

COST LESS THAN SERVICE

IRSTIN CONTROLS

HERE'S THE NEWEST, FINEST, MOST COMPLETE BASEMENT WINDOW UNIT MADE!



The New Fanestra Carton

Giazed Basement Window

> Clip-in Metal Screen

Clip-in Storm Panel

GLAZED-no glass or putty problem

PACKAGED—no loose parts to handle

AVAILABLE IN 3 WAYS

- Package A—Fenestra* Bosemant Window, glased, with Screen and Storm Panel Insert, in carlon.
- 2. Package B-Basement Window, glazed, with Screen, in carton.
- Basement Window Unglassed—Screen and Starm Panel available separately also.
 - Three sizes 2 lights-15" x 12"; 2 lights-15" x 16" and 2 lights -15" x 20". Screen held in by two screen. Storm Panel provides economical insulation.

THESE OUTSTANDING ADVANTAGES

- · Easily installed-ull of the sizes fit concrete block
- · Glazed-no fiddling around with plass or putty.
- · Stardy-made of hot-rolled cosement window sections.
- · Weathertight-double contact of such against frame.
- · Lookproof-square corners for tight construction.
- a Vermingread-impervious to roh, termites, other pests.
- a Protoclad ventilation-opens in at the top-
- · Basy to aperate-steel con't warp or swell or shrink.
- · Locks tight-with quick and easy lever action.



WINDOWS . DOORS . PANELS

- · Easily removable-want removed from inside only.
- · Low cost-produced in great volume . . . In standard sizes.
- . Low maintanance-steel can't shrink, rat ar splinter.

NEW FENESTRA UTILITY WINDOWS AVAILABLE IN 3 WAYS

- Package A—Glazed Utility Window, with Screan, plus Side Guards to reduce drafts in barres.
- Package B—Glazed Utility Window, with Screen only.
- 3. Unglazed Utility Window-Scroon and Side Guards separately.

For garages, shops, dairy barns, building areaways, etc. 2' 9%" wide by 3' 6%" high. Construction and quality features same as the New Fenestra Basement Window.

For full information call the nearest Fenestra office, listed in the yellow pages of your telephone directory, or mail the coupon.

| Plane send | me complete info | irmation on the ser |
|------------------------|----------------------------|---------------------|
| Construction of Street | The conservations would be | comes a magnage |
| Name | | |
| Comment | | |

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BECAUSE:

Upson Kuver-Krak Panels have a long record of satisfaction in rg-covering cracked ceilings!

No other material makes such beautifully modern home-style ceilings!

WHEN THE CUSTOMER SAYS:

No material produces such trouble-free, longlasting ceilings!

No other material is designed for use with Upson Floating Fasteners which eliminate visible face nailing!

No material decorates more effectively.

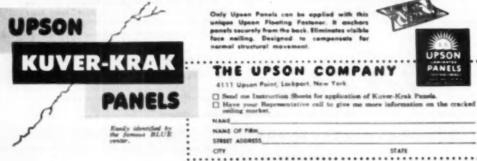
No other material is so widely advertised to home owners for rg-covering cracked ceilings! No other ceiling material has greater sales appeal.

UPSON KUVER-KRAK

PANELS

Upson Kuver-Krak Panels are scientifically processed under an exclusive formula. Laminated! A full 5 plys thick! Crackproof! Presized! Attractively pebbled surface!

Install them with confidence. Their timeproved qualities produce unusual ceilings of enduring beauty steady jobs through the years. For Instruction Sheets, mail the coupon!



Cracked Ceil



IN YOUR DECEMBER ISSUE

The first of a series of articles on CONSTRUCTION LUMBER and Its Carreet Usage. This series will contain the latest recommended features and data on framing with lumber; how and where to use the various grades; hest practices of framing, cutling, and nailing. Every article to be profusely illustrated with pictures, drawings, and tables. This is information you cannot afford to miss. It starts in December.

Exclusive showing of two priarwinning homes selected from Parents' Magazine's builders' contest. These particular homes will not be featured in any other building magazine. They are pucked with down-to-carth ideas, and have exceptional meril from a design standpoint. Floor plans will be shown. You will want these designs for your Portfolio of Homes.

Ranch House for a 50-foot City Lot will be featured as the American Builder Blueprint House of the Month. Lavout includes five rooms, full basement, a garage and porch. Traditional in design, this house has met with exceptional success in the Colicago area.

Timely editorials, Better Detail Plates, How-To-Do-It ideas, and news from all segments of the building industry will round out this hig December issue.



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NOVEMBER, 1950

Number 11

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R. E. Soberson comments on the state of home building.



with these

GARD

Nu-GARD Automatic DOOR BOTTOM AND DRAFT ELIMINATOR

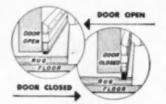
THE MOST UNIQUE DOOR BOTTOM OF THEM ALL!

