illustrations and data of many late model plumbing fixtures. Available from The Eljer Co., Ford City, Pa., the catalog presents fixtures for use in commercial as well as residential installations.

859—REPAIR MANUAL—"How To Make Galvanized Roofing and Siding Last Longer" is the title of a handy reference booklet available from the American Zinc Institute, Inc., 35 E. Wacker Drive, Chicago 1, Ill. Valuable how-to-do-it hints are given.

860—22 RECIPES FOR BETTER LIGHTING—have been issued by the Advertising Division of General Electric Lamp Dept., Nela Park, Cleveland 12, Ohio, in the form of an attractive 30-page booklet. Valuable ideas on the latest in home lighting are presented.

861—FLUORESCENT LIGHTING EQUIPMENT—The Edwin F. Guth Co., 2615 Washington Ave., St. Louis 3, Mo., has released a catalog covering their complete line of commercial and industrial fluorescent and germicidal lighting equipment. Condensed, easy to refer to.

862—LOCKING DEVICE—Tite-Joint fasteners, used for locking plywood panels or other wood members to

(Continued on page 188)

1818
1951

HOPE'S

The Name
Guarantees

ONLY
\$318⁵⁰



Residence in West Ellicott, N. Y. Daniel Elander, Owner and Builder.

HOPE'S WINDOWS, INC., Jamestown, N. Y.

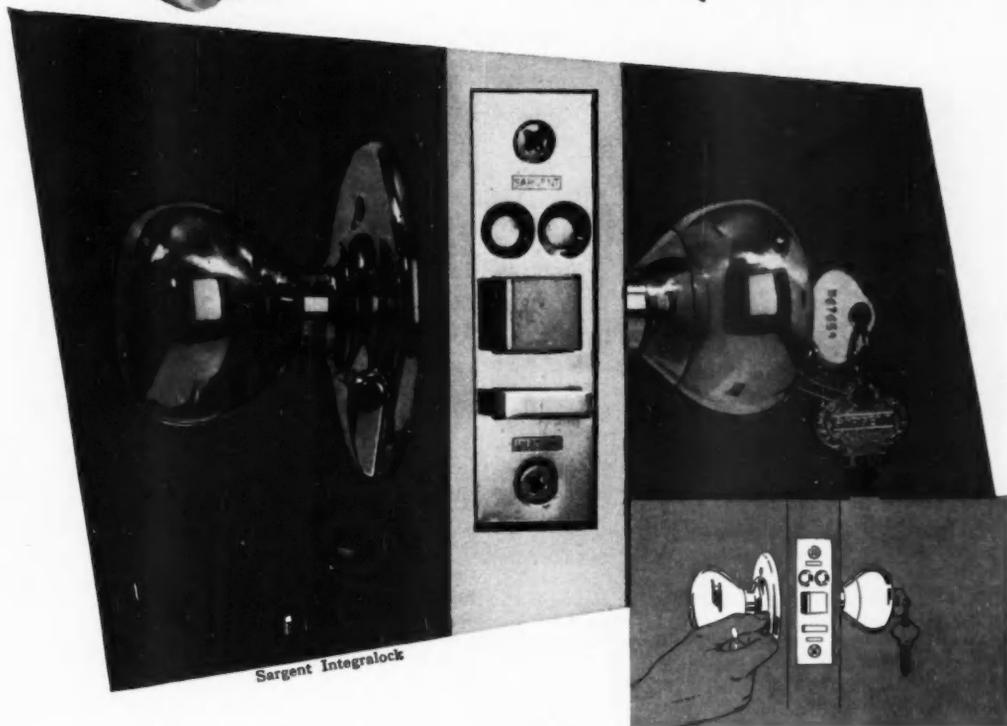
THE FINEST BUILDINGS THROUGHOUT THE WORLD ARE FITTED WITH HOPE'S WINDOWS

... for Hope's Steel Casements in this home. More than that is added to its value by their extra convenience, better quality and longer life. Investigate their real economy.

Write for leaflet No. 102j or consult classified phone directory for name of our representative.



"I like its extra beauty,
extra protection"



• Homeowners like the added security that comes with the turn of a deadbolt. They also want key-in-knob action and styling for today.

Now you can give them both — extra beauty and extra protection — in a popularly priced model of the famous Sargent Integralock,

the superior lock that is being specified by architects everywhere for schools and hospitals, hotels and office buildings.

The new Integralock, especially designed for residential installations, is available in chrome, brass, bronze or aluminum — with round rose or square escutcheon. Sealed case quickly installed in a small mortise.

A better lock by —



*Ask your hardware dealer or
write us for full information.*

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CONNOR LAYTITE MAPLE FIRST AGAIN

Laytite 25/32x2 1/4" Maple as laid in the new Elizabeth Waters Grade School, Fond du Lac, Wisconsin.

Laytite is made under Maple Flooring Manufacturers Association specifications and is famous for uniform quality. Write for prices.

Northwest Convention, Minneapolis, January 15, 16, 17 and 18, Booth No. A-31, A-79



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P. O. BOX 1120 • TELEPHONE 3 OR 418 • TELETYPE 26 • MARSHFIELD, WISCONSIN
CONNOR FOREST PRODUCTS SINCE 1872

Catalogs

(Continued from page 186)

gether, are described in literature available from Roddis Plywood Corp., Marshfield, Wis. Over a hundred uses for this product.

863—RADIANT HEAT PANELS—Radiant heating panels, made of tempered glass, are described in a question and answer booklet offered by Appleman Glass Works, Bergenfield, N.J.

864—CONCRETE FORMING SYSTEM—New circular describing how to use Uni-Form system is offered by Universal Form Clamp Co., 1238-56 N. Kostner Ave., Chicago 51, Ill. Re-use features and other advantages are described.

865—ALUMINUM WINDOWS—Photographs, drawings, and specifications of the new Bayley aluminum projected windows are presented in a 10-page catalog available from The William Bayley Co., 1200 Warbler St., Springfield 99, Ohio.

866—FACE BRICK AND TILE—Perma-Chrome glazed brick and tile in "personalized colors" are described and illustrated in literature from The Claycraft Co., Columbus 16, Ohio.

867—POWERED HAND TRUCKS—Two-color, 12-page booklet describes the Electro-Lift, battery-powered and motor driven unit, and the Hydro-Lift, gas-powered truck driven by hydraulic pump and motor. Clark Equipment Co., Industrial Truck Div., Battle Creek, Mich.

868—"WHERE TO USE DOUGLAS FIR LUMBER"—Available from the West Coast Lumbermen's Association, 1410 S.W. Morrison St., Portland 5, Ore., this 16-page, 2-color booklet will serve as a useful reference.

It covers properties, characteristics and grades of Douglas fir; gives recommended grades for interior and exterior uses and points out other uses of this softwood.

869—STEEL CASEMENTS—"New Beauty In Steel Casements" is the title of a new useful booklet offered by Ceo Steel Products Corp., 5601 W. 26th St., Chicago 50, Ill. Suggestions for use of improved casement stylings are presented.

870—BEFORE YOU BUILD YOUR BARN—Why and how lumber for barns should be treated, and where to use treated lumber are simply explained in an easy-to-read 16-page catalog issued by The Dow Chemical Co., Midland, Mich.

SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department

(January, 1951)

American Builder

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Please send me additional information on the following product items, or catalogs, listed in this department:

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OCCUPATION*

*Please note that occupation must be stated if full service is to be given.

AMERICAN BUILDER

"Why waste heat up the chimney when a Heatilator Fireplace costs no more?"



... asks

MICHAEL DANITZ,
prominent Buffalo
building contractor



● "The people I built this house for told me they would use the fireplace a lot," says Mr. Danitz. "So I built it around a Heatilator* Fireplace unit. It didn't cost any more than a conventional fireplace that wastes most of the heat up the chimney. That's because it includes all the vital fireplace parts in one unit. There were no extra parts to buy or build."

Smokeless...Trouble-free. The Heatilator unit is a scientifically designed, steel form, complete from floor to flue, around which any style fireplace can easily be built. It assures correct construction, and eliminates the common causes of smoking. It draws in air from floor level, heats it and circulates it to every corner of the room. A Heatilator fireplace gives all the heat necessary on cool spring and fall days, cuts dollars from the owner's heating bill.

The Heatilator name is known and trusted because it's been proved in countless thousands of homes and camps all over America. It's the mark of quality in the homes you build.

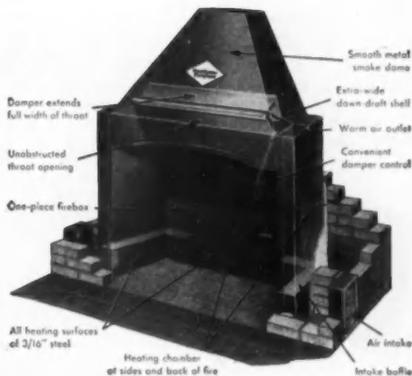
HEATILATOR FIREPLACE

U.S. REG. U.S. PAT. OFF.
Sells Houses FASTER!

JANUARY 1931

Write today for complete specifications. Heatilator Fireplaces are sold by all leading building material dealers. Accept no substitute. Look for the name Heatilator on the dome and on the damper handle. Heatilator, Inc., 941 E. Brighton Ave., Syracuse 5, N. Y.

*Heatilator is the registered trademark of Heatilator, Inc.



TRUE EXPERIENCE

Sells owner of new home on

CAREFREE SCREENING



Three years ago, Mr. and Mrs. Quinn R. Barton were sold Lumite Screening for their former residence by the Jacksonville Sash & Door Co. Today that screening shows no evidence of rust, corrosion, deterioration or staining of the paint. This true experience proved the advantages of Lumite Screening to the Bartons. That's why they insisted on Lumite Screening for their beautiful new home, shown above. Architect, Clyde E. Harris.

IT'S RUSTPROOF LUMITE SARAN SCREENING

the ideal screen cloth for every exterior use!

Stainproof! Lumite Screening can't cause unsightly, costly stains on the screen frame, sill or side of house.

Long-Lasting! An independently conducted accelerated weathering test proves Lumite Screening superior to all other types of screening. Replacement

and maintenance are held to a minimum with corrosion-proof Lumite Screening.

Never Needs Protective Painting! Lumite Screening can't rust, rot or mildew. And—it's non-inflammable . . . easy to handle . . . low in cost.



Sold through hardware, lumber, building supply dealers and screen manufacturers.

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LUMITE DIVISION, Chicopee Mfg. Corp. of Ga. AB-2
40 Worth Street, New York 13, New York

GENTLEMEN: I am interested in the rustproof, stainproof, long-lasting qualities of LUMITE Saran Screen Cloth. Please send me FREE sample and further information.

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COMPANY.....

ADDRESS.....

CITY.....ZONE.....STATE.....

SEND FOR FREE
SAMPLE AND ADDITIONAL
INFORMATION TODAY!

Perimeter Heating...

(Continued from page 58)

continuous air circulations; the temperature difference between floor and ceiling is reduced to an absolute minimum, three degrees F or less. Air motion is maintained within accepted limits for comfort: 25 to 40 Fpm.

Several methods have been developed for delivering heat through ducts, under or in the floor to registers beneath windows. Each has advantages and is suitable for particular sizes of houses and types of construction. A method recommended for houses that do not exceed 1,000 square feet is the radial distribution type with a drum-shaped warm air distribution pit in the center which serves as the hub of the system. This system can serve where only seven register locations are used.

A perimeter system with loop distribution is used for houses that exceed 1,000 square feet in living area. The loop duct is supplied by three or four feeder ducts served from the warm air distribution pit.

Most perimeter systems are served by a counter-flow type of forced warm air furnace a new design in which the blower is located at the top of the furnace cabinet and the warm air is discharged at the bottom. The conventional type of up-flow furnace may be used but requires a duct to connect the warm air plenum on top of the furnace to the pit or distribution chamber in the floor.

Floor Slab— Part of the System

Because the warm air perimeter system is an integral part of the floor slab in a basementless house, the concrete slab may be considered as a component part of the system. The National Warm Air Heating and Air Conditioning Association has, during the past two years, devoted a major portion of its formal research at the University of Illinois to testing the characteristics of floor slab construction in conjunction with perimeter heating systems. Out of these studies factors have been disclosed that have direct bearing on heating performance. They center on the selection of the site and the proper construction of the slab.

The slab should be constructed on a well-drained site where the drainage is away from the slab and not toward it. There should be no standing water at any time. Ground moisture is an important governing factor. The slab must be kept dry. The finished surface of the slab should not be less than 6 inches from the established grade surface and the area within the founda-

(Continued on page 192)

One of the Nation's finest
home developments is equipped
with **AllianceWare** Bathtubs



A vista of the attractive homes in Park Forest, Illinois.



*An AllianceWare bathtub photographed in a
Park Forest Home.
Park Forest Homes are also equipped with
AllianceWare sinks.*

"Plan for ideal family living in spacious beauty, comfort and safety"—this is the aim of the developers of Park Forest, Illinois.

When completed, this extensive home building project will embrace a total of 7500 dwelling units. The first 3,000 rental units consisting of five- and six-room duplex houses with one, two or three bedrooms have been completed. All of the completed homes are equipped with AllianceWare bathtubs—evidence that AllianceWare meets the exacting demands of progressive builders.

There are sound reasons for the choice of AllianceWare by leading architects and builders. Modern styling, stainproof surface and a choice of colors in AllianceWare enhance the beauty of bathrooms, large or small.

Practical details of AllianceWare construction, such as exact dimensions, wall guard flange that stops water leaks around the tub at the wall line, and anchor lugs which prevent shifting or settling of tub are added values of great importance to the builder.

Specifications and dimension sheets on the complete AllianceWare line are yours for the asking.

AllianceWare, Inc. Alliance, Ohio
Bathtubs • Lavatories • Sinks

Park Forest is being erected by
American Community Builders, Inc.
Loehl, Schlossman & Bennett, Architects
Conser, Townsend & Associates, Consulting Engineers
Warren Barr Supply Co., Plumbing Wholesalers
Charles Thumm, Plumbing Contractor

AllianceWare
BATHS AND SINKS

- building supply dealers
- building contractors
- builders
- draftsmen
- architects

Write today

(identifying your trade)

FOR YOUR COMPLEMENTARY BOOK OF

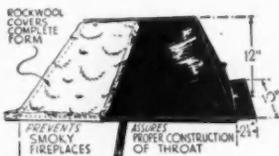
**HEATFORM⁺
FIREPLACE DESIGNS**



HEATFORM Model "A"
Eight stock sizes 24" to 72"



HEATFORM Model "S"
View of Fire from Front & Side



SUPERIOR FORM DAMPER
the Architects' Friend

SUPERIOR FIREPLACE CO.

1708-C East 15th St.
Los Angeles 21, Calif.

601-N North Point Road
Baltimore 6, Maryland

Pioneer manufacturers of heat circulating fireplaces and Form Dampers. Nationally advertised to millions of potential users. Sold through leading building supply dealers everywhere.

HEATFORM The SUPERIOR heat circulating **FIREPLACE**
most efficient and durable of all

Perimeter Heating ...

(Continued from page 190)

tion should not be deepened more than 2 or 3 inches for the underslab fill. The ground around the foundations should be terraced.

Choice of fill material is important. It should be a coarse material such as gravel or crushed rock, 4 inches thick, screened to remove fines. Sand or cinders are unsuitable.

A waterproof membrane should be placed between the fill and the bottom of the slab. It should completely cover the area within the foundations and extend up the sides to the top of the slab. All joints should be lapped and wiped with a suitable sealer.

Two-inch-thick insulation should be placed between the edge of the slab and the foundation and extend completely around the slab to reduce heat loss. This insulation should extend downward a minimum distance of 14 to 18 inches. Insulation should be waterproof and termite proof.

Care must be exercised not to puncture the waterproof membrane when the slab is poured. The concrete must completely encircle the ducts. Tamp and spade where necessary when ducts are close to the foundation wall. A "wet" mix should be used to fill the spaces under the ducts and between them and the foundation walls. In contrast a reasonably dry mix should be used for the slab.

Reinforcing mesh is recommended for the slab, particularly over the metal ducts.

Complete design and installation information about warm air perimeter heating, together with construction suggestions, may be obtained by writing to the National Warm Air Heating and Air Conditioning Association, 145 Public Square, Cleveland 14, Ohio.

Drying the Laundry

Laundry drying can be a problem, especially on damp, muggy days or when it is raining or snowing outside. But according to the National Warm Air Heating and Air Conditioning Association, this problem need not exist in the home heated with a warm air heating system.

By installing an extra large register in the side of the warm air duct running through the laundry room, the system can be used to dry the family wash. Or, if space limitations are such that compactness is a "must," a local sheet metal man can build a laundry drying cabinet through which warm air from the furnace can be circulated.

Heating Controls...

(Continued from page 149)

cial structure uses a minimum of automatic control, while a more pretentious residence may use a system with modulating controls for both heating and cooling in several zones. Larger residential and most commercial installations require control refinements that call for a relatively complex system. It may include such control refinements as modulating zone valves or dampers, plus outdoor sensing devices. This may be accomplished through an electric modulating system, electronic control (which is infinitely more sensitive), or a pneumatic system. The latter, entailing a complete system of small pipes or tubing, operates all the controls by compressed air. The pneumatic system is widely used for more elaborate control systems using from 10 or 20 control devices, up to several hundred.

Pneumatic controls are comparatively higher priced than electric controls, and require an air compressor. However, on large heating or air conditioning jobs, small tubing can be installed at less cost per foot than electric wiring. Moreover, the controls themselves are of simple, rugged construction. They operate dependably for a good many years, and require a minimum of maintenance. In the long run, pneumatic control is considered the most practical and least expensive for larger installations.

A majority of thermostats are manually adjustable and hold room temperature at whatever point they are set. Other thermostats are designed to lower the temperature setting during normal sleeping hours, automatically restoring heat to the usual day time room temperature the next morning. Some day-night thermostats have a mechanical spring-wound timer. This mechanism is wound each night, and the time is set for automatic morning heat pick-up. Other day-night thermostats are operated by an electric clock, and change-over from day to night setting is fully automatic.

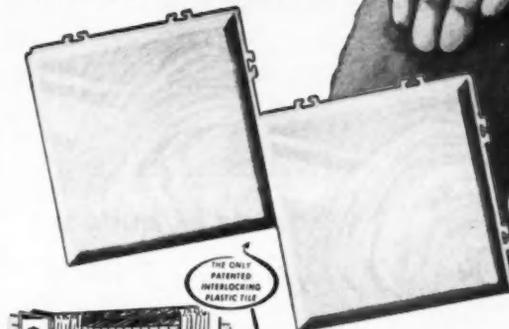
The contractor who builds houses for a quality market should bear in mind that for but a few dollars extra, he can offer the public another "plus" feature when he equips his home with a clock thermostat. A recent survey among prospective home-owners indicated that over 74 per cent prefer the added comfort, convenience, and economy which automatic day-night control provides. Heating authorities agree that fuel savings from day-night control range

(Continued on page 194)

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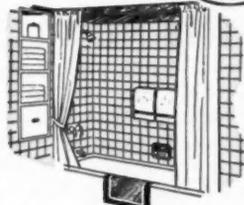
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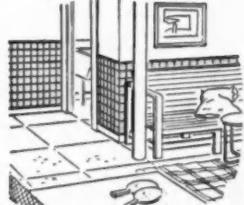
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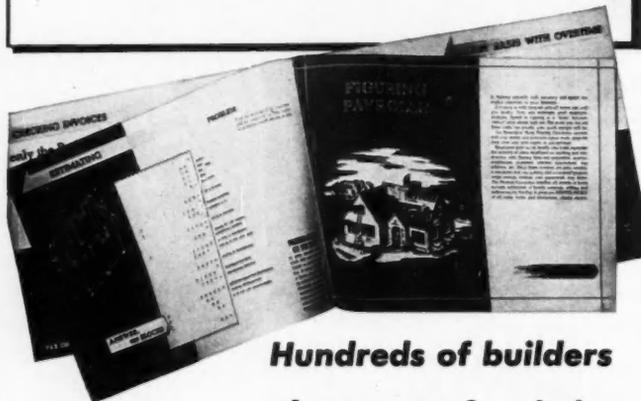
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Heating Controls...

(Continued from page 193)

from about 10 per cent to 21 per cent depending on locality, type of construction, the efficiency of the heating system, and family living habits.

The function of a limit control is to protect automatically fired furnaces and boilers from excessive temperatures. This is accomplished by shutting down the system whenever a dangerous boiler or furnace condition exists. There is a limit control specifically designed for each type of heating medium. The limit control for a warm air system is designed to sense the air temperature of the furnace. Forced warm air heating plants usually have a "Combination Furnace Control," incorporating a temperature sensing element that serves as the high limit switch and fan control. A hot water heating plant uses a limit control designed to sense water temperature of the boiler.

The limit control of a steam system (sometimes referred to as a "pressure switch") is designed to shut off the burner whenever steam pressure becomes excessive. Another limit control used to protect a steam system is the Low Water Cut-off. It is a float type switch, designed to break the circuit to the burner whenever the boiler water becomes dangerously low.

Combustion Controls

The combustion control plays a vitally important role in the control system—particularly when used with gas or oil burning equipment. Gas or oil vapors which enter the combustion chamber from the nozzle of a burner are highly explosive elements which demand the utmost in dependable combustion control.

On an oil burner system, the combustion control is known as the Oil Burner Relay. It is simply an automatic switching device that can be controlled by the thermostat (usually low-voltage) to start the oil burner (line voltage). It is often referred to as a stack switch because, in many cases, it is designed for mounting on the stack of the heating plant. A temperature-sensing element extends into the stack and responds to the presence or absence of combustion in the heating plant.

Upon a call for heat from the thermostat, an electric spark ignition is turned on just as the burner starts. After a certain number of seconds, the stack relay must sense heat or it stops the oil burner. This is to prevent the possibility of a concentration of highly explosive fuel oil vapor

(Continued on page 196)

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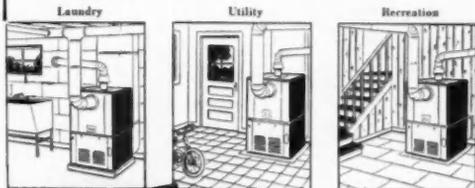


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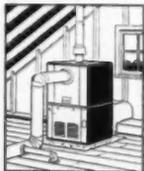
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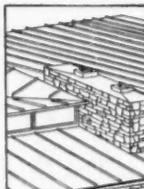
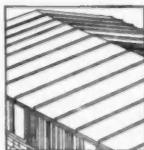
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Heating Controls . . .

(Continued from page 194)

from accumulating in the combustion chamber of the heating plant. In the event the sensing element detects the presence of heat, the ignition spark is turned off, and the burner continues to operate until the thermostat stops calling for heat. On larger installation, where a great volume of fuel oil enters the heating plant, there may be a continuous pilot flame. In such a case, the combustion control checks for a safe combustion condition before the oil burner is started.