Here's the most efficient, most practical door bottom on the market! Overcomes the old problem of clearing rug or carpet every time door opens. Beautifully designed with smart, silvery-satin finish. Easily installed by anyone. All working parts made of high quality Alacrome metal—will not rust or tarnish. Furnished in 28", 32", 36", 42" and 48" lengths. May be shortened approx. 2". Fits right or left hand doors. Packed in individual cartons, including necessary screws and completely illustrated instructions.



Nationally advertised TO BUILD TRAFFIC FOR YOU!

Our advertising in leading national magazines tells millions of readers to buy these quality products from you. So keep well supplied! This handnome double-duty display case given to you with your introductory assortment order. Removable top becomes handy shell on front to hold demonstration model. Case contains 24 door hottoms, twelve 32° and twelve 36° lengtha-individually packaged.



SHOW 'EM HOW IT WORKS AND IT'S SOLD!

A single demonstration makes the sale every time! Just show them how the heavy, thick feit hugs the floor when the door is closed. How it seals out noise, dust, drafts, saves fuel? Then when the door opens how the hinged feit section automatically raises to clear carpet or floor.



You can't cell 'am if you don't stack 'am so ander today. Your stack will be shipped same day your order is received.

MORE --- PROFIT MORE sure-fire favorites!

More than ever . . . swell to have, swell to sell!



FOR DOORS Peckaged in handy sets for almost all standard doors. Available with regular brass and felt door bottom strip, or with threshold and exposed hook. Easily installed-no special skill or tools needed. Comes complete. All ready to install.



Numetal

Vumetal

WEATHER STRIP Easiest in the world to put on!

MACKLANBU

OKLAHOMA CITY



ORDER NOW - Your order will be shipped same day received!

1,

FOR WINDOWS Also comes come plete in conven-lent packages. Fits all standard 28°, 30° 32° and 36° double hung windows. Cut to-dimension service available. Quickly and passily installed by anyone. Each set con tains necessary strip for complete job plus nails and instructions. Individually packaged-ready to hand customer!

DON'T FORGET ALK SPEED LOAD

America's favorite calking compound in the most of ficient load on the market. Packaged 10 loads to each carton and 4 cartons per shipping case. You'll need good supply to keep up with this fast-seller!

OKLAHOMA



Au-Glaze GLAZING COMPOUND

Sells better because it does the job better-really "stays up"? Won't crack or peel off. Perfect for all glazing. Packaged in attractive cans-1/2 pint, pint, quart, \$ lbs.-in drums from \$0 to \$80 lbs.







Any clerk can sell it! Any customer can install it! Works perfectly on most any

type window, storm sash or door. Made of moth-proof, pre-shrunk, color-fast wool felt and white metal. Attractive display carton holds 12 individual 20-ft. rolls.



Everyone likes the charm and beauty of pegged oak floors

 Nothing adds more style and appear to a home than a bright, colorful Ranch Plank Floor with its walnut pegs, alternate widths, and Decorator Finish.

These distinctive oak floors have been commended by top architects and interior decorators for homes of all styles, modern and traditional. No matter what an owner's decorative scheme may be, the mellow coloring and interesting pattern of Bruce Ranch Plank Floors will always harmonize with furnishings. They are in good taste in any setting. The beauty of these floors will never grow old . . . because they are solid oak with a superb factory applied finish. With simple care a Banch Plank Floor will last not only a lifetime . . . but for generations.

These floors are easily laid by blind nailing over wood subfloor or old floors. Their installed cost is about the same as for regular strip floors sanded and finished on the job.

For color booklet and complete data on Ranch Plank Floors, write: E. L. BRUCE CO., MEMPHIS 1, TENN.

Bruce Ranch Plank Floor

Publisher's Page



Regulation X

DEGULATION X, which controls credit on new housing, was issued by the Federal Reserve System under authority of the Defense Production Act of 1950, and became effective on October 12. The regulation applies to loans for more than \$2,500, with more than 18 months maturity, on all new onefamily and two-family housing units, and includes major improvements and additions that constitute new construction on existing properties. It does not apply to loans on which written commitments were made before October 12. It does not apply to conventional loans on housing construction starting before noon on August 3, 1950. No part of the regulation applies in any way to public housing construction or public housing construction loans or credit.

The announced purpose of the regulation is to "reduce the current serious inflationary pressures in housing . . ." and to cut back home building volume in 1950 to not more than 800,000 to 850,000 units. Veterans are given substantial preference over non-veterans.

Certain hardship exemptions and exceptions are made. The prohibitions of the regulation shall not apply to any extension of real estate construction credit with respect to real property in an area where the Federal Keserve Bank may declare that an emergency exists because of flood, fire or other disaster; or in cases where the borrower certifies that the proceeds of credit extension will be used solely for defraying medical, hospital, dental or funeral expenses; or where the borrower certifies that the proceeds of the extension will be used for replacement, reconstruction or repair of a residence destroyed by fire, flood or similar casualty. It does not apply to contracts to sell real property (a) which do not provide for the payment of any part of the purchase price, or any amount to be subsequently applied to such purchase price, except a deposit of earnest money, before the title transfer, or (b) which provide for title transfer within six months after date of contract, or (c) which provide for title transfer conforming to the regulation. Builders or buyers who have made "substantial commitments" prior to August 3, and who will be caused "substantial hardship" through conformance to the regulation may appeal to the Federal Re-serve Bank for exemption.

The regulation does not apply to an extension of construction credit which is fully secured by the loan value or cash surrender value of a life insurance policy. It does not apply to farm property, unless the credit extension is for the purpose of financing construction of a residence on a farm, or a major addition or major improvement to such a residence.

No credit subject to the regulation shall have a maturity of more than 20 years, except that a credit extended with respect to a property having a value of \$7,000 or less may have a maturity of 25 years, provided it is fully repaid at or before the maturity date.

On October 14, the regulation was changed to allow World War II veterans to be granted 30-year maturity periods in hardship cases. Frequent revisions of the regulation may be expected, and it is probable that further revisions may be issued before this synopsis of the act is off the press. Builders are urged to keep informed daily. The following table shows the minimum required down payments under the regulation for both veterans and non-veterans as of October 14.

| Value | IPHA | | fiamai) | | Veteran IGi Loansi | | Differen- tial in |
|--|--|--|--|--------------------------------------|--|--|------------------------------------|
| (Transas- tion price) | Parcett | Amount | Amount | Percent | Amagint | Amount | * Downpaymon Percentage |
| \$ 3,000 4,000 5,000 6,000 7,000 8,000 9,000 | 10.0 10.0 16.0 14.2 17.1 19.4 21.1 | \$ 300 400 500 £50 1,200 1,550 1,900 | \$ 2,700 3,600 4,500 5,150 5,800 6,450 7,100 | \$.0 4.7 7.1 0.4 | \$ 250 250 500 750 1,000 | \$ 4,750 5,750 6,500 7,250 6,000 | 5.0 16.0 16.0 16.0 |
| 10,000 11,000 12,000 13,000 14,000 | 23.0 24.5 25.8 26.9 27.9 | 2,300 2,700 3,100 2,500 3,900 | 7,700 8,300 8,900 9,500 10,100 | 13.0 14.5 15.0 18.0 21.4 | 1,300 1,400 1,900 2,450 3,000 | 8,700 9,400 10,100 10,550 51,000 | 10.0 10.0 10.0 6.1 6.5 |
| 15.000 96.000 17.000 16.000 19.000 | 28.7 21.9 34.7 37.3 39.5 | 4.390 5.190 5.990 6.790 7.590 | 10,700 10,900 11,100 11,300 11,500 | 23.7 26.9 29.7 22.7 34.5 | 3.550 4.305 5.056 5.405 4.550 | 11,490 11,700 11,950 12,300 12,460 | 5.0 5.0 5.0 5.0 |
| 25,900 21,000 22,000 23,000 24,000 | 41.5 43.8 45.9 47.8 49.6 | 8,300 9,200 10,100 11,000 11,000 | 11,200 11,000 11,900 12,000 12,100 | 26.5 28.8 40.9 42.6 46.4 | 7,300 8,150 9,000 9,450 10,700 | 12.790 12,850 13.000 13.150 13.500 | 5.0 5.0 5.0 5.0 |
| 24.250 aver 24.250 | \$0.6 \$0.0 | 12,125 | 12.125 | 45.0 45.0 | 10.912.50 | 12,337.90 | 5.0 |

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This house cost less to build ______ and is easier to sell. One of the low-cost homes built by Gorden Branson, C.B. in New Brunswick, New Jorsey, Konsile Floors are installed in every room,

thanks to low-cost, beautiful KENTILE FLOORS



As selling becomes more competitive, Kentile's advantages become even more important to the builder.

Kentile cuts construction costs

Tile by tile installation speeds installation in large or small areas. No heavy rolls to transport, handle and cut-labor costs are lower. No expensive preparation of the sub-floor is necessary—and because Kentile can be walked on as soon as laid, there are no construction delays.

Ideal for low-cost non-basement homes

Kentile can be installed on concrete in direct contact with the earth. It is resistant to the alkali and moisture present in concrete—and its asbestos filler acts as insulation against dampness and moisture.

KENTILE makes homes more saleable

Colorful Kentile Floors add eye appeal to any interior. Wide variety of colors enables you to create designs suitable for every room in the house---and decorative inserts (ThemeTile and Kenserts) can be added to give custommade distinction at low cost. National advertising in leading magazines has "sold" your prospects on the durability, ease-of-cleaning and all-around desirability of Kentile Floors. Your Flooring contractor will give you full details about Kentile.