A Stoker Time (which may be a separate unit or may be incorporated in the Stoker Relay), calls for a set firing interval and is independent of the thermostat. This is for the purpose of maintaining a minimum bed of fire so that the heating plant is prepared to respond to demands of the thermostat at all times. Some stoker systems employ a stack switch which calls for a brief stoker operation whenever the stack starts to cool. In the event of a complete absence of heat in the stack, indicating the absence of a coal fire, the Stack Switch prevents further stoker operation which would only continue filling the combustion chamber with unburned coal.

The Combustion Control on a gas heating system consists of an automatically operated valve which regulates the flow of gas to the burner, and a Pilot Safety Control. When the thermostat calls for heat, the heat of the pilot flame must be sensed by the Safety Pilot before the main control valve can open. Larger gas installations should have a separate electronic control system to prove the presence of a pilot flame before the main gas valve can open.

Unit Heaters

Unit heaters (very similar to automobile heaters) are widely used for commercial heating applications. Usually a single thermostat controls a group of heaters through a relay. Where a central heating system is used, these units are heated by hot water or steam. Warm air units, independently oil or gas-fired, also contain a separate control system. This warm air type of unit heater is generally referred to as a space heater.

The principal advantage of unit heaters and space heaters lies in its flexibility of installation and its ability to blanket a large area with warm air, circulated at relatively high velocity. This type of heater has generally been used where temperature control requirements were not

(Continued on page 200)

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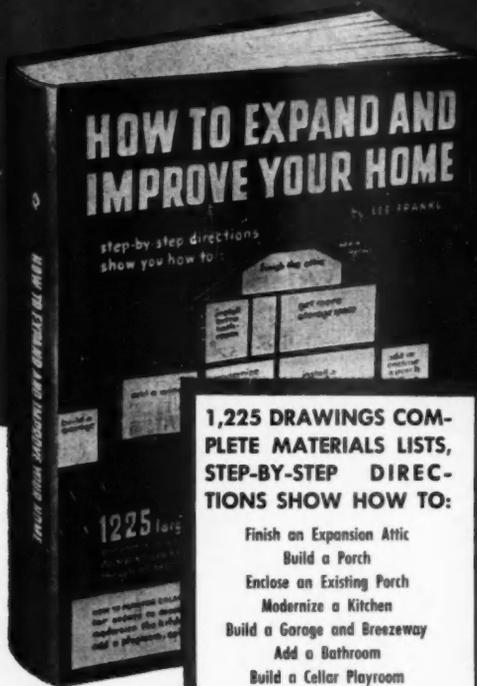
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builder can do for him. Each project is so graphically explained that the homeowner can confidently undertake his own work if he chooses. Either way, because he understands the job better, he is a much stronger prospect for remodeling work. **A MUCH STRONGER PROSPECT FOR SEVERAL HUNDRED DOLLARS WORTH OF YOUR MERCHANDISE.**

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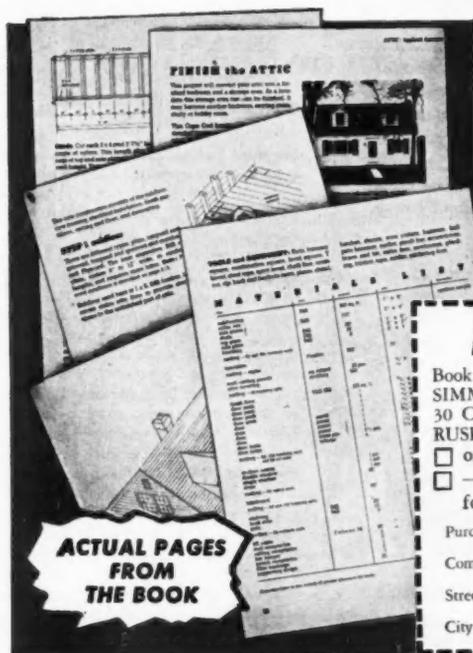
Build good will and future sales by including a copy of this book as a gift with sales of your building materials. Premiums attract more business. And consider, this book describes scores of remodeling projects. As you build up the number of readers, you build up repeat business for yourself.

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Give your advertising added interest, extra punch—the kind that brings high readership and lots of customers. Tie in this book with your advertising. It gives homeowners one more good reason to come into your store, they come in to look at the book. Then—it's easy to sell them on a complete remodeling job.

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Fiat precast terrazzo receptors are made of black and white marble chips and white cement, ground and polished. A rustproof galvanized reinforcing flange and a 2" brass drain fitting are cast integral with the receptor to form a strong, leakproof, slip-proof, non-absorbent floor for the shower.

The use of a precast receptor eliminates the easily damaged lead pan and the labor consuming job of laying a tile floor. It enables the contractor to complete the shower faster and produce a better job at a lower cost.

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The attractive appearance of terrazzo makes a beautiful floor that is in perfect harmony with tile walls. Various colored terrazzo is available on special order, to blend with tile colors.

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Heating Controls . . .

(Continued from page 196)

as critical as in residential heating applications. However, there are recent instances in which a TM type thermostat was used to considerable advantage. Installations where unit heaters had previously heated an area with a variation of 10 degrees, were replaced with TM type thermostats which provided more frequent heating cycles. The result was a practically steady delivery of heat, with room temperature (at the thermostats) maintained within less than a 1-degree variation.

Heating units designed to mount in the floor or wall, as well as those which stand out in the area to be heated, are all in a sense, space heaters. They may be oil or gas-fired, and lend themselves to the same type of control as other warm air space heating units.

Heat the Guest Closet

A guest closet strategically located near the front entrance of your home is a convenient place to hang the coats and wraps of your guests when they come to call. Yet an unheated guest closet can serve to chill even



the most jovial spirited person on a cold winter's evening when it comes time for him to go home. There's nothing that will throw a shiver into an individual like donning a well-refrigerated coat that has been hanging in the host's unheated guest closet.

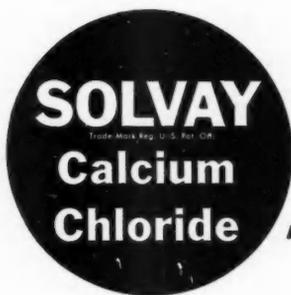
The National Warm Air Heating and Air Conditioning Association suggests that a homeowner make certain that his guests enjoy a pleasant homegoing by providing a warm air outlet in the guest closet. A small 4-inch by six-inch warm air register served by a small size duct will generally do the trick. Such a register can be easily installed in a house that is already built and should be included in planning a house. A 1/2-inch clearance is needed between the bottom of the closet door and the floor in order to establish positive circulation of the heated air.

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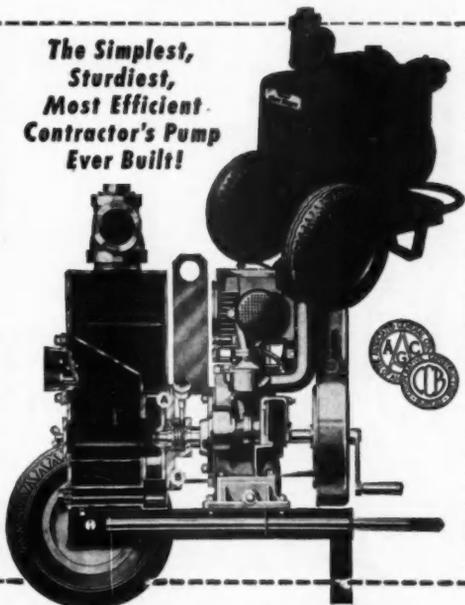
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Houses in Uniform

(Continued from page 167)

A bright color on the roofs would tend to make the houses look top-heavy. The subdued gray and brown blends give the illusion of reduced roof heights. On the other hand, all the rooms in the Bonnyville houses are on one floor, and do not have expansion attics. The houses 'hug' the ground, and colorful roofs give the houses a 'lift,' and make them look taller."

Miss West explained that regional and builder preferences are second considerations in color planning. "Mr. Bonforte," she said, "wrote that he had no definite color combinations in mind. He added that people in Colorado are conservative in their choice of colors, and that many ask for white. He explained that he wanted to lead them away from the monotony of white with pastel shades. An occasional sharp color contrast such as ming red for the trim or the shutters would be desirable."

"Another factor is the site plan," Miss West said. "Levittown houses are built on flat ground with few trees and shrubs. Colors must naturally be soft and blend from one to another in order to achieve harmony. Color is the only background on which to depend. The Bonforte houses have Pike's Peak as a background. Another factor is the size of the project. There is a big difference between 9,000 houses and 96 houses. Put too many roofs on a big development, and it becomes impossible to hold a community of homes together. Integration is lost. In a large project, there is also the inventory question, and the efficient scheduling of materials on a volume basis. Production line building doesn't permit as much variation."

Other factors influencing color selection, according to Miss West, are size of the houses and climatic conditions.

Thus, with the proper use of color, Bonforte has proved to his own satisfaction that there is no customer resistance, and there is more effective variation in appearance. Using color as the chief basis for variation Bonforte has been able to retain the economies in speed and materials that come with a degree of standardization in design.

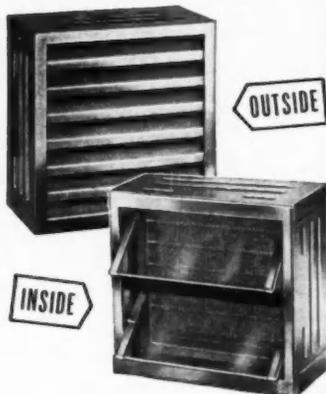
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At the NAHB Show
American Builder Staff
Booth No. 85—Stevens Hotel

AMERICAN BUILDER

WEATHER-BLOC

Trade Mark Patent Applied For

Single Unit VENTILATOR FOR GLASS BLOCK PANELS



VENTILATION... Plus Beauty WHY NOT GIVE BOTH?

WHEN PLANNING—New buildings . . . or remodeling old buildings . . . be sure to get full information about WEATHER-BLOC Single Unit VENTILATOR for glass block small panels.

WIDE APPLICATION—HOMES—kitchens, bathrooms, stairwalls, fruit cellars; STORES—show window fronts, side windows, store rooms; OFFICES—for ventilating inside as well as outside walls or panels.

WEATHER-BLOC FEATURES—Blends with glass block. The outside presents a series of horizontal louvers, which maintain the continuity of design, simulating a glass block. The inside offers finger tip control of ventilation with adjustable louvers. The body is stainless steel. Aluminum screen. All parts can be cleaned and replaced from inside the room. Available in three sizes of standard glass block.

WEATHER-BLOC MODELS—There are 3 models available. STANDARD WEATHER-BLOC with glass louvers outside and inside. UTILITY WEATHER-BLOC has stainless steel louvers outside and glass louvers inside. ECONOMY WEATHER-BLOC with stainless steel louvers outside and inside, 6 and 8 inch only.

WEATHER-BLOC takes no more time to install than single glass block. In old or newly completed glass block panels where ventilation is required, break out single glass block and replace with WEATHER-BLOC.

**PURCHASE THROUGH
YOUR GLASS BLOCK DEALER OR JOBBER
ALSO NATIONALLY DISTRIBUTED BY
WINCO DISTRIBUTING & MFG. CO., INC.**
533 Bittner Street St. Louis 15, Missouri

WEATHER-BLOC

Air Rectifiers, Inc.
3734 Southport Avenue, Chicago 13, Illinois

Please send complete information and prices.

Name
Address
City Zone State

Robert H. Morris Named Publisher



Robert H. Morris, publishing director of *American Builder* since 1948, has been named publisher, effective Nov. 20. In his new capacity he will exercise complete supervision of the magazine and its department heads. A director and the senior vice president of the Simmons-Boardman Publishing Corporation, publishers of *American Builder* and a group of railroad and marine magazines, Mr. Morris has been identified prominently with business magazine sales and publishing since 1922.

He entered the service of Simmons-Boardman as business manager of *American Builder* in 1924. He was elected a vice president in 1932 and a director of the corporation in 1936. Since then he has been concerned with general management policies in addition to heading sales activities of *American Builder*. For the time being he will continue personally to direct sales operations.

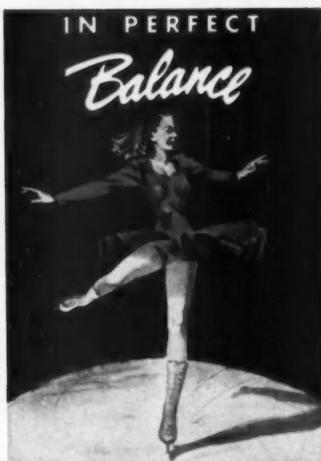
S. O. Dunn Made Chairman Emeritus



Samuel O. Dunn, chairman of the board of the Simmons-Boardman Publishing Corporation, publishers of building, railway and marine magazines and books, including *American Builder*, retired as chief executive officer of the company at his own request on November 20, 1950. Mr. Dunn has been in the service of the company since 1907, becoming editor of *Railway Age* and head of the editorial department of the company in 1911, and continuing to serve in that capacity until 1948. He became chief executive officer in 1931.

He has been elected chairman emeritus, in which position he will continue in an advisory capacity with headquarters in Chicago as heretofore. He is succeeded as chief executive officer by James G. Lyne, president of the company and editor of *Railway Age* since 1948.

Mr. Dunn requested relief from his responsibilities on the ground that his long service record entitled him to opportunity for leisure.



Unique IS THE PERFECT SASH BALANCE For Double Hung Windows

Architects, contractors, millwork retailers and manufacturers specify Unique Sash Balances for good reason. They know the importance of perfectly balanced windows . . . the proven leadership of Unique Balances. More than 100 million in use since 1930 proves the performance of this true counterbalance.

No Readjustment

When properly installed, Unique Balances need no readjustment. Springs are wound with a high permanent tension, controlled always by an accelerated pitch in the turns of the spiral rod. Sash cannot creep up or down.



A TRUE
COUNTERBALANCE
... NOT A
FRICTION DEVICE

No Maintenance

Years of use and Test No. 2295 of Columbia University Testing Laboratories reveal that Unique Balances are designed and built with permanent strength . . . will not lose their lifting power for the lifetime of the sash. Rust and corrosion proof, their first cost is their last.

the Perfect Sash Balance

Over 100 million used throughout the world
Unique
TRADE MARK © 1951
U. S. Co., Inc.

Unique Balance Co., Inc.
25 Bruckner Blvd., Dept. AS-151
New York 34, N. Y.

Please send me detailed information on Unique Balances.

Name Firm
Address
City State

**WURDACK - did it before
WURDACK - does it again**



LOOK ALIKES



They may look alike, but the ring on the left cost \$2600 on Fifth Avenue. The ring on the right came off the 49c counter of the dime store. Which one would you wear?

Other water repellents may look like **CRYSTAL** at first glance but it's on the job, year after year that **CRYSTAL** proves its worth.

CRYSTAL was the first masonry water repellent. Improved **CRYSTAL** is still unequalled as a water repellent.

Wurdack pioneered the use of silicones as a masonry water repellent back in 1946. Since then the Wurdack laboratories have been working constantly to better its product. Now Wurdack announces a new and improved **CRYSTAL** that does a better job of keeping masonry dry than any other type product hitherto available.

CRYSTAL offers builders and homeowners real protection against moisture at low cost. **CRYSTAL** lasts longer and costs less to apply than any other type water repellent. It permits the use of relatively inexpensive masonry materials without fear of moisture damage. And to contractors it opens the door to new, profitable sources of business.

**there is no water repellent to equal
CRYSTAL (PAT. APPL'D FOR) none - none in all the world.**

Investigate the profit possibilities of **CRYSTAL**

WURDACK CHEMICAL CO.
4956 Fyler Ave., St. Louis 9, Mo.

Please send me information about **CRYSTAL**.

Name _____

Type of Business _____

Address _____

City _____ State _____



CHEMICAL COMPANY

4956 Fyler Ave.

St. Louis 9, Mo.

Saberson ...

(Continued from page 168)

exempting himself from the rigors imposed by the new regulations. It's all right to clamp down on everybody else but "no curbs for me." . . . Then comes a barrage of such words as drastic, dangerous, prohibitive, ad infinitum.

Today I came across an advertisement which listed the down payment required for veterans and non-veterans to buy a house under the new regulations.

Price	Veterans Down Payments	Non-Veterans Down Payments
\$5,000	\$ 250	\$ 500
6,000	250	850
7,000	500	1,200
8,000	750	1,550
9,000	1,000	1,900
10,000	1,300	2,300
12,000	1,900	3,100
15,000	3,550	4,300

Frankly I find it difficult to believe that these terms are going to put the home building industry in as bad shape as many would have us believe.

Assuredly if we had suddenly found ourselves blessed with these terms back in the '20s, we would have thought that we had come to the golden end of the building rainbow. Yet without them, or anything that even resembled them remotely, we set a home building record for a single year that was to stand until the present post-war boom was well under way.

Assuredly the new terms will drive from the industry a great many so-called home builders who flocked into it, not because they knew much about it, but because the going was so good they couldn't keep out. Based upon my personal observations, I am convinced that this exodus will be one of the greatest things that has ever happened to the industry . . . and the home-buying public.

A reduction in the number of homes to 800,000 or some such figure will come much closer to the capacity of the industry than the pace we attempted to maintain in 1950. That figure happens to be the annual average constructed during the five years between V-J Day and the beginning of the Korean war . . . the greatest home building period in our national history.

Assuredly a cut-back of some sort should reduce the velocity of the inflationary spiral which was driving building materials to prohibitively high prices. The inability of many segments of the industry to produce as much of the many items needed

could only result in excessively high prices, black markets and dislocations of normal supply channels.

With the incompetents out of the picture, materials more plentiful and lower in cost (barring the exigencies of war), labor more readily available or labor-saving devices more generally in use . . . the building of homes should not become a forgotten industry simply because down payments have been increased to the amounts listed above and the liquidation period reduced to what it used to be when we thought it was too good to be true.

To be sure competition will rear its unwelcome head again and efficient salesmanship will have to be called back into play.

But what of it? Our most profitable sales are those which we have earned by virtue of our skill and ability. We shall have to roll up our sleeves and do a better job of planning, advertising, selling. If we are willing to do this, there will be plenty of people who have the cash to make the necessary down payment to enable them to buy a home. The market still is immense. Money never was more plentiful or good residential mortgages more eagerly sought.

The easy picking may have gone with the wind and taken with it the easy pickers, but there still is plenty left for the efficient go-getters who used to thrive mightily when things were far tougher and terms were far tighter than they are today.

How To Use Sunlight

A study just published in the Housing and Home Finance Agency's Technical Bulletin No. 15 presents sketch plans showing how to make the most desirable use of sunlight and at the same time achieve maximum quiet, privacy, charm, and efficient room arrangement in single-family dwellings.

"Many houses are being designed today which meet specific room-size requirements but do not satisfy the requirement of livability from the owner's point of view," observes Architect Bernard Wagner, author of the article. He presents four model plans to help overcome this shortcoming.

Each of the four plans is for a two-bedroom house, tailored to a 50x100-foot lot facing a different direction. Regardless of which way the lots face, all four have living rooms that face south, or nearly south, to obtain maximum warmth and cheer from the sun in winter. In all cases east or south-east orientation of bedrooms was chosen, "to take advantage of sun's light on winter mornings and avoid the strong heat of the afternoon sun in summer."

When Ordering Your Millwork

insist on

ALLMETAL

SASH BALANCE and WEATHERSTRIP UNIT



Your double hung window assembly will be as modern as tomorrow if equipped with the Double Duty ALLMETAL UNIT.

Double Duty because it provides dependable tongue and groove weatherstrip with maximum area of contact, plus positive counter balance of sash. Lifting springs are concealed without the use of sleeves or covers.

Two types of parting bead are available. Illustrated is the Metal Hat Type Parting Bead which provides a completely metal covered sash runway. No wood parting bead is required.

The inset view shows a Metal Parting Bead Cover to be used with conventional wood parting bead. Both eliminate the need for painting.

The ALLMETAL UNIT is covered by U. S. Patents . . . Nos. 2,284,436-2,284,438 . . . other patents pending.

THESE POSITIVE FEATURES MAKE THE ALLMETAL UNIT OUTSTANDING



ALLMETAL

NAME "ALLMETAL" REGISTERED U. S. PATENT OFFICE

2243 N. Knox Ave., Chicago 39, Ill.

Weatherstrip Company

<p>MEMBER</p> <p>WEATHERSTRIP Research INSTITUTE</p>	<p>ALLMETAL WEATHERSTRIP CO. 2243 North Knox Avenue, Chicago 39, Illinois</p>
	<p>Please send complete information and prices.</p>
	<p>Name _____</p>
	<p>Address _____</p>
	<p>City _____ State _____</p>

CROSS MEMBER
WEATHERSTRIP
INSTALLATION
ALTERNATES

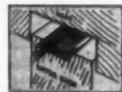
CROSS METAL
EQUIPMENT "AC"



CROSS METAL
EQUIPMENT "IB"



CROSS METAL
EQUIPMENT "FH"

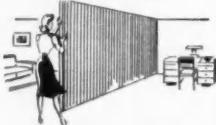


the door that's a door ..and THEN some!

FOR CLOSET DOORS



ROOM DIVIDERS



KITCHEN—DINING ROOMS



DENS AND GAME ROOMS



America's going wild about the new Ra-Tox Flexible Door . . . for new building construction as well as remodeling work. Housewives love it because it lets fresh air circulate through closets that might otherwise be stale and musty smelling . . . and because it makes usable the room space lost with a swinging door. Architects and Decorators like it because it gives a new look to the door areas of walls . . . yet harmonizes with any interior design. Builders like it because it's low in cost and easy to install.

WHAT OTHER DOOR GIVES ALL THESE FEATURES?

- **FOLDS OPEN** . . . mounted on overhead channel, the Ra-Tox Flexible Door folds to side of door opening.
- **DELIVERED COMPLETE** . . . finish painted, with track and anchor moulding.
- **LOW COST INSTALLATION** . . . no door framing needed, no hardware to buy. Installed with screw driver in a few minutes' time. Big construction savings; no door casings needed! Door opening can extend to ceiling.
- **WIDE COLOR RANGE** . . . eleven different colors to choose from including "natural" finish.

RA-TOX FLEXIBLE DOOR



ASK YOUR
DEALER
ABOUT THE
RA-TOX
FLEXIBLE
DOOR

... or write for
information.

THE HOUGH SHADE CORPORATION

RA-TOX DIVISION

044 Jackson Street • Janesville, Wisconsin

NAHB Convention . . .

(Continued from page 38)

heating unit specifically designed for installation by operative builders. The reaction from builders at the exposition was so favorable that the company designed an entire line for this purpose and will feature the new units in the current show.

The exposition will provide an opportunity for builders and exhibitors to probe first-hand two big questions. Builders want to know what materials and equipment they can buy with confidence of getting delivery when needed. Manufacturers are interested in learning how many houses builders expect to start in the foreseeable future.

Preliminary meetings of standing and special committees begin Thursday, January 18, and continue through Saturday. First of the general convention sessions will be the popular "Women's Program for Home Builders" at 10 a.m. January 22. Mrs. Henry Chaloron, builder from New Orleans, will be in charge, assisted by Mrs. Henny Mollgaard, Milwaukee; Mrs. Maud Butler of Tulsa; and Mrs. Irvin Blietz, Chicago.