BAVID E. KENNEDY, INC., 58 Second Ave., Brooklyn 15, N. Y. + 350 Fifth Ave., New York 1, N. Y. + 705 Architects Bidg., 17th and Sansem St., Philodelphia 3, Pa. + 1211 NBC Bidg., Cleveland 14, Ohia + 225 Maore St., S.E., Atlanta 2, Ga. + Kanas City Merchandise Mart Inc., 2201-5 Grand Ave., Kanas City 8, Ma. + 1440 11th St., Denver 4, Colo. + 4532 South Kolis: Ave., Chicago 32, III. + 1113 Vine St., Houston 1, Texas + 4501 Santa Fe Ave., Las Angeles 58, Calif. + 95 Market 51., Oakland, Calif. + 452 Statler Bidg., Boston 16, Mass.

HOVEMBER, 1950

CROSLEY



More end more builders have come to rely on Crosley for the type of kitchen appliances and equipment their clients want. Amazingly increased acceptance of Crosley products over the past few years assures you that your clients will like what they see --when you specify Crosley. The name Crosley stands for modern styling, simplified instullation, long life, and complete client satisfaction.

CROSLEY is designed from the woman's angle and engineered for the architect and builder. CROSLEY'S complete line provides a product to fit your every specification.



E

Today's Budding Cash dama space-taving moders wat basissi Crashy Corner We thaten one more and define



antria Garbago Disponen Al 19 standard sink.critti a 31/2⁰ r 4⁰ deain. Patontad Constry achanism won't clag or fam.



B Heans and Ferm Pressons give you a variety of capacities from 4.1 to a full 20 cubic feet.



Genery Son the Pase in Elintric Ranges with smart innovations in automatic croking. Pierwir one that reacts, beken, bolis, broits, frist and Aarberver, all by clock controlf Double or single overs . . . "chatter" of "divided" ison.

AMERICAN BUILDER

tight- or left-band drainboard ... one d metd of two ... deuble or single bow Taxion or Do Lase Medals.

builds what your clients want!



NOVEMBER, 1950



WIRING NEWS



Master Selector Switch Adds New Remote Control Uses

Have you stopped to consider the amazing scratility added to General Electric's remote-control wiring system by the masfer selector switch?

Replacing gangs of separate On and Dry constrols, the compact master selector writch, RMS-1, provides instant, postive control of up to nine different circuits. With its help you can now plan wring gystems that provide the utmost in dBew renience—and, best of all, at a cost you'll and hard to believe. Here are just a few of the step saving advantages you can neve clients by using one or more master allector writches.

In Homes and Apartments

Instant bedaide control of all interior and exterior lighting . . . an invaluable meet in emergencies. Added convenience brough control of kitchen appliance outors and attic ventilators from several Afferent points. Control of key indoor and outdoor lights from the garage, from bor, back door, and bedroorn.

In Plants and Factories

Control of fire and alarm circuits. Control of watchman's circuits and provision for pathway lighting on his rounds. Selective control of aisle lights, individual workarea lights, outlets, and small electricallyaperated machinery from any desired point.

Then too, there are many applications for farms, ewimming pools, parking lots, athletic helds, tourist cabins, achools, museums, hospitals—and you have probably already thought of many more. For further information simply check box (A) below.

New Levelock Switch Box Takes Job-site Abuse



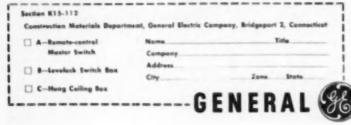
Neither hammer blows nor constructionsite abuse can dislodge the side plates of the new General Electric Levelock switch böß. Wedging action of a new locking mechanism locks bon parts sedurely in place — yet is simple enough to permit fast, certain assembly of switch-gangs.

Leveling the box against the studding is also a faster, easier operation. Four contact points — instead of the usual three prevent tilting or rocking of box during nailing.

In addition to nail-through holes, an extra set of nail holes through the side plates allows speedy gang mounting of the Levelock box direct to studding. Extra side-plate pryouts provide for out-of-theordinary installations. All pryouts are easily removed by a quick twist of a screwdriver.

A new single-screw ear adjusts from slightly above to \$5-inch below the edge of the new Levelock box, while an extrasturdy bridge across the ear adds increased strength. There's plenty of space, too, within the bridge to accommodate the device strap.

The ingenious construction of General Electric's Levelock saves time when used on either new construction or modernization work. Builders and contractors will appreciate your specifying the Levelock box, so check box (B) in the coupon and get complete information.



Safe, Dependable ... Easyto-install G-E BX* Cable

More than a half-century of research and improvement are reflected in today's General Electric BX armored cable. Factory - assembled and factory - tested, BX armored cable is still the most practical metal-protected wiring system available for general purpose use. For new construction or modernisation work, BX armored cable provides asfe, dependable, long-term operation.

And, best of all, a EX system is a cinch to wire. A few strokes of a hacksaw and a quick twist of the wrist removes the armor and leaves the conductors ready for easy stripping. Cable armor provides grounding protection. In Awg sizes 14 and 12 a metal bonding strip is included under and in contact with the armor to provide increased conductivity in case of ground faults.

You'll like the case and simplicity of a BX armored cable job, so make it a point to offer your cuatomers this added protection. You'll be more than repaid by savings in installation and "call back" time. Underwriters' Laboratories inspected, General Electric BX armored cable is available in Awg sizes from No. 6 to No. 14 in both two-conductor and three-conductor types. Specify it on top-quality jobs.

*Reg. Trade Mark of General Electric Company



New Hung Ceiling Box¹

For fast, easy installation and real savings on jobs using conduit, this new hung celling box is hard to beat. By specifying this new box you can virtually eliminate special couplings and pipe bending operationa. Thanks to its special eight-sided design, this easy-to-handle criling box allows conduit to enter the knockout—over the grid structure — from all eight angles. In addition, the lower row of knockouts permits conduit runs parallel to channels.

Four-point suspension of the box is provided by two sturdy mounting bars. With bars in a parallel position, the box slides back and forth for quick, easy centering. When bars are spread slightly, the box locks securely into any desired position for easy wiring. For full particulars check box (C) at left.

(†U. 8. Patent No. 1,954,481)

ELECTRIC

saves us \$**112**00

Read, in the letter above, what Mr. Coles Doty has to say about DeWalt saws!

operation possible.

We used DeWalts on every job I've been on during the past 14 we usen Dewarts on every job I've been on during the past 14 years. I've seen them stand up and do the job quicker and During the past 2 years we built 83 houses in this section of Long Island and a study of our operating costs shows that it

LOOK issand and a study of our operation costs shows that it cost us about \$4.30 per hours to operate the DeWalt while our cost us about \$4.30 per bouse to operate the Dewart when our savings in labor figures about \$111.00 per bouse. Maybe that explains why we've such enthusiastic boosters for Recently we expanded our operations and built a new plant to produce prelabricated house sections for quick, site erection. Networky our DeWalt

saws are playing a big part in making this whole

(Signed) Colas Doty, Per Datybili Homo

Dotybilt Homes. Inc. Sy

better when other saws failed.

DeWalt.

Every builder and contractor operating today-building one house or one hundred houses-can profit by doing what Mr. Doty did.

When you have a flexible, all-purpose DeWalt on your job you know all these things:

You know you have today's finest, most dependable radial saw.

You know you have a machine that will help you build better, faster-from cellar to roof!

You know you will get fast, accurate cutting all the way -and many different kinds of cuts. DeWalt is many machines in one!

You know you will save money on every house-increase year-round profits.

Investigate DeWalt now. Go in to see-or call-the nearest DeWalt dealer! See, especially, the new DeWalt Model GR with 5 new features, including low dead rise motor which permits deeper cut, allows you to use 14" blade and make 41/2" cut. Send coupon below for full information on DeWalt.

DE WALT INC.

a subsidiary of American Machine and Foundry Company

| DE WALE, INC. |
|--|
| 111 Fountain Avenue |
| Lancaster, Pa. |
| Pieace cond me literature and complete specifications on the new DE WALT GR. |
| Hang |
| Address |
| Coy |
| I plan to build |

NEW!

DE WALT GR

with low dead

rise moter!

says

Every Home and Business is a Prospect for Johns-Manville CEILING PANELS

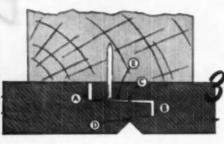
You, too, can make more money with this J-M Insulating Board Product!

right angles to ceiling joists, and nail or staple the Panels in place. Detailed instructions come with each carton.

 J-M Decorative Ceiling Panels are easily and quickly applied on new or existing construction. All you need to do is install furring strips at

Application is easy

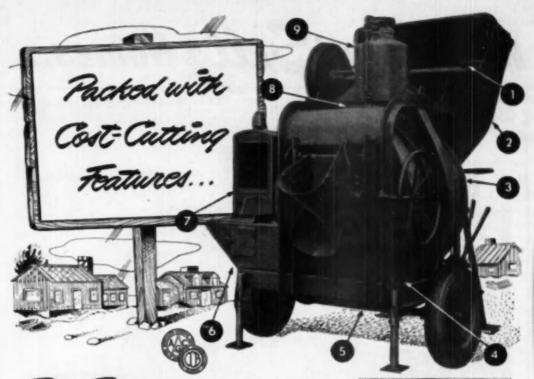
You can bare time by stapling . By using a trigger-type automatic stapler, you can cut application time by one-half, and tests show that staples hold as securely as nails. Thanks to the J-M Lightning Joint, all staples or nails are concealed in the finished tob.





Send for free Instruction Sheets and full-color brochure on J-M Insulating Board products, 18-30A. Write Johns-Manville, Box 290, New York 16, N.Y.