Scheduled are a discussion of how housing for minority groups can be provided; a prospective debate on whether home builders are meeting the needs of American housewives in the homes they provide; and a presentation on what women can accomplish in politics.

At the same time a discussion group will explore management and financial problems of 608 projects. Nathan Mani-low, Chicago builder, and NAHB treasurer is scheduled to lead this panel with assistance from government spokesmen and builders.

Builder Shop Talk

A new feature this year will be a series of "shop-talk" sessions for builders, led by Earl Smith, Berkeley, Calif. Beginning Monday, these informal sessions will run every morning. At the "shop-talk" all builders will have an opportunity to swap experience stories and talk informally with fellow builders from other parts of the country. The feature is an outgrowth of a highly successful informal meeting engineered by Builder Smith at the last convention, which gave the small builder a chance to get into convention discussions.

Monday afternoon will see the start of the general sessions. Association business will be disposed of at this time, with an opening address by President Thomas P. Coogan, a welcome from Convention Chairman E. M. Spiegel, the reports of Secretary Joseph Haverstick and Executive Vice President Frank W. Cortright, with election of 1951 directors. An outstanding "name" speaker will appear.

The big convention and exhibitors' dance with a vaudeville show will be staged Monday night. This has proved to be one of the most popular entertainment features of the convention.

Clinic discussion sessions will begin on Tuesday. Scheduled on this morning are a discussion of builders' tax problems

(Continued on page 208)



Orchids

TO

AMERICA'S BUILDERS

for the Housing Job they've done!



Youngstown Kitchens

BE SURE TO VISIT OUR BOOTH AT THE
CHICAGO BUILDER'S SHOW!

We'll have an orchid there for you!



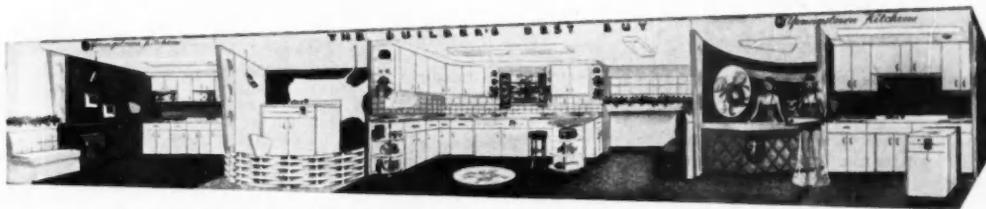
And while you're there, be sure to see the newest Youngstown Kitchens units, including the revolutionary Youngstown Kitchens Jet-Tower Dishwasher that completely modernizes dishwashing and helps keep the homes you build modern for years to come!

We know you'll be interested in the facts and features we can show you—because they are improvements on, and expansions of, the line

of steel kitchens that many builders *already* prefer over any other.

For it is you builders who have put Youngstown Kitchens into one of every three new homes equipped with steel kitchens this year!

Let us prove how Youngstown Kitchens can now do an even better job for you . . . in cutting costs, increasing appeal, and making sales easier!



Visit this booth—let us give you the orchid you deserve, and get a good look at the new Youngstown Kitchens!



Youngstown Kitchens

MULLINS MANUFACTURING CORPORATION

WARREN, OHIO

World's Largest Makers of Steel Kitchens



Look what MODERN SCIENCE HAS DONE FOR WOOD WINDOW UNITS

"Good for a lifetime" is no empty slogan when applied to wood window units. Today, water-repellent preservative treatment has amazingly increased the durability of wood—giving it extra resistance to stain, decay, insect attack and humidity.

But that's not half the story!

Modern stock design windows are precision made—available as completely assembled units for quick, easy installation. Standard size screens and storm windows can be used without additional framing expense.

Wood windows today are ultra-modern in operation, with sash balances which permit finger-tip opening and closing. And wood, as always, offers greater resistance to the passage of heat and cold—keeps houses more comfortable the year 'round—discourages annoying condensation. Wood Window Information Service, 38 South Dearborn Street, Chicago 3, Ill.

See your local lumber dealer
for wood window units

NAHB Convention ...

(Continued from page 206)

led by Sylvanus Felix of Oklahoma City; "Building and Merchandising the \$20,000-and-Up House" with Irvin Blietz as moderator; a session on defeating public housing through local referenda; and a discussion of low cost rental apartments, led by Wallace Johnson of Memphis.

One of the most important general sessions of the convention is set for Tuesday afternoon when "Stretching the Supply of Building Materials in 1951" comes up for discussion. A group of top government and industry leaders will appear. A major address by a nationally prominent person will conclude the session.

Also set for Tuesday is the opening of a completely new convention feature, the "Man From Mars" show of new building devices, to be staged by Joe Schulte. This show, described as expertly staged and replete with surprises, will run continuously through Tuesday and Wednesday in the Eighth Street Theater, opening off the Grand Ballroom of the Stevens.

Other highlights of Tuesday's program will be the popular land planning panel and a report by Fritz Burns on his recent public relations and education campaign.

Design problems and their solution head the agenda Wednesday morning. There will be a program by the joint NAHB-American Institute of Architects architectural committee; and awards will be made to winners in a recent house design competition. A discussion of better house design will follow with colored slides for illustration.

Take Up Financing

Two clinic discussion sessions will take place Wednesday morning. One, on simple bookkeeping and time and material accounting, will be led by Herbert F. Taggart of the University of Michigan, who is surveying builders' accounting methods for the Housing and Home Finance Agency. The other will be devoted to "FHA-VA-Federal Reserve Board Questions and Answers" with Regulation "X" as a springboard.

Regulation "X" will also get plenty of attention Wednesday afternoon when the general session will be devoted to the "Status of Housing Construction and Mortgage Finance." HIFA Administrator Raymond M. Foley; Federal Housing Administration Commissioner Franklin D. Richards and Veterans Administration Loan Guarantee Chief Bert King are scheduled to participate. The panel discussion, with outstanding builders and industry leaders appearing, will be moderated by NAHB President Coogan.

The convention banquet arranged by Edward R. Carr, past NAHB president, will take place Wednesday night.

On Thursday morning the old and new NAHB presidents will be questioned by the nation's leading real estate editors in a press conference on the ballroom stage. Other highlights will be a report by Earl Smith on the conclusions reached in the

(Continued on page 210)

CLOSURE PROBLEMS

**BUILDERS
DEALERS
ARCHITECTS**

where **SPACE • COST • BEAUTY**
are important factors



Superlative examples of complete know-how — in engineering, construction, and interior decoration — these 3 distinctive closures offer a solution to every interior closure problem where beauty, cost, and space-saving are important factors. Complete details are yours for the asking!

wondoorwall

1

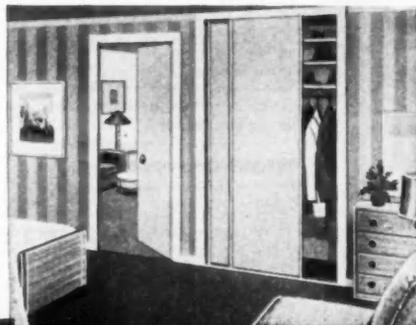
No wasted wall space! Makes rooms more spacious, more charming! Folds accordion like onto itself. Serves as door, wall, partition or drape. In six beautiful colors. Standard sizes in single or double width actually fit 90% of all openings up to 7 feet high. Odd sizes custom-built to order.



2

ALUMAROLL DOOR

Ideal for Kitchenettes and closets! Aluminum interlocking slats roll up to less than 6"! Requires no swing-out or fold space. Finger-tip spring roller action. Unit supplied to size ready to install. Baked-on enamel colors. Adds beauty to any room. Unit cost amazingly low.



3

ALUMASLIDE DOOR

A new idea in sliding door saves money! Plywood or Masonite panels, free-moving in an expansion-joint steel frame. Can't warp, can't twist out-of-shape. Combines the richness of wood paneling, the sturdiness and weight of steel doors and top track suspension for quiet, effortless operation.

Visit Booth 24 N.A.H.E. Show

Orchard Bros., Inc.
63 Meadow Rd., Rutherford, N. J.

Please send full information about

- AlumaROLLdoors Wondoor Wall AlumaSLIDE Doors
I am an Architect Builder Contractor
 Building Material Dealer

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Address _____

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ORCHARD BROS., INC.

63 MEADOW ROAD RUTHERFORD, N. J.

the **BIG NAME** in **HEATING** — for warm air heat!



Tailor-made for today's homes!

Mueller Climatrol

Winter Air Conditioners
for gas or oil: 60,000
to 540,000 Btu. (Type
110 shown)

**... meets your customer's demand
for warm air heating at its best!**

You're sure to satisfy your customers when you give them what they want. And when it comes to warm air heating they want the Big Name—Mueller Climatrol!

It's a line designed to meet every need — sizes and types for every home . . . for gas, for oil, for coal . . . forced-air or gravity . . . steel or cast-iron . . . hi-boy, low-boy or horizontal design . . . unit heaters . . . conversion burners . . . Mueller Climatrol fills the bill!

With a Mueller Climatrol you can meet their demands and count on their good will. Specify and recommend the Big Name in Heating. Write for our new "all product" catalog . . . L. J. Mueller Furnace Co., 2021A W. Oklahoma Ave., Milwaukee 15, Wisconsin



Gravity Furnaces —
for gas or oil: 90,
000 to 125,000 Btu
(Type 111 Shown)



Mueller Climatrol

FOR GAS FOR OIL FOR COAL

Dean Crandall to Lead Insulation Board Group

Dean D. Crandall of Buffalo, N.Y., was elected president of the Insulation Board Institute at the group's annual meeting November 16 in Chicago. Crandall, a vice president in charge of sales of the National Gypsum Co., succeeds M. C. Fairfield of the Insulite Division of Minnesota and Ontario Paper Co., Minneapolis.



Dean D. Crandall

Marland Wolf, Wood Conversion Co., St. Paul, Minn., was named vice president. J. B. Blackburn, Chicago, will continue as secretary-treasurer.

The board of directors will include Crandall, Fairfield, Wolf; Glenn W. Cheney of Dant and Russell, Inc., Portland, Ore.; Earl C. Faulkner, U.S. Gypsum Co., Chicago; William R. Wilkinson, Johns-Manville Sales Corp., New York City; and Marvin Greenwood, Celotex Corp., Chicago.

"Operation Membership" Launched in Chicago

In order to establish as united a front as possible in opposing "inequitable regulations upon home building under the pressure of war necessity," the Chicago Metropolitan Home Builders Association has launched an intensive campaign to extend its membership to every legitimate home builder as well as to all supply, finance and service firms.

Called "Operation Membership," the drive was launched in November with three components—a general membership revival, an active operating committee and a skilled follow-up man employed by the association.

NAHB Convention . . .

(Continued from page 208)

"Shop-talks" and presentation by Joseph Haverstick of his Dr. Hi-Cue quiz program. An unannounced special feature also is being readied for this session.

Entertainment and special events will include tours and other attractions for wives of delegates and a women's headquarters where assistance will be given in arranging shopping and sightseeing trips. For those who want to see Chicago builders' projects, the popular housing tours of Chicago building will again be arranged, with special busses leaving the Stevens Hotel throughout the week.

Hospital . . .

(Continued from page 141)

for incoming ambulance cases.

The hospital was carefully planned for maximum operating convenience. All rooms used for routine business are consolidated in the stem of the "L." A particularly good arrangement is the segregation of the dish-washing space from the kitchen proper, which eliminates this traffic from the kitchen, and allows dishes to be handled in a continuous operation. Soiled china comes in by cart to



COLORFUL drapes in lieu of Venetian blinds add warmth and color to rooms

a counter, which has an opening into a garbage can underneath. Dishes are scraped, washed, and dried, and sent directly into the serving area of the kitchen by way of a counter connecting the two rooms. A similar arrangement for handling laundry takes soiled linen through the various processes to shelves in the main linen storeroom adjoining the laundry. There are unit ventilating systems in the kitchen, laundry, surgery, and delivery room. In the latter two, provision has also been made for humidity control.

Patients' bedrooms, a four-bed isolation suite, two glass-enclosed nurseries (one of these is a "suspect" nursery with two bassinets), the nurses' station, and a solarium for convalescent patients occupy the wing at right angles to the length of the building. The cheerful interior color scheme was chosen with a view to the psychosomatic effect of color, the University of Minnesota research serving as a basis.

Each patient's room contains two beds, and is 11 feet wide and 16 feet deep. This planned spacing allows 2 feet 6 inches from the wall to the first bed; 3 feet for the bed; 3 feet 6 inches between beds, 3 feet for the second bed, and 1 foot 8 inches to the sink and the face of the clothes closet, which is 18 inches deep. Closets have double doors, as well as shelves at the top and bottom of the closet for patients' belongings. Each patient controls his own lamp and nurse's call bell, and there is space to plug in a

(Continued on page 216)

the **BIG NAME** in **HEATING**

— for radiant or radiator heat!

Compact, Efficient—Quickly Installed!



Type 10 Gas
Boiler — from
\$4,000 to 378,000 Btu.



Mueller Climatrol

— fuel-thrifty boilers
add sales appeal to every job you build!

This famous name on a radiator or radiant installation wins immediate acceptance from your clients. And their satisfaction — years afterwards — is goodwill that pays dividends.

Compact, beautifully styled, the Mueller Climatrol gas boiler is built for today's homes . . . sized to give close-to-capacity fits for every job . . . designed for quick, easy installation . . . and built to deliver trouble-free comfort for years.

Specify or recommend the Big Name in Heating — Mueller Climatrol — for all your radiator or radiant heat jobs. Your choice is backed by Mueller's 94 years of home-heating leadership. Write for our new "all product" catalog . . . L. J. Mueller Furnace Co., 2021 A W. Oklahoma Ave., Milwaukee 15, Wis.



Type 20 Boiler — For
commercial sales. Sectional
construction for
battery installation
from 318,000 to 3,780,000
Btu. For hot water,
steam or vapor heat,
and hot water supply.

B-54



Mueller Climatrol

FOR GAS FOR OIL FOR COAL



WHEN YOU ARE READY TO SELECT
SPACE-SAVING DOORS...
Check these important features



THAT "FINISHED LOOK"—FOLDOOR comes in a wide choice of beautiful, colored, highly durable plastic-coated fabrics to harmonize with any color scheme. Topped with an attractive cornice, FOLDOOR installations have that finished look.



"EASY GLIDE" OPERATION—Built with a sturdy frame of rust-resistant steel, FOLDOOR travels on a rugged, single piece, two-rail steel track. The double-truck trolley, with large-diameter wheels, insures smooth, easy-glide operation.



"DOOR-KNOB HEIGHT" HARDWARE—Handles at normal, door-knob height is a FOLDOOR feature especially desirable in homes with small children. FOLDOOR'S simple yet positive latching mechanism is easily operated with one hand. No fussing, no fumbling with FOLDOOR.



"WALL-FIT" THICKNESS—FOLDOOR occupies the least amount of "stack" space of any extensible door. When pushed back onto itself, FOLDOOR'S maximum thickness is only 5½ inches. This means FOLDOOR fits inside the measurements of most walls—does not stick out into the room.

You get them all with new, improved

HOLCOMB & HOKE
FOLDOOR

HOLCOMB & HOKE MFG. CO., INC. • INDIANAPOLIS, INDIANA

Profitable Installing Distributorships Still Open

National Homes Displays House Within Building In Cincinnati Exhibit

When promotion-minded Edward W. Hodges recently got the idea of building a National Homes model home within the Cincinnati Gas and Electric Company building, he meant a full-size home—complete almost to the last detail. Hodges, of the Cincinnati Gas and Electric Company, could easily visualize the advertising impact of a home sitting just inside a large downtown display window (the Gas and Electric Company building is practically in the heart of Cincinnati), and so could National



THIS National Homes model was built within a building in Cincinnati



FLOOR plan of National's Fleetwood model

Homes, and a leading local department store that offered to furnish the home, and a landscaping concern that actually went so far as to plant small trees and shrubs in boxes around the house.

After the home was up, officials from Ohio Homes, Inc., who erected it, and representatives from National Homes inspected the completed Fleetwood Model TH35 and modestly estimated that more than 80,000 would visit it. By televising the grand opening of the exhibit over WCPO-TV, several thousand more would see it. They would keep the exhibit open about a month.

The National Homes model is 24½ x 34½ feet; estimated to sell (with 50x 124-foot lot) in Cincinnati for about \$8,300. To be built on a concrete

(Continued on page 214)

AMERICAN BUILDER

This low-priced
**UTILITY HARDWOOD
 PLYWOOD**
takes perfect
"NATURAL" FINISHES!



Mengelbord
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Mengelbord* is a low-priced, one-piece face, 3-ply, utility hardwood plywood, 1/4" thick. Made from beautiful White Tupelo Gum (a genuine cabinet-maker's hardwood). It is ideal for "natural" finishes!

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*Write today for descriptive literature.
 No obligation, of course.*

Where fine wood panels of Mahogany, Oak, Birch or Walnut are desired—ask for Mengelux*.
 Literature on request.

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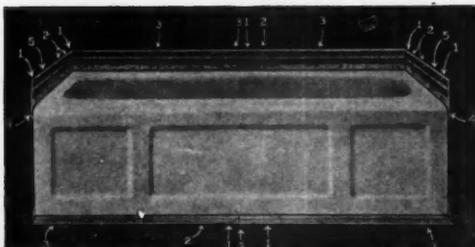
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**Outstanding
Features**

- 1—Bolts in hanger where necessary.
- 2—Filler to seal joints against leaks.
- 3—Two nails, screws or bolts at every stud.
- 4—Filler in groove between tub and Hanger.
- 5—Perforations as a base for wall materials.



House within Building

(Continued from page 212)

slab floor, the model has three bedrooms, utility room, kitchen, living and dining room combination and bath; storage space in five closets as well as in the accessible attic, and a compact Winkler wall furnace with 70,000 B.T.U. input, as well as a hot water heater, kitchen sink and cabinets. The Cincinnati display home had a Thor sink with combination dishwasher and clothes washer, Youngstown cabinets, Sanitas wall covering, Briggs bathroom fixtures,



SPACIOUS kitchen pleases visitors

Andersen windows, Dexter hardware. On the front right half of the home, Weldtex striated plywood was used. Other exterior wall covering was plastic coated plywood siding, placed vertically on gable ends. Roof was covered with 210-pound asphalt shingles. Insulation for the home was Lockport Cotton Batting Company batts in the walls and attic, with Reynolds Metals Company aluminum foil in the attic, also.

Local Ohio Homes, Inc. officials concerned with erection of the demonstration home were Harold D. Comey, president; Bud Schwein, general manager, and Richard Sandburg, in charge of sales. Officials from National Homes at the Grand Opening of the exhibition were James R. Price, president; George E. Price, vice president, and W. A. Shearer, sales manager.

Co-sponsors of the exhibition were the Cincinnati Gas and Electric Company, the Cincinnati Enquirer, and Good Housekeeping magazine.



FURNISHINGS for National Homes' exhibit were supplied by a local Cincinnati department store



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Here are two inside jobs for the winter

With outdoor construction virtually at a standstill, every builder is looking for profitable indoor jobs for the winter months. With practical, low-cost ceiling materials like Armstrong's Cushiontone and Armstrong's Temlok Tile, you can develop a sizeable volume of remodeling business.

If you look around, you'll find that a lot of stores, offices, restaurants, and even private homes are good prospects for new ceilings of Temlok and Cushiontone. Both these materials are easy to sell. Each has a clean, white ironed-on paint finish and can be installed quickly and economically. Temlok Tile answers the popular need for a decorative, smooth ceiling finish, and Cushiontone offers the added advantage of noise quieting, a feature that is particularly favored by owners of commercial establishments. Together, Temlok Tile and Cushiontone will meet the requirements for practically any ceiling job.

Armstrong's Temlok and Cushiontone are well known to your customers. They're advertised consistently in national magazines. They're also displayed on the "Armstrong's Circle Theatre" program which appears on the NBC television network. These popular, practical materials can take a lot of the slack out of the winter months for you. Get full details about them now. Get in touch with your Armstrong lumber dealer or write to Armstrong Cork Company, 1601 Ocean Avenue, Lancaster, Penna.



Temlok Tile makes old ceilings new. Units are quickly nailed or stapled in place over furring strips. The handy Lok-Bevel joint speeds the job and hides nail-heads or staples from view.



Cushiontone stops noise. Units can either be cemented in place or nailed to furring strips spaced 12" on centers. Short-drilled corner holes provide greater nail-holding strength.

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INDUSTRIAL AND COMMERCIAL LUMBER, POLES, POSTS,
AND TIMBERS. *Mixed or Solid Car Shipments*

announces
a NEW
PLANT

Hospital

(Continued from page 211)

telephone. Curtains between beds travel on an overhead track. Instead of Venetian blinds, colorful drapes made by volunteer local women at a considerable saving provide decoration and feeling for the room, while giving protection from excess light. Wood trim is natural finished birch.

The nurses' station includes general work space, a chart room, and a room for making up medicine. It is strategically located to command a view of the main and ambulance entrances, and enables the night nurse



QUIET distinction marks reception room

to control the reception room as well. The latter is marked by quiet distinction. One wall has painted wood flutes with louvered windows. A latticed overhang above the receptionist's desk gives proper scale for the girl sitting down at her work.

The hospital is so planned and oriented on the land available that an addition can be built as more space becomes necessary.

The Bagley project proves that small, relatively poor communities can have attractive, modern facilities if they are so minded. A further advantage is that such a hospital serves as an inducement to first-rate doctors, who might not otherwise be interested in locating in the area.

Abundant Tree Supply

The present stands of Hard Maple trees in Northern forest should last another 50 years, according to the Maple Flooring Manufacturers Association. After that, according to timber engineers, the second growth trees will have matured sufficiently to provide Maple lumber for many years to come. This will make it possible to continue the production of Northern Hard Maple Flooring indefinitely.

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Quick demonstration makes easy sale! Converts wasted attic into an extra room or usable storage space. Easy to raise and lower. Folds compactly, requiring minimum ceiling space, negligible installation cost. Comes completely assembled. Write for FREE folder—full details.

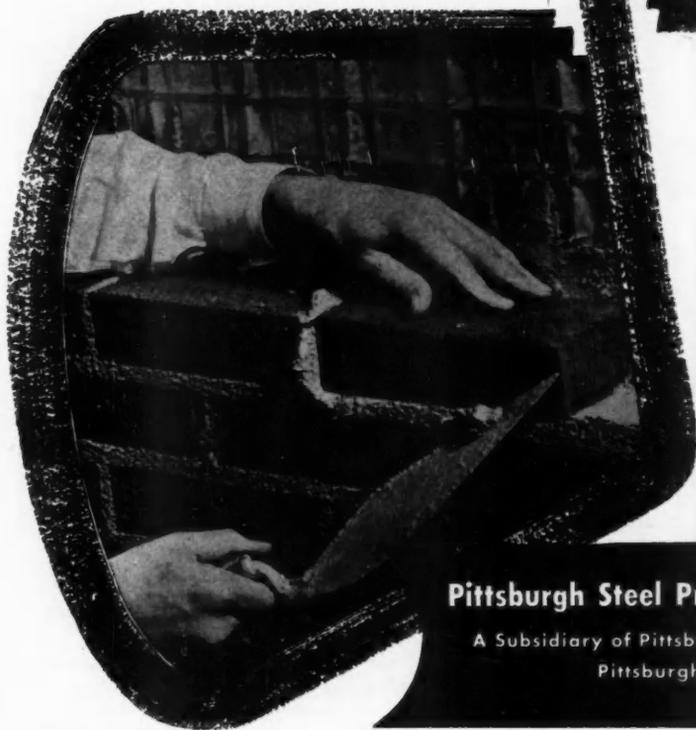
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Notice how the strong, welded, galvanized steel mesh bites into the continuous mortar bond.

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Used by national builders in large scale housing developments and by small contractors in individual homes.

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Texas The Great

By Martin C. Huggett

Executive Vice President
Chicago Metropolitan Home Builders Assn.

The occasion of the recent National Directors Meeting at Houston, Texas, and an independent visit to Dallas have afforded an opportunity to observe two metropolitan centers of the "Lone Star State" that are said to be typical of that area's growth and progressiveness. The traveler leaves the scenes of his visits with an impression of grandeur which after a time resolves itself into two self-inquiries — "Did his impression arise from what he saw or was it as the Texans told it?"

Texas is a State of Superlatives where conservatism is a misdemeanor punishable with ostracism. Everything is the world's greatest, best, widest, highest, most numerous, fastest growing, or "what have you." Even the Rio Grande is claimed to be the world's dirtiest river, which is unquestionably true. An elaborate system of irrigation robs the river of its water but creates a fertile valley that furnishes millions of consumers with citrus fruits.

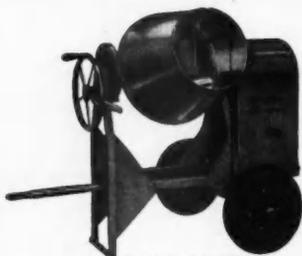
The City of Houston with its deep water channel connecting with the Gulf of Mexico at Galveston and its ample turning basin provides safe anchorage for the thousands of ships from all parts of the world. The channel is lined with docks serving the leading industries of the nation. An ever-increasing number of manufacturing and distributing plants seal the destiny of the city as the Texas industrial metropolis. With some 600,000 population as shown by the current year's census it stands well in front of all others in growth and justifies its braggadocio by the enterprise which has resulted in its growth.

Its glamorous Shamrock Hotel where the meetings were held presents visible and appreciative evidence of Texas claims. Built by an oil mogul seeking to find expression in a monument for his excess millions, nothing was spared in the pursuit of perfection. With pride and Texas patriotism rather than dividends as the prime incentive the hostelry has accomplished its destiny most nobly. It is justly famous.

Houston is often dubbed "the little brother" of Los Angeles since the pattern of growth follows similar lines. No rail transportation of any kind serves the urban or suburban population, only busses and private cars.

(Continued on page 220)

GILSON MIXERS



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- Best Price on the Market

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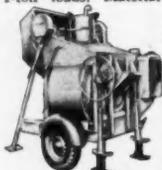
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Also 6-S, 11-S and 16-S Power Loader Mixers.

THE JAEGER MACHINE CO., 521 Dublin Ave.
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Texas the Great

(Continued from page 218)

With a population of only 600,000 it occupies nearly as much area as Chicago with its 3,600,000 citizens. Consequently the growth is evidenced by a series of communities with much vacant land intervening.

Home builders have not been backward in maintaining their position and rank in the Texas jubilee procession but, strangely, their claims that appear wild at first are justified by visual proof. Their prowess in keeping pace with population and industrial growth is evidenced by numerous sizeable housing projects where Texans in all walks of life can find appropriate shelter.

From communities rivaling Chicago's gold coast and northern suburbs, down to snug homes for industrial workmen, home builders have displayed good taste, good planning, and good judgment.

Except in the lowest cost homes, brick and stone are utilized for exterior walls with very little stucco such as adorns practically all projects in California and Florida. A bountiful supply of reddish clay in the State provides an interesting color for common brick and variety is obtained by changing mortar shades. The stone, similar to Northern sandstone, is interesting but less colorful.

The roofs of the majority of homes, when not built in traditional styles, are of low pitch and are covered with composition roofing, wood and asphalt shingles. A complete lack of chimneys in lower cost housing strikes the Northerner as queer until he learns that heating plants in these homes consist of a gas wall heater in bath rooms and a gas stub in each other room where the buyer may attach a rubber hose supplying any type of space heater that suits his family as long as the fuel is gas. In the better homes small forced air central heating plants are often located in the attic section and summer air conditioning is becoming more prevalent.

In all types of residential construction builders claim practically one hundred per cent use of Drywall construction. They find it more durable, less subject to cracking and crumbling and in every way more satisfactory. It is applied and finished by carpenters and painters.

What has been said of Houston construction applies equally to Dallas. Dallas, however, as a thriving community presents a somewhat different picture. Though smaller than

(Continued on page 226)

The Mighty Midget

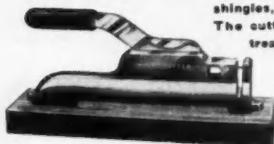


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The SCOUT is a small utility cutter for asbestos siding and shingles, with front end nose punch.

The cutting blade is made from a high grade steel, heat-treated, has sharp serrated teeth machined by a milling cutter. Overall length 16", height 6", width 2½". Approx. wt. 3½.

The base of the Scout Cutter is high-grade aluminum casting, having the proper amount of weight necessary to perform the best operation by the applicator.



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The Monarch Asbestos Siding and Shingle Cutter in malleable iron gives you the 100% guarantee against broken castings. Because of its metallurgical structure, malleable iron is the ideal material for this cutter. The Monarch gives greater toughness, higher resistance to corrosion and will stand up to heavy and repeated impact.

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The World's Smallest and Lightest
True Counter Balance for Double
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An Amazing New Type Spring results in a tiny mechanism doing the work of a giant. The negative spring is a tight coil of flat material which is progressively unwound throughout the range of action. Tightness of coil reduces diameter markedly over power spring. In the spring action the coiling torque which opposes the uncoiling pull, is developed only by that section of the spring that is being straightened as it is drawn off the coil. This results in constant spring force at all positions of the sash, and true counterbalancing. The Pullman Powerful Pigmy is the greatest innovation in balancing double hung windows since the spring balance was developed by Pullman Manufacturing Company over 65 years ago.

PULLMAN POWERFUL PIGMY FEATURES

1. **Lowest Priced** true counterbalance on the market.
2. **Top Quality** . . . the result of years of engineering know how.
3. **No Head or Side Room Necessary** . . . simple, easy installation.
4. **Foolproof** . . . no moving parts . . . nothing to get out of adjustment.



Cutaway showing actual position of spring when it's extended.

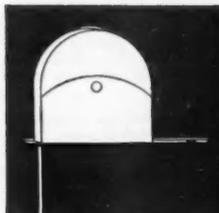


Position of balances installed in sash.

No Head or Side Room Necessary — The small diameter of the new spring cuts balance size by 75%, thereby allowing the Powerful Pigmy to be mounted in the window sash itself. This is the first time in residential window history that a true counterbalance is available which requires neither head nor side room.

Cuts Costs — One set of four balances weighs only 12 ounces. This reduces shipping and handling costs. Easy morticing in sash reduces installation and job handling costs. In addition the Powerful Pigmy is the lowest priced true counterbalance on the market.

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325 Hollenback Street, Rochester 21, N. Y.



Specify Window Units with
PULLMAN *Sash Balances*

BOOK REVIEW



TWO books that have not been promoted to any great extent and yet have been in heavy demand among builders and contractors are **PRACTICAL ACCOUNTING AND COST KEEPING FOR CONTRACTORS** and **HOME BUILDERS' MANUAL FOR CONTRACTORS**. The reason for their popularity is not hard to find because they both make direct contributions toward helping a builder manage his business successfully. Books that can do that deserve a prominent place on a contractor's bookshelf.

PRACTICAL ACCOUNTING AND COST KEEPING FOR CONTRACTORS

by Frank R. Walker. 170 pages, 300 forms. 8½ inches by 11 inches. Frank R. Walker Company. \$3.00.

Here is a business book, now in its fourth edition, that is familiar to many contractors in all parts of the country. It is an easily understandable book, written by an expert on contractors' business methods who tells the builder just how to select the right accounting system, how to keep books in the easiest possible way, how to keep time records, how to handle tax and insurance matters, and how to draw up contracts. Then, too, there are other sections devoted to labor and material reports, subcontracts, material bought and sold records, Social Security forms, receipts and expenditures, etc. By good management the author of this book has avoided complicating what is too often a complex subject. All the information in the volume is practical and up to date so that if the author's directions are carefully followed the contractor using his book should always know just where his business stands. A particularly valuable feature of this work is the great number of sample forms illustrated and described. It is our guess that by using this book properly a contractor can simplify his off-the-job, after-hours paper work considerably.

HOME BUILDERS' MANUAL FOR CONTRACTORS

275 pages, 359 illustrations, 12 complete house blueprints, legal forms, 9½ inches by 11½ inches. 3-ring binder. \$5.00. Simmons-Boardman Publishing Corporation.

Another old standby that might well be titled "The Contractor's Catch-All," is this loose-leaf volume that contains dozens of standard contracting forms brought together to serve the builder in figuring his costs for a particular job. The book has value in that it provides the builder with an excellent group of open specifications, material lists and property records, contractor's bid and budget forms, changes in contract forms together with a great deal of extremely useful data dealing with house plans, housing diagrams, and home heating details. Because this material is contained in a sturdy loose leaf binder, the reader can use the volume to preserve his own miscellaneous papers and forms for easy ready reference. All of the individual forms in the Manual can be reordered as needed, thus keeping the book permanently up to date.

Home Builders Are Going to School

Special courses are being offered at the Midtown Business Center of the City College of New York, in cooperation with the New Jersey Home Builders Association. The instruction provides young builders with a professional understanding of methods used successfully by contractors and home builders.

A SPECIAL

Here's an easy way to get new essential information that will help you increase your income. Every volume a standard work by leading authority. Remember—it's the informed builder who is the successful builder.

ESTIMATING

1. **THE BUILDING ESTIMATOR'S REFERENCE BOOK** and **Vest Pocket Estimator** (not sold separately). By Frank R. Walker. Contains latest estimating and cost data on everything that goes into house construction. Most complete compilation of estimating and cost data available. \$10.00.
2. **SIMPLIFIED CARPENTRY ESTIMATING**. By J. W. Wilson and Clell M. Rogers. Everything needed to "take-off" a bill of materials from set of plans and specifications for a frame house—with many helpful quick-reference tables and short-cut methods that simplify the work. \$3.50.
3. **THE BUILDING TRADES HANDBOOK**. Ready reference on building subjects—mathematics, architectural drawing, structural design, materials and methods. \$1.75.
4. **CONTRACTOR'S MATERIAL LIST**. A 10-column take-off form for complete listing of materials and labor costs. \$1.00.
5. **SPECIFICATIONS**. Full set of detailed house specifications (and item index), with spaces for inserting the pertinent description data. \$5.00.

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HEATING AND PLUMBING

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23. **PRICE GUIDE FOR PAINTERS AND DECORATORS.** Tables covering practically every type of work done by the painter and decorator, with suggested prices based on various wage scales. \$1.25.
24. **PAINTING AND DECORATING CRAFTSMAN'S MANUAL.** Sponsored by the Painting and Decorating Contractors of America. \$2.00.

BRICKWORK AND MASONRY

25. **THE ART OF BRICKLAYING.** By J. Edgar Roy. Basic bricklaying job instruction, many illustrations, glossary, special scaffolding and cement block chapters. \$4.00.
26. **THE MASONRY HOUSE.** By Lee Frankl. Training-Thru-Sight Associates, Inc. Step-by-step guide to complete house construction in brick and tile. Excellent self-teacher. \$2.95.
27. **MASONRY SIMPLIFIED, Vol. II.** Practical masonry procedures in the various phases of construction, from building forms for concrete to constructing fireplaces and septic tank systems. Includes discussion of handling new products such as glass blocks, waterproofing mixtures and insulating blocks. \$5.00.

ELECTRIC WIRING

29. **INTERIOR ELECTRIC WIRING AND ESTIMATING.** By Albert Uhl, A. L. Nelson and C. H. Dunlap. How-to-do-it book on interior wiring and cost estimating. \$2.75.
29. **WESTINGHOUSE HOME WIRING HANDBOOK.** By A. Carl Bredahl. A guide for planning the wiring of moderate-priced homes, with emphasis on safety, effectiveness and efficiency. \$1.00.

MISCELLANEOUS

30. **HOME BUILDERS MANUAL FOR CONTRACTORS.** Provides convenient data and check lists to follow all operations connected with construction of a home. Loose-leaf binder permits additions of special material pertaining to project being constructed. \$5.00.
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AIR WALL Heating System

General Electric's amazing new heat distribution system that continues to smash sales records.



MASSACHUSETTS G-E Air-Wall Heating makes this home, and eighty-eight others in the project in Weymouth, Mass., warm and comfortable even on the coldest days.



CALIFORNIA Three thousand five hundred homes equipped with G-E Air-Wall Heating at Housing Project in San Francisco, Calif.



MICHIGAN Thirtieth anniversary model home in project of eight hundred homes constructed by Miller Homes, Inc., in Detroit, Mich., equipped with G-E Air-Wall Heating.



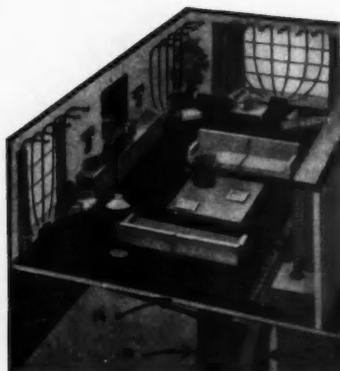
NEW JERSEY This is a typical G-E Air-Wall installation showing small duct size and return air fittings.



PENNSYLVANIA G-E Air-Wall installation in Williamsport, Pa., showing G-E Oil-Fired Unit and extended plenum.



COLORADO This interesting G-E Air-Wall Heating installation in Denver is made with ducts in concrete slab of basementless house.



Builders who use G-E Air-Wall Heating have important advantages over other builders. First, they can use G-E Warm Air Furnaces, for gas or oil, that are famous for economy and reliability. Second, they have a heating system that gives two types of heat in one—radiant and forced warm air. Third, since smaller ducts and standard fittings are used, costs can be figured more quickly and exactly. Fourth, they can use the power of the famous General Electric name to help sell their houses.

- A—Small Diameter Ducts
- B—G-E Oil or Gas Warm Air Furnace
- C—Return Air Ducts



Notice the pattern of heated air from the G-E Air-Wall Register. It blankets the cold walls of the rooms in your home...and warms them so they actually radiate heat!



New advanced automatic G-E Air-Wall Register provides all the advantages of the standard G-E Air-Wall Register plus automatic individual room temperature control.



HOME HEATING EQUIPMENT

For economy and comfort . . . these efficient, quality units for gas heating.

● You get benefits of 2 types of heat!

The amazing new G-E *Air-Wall* Register, a product of G-E research and engineering, is generally placed just above the baseboard. It directs air up and out in front of the wall... warming the cold surface so it radiates heat. You get better forced warm air heat, too. The air pattern cuts down natural cold drafts which normally creep down cold walls.

● Freedom of furniture placement!

No interference from radiators or heat supply grilles. You can sit directly in front of the G-E *Air-Wall* Register and feel no draft... no uncomfortable hot blasts. In the morning, when the system goes on automatically, you feel no cold air that has settled overnight in the ducts.

● Balanced heat in all rooms!

You can accurately adjust heat flow to each room in the home by simple adjustment of the damper on each duct, with minimum disturbance to the "balance" of heat to other rooms.

● Uniform floor-to-ceiling temperatures!

The wall of warmed air diffuses quickly to give even temperatures throughout the room. Warmer floors, too!

● Quiet!

Small *Air-Wall* ducts dampen furnace noise more fully than large ducts. Register design also helps to reduce noise.

*architects—
builders—contractors!*

G-E *Air-Wall* Heating is engineered for low installation cost; its design is guided by the same famous standards long built into G-E furnaces. It is easier and less expensive to estimate a job when you plan to use G-E *Air-Wall*—because of the standard ducts, elbows, and register boxes. This system can be installed in houses with or without basements.

Where is GE AIR-WALL available

It is available RIGHT NOW through your local General Electric Heating Distributor. He is listed in your classified telephone directory.

You are cordially invited to visit
General Electric Booths 111, 112 and 113
at the Home Builders' Show.

You can put your confidence in—

GENERAL  ELECTRIC

JANUARY 1951



General Electric GAS-FIRED Warm Air Furnaces... come in five compact sizes. Home planners will enjoy clean, quiet operation, their quick heat, their high efficiency, their filtering which cuts down dust and dirt. All units circulate and humidify the air. Designed for use with the new G-E *Air-Wall* system of heat distribution.

General Electric GAS-FIRED Boilers... turn gas fuel into low-cost comfort. Three to five minutes after the flame goes on, steam is in the radiators, or hot water is pouring out its warmth. Clean, complete and efficient combustion. Heavily insulated, with jacket construction of heavy steel. All models approved by American Gas Association.

For oil heating, use these famous G-E Units.



General Electric OIL-FIRED Warm Air Furnaces are low-cost, compact, easily installed, quiet and long-lasting. They are designed to save you money on fuel bills because of the compressed air-oil impact method of atomization of each drop of oil. Designed for use with the new G-E *Air-Wall* system of heat distribution.

General Electric OIL-FIRED Boilers... give quick comfort, at less cost. The way the oil is burned assures you the most heat from every gallon because (1) the oil is mixed with air into a frothy, bubbly foam; (2) each single bubble is then shattered into millions of particles; and (3) these particles burn completely. Five models.

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- Free information on G-E *Air-Wall* Heating
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LOW-COST HOME COOLING IS HERE!



Easily installed attic unit gives cool comfort in hottest weather

No investment can give home owners as much comfort and pleasure as a Hunter Attic Fan. This modern convenience is now being used in thousands of houses and apartments throughout the nation. Low in initial cost and with no upkeep expense, the Hunter Attic Fan is practical for homes in all price ranges.

Installation of Hunter's new, compact package fan is simple and inexpensive. Fan, motor, suction box and shutter are all in one unit that requires only a ceiling opening in hallway and 18" clearance in attic. Four models, ranging from 4750 CFM to 9500 CFM, to fit any home size and climate. Quiet, powerful, dependable. Manufactured by Hunter, exclusive fan makers for 65 years.

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381 South Front Street,
Memphis, Tenn.

Send copy of "How to Cool for Comfort" to:

Name _____

Address _____

City & State _____

Hunter Package Attic Fans

On Display at NAHS Show

226

Texas the Great

(Continued from page 220)

Houston in population it appears to be somewhat more cultural in aspect and to have given more thought to its city planning and its zoning laws and regulations.

Its central position in the State makes it an ideal distributing point and practically all national producers are represented by warehouses, large and small. These and many manufacturing plants are grouped together in well kept and well ordered areas where they have become an ornament to the community.

Here also were many fine residences but the most interesting group observed was a community where homes were sold for the most part under \$20,000. Whoever provided the home designs was a master of variety, color, texture, and individuality. Yet the whole pattern fitted so beautifully that one felt that here was a place to stop and live.

To complete the perfection, nearby was located a most unusual and completely ample shopping center where all of the buildings reflected the atmosphere of Old Mexico and Spain. The area was a dreamland.

Always seeking comparisons we cast up the construction cost of one typical economy enterprise. The houses contained 850 square feet of living area with a garage added and consisted of living room, kitchen, two bed rooms, and a bath. There was no utility room but the domestic water heater was located in an ample closet. Foundations and floor were as heretofore described. Sidewalls and interior partitions were standard 2 x 4's with asphalted paper and drop siding on the outside and 1/2-inch gypsum Drywall on the interior. No beveled siding was seen anywhere in Texas, but shingles and shakes provided a variety. The roof had a 30 per cent pitch, was covered with asphalt shingles and supported by trusses made on the job with jigs. The kitchen had wood cabinets and a sink on one wall. Range and refrigerator were provided by the purchaser. A small wall heater was provided in the bath room but only gas outlets in the balance of the rooms. A frame garage was located at the back of the lot. The house on a lot 60 x 100 feet was selling for \$7,300. Material costs in Texas are about the same as in Chicago but labor, which is non-union, accomplishes more, works for a lower scale, and costs not more than sixty per cent of the same help in Northern cities.

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Save HALF Your Time BUILDING STAIRCASES



Above—Measure tread or riser in 10 seconds.
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In 10 seconds gives you BOTH correct length and angle of stair treads, risers, closet shelves, etc., ready to mark board. Each end pivots and locks at any LENGTH OR ANGLE automatically. Adjustable from 30° up. Saves a day or more, increases your profits \$20 or MORE on each staircase. Fully guaranteed. Circular on request.

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THERE'S GOOD PROFIT SELLING BOAT MATERIAL



DILLABAUGH K. D. "Short" Boat Kit Makes it Easy

The hundreds of small items with odd size pieces accurately machined are accumulated in one compact package. You offer "ONE-STOP" service, covering the boat builder needs with DILLABAUGH "Short" Kit.

You make a profit on the kit and an ADDED profit on PLYWOOD, LUMBER, PAINT to complete the boat. Volume production of the kit makes it possible to retail as low as \$26.00 f.o.b. factory.

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EASY TO ASSEMBLE

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TEL-O-POST

The original adjustable jack post . . . to correct sagging beams, prevent cracking plaster, sticking windows, etc. . . . available in complete size range from 1' to 8' 2" . . . comes complete in sealed carton . . . no parts can become lost . . . many patented features make Tel-O-Post strongest, longest lasting, easiest-to-use, most popular post on the market.

Brite-Lite AREAWALLS

Finest creawall available anywhere . . . high quality fully corrugated areawalls made of heavy gauge, copper-bearing, zinc coated steel. Available in both the straight and round types in a wide variety of sizes. Ideal for new construction or remodeling . . . flat leak-resistant flanges are a part of the areawall . . . attractive rounded top edge and full corrugations add to strength and appearance.

BRAINARD
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Standard AREAWALLS

For competitive, low cost building projects where low unit cost is essential. Inexpensive, sturdy, serviceable areawalls of prime steel, zinc coated for lifetime wear. Comes in round style in six heights. One width with 5" adjustment . . . easily attaches to any standard basement window opening. Will not buckle . . . has attractive rounded top edge. Flat leak-resistant flanges are a part of areawall.

STEEL-STRONG BUILDING POSTS

Fixed or adjustable the Steel-Strong post is the easiest to install and the most efficient building column on the market. Of sturdy prime steel tubing . . . painted inside and out with rubberized Rust Ban paint. Plates of heavy gauge steel painted to resist rust . . . attach to either wood or steel beams. Popular with construction firms for new construction and replacement. Complete range of sizes. Can be concrete filled where codes demand.