B-level Lightning Joint about faster, better installation for expansion and contraction ... the tapered top edge of the tongue to facilitate joining of panels ... the definite square-corner edge at D to help speed installation and keep alignment ... and the large nailing are at E for concealed nailing or stapling without damage to panel edge. These and other J-M advantages add up to an attractive finished job which provides lasting customer-satisfaction. One job sells another-and your potential market is unlimited.



Blue BRUTE design shows you what to look for in a portable mixer

Give a Worthington-Ransome Blue Brute 11-S or 16-S Portable Mixer a thorough going over — and get a real revelation of how far mixer-design has advanced! For example: **a** *kip* cable winding shaft, mounted on self-aligning bearings, has grooved spools for knager cable life; **b** power *koafer* with automatic knock-out and brake set when skip raises to charging position; **b** *skip vibrator*, simple and effective, assures quick transfer of materials from skip to drum; **b** *drum* rollers of genuine car wheel metal with chilled treads — each roller mounted on two Timken bearings; **b** rollers sub-frazies under drum prevents concrete accumulation on roller shaft or bearings; **b** countershaft of heat-treated alloy steel in self-aligning ball bearings — all units easily accessible: **e** engine mounted with radiator facing mixer's discharge side avoids dust, clogging and overheating; **e** drues drive gase of one-piece semi-steel casting, machined to true circle; **e** water tanks of accurate, exclusive spiral cut-off type — no rubber to deteriorate.

These and many other features — including Ransome's perfected mixing action, famous for producing better quality concrete — are the reasons why construction men everywhere depend on Blue Brute Portable Mixers for more concrete at less cost. See your nearby Worthington. Ransome distributor for performance facts that prove there's more worth in a Blue Brute.



A Blue Brute 16-5 Particule Minor speeds operotions on a big housing project in Springfield Gordens, Long Island, N. This mochine is one of a fleet of both 16-5 and 11-5 Blue Brutes ownad by Angela Aragone, who says "1 am well pleased with their performance and economy."

> Worthington Pump and Machinery Corporation, Worthington Construction Henipment Dept., Harrison, N. 5. Distributors in all principal cities

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brings factory production-line economies right to your job

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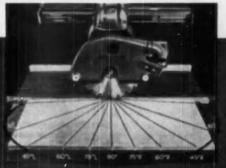
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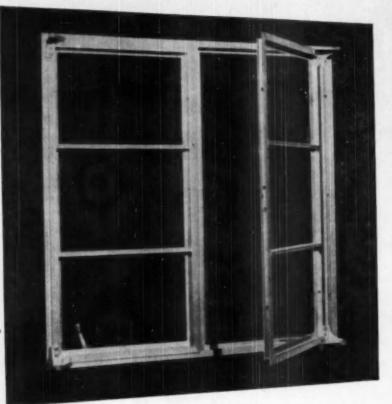
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Richmond plumbing knows no boundarieswhen it comes to meeting fine housing requirements. From North to South . . from East to West . . . more and more . . leading builders, contractors and architects are consistently recommending Richmond.

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NOVEMBER, 1950

in the Building Field

Construction Activity and Population Growth

A LMOST a million dwelling units were started in the first eight months of 1950, 54 per cent above last year's figure for the corresponding months. The August volume of 141,000 dwelling units brought the total for this year to date to 988,400. Starts for July were 144,000, second only to May 1950 with 149,100 dwelling units started, the largest volume of starts in housing history.

Thus the Korean War and increased defense preparations have so far done little to halt peak activity in residential construction. Only restriction at present is the curb on credit. It is believed that ultimately the requirements for veterans buying houses costing \$10,000 or under will be about 10 per cent cash and that 30 per cent cash will be the requirement on most non-veteran purchases. Down payments of as much as 50 per cent may be required on "luxury houses."

Various communities may have their own little booms and depressions, but for the nation as a whole the five years since V-J Day have been years of steady progress in residential building.

The volume of construction in a given locality is determined largely by how many people live there and to what extent the population increases. Preliminary 1950 census data shows that the United States in April had a population of 150,000,-000, up 14 per cent over the 1940 census. It shows that 20 per cent of the population live in the northeastern states from Connecticut to Pennsylvania, 30 per cent live in the north central states from Ohio to North Dakota, 31 per cent in the southern states from Delaware to Texas and 13 per cent in the western states from Arizona to Oregon.

Most spectacular growth is revealed in the western states where population increased 40 per cent. from 1940 to 1950. Mist of the increase is in Arizana, California and Oregon, which increased 49, 52, 39, and 36 per cent respectively.

According to Department of Commerce estimates, the northeastern states accounted for 20 per cent of total private construction in 1949, the north central states 31 per cent, the southern states 30 per cent and the western states 19 per cent. This follows fairly closely the pattern of population, except for the western states, where a larger amount of building is being done on account of the greatly increased population.