Booth 30
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Hotel



WATCH FOR OTHER NEW BRAINARD ALL-STEEL
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SHARONSTEEL



Specify GRANT SILENT Sliding Door Hangers

For over half a century, architects have specified Grant Silent Sliding Door Hangers because:

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- They Allow Simpler Room Partitioning

Grant No. 16 and No. 17 sliding door hangers are the only Sliding Door Hangers with rollers of nylon. There is no metal to metal contact as nylon makes up the complete rotating member of the ball bearing roller, thus eliminating metallic sound — your assurance of SILENT, smooth operating sliding door hangers. Grant Sliding Door Hangers are the only hangers with these exclusive features: • Nylon Rollers • Three Adjustments • Automatic Alignment of Doors • Center Hung Feature • Doors can Never Jump the Track.



GRANT No. 16 Single Track Sliding Door Hanger



GRANT No. 17 Double Track Sliding Door Hanger allows for a simplified installation of multiple unit doors.

GRANT also manufactures:
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Write Dept. A-1 for a catalog or individual brochures on the above Grant products.



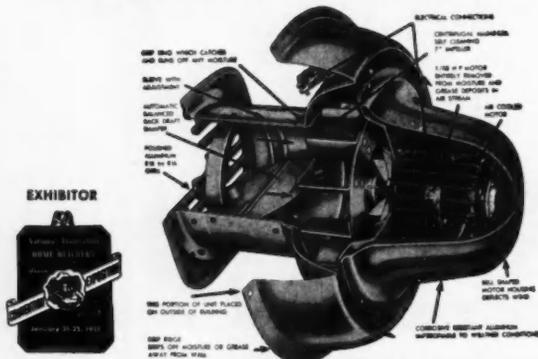
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31-85A WHITSTONE PKY., FLUSHING, N. Y. • FLUSHING 9-1900

Representatives in all major cities.

The foremost name in Sliding Devices

HOME BUYERS LIKE THE KITCHEN-AIRE EXHAUST FAN BECAUSE IT'S DIFFERENT



- Different, because it is FIRE-SAFE, grease laden air is NOT drawn over motor;
- Different, because intake grill may be mounted above cooking range even on inside wall;
- Different, because ordinary 6" stove pipe will serve for making connection between intake grill and exhaust fan;
- Different, because it is QUIET, operating mechanism is mounted OUTSIDE the wall;
- Different, because it is weatherproof, back draft damper protects against heat loss, operating mechanism is housed in corrosion-free aluminum.

Yes, the Kitchen-Aire is different. Electrically operated, easily installed, the Kitchen-Aire adds that plus-value which makes new homes salable. It is the last word in Kitchen ventilation, a feature your buyers will like. Underwriters Approved. Advertised in Better Homes and Gardens.

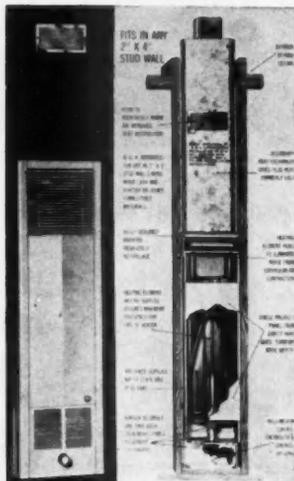
STEWART MANUFACTURING CO.

3204 E. Washington Street,

Indianapolis, Indiana

New Wall Heater Has Secondary Heat Exchanger

A new wall heater developed by Holly Manufacturing Company, Pasadena, California, incorporates a "Secondary Heat Exchanger" that is



NEW "NarrowWall" units fit between studs

said to increase the units heating efficiency by 25 per cent. The exchanger saves heat that otherwise is lost through the flue.

Called "NarrowWall," the wall heaters extend from floor to ceiling, and are AGA tested and approved for use within 2x4-inch stud walls covered with lath and plaster, wood panels, wall board, or other combustible material. The heater extends within the wall and up and beyond the ordinary ceiling height so that a savings is made in vent material. Single or dual models with 25,000 and 35,000 B.T.U. input, as well as a dual model with 45,000 B.T.U. input are available. All models are approved for natural, manufactured or L.P. gases.

CORRECTION . . .

The Pittsburgh Plate Glass Company, who supplied material for the article, "Installing Double-glazed Windows" (Page 48, November *American Builder*) requested this change be made: Glazing rabbit requirement should be $\frac{3}{4}$ -inch instead of $\frac{5}{8}$ -inch.

Third Installment
Construction Lumber
features
LAMINATED BEAMS
February *American Builder*

AMERICAN BUILDER

*Versibond
has Everything*

PLUS EASIER APPLICATION!

Yes! VERSIBOND has ALL the advantages of beauty and durability that make decorative laminate materials so popular for sink tops and backs, table tops, paneling and many other applications.

But VERSIBOND has the EXTRA advantage of EASIER APPLICATION... right on the job...by contact pressure...using ordinary hand tools! VERSIBOND is the only material of its kind with FLEXIBLE RUBBER BACK. You can bend it...you can cover it...you can save time applying it!

VERSIBOND is cigarette-proof, and passes NEMA tests for resistance to heat, light, stains, and wear.

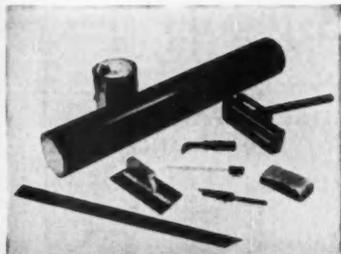
Write for descriptive folder, beautifully lithographed to illustrate typical installations and the full range of 25 popular VERSIBOND color-patterns. Always remember—VERSIBOND has Everything PLUS EASIER APPLICATION!

THE OHIO RUBBER COMPANY
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VERSIBOND
VERSATILE
DECORATIVE LAMINATE

KNOW IT BY THE FLEXIBLE RUBBER BACKING



1 Ordinary hand tools are used in cutting and applying VERSIBOND. A roll of VERSIBOND is shown with the exclusive rubber backing.



2 A uniform coating of cement is applied to the rubber backing of a VERSIBOND sheet. Likewise, the underlying surface is also cemented.



3 Flexibility of VERSIBOND shown partially applied, permits easy handling. VERSIBOND bends in any direction.

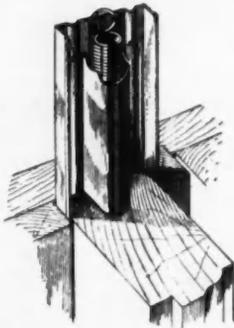


4 Contact pressure with an ordinary hand roller assures a perfect bond. Note how VERSIBOND can be covered.

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FEATURING:

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Low original cost plus economy of installation made Cenco combinations the first choice of Builders and Home owners. Available in Bronze or Aluminum for lifetime window satisfaction.

Request literature & prices in Cat. No. 51

CENTRAL METAL STRIP CO.

4343 No. Western Ave.,

Chicago 18, Ill.

Study of Wiring Costs Reported Favorable for Multi-Outlet Assemblies

Summing up a study of wiring costs in two residences, one using duplex outlets in the walls and the other multi-outlet baseboards, Orth Electric Co., Cincinnati contractors, reported that the advantages of an increased number of outlets in the latter system could be had at a relatively low extra expenditure for materials and labor.

Both jobs specified a 60-ampere wiring entrance and a four-circuit



PLUG-IN baseboard strip allows unlimited placement of furniture and electric devices distribution panel. Installation of the baseboard electrical trim, which took the place of conventional baseboards,

cost \$403.43, the contractors said. It provided outlets every 18 inches throughout the house, 125 in all. The 22 duplex outlets in the other house cost \$335, or 20 per cent less.

The contractors pointed out that, besides the convenience of frequent connections, the baseboard system also permitted flexibility of furniture and electric fixture arrangement.

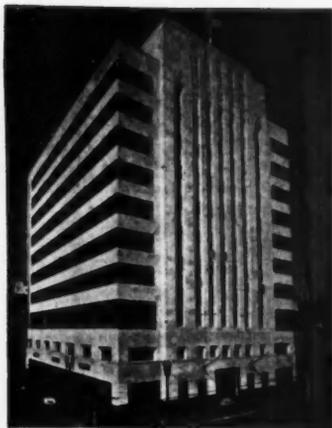
Plug-in strips permit automatic switch control of lighting from doorways, or constant service at every receptacle.

The \$18,500 homes selected for the wiring cost study were of brick veneer and frame construction. Built by the Martin L. Holman Co., Cincinnati, both have living-dining combination areas, three bedrooms, kitchen, bath, full basement and integral garage.

Design Book

A book called "Twenty-three Garden Apartment Designs for Military Housing, Suburban Apartments and Low-Cost Public Housing," which contains the 23 prize-winning designs in the recent wood garden design contest of the Timber Engineering Co., is being made available by the firm to architects, designers, builders, realtors and investors.

ANOTHER ADAMS-RITE INSTALLATION!



THE NEW MIRROR BUILDING, LOS ANGELES, Rowland H. Crawford, Architect, uses Pittsburgh Plate Glass Company "Herculite" doors—all of them equipped with Adams-Rite Series 0161 horizontal locks. These locks can be used in any tempered glass door, top or bottom channel. They take the place of 2 locks and are available with single or double bolts and 1 or 2 cylinders.

Write for catalog.



QUALITY HARMONY AND ECONOMY

ADAMS-RITE MANUFACTURING CO.

180 WEST 10TH STREET, DENVER 4, CALIFORNIA

Red Cedar Closet Lining

**Brown's
SUPERCEDAR**
NATIONALLY
ADVERTISED

Guaranteed 90% Red Heart or Better

Only SUPER-
CEDAR is of
the same uni-
form high qual-
ity standard that
guarantees every
package to contain
90% Red Heart or
better, and 100% oil
content that produces
the pleasing aroma.

100% oil content
Suggest Cedar Lined
Closets to Every Home
Builder. There is
Nothing Better than

**BROWN'S
SUPERCEDAR
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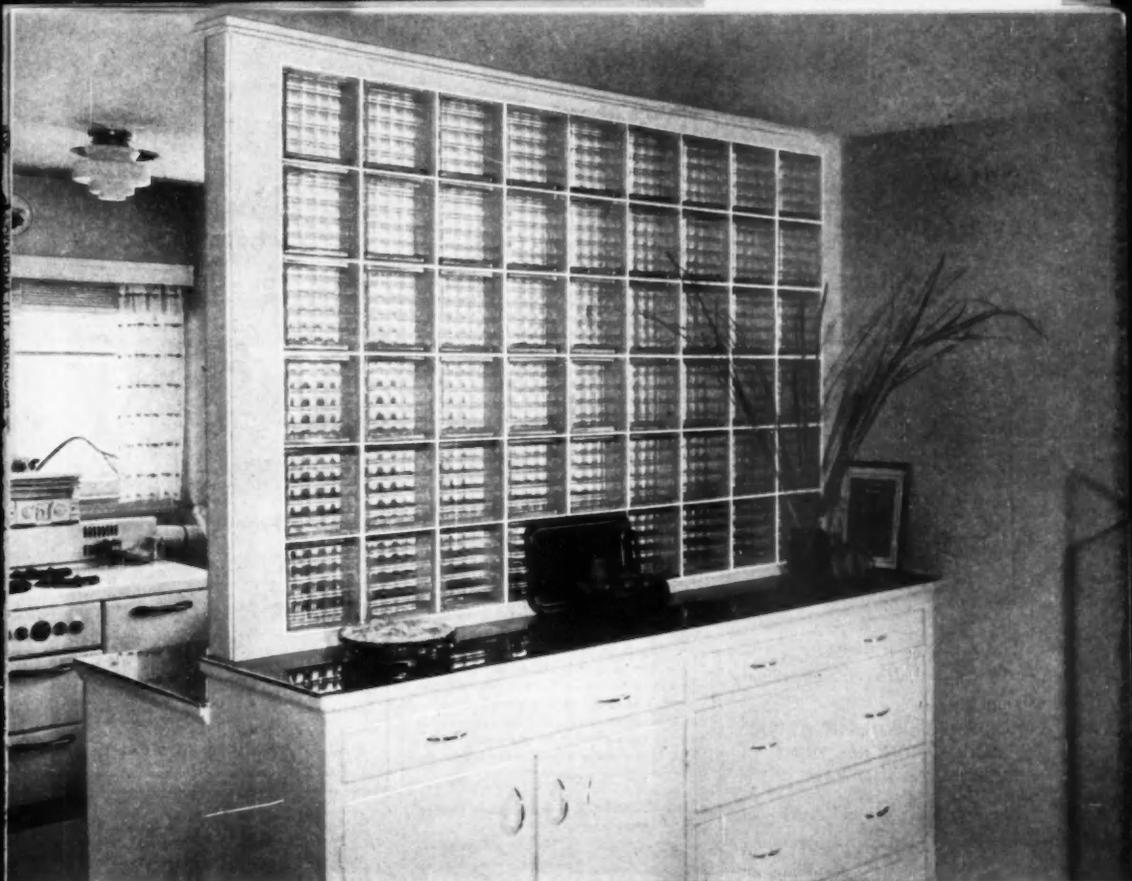
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More home builders are
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closets today than ever—and
Brown's SUPERCEDAR is na-
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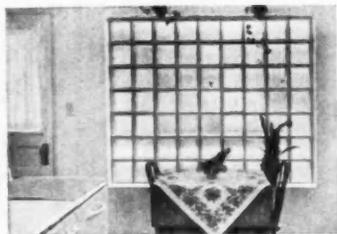
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GREENSBORO, N. C. ESTABLISHED 1896

LARGEST MANUFACTURERS OF
AROMATIC RED CEDAR IN THE WORLD



You can "borrow" daylight from one room and use it in another through partitions of Insulux Glass Block.

KITCHENS, BUILT OR BEING PLANNED, ARE GOOD PROSPECTS FOR Daylight Engineering



Light with privacy. Insulux Glass Blocks shut out ugly views and prying eyes yet let in ample light.

With Regulation X halting much new construction, more and more emphasis is being placed on the maintenance, remodeling and modernization market.

Daylight Engineering with Insulux Glass Block offers you an opening for a lot of work on existing homes. You can provide light on stoves, sinks and working surfaces yet maintain complete privacy for the housewife. Her wall of Daylight will be permanent—nothing to rust or rot, sanitary, have the thermal insulating value of an 8-inch brick wall.

One Insulux Glass Block job in a home often opens other opportunities, especially if a quick-witted salesman shows

the housewife in how many places Insulux Glass Block can enhance her home. Light with privacy in the bathroom—light in other rooms but blocking out ugly sights—light for the front entrance, basements, inside partitions.

But get the whole story from a Daylight Engineer. He will show how to locate scores and scores of profitable Daylight Engineering jobs. For details, write Daylight Engineering Laboratory, Dept. AB-1, Box 1035, Toledo 1, Ohio. American Structural Products Company, subsidiary of Owens-Illinois Glass Company.

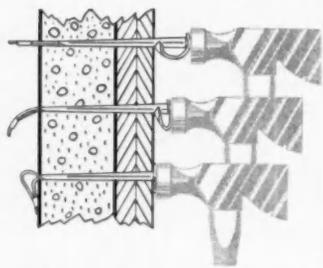


INSULUX "WALLS OF DAYLIGHT"

—by the pioneers of Daylight Engineering

**AMERICA'S
FOREMOST BUILDERS
ARE REDUCING COSTS
WITH THE**

LOC-NAIL



This revolutionary fastener is scientifically designed, drives like an ordinary nail and its

**EXCLUSIVE AUTOMATIC RADIAL
ACTION CLINCHES TIGHT
EVERY TIME—NO RATTLING**

The very fine point and shank penetrates easily and does not displace or mutilate the non-wood sheathing material.

No expensive cross furring required to fasten asbestos cement siding or red cedar shingle to 1/2" or 25/32" non-wood wall sheathing.

Unbiased laboratory tests report LOC-NAIL terrific holding power up to 99.9 LBS.

**LOC-NAILS AVAILABLE
THROUGH:
JOHNS-MANVILLE SALES CORP.
THE HOMASOTE COMPANY
YOUR BUILDING
MATERIAL SUPPLIER**

**Included in the Celotex Corp.
Specifications for Applications.**

**Approved by the Red Cedar
Shingle Bureau, Seattle, Wash.**

**The LOC-NAIL is a product of
E. G. BUILDING FASTENERS CORP.**

E. Gisondi, Pres.

101 Park Ave. New York 17, N.Y.

232

What's Ahead . . .

(Continued from page 136)

**JOSEPH A. GOLDMAN, Builder,
Dumont, New Jersey**



"The American home building industry for 1951 faces an enigma of Gargantuan proportions as a result of the restrictive measures imposed on it by the new governmental regulations.

"Affected, as the result thereof, is not only the productive ability to create new homes, but also the financial ability of the consumer to purchase new housing units under such conditions.

"Recent government cut-back orders in such vital items as steel, copper, aluminum and other alloys will, without doubt, result in curtailment of planned production of new housing starts simply because of the inability to definitely count on finished products arriving on planned schedule to the job site.

"Furthermore, as new and added regulations come into existence in the months that lie ahead, the skill, ability and ingenuity of the American home builder will be taxed to the limit. It is therefore of extreme importance that the fullest of cooperation is exerted by the proper government officials in conjunction with labor and management to preserve the economic existence of the home building industry. It is hoped, that barring on an all-out war, our government agencies will enlist the advice and sincere counsel of qualified representatives of the home builders of the United States before embarking on any further restrictive measures."

**ELIAS W. NUTTLE, Retail Lumber Dealer,
Denton, Maryland**



"The unpredictables will determine what business will be in this and all areas of the United States. Considering just the Del-Mar-Va Peninsula, we feel that building under present regulations will go along about as usual. There may be some cut-backs because of financing but not many since most of the money used here for financing building is private.

"Farm building has not been good for several years. There also has been very little repairing and remodeling. Much of this we feel has been caused by lack of labor. With new house building cut back this should start again and fill at least part of the job.

"Another thing that is going to affect this Peninsula is public building. There are more schools going up here than at any one time in the past. There are many roads being built. The new Chesapeake Bay Bridge and connecting roads will open up a whole new territory for summer cottages, small manufacturing and small commercial building.

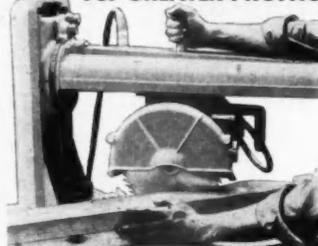
"Over the entire Middle Atlantic territory building will be off at least 25 per cent, because: 1. Restriction in credit. 2. Building is catching up some in metropolitan areas. 3. The families of men in Armed Forces doubling up. 4. Labor migrating to other industries. 5. High cost of building is putting housing out of reach of many families. 6. Not as many families being formed. 7. Uncertain as to where our government is leading us. 8. Scarcity of certain necessary materials."

(Continued on page 234)

USE THE

**WALLACE No. 1
RADIAL SAW**

For GREATER PROFITS



Portable Powerful Accurate

Designed for the building trade, this fast-cutting, versatile saw cuts rafters without marking or handling material twice. It can save you from \$200 to \$400 on small home jobs. You owe it to yourself to get full information on the speedy, accurate, cost-saving WALLACE NO. 1.

Send Coupon Today For Free Bulletins

Name

Company

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J. D. WALLACE & COMPANY
136 So. California Ave., Chicago 12, Ill.

**need AUTOMATIC
CONTROL**



GENERAL CONTROLS
801 Allen Avenue Glendale 1, California
Manufacturers of Automatic Pressure, Temperature, Level and Flow Controls
FACTORY BRANCHES: Baltimore 3, Birmingham 3, Boston 16, Buffalo 3, Chicago 5, Cincinnati 2, Cleveland 13, Dallas 2, Denver 4, Detroit 21, Glendale 1, Houston 6, Kansas City 2, Minneapolis 2, Newark 6, New York 17, Philadelphia 23, Pittsburgh 22, St. Louis 3, San Francisco 7, Seattle 1, Tulsa 6, Washington 6. DISTRIBUTORS IN PRINCIPAL CITIES

AMERICAN BUILDER

* a good file retailer

YOU*

**CAN NOW
RENT
TILE CUTTERS**

*To Your
Customers!*



INCREASE TILE SALES AND MAKE PROFIT FROM RENTAL WITH THIS TILE CUTTER RENTAL PROGRAM. MERCHANDISING UNIT INCLUDES RENTAL FORMS, AD MATS, AND POINT OF SALE DISPLAYS. GET YOUR SHARE OF THE HOME INSTALLATION MARKET! SEND FOR RENTAL BULLETIN AND THE NAME OF YOUR NEAREST DISTRIBUTOR TODAY!

Write Department AB-2

J.M.J. PRODUCTS CO.

MAKERS OF THE FAMOUS PT-91 PLASTIC WALL CUTTER



ENGINEERS MANUFACTURERS
BELLEVILLE, ILLINOIS

JANUARY 1951

Now screening
millions of windows
better than they were ever
screened before!

DURALL[®]
ALUMINUM TENSION SCREENS



MANUFACTURED BY LEVONCO OF NEW YORK
Guaranteed by
Good Housekeeping
AS OUR ASSOCIATED TRADE



SNAPS INTO PLACE FROM INSIDE! Flick of a finger installs Durall. No ladder climbing, no side frames to cut.



ALUMINUM! NO RUST AND NO PAINTING! Durall keeps its good looks, will not rust or stain house.



ROLLS UP FOR STORAGE! Durall swings free for window washing... makes compact roll for storing.

DURALL Tension Screens are made by one of the oldest manufacturers of wire screening. For complete information, write the New York Wire Cloth Co., Dept. AB-1, 445 Park Avenue, New York 22, New York.

"For Sale" signs
come down
faster...



when you
specify MYERS
Water Systems

Today's rural home buyer has an especially critical eye for equipment quality. And that's where Myers Water Systems can stand you in best sales stead. Your soundest prospects are doubly pre-sold on Myers quality: (1) by the most consistent, most comprehensive advertising in the field; (2) and by the enthusiastic endorsement of their Myers equipment by long-time owners. Wherever you build beyond city water mains, you'll speed up sales by specifying Myers Water Systems. You'll get the right system, too—because the full Myers line of Ejecta and Reciprocating Types covers every possible need. Mail coupon for catalogs and name of nearest distributor.

New Myers "HN" Ejecta
Convertible for
Shallow and Deep Wells



Vertical Type
Ejecta for
Deep Wells



Self-Oiling Bulldozer
for Shallow Wells



New Myers Water Softeners —
Types and Sizes for Every Need



Self-Oiling
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Depths



New Deeplift
Ejecta for 100
to 300 ft. Wells



Tank-Mounted Water
Systems for Smaller
Homes, Cottages, etc.



THE F. E. MYERS
& BRO. CO.

Dept. T-105, Ashland, Ohio

Send free literature on

Water Systems Water Softeners

Name _____

Town _____ R.F.D. _____

County _____ State _____

What's Ahead . . .

(Continued from page 232)

R. L. RUE, Retail Lumber Dealer,
Plentywood, Montana

"This rather sparsely settled but progressive territory in northeastern Montana should provide a large per-capita demand for new homes during 1951. With good crop yields and extension of rural electrification throughout the region; with a younger generation, in a great many cases, taking over management of farms, new homes or remodeled and modernized homes are becoming the rule.

"The larger trading points, particularly county seat towns are steadily growing and building new homes and commercial buildings."

B. A. MARTIN, Builder,
Atlanta, Georgia

"Normally, we build approximately 10,000 units per year in the Atlanta area. In 1950 it will reach approximately 13,000 units.

"Consulting with the Veterans Administration, Federal Housing Administration and various builders, I have a conservative estimate of 4,500 units which have been started or on which commitments have been made. These, of course, will be excluded from Regulation X.

"It is a consensus, and I believe a conservative considered estimate, that there will be 5,000 new units started (50 per cent of normal) during 1951 under Regulation X. Putting these together, there should be, barring emergencies, between 9,000 and 9,500 units built in 1951, which is about 10 per cent under normal."

EDWARD B. HAWKINS, Builder,
Englewood, Colorado

"Home building in the Denver area will probably proceed on a fairly vigorous scale into the first half of 1951. Federal credit curbs will increase down-payments required from \$200 to \$800 above previous overages on homes selling from \$12,000 to \$20,000, which may not reduce volume too greatly in this price range. Volume will be most severely cut in the homes previously selling for under \$10,000 with \$300 or less down-payment.

"Likely to slow building volume about mid-1951, will be still further cost increases, pricing houses out of the market, and shortage of critical items. As a great many building materials are shipped into Denver (lumber from the West Coast, manufactured items from the Midwest and East) shortages are always felt here first, as supplies are absorbed nearest the points of origin.

"A cautious-attitude by the average builder, with smaller groups of houses under construction at one time, and a close watch kept on sales trends and availability of materials will be the rule for 1951."

HAROLD SHERMAN, Builder,
Bethpage, L.L. N.Y.

"Because of expected shortages in critical materials and equipment in 1951, we plan to leave the low price field of \$8,900 and \$10,000 houses and build \$12,000 and \$13,000 models. Several other builders in the low price range are planning similar action.

"No more critical material is required in a \$13,000 house than for one selling at \$10,000. For that reason, I would not be surprised to see the \$10,000 house virtually leave the Long Island market during 1951. For several months

(Continued on page 236)

your GHQ for steel service . . .

Here is a Service Department for builders — where expert engineers, designers, and estimators will help you solve any building problem.

You will find the answer to all your steel problems at International Steel. Large stocks of various steel shapes, standardized methods of manufacture, and a large, fully equipped plant enable us to make quick delivery of your structural steel.

Write today — let International help you solve all your building problems.



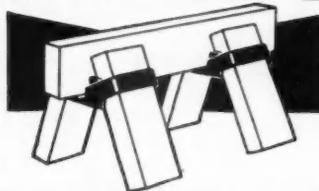
INTERNATIONAL STEEL CO.

1804 EDGAR ST., EVANSVILLE, IND.

Jiffy

SAWHORSE BRACKETS

SET UP OR TAKE DOWN
WITHOUT NAILS OR BOLTS



Saves time for carpenters, painters, paper hangers, contractors, and builders. Also saves trucking and storage space between jobs. Use any 2x4 for legs—2x4, 2x6, or wider for crossbar.

\$150



at building supply and hardware stores. (\$1.60 west of the Rockies.) Look for the handy display carton. If your dealer cannot supply you, order direct.

GRAND HAVEN
STAMPED PRODUCTS
COMPANY
GRAND HAVEN, MICH.

AMERICAN BUILDER

Easier to
BUY
Easier to
SELL
Easier to
INSTALL



ALDRICH

Compact BOILER-BURNER UNITS

Here are compact, complete, packaged boiler-burner units in sizes for home and industry, for low-pressure steam and hot water heating and/or hot water supply.

They're economical to buy and use; easy to install in minimum space with a minimum of skilled labor. Six sizes in the Aldrich Series "B" Heat-Pak are rated at 118,000 to 808,000 BTU an hour...6 sizes for hot water supply with ranges of 125 to 850 GPH at 100 degrees rise.

All Aldrich boilers are available for either oil or gas firing with burners readily interchangeable.

If you buy, sell, specify, or install boiler-burners, write for information about Aldrich.

The Popular New



ALDRICH *Bantam*

FOR MODERN LOW-COST HOMES

This outstanding boiler-burner unit, designed especially for the modern 4 to 5 room home, stands only 45" high, occupies 20" x 33" of floor space. Rated at 100,000 BTU, it can be adapted to steam, hot water, or radiant heating systems, and provides domestic hot water in excess of FHA requirements. Models also available for hot water supply only

See **ALDRICH Heat-Paks**
at these shows:

- American Society of Heating & Ventilating Engineers, Philadelphia January 22-26.
- Oil Heat Institute, Chicago, April 2-6.
- National Association of Master Plumbers, Chicago, May 28-31.



ALDRICH OIL BURNERS are skillfully engineered, precision-built for economy and trouble-free service.

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A subsidiary of Breeze Corporations, Inc.

111 E. Williams Street
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Avoid costly errors
with this . . .

NEW UNIVERSAL Level-Transit



Price \$185.00
complete with tripod*



Now David White offers you, at the lowest price anywhere, the finest of Universal Level Transits with 4 1/2" protected arc, internal focusing and coated optics.

Don't wait if you're in the market for a new all-round practical builder's instrument—see the improved new David White Model 3000 Universal Level Transit now.

You'll find this instrument properly used will be your best insurance against costly layout and building errors. The new 4 1/2" protected arc means easier, more accurate readings, less likelihood of instrument damage through accident. Internal focusing assures you of dust and dirt-free inside lens surfaces, better protection for optical parts and mechanism. Coated optics mean clearer, distortion-free images, sharper definition, positive readings at greater distances and under adverse conditions. Instrument spindle supported on ball bearings for perfect horizontal adjustments.

Ask our nearest dealer to give you complete information on this and other fine engineering instruments. Or write direct to David White Co., 311 W. Court St., Milwaukee, Wis.



We offer complete, prompt repair service on all makes of instruments — levels, transits, theodolites, etc.

* Prices subject to change without notice.



**ONLY THE
TRADE-WIND
CLIPPER
HAS ALL THESE
ADVANTAGES**

FOR the best method of ventilating kitchens, bathrooms, laundries, dens or other small rooms specify and install the Trade-Wind Clipper. This proven ventilator is the only small room unit that gives the home owner every worthwhile advantage.

Squirrel cage blowers, accepted and used in air conditioning systems and for forced air heating, are used exclusively in the Trade-Wind Clipper. This forced air discharge, located at the ceiling, traps all unwanted air and expels it instantly. Trade-Wind also has located the motor completely outside the greasy air stream. The motor stays clean indefinitely—requires far less service—and is guaranteed for 5 years. No other small room ventilator combines all these outstanding advantages. In addition, Trade-Wind Clippers are easy to install—they are competitively priced*—and they make every new owner another salesman for the Trade-Wind line.

Get the complete story from your local supply source, or mail the coupon today.

*Important price reduction has just been made on Model 2501.

MAIL THE COUPON TODAY

TRADE-WIND MOTORFANS, INC.
5705 S. Main St., Los Angeles 37, Calif.

Please send me the complete story on the Trade-Wind Ceiling Ventilator.

Name _____

Address _____

What's Ahead . . .

(Continued from page 234)

there has been a growing demand for better type homes in our area.

"A sampling of potential buyers leads us to believe that the Regulation X credit curbs also will play a part in forcing the better type house onto the market. If a family has the \$2,300 required as down payment on a \$10,000 home under Regulation X, that family usually is able to manage the additional \$1,200 to make up the \$3,500 down payment on a \$13,000 home.

"We built and sold about 350 houses during 1950. We have acquired land for about 400 more, but we are not making any large-scale commitments. We will watch the market very cautiously and not build ahead of actual purchase contracts more than 20 or 25 houses at a time."

• • •

ROY NEWELL, Builder. Great Neck, L.I., N.Y.

"We plan to build only half as many houses in 1951 as in 1950 and do not plan any marked change in our model.

"Principal reason for the cutback is the growing scarcity of materials and equipment. The mortgage credit restrictions in Regulation X will have little or no effect on our operations because to most home buyers in the \$30,000 price range, mortgage credit is not a factor.

"We feel we must go ahead in some volume, however, because we have a considerable sum invested in land, utilities and site preparation. Were it not for that, we might think seriously of halting operations until the materials supply and general economic situation become more clarified. Other builders in our price bracket say they feel the same way.

"We have land prepared for 62 houses, but probably will not build more than 30 during 1951. This is just half the number we built and sold in 1950.

"Buyers are going to be disappointed, too, in 1951. Ours has always been an operation in which we catered to the whims of buyers, such as additions of extras, allowing a wide color selection in kitchen and bathroom equipment, and the like. But it appears now that this policy will have to be abandoned in 1951. Contractors are very reluctant to deviate one iota from specifications in their original contracts. They are trying to make what material they have last as long as possible."

• • •

FRED W. AHLEMEIER, Builder. Clayton, Missouri

"Our feeling is that, in the field of higher priced houses, or the local price field of \$25,000 or more based on present costs, there will be little if any damage to builders in the present credit restrictions. The threat of material shortages and delivery delays, along with the price structure, is, in our opinion much more inhibiting in this class of residence.

"We also are in the loan business as approved FHA mortgagees. In this field, the restrictions are far more damaging, particularly in FHA loans. The FHA restrictions are, of course, far more severe than those of Regulation X, which appears to us to put FHA out of the picture altogether for medium priced properties, leaving them only the low-priced houses

(Continued on page 238)

SUN-SASH

the lowest priced
LOUVRE WINDOW
on the market . . .



**THIS
COUPON**

... can give you the
Amazing story

Name _____

Address _____

City _____ Zone _____ State _____

Have Representative Call Send Literature

CHECK ONE OF THESE:

Builder Architect Retailer Home Owner

SUN-SASH Co.
38 Park Row New York 7, N.Y.

If your partner dies are your interests protected?

A Business Purchase Agreement, when properly prepared and implemented, offers iron-clad and inexpensive protection for your interests and those of your partner and his family. In the event of your partner's death enough cash is provided to prevent forced sale of the physical assets of your business to pay the debts and inheritance taxes of your partner's family.

WRITE TODAY FOR FREE BOOKLET

"The Importance of Business Purchase Agreements" explains the application of this vital protection in partnerships, sole proprietorships, and close corporations. This is something you should know about. Send for your free copy today.



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Insurance Company
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FOUNDED IN 1850—A MUTUAL COMPANY—OWNED BY ITS POLICYHOLDERS

NATIONAL LIFE INSURANCE COMPANY
Dept. E. Home Office—Montpelier, Vermont

Please send me your free booklet: "The Importance of Business Purchase Agreements."

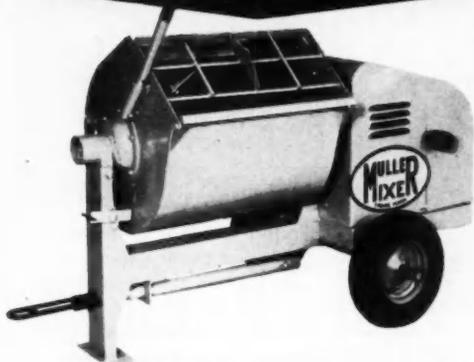
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Business Address _____

City _____ State _____

Do YOU mix the way the Egyptians did?

Change to the **MULLER**
—it's better, faster, and costs less!



You are losing money if you mix mortar and plaster with a hoe these days. The new Muller Three Cubic Foot Mixer, for a small investment, eliminates this old-fashioned, back-breaking, costly hand operation. Its perfectly mixed plaster makes better walls in less time. Its mortar has just the right consistency to please the most particular bricklayer and increase his production. Light and portable, the Muller is ideal for inside mixing and holds a full bag batch of most mixtures.

PRICE: \$300 with electric motor and extension cord
\$320 with air-cooled engine—FOB Factory

Also available in 6 (2 models), 9 and 12 cubic foot sizes.

Start now to cut your costs and increase your profits. Write or wire for name of nearest Muller Distributor.

Manufacturers of tilting and non-tilting concrete mixers, concrete carts, mortar boxes.

MULLER MACHINERY COMPANY, Inc.

Metuchen 4, New Jersey

Cable Address: "Mulmix"



helps you **SELL & RENT FASTER!**

The "Lifetime"

SHAMPOO SPRAY



Every woman who sees a "Lifetime" Shampoo Spray permanently mounted on the wall of your model house or apartment, will want to live with its beauty and enjoy its convenience.

Home hair care, permanents, tinting, etc., have grown enormously recently, creating a demand (unsatisfied up to now!) for a good looking, easy to use, professional shampoo spray. The "Lifetime" is the perfect answer—gleaming, stainless steel hose, triple chromium plated brass spray head and holder hook (holds spray in "no-drip" position when not in use)... Instantly available... nothing to screw on, take off, get out of order or wear out... performance proven by years of use by professional beauticians AND, the "Lifetime" is sold with a written five year guarantee! The "Lifetime" is wonderful for the whole family—even the pup!

Write today for a sample spray and complete details—The "Lifetime" Shampoo Spray will pay off handsomely for you! SPECIFICATIONS: four foot hose (longer lengths available). Wall hook tapped out with 3/8" I.P.S. female inlet, hose screws directly to outlet. Water feed controlled via diverter valve on washbowl or both tub fixtures, or separate controls for spray can be installed. Consumer list price \$13.50 (spray unit only). **SPECIAL DISCOUNT TO BUILDERS!**

DEALERS: Territories open—write for our liberal sales plan.

T & S BRASS & BRONZE WORKS, INC.
121 East 2nd Street, Mineola, L. I., N. Y.

I am Builder Dealer

Send sample spray at introductory price of \$10.00 and full details

Just send me full dope

NAME: _____

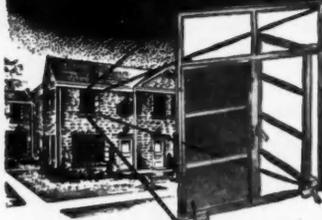
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121 EAST 2nd STREET, MINEOLA, L. I., N. Y.

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Real
Profit Builders
Ualco
Lifetime
**ALUMINUM
CASEMENT
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.. in Modular Sizes, Too!

When bidding or planning construction of apartments, housing projects, or any type of residential or commercial building, you'll find countless advantages in specifying Ualco Lifetime Aluminum Casement Windows!

Only Ualco offers you modular sizes in aluminum casement windows among the 120 sizes plus many variations . . . lowest price . . . easiest handling . . . rapid installation . . . and, superior design and construction.

For complete details write for FREE Ualco catalog. See our catalog in Sweet's Builders and Architectural file.



Write for this

FREE CATALOG
today!

Stop. Visit our sales at the Stevens Hotel during the NABH show in Chicago January 23 through 25.

UNION ALUMINUM COMPANY, Inc.
Department A-65
Sheffield, Alabama

Gentlemen: Without obligation, please send me your Ualco catalog. Please check. I am an
 Architect Building Supply Dealer Building Contractor.

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Company _____

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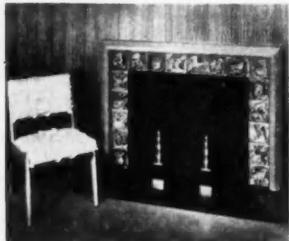
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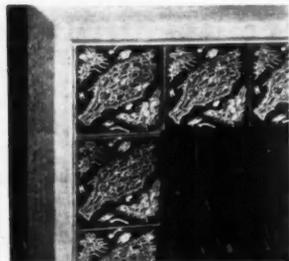
World's Largest Manufacturer of Aluminum Casement Windows

**Fireplace Tile Takes On
New Qualities in Hands
of New York Designer**

Warner Prins of New York has designed and is producing a new series of tiles for fireplace facings and wall coverings. As a practical material for fireplace facings, tile is sturdy, washable and impervious to smoke and other stains, but under Mr. Prins' direction, these tiles have become a



DROLL caricatures on Warner Prins tiles form a colorful and amusing fireplace facing in vivid colors on a dusty reddish-brown ground



THIS tile fireplace facing is one of Prins' repeat designs in white on a deep coffee ground

medium for bold contemporary motifs and unusual texture effects.

In fireplace facings consisting of one-of-a-kind tiles, each square has a different pattern, but matching colors and a basic design theme blend them into a composite unit.

Inexpensive repeat tiles are used in six other fireplace facings. Repeat tile panels especially designed to cover large wall surfaces are more subdued in color than the fireplace facings, giving all-over textured effects rather than design emphasis.

What's Ahead . . .

(Continued from page 236)

in new construction, with all existing houses almost forced into conventional loans, probably at higher interest rates.

"We feel that damage will be done by the present tendency to postpone or give up planning for residence building due to fears for the future. This will reflect in 1951 starts after the present starts outside the credit controls have been finished next year."

metal weather strip NAILS



Preferred everywhere by the trade for many years. Made with barbed shanks and suitably plated for maximum resistance to elements. Available in one, two or five pound packages and in bulk. Immediate delivery.

JOHN HASSALL, INC.

192 Clay Street
Brooklyn 22, N. Y.
Established 1850

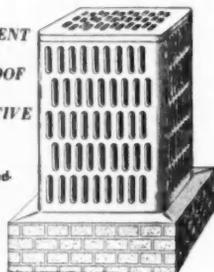


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CHIMNEY TOPS • NON
CORROSIVE, ACID-PROOF,
HEAT-RESISTANT • FOR
INCINERATORS, CHIMNEYS,
HEATING UNITS, FIRE-
PLACE FLUES

PERMANENT
FIREPROOF
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The PERMA-TOP Co.

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Individual VIKON METAL TILES

*Permanent Beauty
at a Practical Price*

Here's the perfect answer to decorating problems that call for tile. In either new or existing homes or apartments, bath and kitchen walls and ceilings take on a look of rare beauty with the richness of color afforded by *feather-light* Vikon tiles. *Individual* aluminum or stainless steel tiles—no waste, order only the number needed. Always look to Vikon metal tiles for

BEAUTY • ECONOMY • DURABILITY

- 30 fade-resistant decorator colors and stainless steel
- will not warp, crack or craze
- resist heat and household chemicals
- fire-resistant, waterproof, seals out insects
- steel, aluminum, stainless steel

See our catalog in Sweet's Files

VIKON TILE CORPORATION

Washington, N. J.

Dept. 1M

Please send me, without obligation or cost, a full-color descriptive brochure and sample of Vikon Metal Tile. I am interested in tile for:

My home As a dealer As a contractor

NAME _____ (Please Print)

ADDRESS _____

CITY _____ ZONE _____ STATE _____

**Now SIMPLIFIED..
STANDARDIZED**



BENNETT

Warm-Aire FIREPLACE

Here's the fireplace your trade has been waiting for. It's *simplified* for prices that mean volume... *standardized* for quick, economical construction. It's the contractor's favorite—all Bennett's new sizes lay up with standard brick—*without cutting!*

It's a complete form, including a scientifically proportioned firebox and throat, downdraft shelf and heating chambers. Other features include:

- Extra large funneling chamber
- Leak-sealing flanges
- Longer sidewall baffles
- Simple, efficient damper—built-in
- Interchangeable, rotary or poker controls
- Large backwall heating chamber
- Better view of fire
- More radiant heat

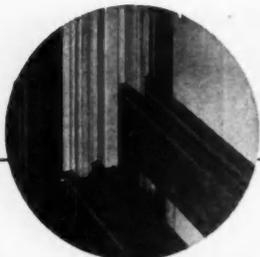
Sizes are 27", 31", 35", 39", 43" and 49".

Write for complete information on this big-volume, good margin line. The new Bennett Fireplace offers you the best profit opportunity ever. Address your inquiry to us at 151 Market Street.

By the makers of Flexscreen

BENNETT-IRELAND INC.

NORWICH, NEW YORK



YOUR HOME BUYERS WANT

IN ONE UNIT { EFFORTLESS WINDOW OPERATION
COMPLETE WEATHER PROTECTION

Dura-Seal Combination Metal Weatherstrip and Sash Balance provides weather protection, free, easy window operation and window beauty . . . *all in one unit.* It eliminates old style pulleys, cords, weights and box frames. It is used with a plank frame which permits the use of narrow mullions and trim. It provides an outstanding visual sales feature for your homes!

ZEGERS *Dura-seal* COMBINATION METAL WEATHERSTRIP SASH BALANCE

Dura-seal aluminum housings contain life-time cadmium-plated steel coil springs. These housings are attached to the jamba of a plank frame and fit into the grooves at both sides of the sash. *The springs are completely enclosed.*



- The back surface of the Dura-seal one-piece jamb members is concave. This concavity provides a desirable flexibility that assures smooth, easy operation during all atmospheric conditions.
- Dura-seal permits easy removal of the sash.
- One-piece jamb members are cut to the pitch of the sills, thus providing an attractive appearance.

FOR COMPLETE
INFORMATION ON

Dura-seal



ZEGERS INCORPORATED

8096 South Chicago Avenue, Chicago 17, Illinois



MODERNISTIC is the word for stage

'Man from Mars' to Appear At NAHB Convention

The "Man from Mars" will be on exhibit—in the form of a professionally-staged show of new products—for delegates to the convention and exposition of the National Association of Home Builders at the Stevens Hotel, Chicago, January 21-25.

Staged by Joe Schulte, director of Research for Kaiser Homes, and sponsored by the New Products Institute of America, the exhibition will take place on a specially-built stage. Twenty products will be shown, including what is described as an "animated" automobile—one that "talks, blushes, winks and flirts."

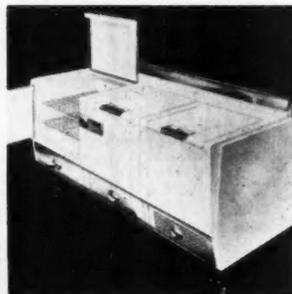


SCHULTE

Also scheduled for demonstration are an automatic home message recorder for telephones, a new lightweight building board, an unusual safety hinge, automatic pet feeder and others. Among "things to come" are a package bathroom and console-type refrigerator.

Presentation of the products will be made by "Miss New Products of 1951" who will "arrive from Mars" on a 12-foot flying saucer.

The show, which lasts an hour, will be shown several times January 23 and 24 at the Eighth Street Theater, opening off the grand ballroom of the Stevens.



"THINGS TO COME." preview of future products. Includes console refrigerator

New SAMSON REINFORCING BAR CUTTERS

- All Steel Construction
- Unbreakable Frame
- Easy Operation
- Immediate Shipment



Write for catalog of
Metal Working Equipment

SIZE	No. 20	No. 23	No. 26
Cuts Rounds	3/4"	3/4"	7/8"
Cuts Squares	1/2"	3/8"	3/4"
Cuts Flats	2" x 1/4"	2 1/2" x 5/16"	2 1/2" x 3/8"
Cuts Concrete Bars	3/8"	1/2"	3/8"
PRICE	\$44.90	\$60.30	\$68.50

f.o.b. New York (Prices subject to change)

JULIUS BLUM & CO., Inc.