Eight states account for 51 per cent of total private construction. These are: New York, New Jersey and Pennsylvania in the East, Ohio, Michigan and Illinois in the Central states and Texas and California in the South and West. These states also account for 48 per cent of the population, 53 per cent of the builders and 48 per cent of the lumber dealers.

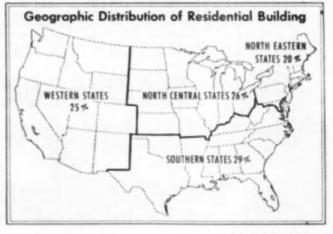
Except for California and Florida there is a variance of less than one per cent in each state between percentage of total population, builders, dealers and total private construction. For example, Wisconsin has 2.3 per cent of the population of the United States, 2.2 per cent of builders, 3.1 per cent of lumber dealers and 2.2 per cent of total private construction.

Economic laws apparently govern the number of builders and dealers who can operate successfully in a given locality dependent upon the size of the population and its increase and to some extent on the character and requirements of the population. The Southern states are generally exceptions to this premise. Temessee, for example has 2.3 per cent of the population of the United States and only 1.3 per cent of the builders, 1.6 per cent of the kumber dealers and 1.4 per cent of total private construction.

Social Security records show that there are about 60,000 builders in the United States. North Dakota has only 103; they could banquet comfortably in a small room. California has 7,843 builders, the most in any state. They would require a large hanquet hall. The 3.275 builders in Texas would probably throw a giant barbecue on a ranch of tens of thousands of acres.

Although the nation's builders employ 725,000 persons, almost as many as the 785,000 employed by the automobile industry, most builders are small businessmen indicated by the fact that 70 per cent of builders have seven employees or less.

There is an average of two builders for each lumber dealer. Dealers employ 310,000 persons, double the 155,000 employed in hardware and farm implement stores. Lumber dealers are also small businessmen indicated by the fact that 62 per cent of dealers have seven employees or less.



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1

For heavy duty service

Stanley introduced the ball bearing hinge. For carrying the vertical load of a door it outperformed all others.

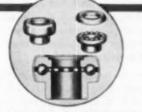
Recognizing the need for a hinge for extra heavy service that would support both the lateral and vertical thrust of a door on ball bearings, Stanley has developed the Full-Jeweled* Ball Bearing Butt Hinge. After exhaustive laboratory and field tests we can say, "It's practically impossible to wear out this hinge."

For heavy doors, exterior doors or doors receiving high frequency service, be safe-use Stanley Full-Jeweled* Ball Bearing Butt Hinges.

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takes lateral as well as vertical thrust



Exclusive Full-Jeweled Ball Bearing assembly consists of a movable and fixed raceway. When lateral thrust occurs, the movable raceway transmits the force directly to the bearings, which, in turn, are held firmly by the fixed raceway. Thus, the weight of the door is supported bath laterally and vertically on ball bearings.

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STANLEY

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THE STANLEY WORKS, NEW BRITAIN, CONN.

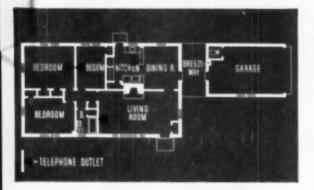
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W. W. MEIRS, Designer

RIGHT FROM THE START...TELEPHONE OUTLETS



BELL TELEPHONE SYSTEM



It's both practical and profitable to plan for telephones while a house is still in the blueprint stage. Practical because it protects the beauty of walls and woodwork by keeping telephone wires concealed. Profitable because it impresses prospects and makes houses more salable.

Telephone outlets can be made an integral part of any house—with little effort and at little cost. A few lengths of pipe or tubing leading to outlet boxes are usually sufficient for the average house. Placed inside the walls during construction, they carry the wires unseen to the outlets, thus protecting the beauty of walls and woodwork.

Your Bell Telephone Company will be glad to help you in planning efficient, economical conduit layouts for houses and buildings. Just call your local Basiness Office for free telephone planning service.

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"From the front door to the corner of the last bedroom, I've got a powerful sales assistant in oak flooring. Every time my prospects walk through another door and see those oak floors, I'm closer to closing a sale. I've tried other flooring materials and they just don't create that buying spark in a prospect's eyes the way oak does.

"That's because those people see what they want when they see oak. A big 85% prefer oak for economy, life-long beauty, and easy care. So of course you'll always see oak in *all* my homes, no matter what the style or price."

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Nathing helps self a house faster than Good Oak Floors

Quality

THROUGH AND THROUGH

No Wonder the Public Likes It!

Look at the extra features and you'll see why Eljer's Martha Washington Vitreous China Lavatory is so popular. The unmarred back surface is made possible by the Eljer concealed front overflow . . . the generous shelf back provides extra room for bathroom odds and ends . . . an anti-splash rim prevents water from "slopping" over . . . Eljer Brass is distinctly styled and quality made for extra-long service . . . and for extra-beauty in the bathroom the Martha Washington, in color or in white, can't be topped.