Established 1910

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FOR NEW CONSTRUCTION, REMODELING



THE BEST OF A
Guaranteed by
Good Housekeeping
IS NOT AN ADVERTISED TRADE

HASTINGS *aluminum*

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14 DECORATOR COLORS

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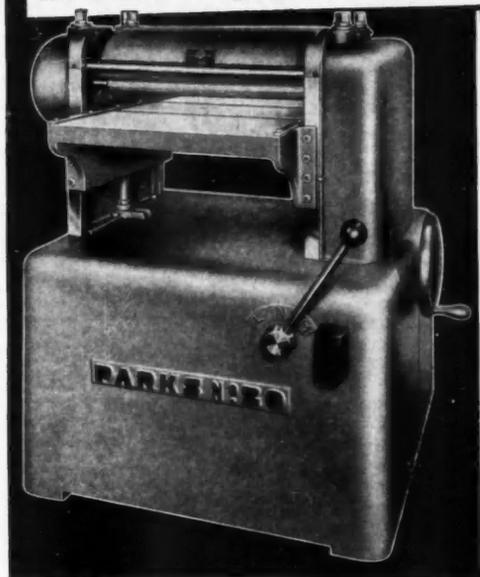
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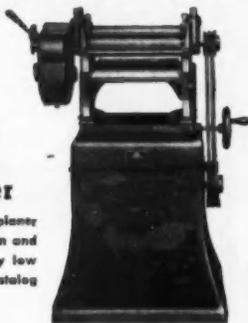
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Size No.	Low Point	High Point	No. of Adjustments	For Working Heights	Leg Spread	Weight Lbs.	Price Per Trestle
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4	3'	4¼'	6	9' to 10¼'	23"	28 13.90	
6	4'	6'	9	10' to 12'	33½"	53 17.20	
8	5½'	8'	11	11½' to 14'	41"	74 22.30	
10	6½'	10'	15	12½' to 16'	41"	113 35.60	
12	7'	12'	19	13' to 18'	47"	153 41.00	

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3. MORE DURABLE

	Length	Width	Depth	Gauge
No. 11—MBD	2'6"	1'11"	6"	16
No. 1—MB	5'4"	2'4"	11"	16
No. 2—MB	7'10"	3'4"	11"	14

	Capacity	Weight	Price, Ea.
No. 11—MBD	2.0 cu. ft.	18 lbs.	\$ 4.40
No. 1—MB	9.2 cu. ft.	62 lbs.	19.00
No. 2—MB	20.7 cu. ft.	143 lbs.	32.50

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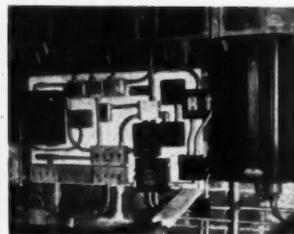
WOMEN'S shop has early American motif

**All-Weather Unit Used
To Air Condition Store**

One of the first installations of a combination all-weather air conditioning system, composed of a high-capacity, industrial type warm air space heater in conjunction with a cooling coil arrangement, was made at Bramson's women's specialty shop in Evanston, Ill.

Among the advantages of the system, according to Ralph J. Abramson, Chicago consulting engineer, are economical initial installation and maintenance costs. Full utilization of sales and storage space is also possible, since there are no heating or air conditioning supply pipes throughout the building and no individual air handling or conditioning units to service.

The new building, with a 100-foot frontage and 150-foot depth, consolidated the area of four smaller stores. The Bramson Evanston shop was



MAIN control panel has switches to change from summer to winter operation

formerly located in a hotel building. Since the new building was opened, business has increased 60 per cent.

Core of the combination heating and cooling system at Bramson's is a direct-fired, warm air space heater developed by the Dravo Corp., Pittsburgh. The heater used for this installation is an oil-fired model with an output capacity of 1,250,000 B.t.u. per hour.

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New Improved
BOSTITCH H2B
Stapling Hammer

CUT COSTS with new improved Bostitch H2B automatic stapling hammer, here shown fastening insulation in place. Wide crown staples provide excellent holding for materials such as paper and cloth.



3 TIMES FASTER THAN HAMMER AND NAILS. New Bostitch H2B stapling hammer — shown attaching cornerite the quick, easy, low-cost way. Drives staples with $\frac{1}{4}$ " and $\frac{3}{8}$ " legs. H2B's drives $\frac{1}{2}$ " staples.



EASIER TO LOAD. New loading door on improved Bostitch H2B stapling hammer has positive latch for quicker loading, secure closing — cannot snap open in use. Shown applying coarse screen to frame.

YOU SAVE 50% OR MORE in fastening time when you use the new improved Bostitch H2B self-feeding stapling hammer. More than 20 design improvements assure continuous, trouble-free operation.

No continuous hammering — next blow drives next staple. No mashed fingers — no infected mouths. Single blow drives staple *without effort* — accelerated driver multiplies blow. Longer, one-arm reach.

For high-speed tacking, light nailing — attaching insulation, metal lath, building paper, laying floor padding. Drives staples into hard or gummy woods without buckling. For complete details on the new H2B — and the full line of Bostitch tackers, hammers — send coupon below.

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BOSTITCH, 552 Mechanic Street, Westerly, Rhode Island

I'm interested in more information about time-saving, cost-cutting Bostitch machines for applying:

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TYPE of structure termites like to attack

Life Artery of a Building

Termites are not a new pest in this country. They were here long before the advent of the white man, feeding on stumps and fallen trees. Now that many of the forests have been cleared, and virgin wood is not available in abundance, limiting their original food supply, the termites not only feed on standing timber and fallen trees, but attack wood construction wherever conditions are in their favor.

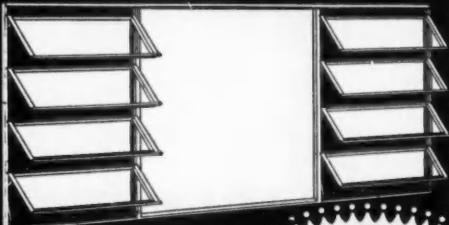
According to government reports and extensive investigation by authorities, termites are not confined to the warm section of the country, but prevail in every state of the union. Today, the government, the lumber industry, entomologists and engineers, are taking vigorous steps to check the spread of termites. This work is known as termite control, and various systems of treatment and chemicals have been devised to eliminate and prevent the termite pest.

The Antimite system of termite control is especially adapted for soil treatment—recognized as one of the most effective methods of controlling termites, as termites live in soil, not in the wood. One of the important steps is soil poisoning. For this purpose a chemical is used in the ground and runways through which the worker termites travel between the ground they live in and the wood they feed on—floors, joists, sills, etc. This chemical does not kill on contact. Termites pick it up on their bodies or wings, and other termites lick it off in passing and die from its effects. The mass murders pile up still further because termites are cannibals and eat these poisoned bodies.

Ground poisoning alone will not eradicate termites. It is also necessary to break all direct contacts between wood and soil, to clear out earth-filled porches, to improve ventilation or drainage or correct whatever conditions might cause reinfestation, all of which is part of the termite control system. Termite control is an engineering feat. This system

(Continued on page 246)

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EXTRUDED ALUMINUM
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Schools, Hospitals, Public Buildings
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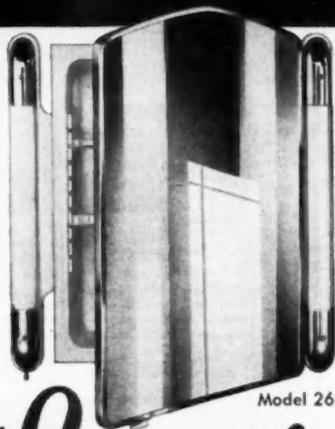
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Metal Weatherstrip pays for itself in two or three years by savings in fuel alone. Reductions in fuel cost range from 20% to 30%. In addition, it's a weather-tight defense against rain, wind, storm, snow and all moisture.

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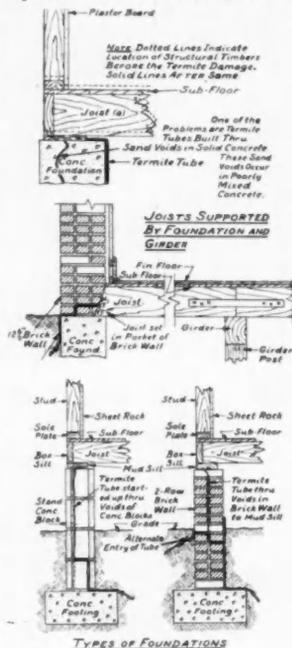
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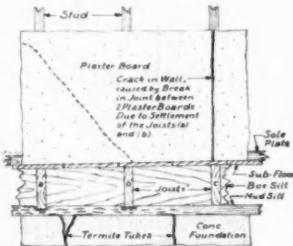
(Continued from page 244)

employs the same technique and specifications set forth by the U. S. Department of Agriculture.

For most termite jobs it is economically practical to incorporate the number 1, 2, 3 and 3½ steps or principles of mechanical and chemical in-



TYPES OF FOUNDATIONS



SKETCH SHOWING THE EFFECTS OF TERMITE ATTACK ON A MUD SILL

FIGURE I: Illustrates termite tubes that occur in sand voids in solid concrete
FIGURE II: Illustrates solid brick wall construction with end of floor joist set in pockets. Termite tubes carry through mortar voids and contact end of joist
FIGURE III: Illustrates cement block and brick foundation with wood construction above. Termite tubes enter core of block and mortar voids to contact wood mud-sill
FIGURE IV: Showing termite damage to mud-sill causing joint and substructure above to settle, cracking plastered walls
(Continued on page 248)

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NATION'S BEST
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EXTRA MONEY!

With the high prices of food, clothing and everything else, just think what you could do with extra money every week! Turn your spare time into CASH — sharpening saws with a Foley Automatic Saw Filer pays you to \$2 or \$3 an hour. Start in your basement or garage — no experience necessary. "The first saw I sharpened with my Foley Filer came out 100%" — writes Clarence E. Parsons. No canvassing — "I advertised in our local paper and got in 93 saws" — says M. L. Thompson. With a Foley you can file all hand saws, also band and cross-cut circular saws.

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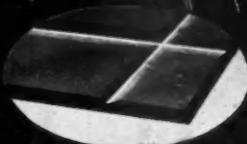
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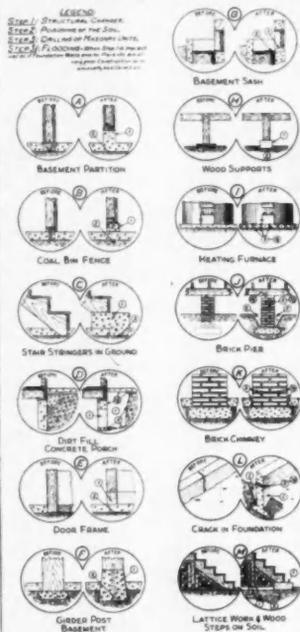
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Life Artery . . .

(Continued from page 246)

sulation for the control of subterranean termites. If these standard procedures are adapted in a common-sense manner to the special needs of each infestation there should not be any necessity for controversy developing because of different methods of procedure in various sections of the country. These principles were



HOMES already erected and infested with termites should be inspected and treated as shown in "before and after" drawings drawn up in so broad a manner as to make it possible to include any effective, practical method.

One-Two-Three-Three-and-One-Half Steps

The above steps represent the major steps, or fundamental principles and operations so vitally necessary in the control of subterranean termites as suggested by the Termite Committee of the National Pest Control Association as being applicable in every section of this country and later approved by the United States Department of Agriculture.

Translated into words, the above subject title has the following meanings:
 Step #1—Structural modifications
 Step #2—Soil poison
 Step #3—Drilling
 Step #3 1/2—Flooding

(Continued on page 250)

HOW TO MAKE ACCURATE ESTIMATES



NEW REVISED

TAMBLYN BUILDING LABOR CALCULATOR

You, too, can make accurate estimates. Forty years of on-the-job cost analysis has produced the factors given in the Tamblyn Building Labor Calculator. Use these factors and make your estimate right!

HOW TO USE THE TAMBLYN BUILDING LABOR CALCULATOR

... simple multiplication of figures

To figure the cost of laying 8" x 8" x 16" cinder block analyze the cost of 100 square feet as follows: (Wage rates and material prices assumed.)

Material	Labor		Material		
	Rate	Quantity	Rate	Quantity	
100 sq. ft. 8" x 8" x 16" cinder block	1.25	100	1.98	100	
4.0 Hrs., Mason	43.00	4.0	32.64	111 Pcs.	
4.0 Hrs., Tender	1.75	4.0	7.00	4.4 C. F. Mortar	
4 Hrs., Foreman	3.50	4.0	14.00		
Total Labor Cost		\$30.40	Total Material Cost		\$28.62

111 Pcs. 8" x 8" x 16" cinder block @ 24c = \$26.64
 4.4 C. F. Mortar @ 45c = 1.98
Total Material Cost.....\$28.62
 4.0 Hrs., Mason @ \$3.00 = \$12.00
 4.0 Hrs., Tender @ 1.75 = 7.00
 4 Hrs., Foreman @ 3.50 = 14.00
Total Labor Cost.....\$30.40

Or 28.6c per square foot for material—and 20.4c per square foot for labor. Figuring for all the trades is as easy as this example—and accurate!

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 "... I want to congratulate you upon an excellent piece of work."

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- All the advantages of radiant heat plus greater uniformity, instantaneous response to thermostat control plus filtered and conditioned air circulation throughout your homes.
- Requires less than four square feet of floor space.
- Saves up to 30% and more on your heating budget.

Amazing new method of heating homes tested and approved by the National Warm Heating and Air Conditioning Association in conjunction with the University of Illinois, as well as in thousands of homes. Provides heat at floors with a blanket of warmth at outside walls. Builders all over the country are adapting this revolutionary new way of heating their homes at lower cost—and better than ever before.

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HOUSE & GARDEN: "combines advantages of a radiant floor panel and a warm air system... envelopes outside windows and walls in warmth."

PRACTICAL BUILDER: "especially well adapted for basementless houses... economical... very compact furnace."

AMERICAN BUILDER: "answers need for low-cost heating method... blower is cradled in resilient springs, permitting operation without hum or vibration."

ARCHITECTURAL FORUM: "sets a stiff pace in the economy house field."

LIVING: "This system has many advantages... outlets under windows... low initial and installation costs... warms quickly."

SEE THE COMPLETE LINE OF INTERNATIONAL FURNACES—SPACES 54 AND 55—AT THE NAAB SHOW, STEVENS HOTEL, CHICAGO, JAN. 21-25.

Send for details on how you can heat your homes better at lower cost. Enclose your plans and we will send estimate and cost of installation.

International OIL BURNER CO.
SAINT LOUIS 3814 Park Ave., St. Louis 10, Mo.

JANUARY 1951

HAR-VEY ROLLING DOOR
HARDWARE



Acclaimed
for

*Winning
Performance*
FROM COAST TO COAST

"It's mechanically perfect and architects, contractors and owners alike agree that Har-Vey is tops for smooth performance," says L. C. Brown, Millwork Sales Manager for the Chicago & Riverdale Lumber Co., Chicago, Illinois.

"With its simplicity of installation and quiet, trouble-free operation, Har-Vey Hardware is winning more and more users all the time."

From all over the nation praise like that stems from Champion Har-Vey qualities like these:

- 100% Rustproof • Self-lubricating Oilite Bearings
- Quick, Easy Installation • Positive Locking
- Superior parts made by leading U. S. Manufacturers

Write for full details today!

Address **HARDWARE DIVISION O**

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HARDWARE

Please send me your free folder on rolling doors & Har-Vey Hardware

NAME _____
COMPANY _____
STREET _____
CITY _____ STATE _____

Sensational Indoor Incinerator disposes of all burnable refuse

Costs nothing to use!

The year's big news in an extra-profit item for builders is this low-cost Majestic Incinerator. It burns wastebasket trash along with wet-and-dry garbage indoors! Taps to flue in basement or utility room. Uses only the waste itself as fuel. Unique downdraft does the trick! Dries the refuse and hastens burning. The Majestic Incinerator is a handy appliance for any home. Automatic-heated homes especially need its disposal help. Available in Economy (2 bu.) and Deluxe (3 bu.) models.

SATISFACTION GUARANTEED

Attached to every Majestic Incinerator is a money-back guarantee that it will perform as claimed. Write for details.

The Majestic Co. 300-A Erie St.
Huntington, Indiana



Majestic

HOME INCINERATOR

Nationally Advertised in Leading Magazines

MAKE YOUR 1ST CHOICE
BOSTWICK METAL LATH



YOUR DEALER WILL
GET STRAIGHT FACTS
ON DELIVERY
FROM BOSTWICK

BOSTWICK MAKES
METAL LATH,
CORNER BEAD,
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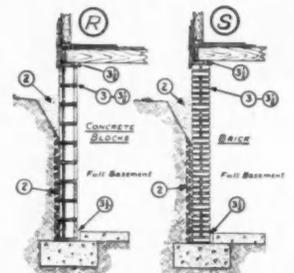
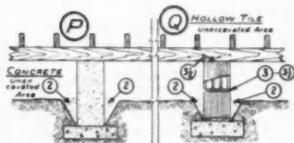
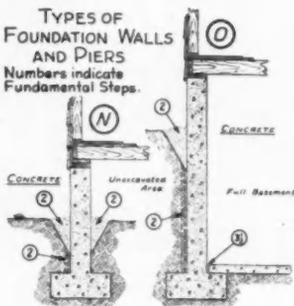
THE BOSTWICK STEEL LATH CO.
103 HEATON AVE. • NILES, OHIO

Life Artery ...

(Continued from page 248)

The following is a detailed explanation of these major steps as incorporated in the Antimite system of termite control.

TYPES OF FOUNDATION WALLS AND PIERS
Numbers indicate Fundamental Steps.



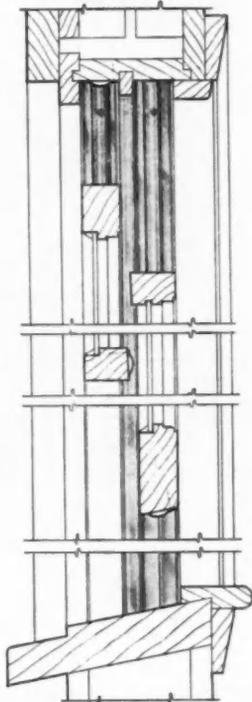
VARIOUS types of foundation walls shown above, with the 1-2-3-4 fundamental steps of the standard specification, which control the infiltration of termites into an existing or new building

STEP #1—STRUCTURAL MODIFICATIONS:

Termites usually find entry into a building through some defect in construction. Consequently, if such defects are corrected it forms an important step in controlling the termites. Such modifications, or corrections, should in no way be mistaken for repairs and replacements which will be discussed further, in these instructions. The following may be classed as "structural modifications"—

(a) Break all direct contact of wood in a building with the soil by their complete removal, or by placing such supports on a concrete base. Excavation should be thoroughly treated before replacement is made.

HETTINGER'S
Triple Seal
PATENT NO. 2,472,500
COMBINATION
SASH BALANCES AND
BRONZE METAL WEATHERSTRIPPING
IN ONE UNIT



COMPLETE TUBE PACKAGED

- 1st. Low in cost. Any size window
- 2nd. Easy to apply
- 3rd. Velvet smooth in operation
- 4th. Absolutely weatherproof
- 5th. Sales helps and displays
- 6th. Nationally advertised
- 7th. Wide consumer acceptance
- 8th. See your lumber dealer today



Builder
File

THE WEATHERPROOF PRODUCTS CORP.
 329 Westport Road Jefferson 3133
 Kansas City 2, Missouri

(b) All earth filled porches, brick, concrete or tile, must be excavated along the main foundation walls of the building. Such a tunnel should extend from the bottom of the top slab of the porch down to the normal ground level and to be wide enough for an application of the solution.

(d) Proper ventilation must be provided for the unexcavated areas under a building; namely 1 sq. ft. of grilled ventilating opening for each 12½ lineal feet of exterior wall, or 1½% of the floor area. Care should be exercised so that openings are placed to prevent "dead air pockets" under a building.

STEP #2—SOIL POISON:

This step plays an important part in the control of the subterranean termites because termites live in the ground. If all ground around an infested building is thoroughly treated with a chemical, it means that termites in going in and out of buildings, must pass through the treated ground, thus picking up the chemical on the fine hairs of their bodies and also into their systems, which is another means of spreading the solution.

STEP #3—DRILLING:

This way shall in no way be confused with the drilling of timbers preparatory to the "high pressure treatment of timbers in place," but from a practical and engineering standpoint impossible to perform. This particular "drilling" refers to cases where termites might possibly pass through the voids, cracks or spaces in, or between, foundation walls, piers, chimneys, etc., all constructed of masonry units. Solution shall be forced into such voids or spaces in order to form an effective chemical barrier.

STEP #3½—FLOODING:

In cases where it is impractical to make structural modifications and if the foundation walls or piers are of poor construction, or in unusually bad condition the solution shall be forced between the top of such masonry foundation walls, piers and the wood resting on same.

The problem of overcoming obstacles enumerated and protecting "The Life Artery of a Building" and wood members supporting superstructure can be best solved in building new homes by:

1st: Good materials and workmanship in building foundations.

2nd: Wood or masonry supports for girder to be placed on solid concrete bases a minimum of six inches above
 (Continued on page 252)

WHAT DO YOU PAY FOR INDOOR COMFORT—PER POUND?



When your heating contractor installs the most beautiful furnace ever built...

When the prospect sees it...
When the home owner turns it on...

You've delivered the goods...
the MOR-SUN furnace...
Automatic healthful indoor comfort...

Economically...at the lowest cost per pound!

MOR-SUN
 Pressed Steel Forced Air and Gravity
FURNACES
 for GAS and OIL

A request on your letterhead will bring you beautiful free guides to the selection of home heating equipment.



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MORRISON
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Ask for a "BESSLER" when buying a DISAPPEARING STAIRWAY



Made in
Seven
Models

With a Bessler Disappearing Stairway it is possible to finish off the space above for use as either storage or added sleeping quarters.

Constructed of the finest materials, it is easily and quickly installed in old or new homes. Saves floor space in the room below and is easily operated.

Write for literature
THE BESSLER DISAPPEARING STAIRWAY CO.
1900 E. Market St. Akron 5, Ohio

Hydraulic Truck Crane Speeds Erection Time

Precast concrete planks are set four times faster with a hydraulic truck crane than with the wheel tractor and boom he formerly used, according to George P. Andrew, Fond du Lac, Wisconsin, manufacturer and erector of concrete sections.

Andrew reports further time saving with the crane in traveling from



HYDROCRANE is shown moving concrete slabs. It moves at regular truck speed

job to job, since the rig can be driven at regular truck speeds.

When not busy on plank setting work, Andrew handles many extra jobs on a rental basis. He uses the rig to excavate for and install gasoline drums up to 5,000 gallon capacity. In the spring last year he dredged out a space for a boat landing on Lake Winnebago, at the outskirts of Fond du Lac. The job took approximately sixty hours for which he received \$450. Hydraulic truck he uses is a Hydro-crane, made by Bucyrus-Erie Company.

Life Artery . . .

(Continued from page 251)

grade level or concrete floor level. 3rd: Any wood supports, unexcavated or basement area, girders, mud sills, floor joists and sub-floor to be pressure treated with 5 per cent Pentachlorophenol, not less than 6 pounds per cubic foot, conforming to A.W.P.A. specifications. Homes already erected and infested with termites should be carefully inspected and serviced by a reliable termite control operator—and according to the Standard Specification known as Steps 1-2-3-3½.

Courtesy The Antimite Company, St. Louis 10, Mo.

insulated comfort



BILDRITE* sheathing

Gives you more than twice the insulating value and bracing strength of horizontal wood sheathing. Specify 4" Bildrite Sheathing with confidence.

Made of Hardy



Northern Wood

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INSULITE DIVISION, MINNESOTA AND ONTARIO PAPER COMPANY

3 WAYS TO OFFER FRANTZ OVER-HEAD DOOR CONVENIENCE

ARCHITECTURALLY DESIGNED

EQUIPMENT AND CARPENTER-BUILT DOORS

You can furnish Frantz Door Equipment for practically any size or type of door . . . mill made or carpenter built. Doors can be architect-designed to harmonize . . . a real advantage for the homes with attached garages. On remodelling jobs old swinging type doors can easily be converted at modest cost.



SECTIONAL TYPE

● Frantz, the leading manufacturer of one-piece garage doors, now offers a sectional-type door with new design advantages. Frantz experience has produced a door 14 ways better . . .

one that can be installed more quickly and easily. Available in six popular sizes: 8' wide x 7' high, 9' x 7', 8' x 6'6", 9' x 6'6", 15' x 7', and 16' x 7'.

ONE-PIECE UNITS

EQUIPMENT AND DOOR COMPLETE

● Available in a variety of sizes, wood or aluminum construction, Frantz one-piece Door Units lift automatically when handle is turned . . . are powered by famous Frantz equipment. Require only 2" headroom. Pre-bored bolt holes and simplified design cut time and labor costs.



Write for full details on the complete Frantz line.

FRANTZ

GUARANTEED BUILDERS HARDWARE

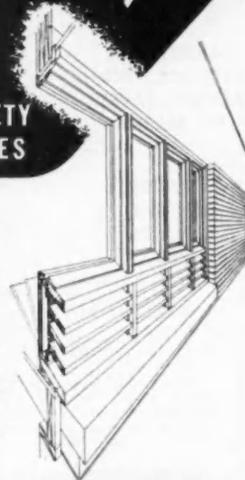
FRANTZ MANUFACTURING CO., STERLING, ILLINOIS

JANUARY 1951

Now Ready TO INSTALL IN STOCK SIZES FOR A WIDE VARIETY OF WINDOW TYPES

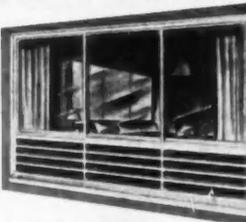
PRECISION-BUILT FOR DRAFTLESS VENTILATION

These new windows provide maximum visibility plus a minimum amount of infiltration or heat loss. They are suitable for all kinds of weather conditions . . . adaptable to almost any architectural specification . . . permit the use of narrow mullions and trim for more attractive exterior and interior appearance. Special sill construction, and stops under supply a snug job. No rain or snow can enter.



SOLAR AIR-FLO[®] ENGINEERED ALL-WEATHER Windows

Louvered sections are placed at top, bottom or sides of stationary window pane, according to design requirements. Baffle doors regulate circulation of fresh air, winter and summer. Screens concealed in air-flo section, removable from inside, for cleaning. Solar areas can be glazed with single, double or triple plate glass, according to climate.



INSTALLED IN ALL KINDS OF WALLS

Solar Air-Flo windows may be installed in any and all kinds of wall construction. The unit comes assembled and ready to place, complete with all exterior trim. No precision work or special tools are needed. Window frames and all sectional parts are precision-built of wood that has been treated for permanent protection against termites and water.

Solar Air-Flo windows can be used effectively in homes and commercial buildings, for building or remodeling. They combine beauty with utility. Learn more about these versatile units and their reasonable cost. Cash in on national advertising now appearing in leading magazines. Profit-wise dealers and builders will write NOW for specification data.

GET NEW PLAN BOOK

Shows attractive Solar-design homes, floor plans with original features. Only \$1.00. Write today for this valuable guide.



MAIL COUPON NOW!

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Send me free descriptive literature. I am Dealer Contractor Architect. Send me Solar-design Plan Book. \$1.00 enclosed.

Name _____ Firm _____

Address _____ Zone _____

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FINER FINISH SANDING AT A NEW LOW PRICE!

STRAIGHT-LINE
RECIPROCATING
ACTION LEAVES
NO MARKS

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14,400
SANDING
STROKES
PER
MINUTE

(PATENTED)

- Only Two Moving Parts — Uses 110-120 v. A.C.
- Easy To Use — No Bearing Down—Continuous Use Doesn't Tire Operator.
- Weight Less than 5 lbs. — Over-all Size, 3½" wide x 4½" x 7".
- Dust-Proof—Fuel-Proof—Fully Guaranteed.
- 21 Square Inches of Sanding Surface.



RUGGEDLY BUILT FOR AN ECONOMY-WISE BUILDING INDUSTRY

The new Dremel Model 2000 is a fast-cutting, finish sander. It offers for the first time in the building field, a top-quality electric sander at a remarkably low price. Truly a versatile performer, it sands dry-wall joints, smooths plaster, puts a satin-like finish on doors, woodwork, siding, etc. Rugged construction, trouble-free design—plus low initial purchase and operating cost—all demand your thorough investigation. Call your supplier, or write us for details.

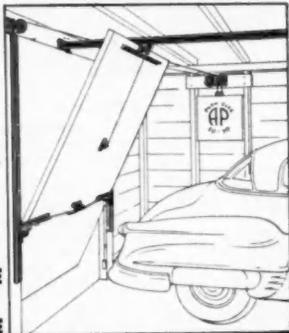
DREMEL MANUFACTURING CO., 2414 18th Street, RACINE, WIS.



EVERY BUILDER NEEDS . . . EVERY BUILDER CAN AFFORD
THE NEW DREMEL ELECTRIC MODEL 2000 SANDER

ALLLITH
50-50
PUSH-OVER
GARAGE
DOOR
HARDWARE

**Easy to Install . . .
Lasting Satisfaction**



Combine the expertly-designed Alllith garage door hardware with your own or any standard door. Result . . . a rugged, easily-operated overhead door that gives full and lasting customer satisfaction.

Quickly 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.

ALLLITH
-PROUTY, INC
DANVILLE, ILLINOIS
IN AMERICAN BUILDER for Forty-Five Years

New Screens Used In Sliding Wall Panels

Lumite woven saran screening has been used in unusual and interesting sliding wall panels in the woodland pavilion of the Gerald M. Loeb home in Redding, Connecticut.

The three-way panels are removable, and transform a secluded room into an open pavilion that includes within its 768 square feet, space for sitting, study, and sleeping; also, dressing and bath space, and a small tea pantry.

Three different sets of panels on two tracks are installed on three sides of the living space and one side of the bed. In summer, Lumite screens occupy the outer track, while waterproof, plastic panels, which are translucent, are added on the inner track in case of rain or strong sunshine. The screen panels serve as doors and slide open readily.

These screens, woven by the Lumite Division of the Chicopee Manufacturing Corporation, need no painting, for they can be washed without rusting or corroding. Architect for this pavilion was Harwell Hamilton Harris.

High Home Interest Shown By Germans

The so-called "iron curtain" designed to cut off the East from the West in Europe is not strong enough to curb the curiosity of thousands of people in the Eastern zone of Germany who want to find out all they can about life in America.

This was strikingly demonstrated at the International Trade Fair held recently in the American sector of Berlin, where one of the most popular attractions proved to be an American prefabricated house, produced in this country and erected at the Fair on order from the U. S. State Department. Every day of the Fair long lines of people waited, sometimes for several hours, to go through the house, and a careful check showed a daily average of 4,000 going through. Of these it was estimated that at least 30 per cent were Germans who had crossed over the Eastern zone.

The house, which was produced by Page & Hill Homes of Shakopee, Minn., comprised three rooms, with breezeway and garage. Exterior features attracting much attention were the attractive siding material and the Ruberoid asphalt shingle roof. Inside, the greatest interest was displayed in the compact plumbing and heating equipment and in various kitchen features such as an electric mixer and an automatic washing machine.

SAVE ON
PIER HOLES
UNDER-
REAMING



with this Remarkable, New
B. & R. UNDER-REAMER

- (1) UNDER-REAMS, (2) FLATTENS AND (3) CLEANS PIER HOLES TO F.H.A. SPECIFICATIONS . . . all at same time. Experienced users under-ream hole in 3 minutes, novices in 5 or 6. Tremendous saving over conventional spooning method.

PAYS FOR ITSELF THE FIRST 3 HOUSES YOU BUILD
Contractors' claims — not ours! Some say it liquidates itself very first job—in time and concrete saved.

\$127.50
F.O.B. PLANO, TEX.

MONEY-BACK GUARANTEE
Use B&R Under-Reamer 30 days. If not completely satisfied, money cheerfully refunded. 1-year guarantee.

STURDY AND FOOLPROOF



Easy-operating, positive, high-ratio, crank-controlled worm gear on handle opens colters to cut 17" base for 10", 5" hole. Forms its own bucket for removing dirt. Extensions and other widths available on order . . . write for prices.

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Enclosed is check for \$ _____
Ship _____ Under-Reamer(s) at once

Please Rush Me Descriptive Literature on B. & R. Under-reamers

Name _____
Address _____
City and State _____

INDUSTRY BRIEFS



Cohen

Henry Cohen, managing director for a wholesale building material and equipment distribution firm in Sydney, Australia, stopped recently in Chicago to call on manufacturers in the area. The Australian is making an around-the-world trip to inspect new developments in the industry.

William E. Rye has been appointed sales manager of the **Sam Mulkey Co.**, Kansas City, Mo. Mulkey joined the firm in 1942 when it was engaged in war production work. Prior to that he was affiliated with a lumber company in Omaha, Neb.

R. B. Fuller has been named sales manager of the **Huttig Manufacturing Co.**, Muscatine, Iowa.

Arvid C. Petersen, president of the **Homograf Planner Corp.**, East Detroit, Mich., has announced the appointment of **Lynn P. Hollowell** as design director of the firm's Home

(Continued on page 256)

WHEREVER YOU ARE BUILDING keep plenty of



always on the job

SISALKRAFT Products are tough . . . easy to handle, easy to apply. Their cost is surprisingly small. The protection they provide is great. As a protective cover for materials and equipment, SISALKRAFT is the most economical material you can use. As a safeguard against destructive weather . . . as a moisture-vapor barrier, wind, dust and dirt barrier . . . always dependable.

SISALATION Reflective Insulation saves up to 50% — and costs less to apply.

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New York 17, N. Y. — San Francisco 5, Calif.
Manufacturers of SISALKRAFT, SISALATION, COPPER ARMORED SISALKRAFT

Amazing Low Cost!
A GARAGE DOOR OPENER
That Every Homeowner CAN AFFORD!

you can have your own "HIRED HAND"

JUST PRESS a button from within your car

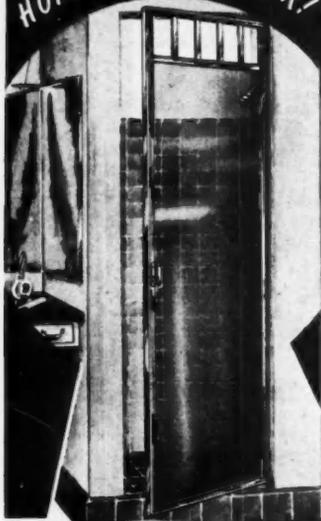
No longer is it necessary for you to labor in opening your garage doors or to brave inclement weather . . . or encounter robbers and attackers of the night! The **MAGIC CIRCLE** remote control Crane "300" does it all! Just push a button in the car and the garage door opens . . . headlights are turned on! And the same button closes the doors, turns off the lights — and the doors stay locked.

This new low cost model, the Crane "300," is what American homeowners have been waiting for! It's economical in cost and operation, easy to install and lasts practically forever! As easy to maintain as a small radio! **FHA APPROVED** . . . Send for additional information!

Send for **FREE FOLDER**
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1447 W. Lake St., Dept. AB1, Chicago 7, Ill.

that extra touch you're
looking for to make

HOMES SELL FASTER!



SHOWER DOORS & TUB ENCLOSURES

GULFSPRAY—the better-made, smartly styled line to meet varying needs of modern homes! Good values because they're produced in volume by an experienced manufacturer!

Send for free catalogue today and learn more about this "sales-plus" for homes of today.

NOTE: Gulf Spray units do not leak when installed according to factory specifications.

• 15 warehouses with stock to serve you

Binswanger + co.
of Texas

207 N. Main St. • Houston

INDUSTRY BRIEFS

(Continued from page 255)

Planner book and as supervisor of the architectural division. Petersen said that the appointment of Hallowell, who has been active for many years in the designing and planning of low- and moderate-cost homes, completes a major expansion of the Homograf architectural division, enabling the company to provide architectural service to builders and contractors as well as to individuals.

Election of **James J. Upson** as administrative vice president of the **Upson Co.** has been announced by the firm's board of directors. Upson joined the company in 1946 after service as a naval officer. He is a graduate of the Wharton School of Finance and Commerce of the University of Pennsylvania.

Walter D. Scott has been appointed manager of the stock sales division of **Sargent and Co.**, according to an announcement by J. Bryer Duff, general sales manager. Scott has been affiliated with the company since 1927. In his new post he will have charge of sales operations for both Sargent and Bernard tools and all of the firm's stock hardware products.

Speed-up Sanding



Cleans
Sands
Smooths
Polishes

\$34.50

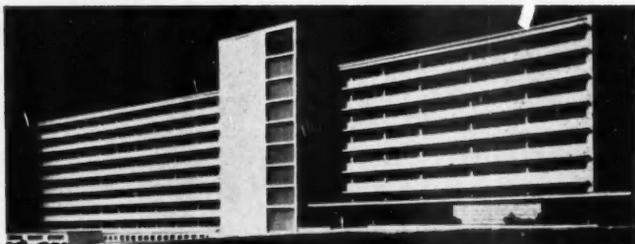
**Speed Way
Speed Sander**

This powerful, motor driven, orbital motion, finishing sander works easily in all positions—in hand weight

5 lbs. Takes any sand paper or sheet abrasive—three 4 1/2" x 6 1/2" overlays cut from standard 9" x 11" sheet. Cast aluminum body, chrome plated. All-sealed-ball bearing construction. Powerful AC induction motor—direct connected—no gears or heavy housing. No floor finishing sander at any price. Your dealer will demonstrate.

Write for circular.

Speed Way WRITE FOR CATALOG
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Peachtree-Seventh Building, Atlanta. Alexander & Rothschild, Architects

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Designers of office buildings seek efficiency and clean, simple beauty in all phases of construction. Naturally, they choose One-der Frames.

Complete one-piece metal frames for any type of construction

Whatever the type of building, One-der Window Frames and One-der Door Frames mean savings in cost and installation time, plus a handsome appearance that is permanent.



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Let us send you this
book of
**HOME BUILDERS'
SHORT CUTS**
for a **FREE 5-day trial**

More than 800 "practical job pointers" that save time, expense and labor on building jobs.

Now! Carpentry, building construction and building repair jobs are made easier with the practical methods shown in this big 211-page book. Every one of these methods has been TESTED in actual use; every one saves time, saves work, saves money.

CONTENTS INCLUDE: 88 handy ways to use tools; 57 ideas for work benches and attachments; 62 work-saving ways to use portable equipment; 39 suggestions on excavations, foundations and forms; 32 methods for making sills, girders, joists and sub-flooring; 49 hints on exterior and interior wall construction; 36 short-cuts in roof and bay construction; 19 tips on making cornices and porches; 54 ideas for interior wall covering and trim; 27 helps on stair construction; 37 window suggestions; 54 ideas for installing doors; 29 tips on closets, shelves, and built-in equipment; 24 flooring pointers; 35 aids in installing sanitary equipment; 44 short-cuts in laying out work; etc., etc., etc. More than 700 illustrations show you exactly "how-to-do-it." All items indexed so that any particular idea or short-cut you want can be located instantly.

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Just fill in and mail coupon below to get "Practical Job Pointers" for 5 DAYS FREE TRIAL. If not fully satisfied, return the book and owe nothing. If you keep it, send only \$3.98 plus few cents postage in full payment. You take no risk. Mail coupon below, now.



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City _____

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JANUARY 1951



Save **INSTALLATION TIME**
WITH **COMPLETE ALUMINUM**
Fleettlite **WINDOWS**

★ *All Seasons*
Windows
for **New Homes**



FLEETLITE is a revolutionary new window—a complete year-around unit combining interior and exterior double hung windows and screen in an aluminum frame! FLEETLITE windows are delivered assembled and glazed in corrugated cartons. It is the greatest advance ever in window design and construction . . . the **ONLY COMPLETE** all Aluminum window unit on the market today.

Thousands of FLEETLITE windows have been installed in new homes throughout the United States and Canada. Builders are boasting about the easy installation and the spectacular selling advantage of FLEETLITE equipped homes. Home owners are delighted with the beauty, convenience and ever-lasting construction of FLEETLITE units. Eliminate storm sash. No storage problems, less dirt and dust, warmer winters and cooler summers. FLEETLITE features sell homes for you . . . spell comfort for your customers.

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AMERICA'S *new* WINDOW

As advertised in House Beautiful, House and Garden, Small Homes Guide, American Builder, Practical Builder and Magazine of Building.

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PERFECTLY *Balanced*
WITH
Genuine VIKRE
SASH HOLDERS

- Quickly and Easily Installed
- Fully Encased . . . Will Not Bind
- Require No Weights or Cords
- Save Two Dollars or More Per Opening
- Provide Efficient Anti-Rattler
- Need No Special Type Weather Stripping
- Two Sizes: VSH-57 for Check Rail Sash; VSH-20 for Plain Rail Sash

Vikre Sash Holders with their patented adjustable spring tension keep your clients' windows perfectly balanced at all times. All parts of holder are fully encased to eliminate wear or faulty operation of window. Install Genuine Vikre Sash Holders for better performance at lower cost.

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Sales Up for Light Shades of Structural Glass

Reporting on a recent survey of new structural glass installations by Libbey-Owens-Ford Glass Co., C. Edward Johnson, manager of Vitrolite Sales, said that lighter shades are fast becoming the leading sellers for surfacing bathroom and kitchen walls, with light gray, alamo tan, sky blue and jade green the current favorites.

The trend toward colored wall surfaces began several years ago, according to Johnson, who attributed it to a reaction from the traditional "sterile look" of kitchens and bathrooms.

The trend toward lighter colors, Johnson said, has been accompanied by a preference for only one color of structural glass to a room. This was described as not only proving more economical from the standpoint of installation costs, but as simplifying the job of decorating—permitting more flexibility in color of variable elements such as draperies, etc.

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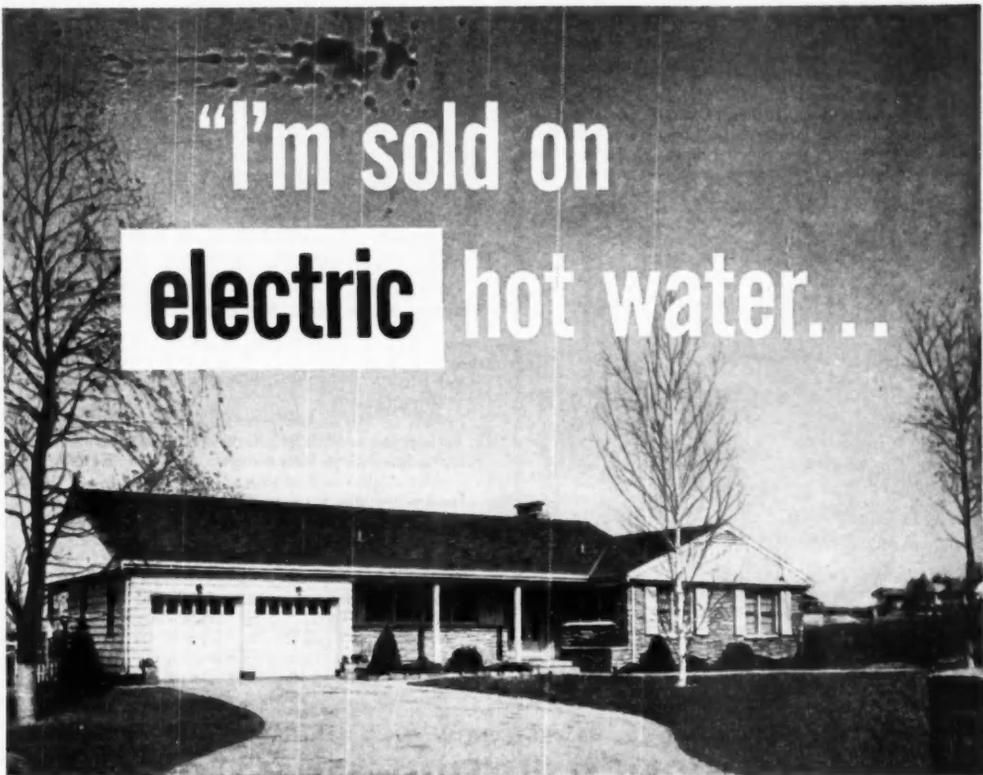
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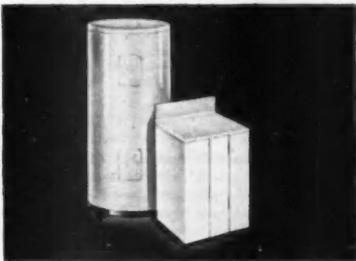
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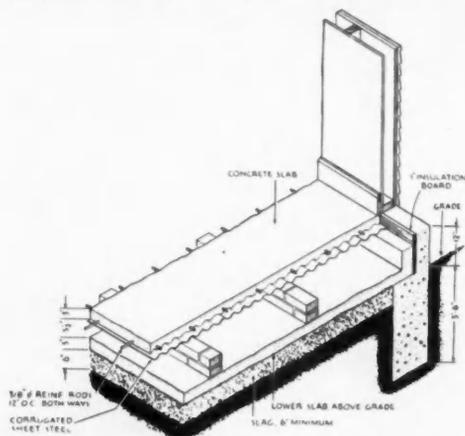


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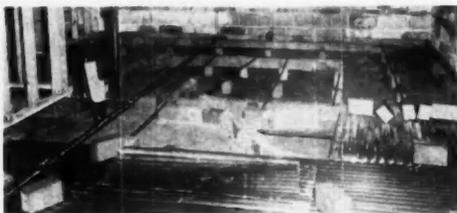
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it is returned to the heating unit.

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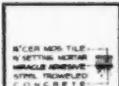
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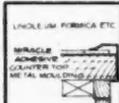
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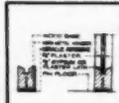
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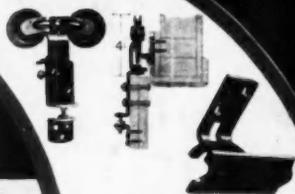
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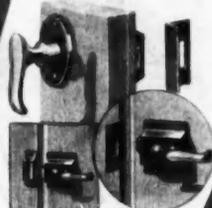
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