But most important of all ... the Martha Washington, like all other Eljer Fixtures, represents quality through and through ... quality that means customer satisfaction for you. For complete information on the complete Eljer Line of fixtures and fittings, see your Eljer Distributor or write Eljer Co., Ford City, Pa. Real Vitreous China Concealed Front Overflow Spacious Shelf Back Anti-Splash Rim Renewable Brass Outstanding Beauty

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



ASSOCIATIONS Their Plans and Activities

Boards; George W. West, Atlanta, past

League; and Douglas Whitlock, general

counsel, Structural Clay Products Insti-

S. Savings and Loan

Industry to Work With Government on Security Problems

president, U.

tute.

Leaders in the construction industry met recently in Washington and formed two special committees to cooperate with the Federal government on national security problems related to the industry.

The meeting took place at the offices of the Chamber of Commerce of the United States. Both special groups are subcommittees of the construction and civic development committee of the national Chamber of Commerce.

Heading the subcommittee on construction mobilization is Ralph Walker, New York City, president of the American Institute of Architects. Francis G. Addison, Jr., president of the Security Savings and Commercial Bank, Washington, D.C., is chairman of the subcommittee on construction credit.

Commenting on the functions of the two groups, Norman P. Mason, chairman of the national Chamber of Commerce's construction and civic development committee and a past president of the National Retail Lumber Dealers Association, said:

"The construction industry and the public which depends upon it for essential services in both peace and war have a heavy stake in the actions which will be taken under the Defense Production Act.

"No one questions the fact that mational security must have first call on our materials and manpower. The problem is to meet these requirements with minimum disruption to the normal and legitimate needs of our economy.

"There is no easy, simple way to do this. It calls for the best efforts of all good citizens, particularly those best equipped by knowledge and experience to find a solution."

Included in the membership of the construction mohilization group are Vice Chairman Carlton S. Proctor, New York City, past president of the American Society of Civil Engineers; Thomas P. Coogan, Miami, president, National Association of Home Builders; and C. B. Sweet, Longview, Wash., president of the National Retail Lumber Dealers Association.

The construction credit committee includes Coogan; Melvin H. Baker, Buffalo, president, National Gypsum Go.; Leonard G. Carpenter, Minneapolis, director, National Lumber Manufacturers Association M. A. Clarke, Philadelphia, board member, Mortgage Bankers Association of America; Miles L. Colean, Washington, D. C., consulting economis; Herbert S. Colton, Washington, D. C., attorney; Alexander Sammer, Teaneck, N.J., director, National Association of Real Estate



THE THREE top prize winnows of the Long laland Home Builders Institute membership contest in their royal ratiment at the place of honor during diamer closing competition. Left to right, southed, are Walter (Prince) Stockler, second prize winner; Maxwell (King) Smeddan, first prize winner; and Chiten (Duko) Rend, third prize winner. They are backed up by Wm. Toble. NAMB chapter relations director. Washington, D. C.; Bernard Erinsky, institute membership committee choirmon and Leenuel Frank, Institute president



ARRAY of dunce caps at the head table during the disner climating the membership compaten which resulted in a 142 per cent increase in membership in the Long Island Home Builders Institute

New Ohio NRLDA Director

J. Irvin Jones of the Doddington Lumber Co., Columbus, has been named by the Ohio Association of Retail Lumber Dealers to fill the vacancy in the National Retail Lumber Dealers Association board of directors left by the resignation of John Woodruff.

New Members Total 304 As Long Island Drive Completes 7th Month

Between February 1 and September 1 this year the Long Island Home Builders Institute increased its membership by 142 per cent. February 1 the rolls totaled 214 and on September 1 the total was 516. Although September 1 marked the conclusion of an intensive membership campaign, that was not the end of an effort to recruit more members. At that time a goal of 124 more members by January I was set.

From February 1 to May 15 routine staff solicitation of new members brought in 43. At that time the Institute's phenomenally successful campaign started. Bernard Krinsky, chairman of membership and his committee, working with Executive Secretary Otto Hartwig and Assistant Executive Secretary Joe Quinn, named 16 teams captains, each of whom chose three other Institute members to make up four-man "hasehall" teams. A host of valuable merchandise, U. S. Savings Bonds and free trips to the annual NAHB convention and exposition in Chicago were offered as prizes.

"Runs" were scored according to the classification of each new member signed by the contestants, as follows: Each new builder member, 5 runs; \$60 associate, 1 run; \$100 associate, 2 runs; \$250 associate, 5 runs; \$500 associate, 10 runs.

(Continued on page 198)

NAHB Directors Meet in Houston

The annual fall meeting of the National Association of Home Builders board of directors was held at the Shamrock Hotel, Houston, Tex., Oct. 16-21 with approximately 500 builders, government beasing officials and industry leaders in attendance.

In addition to regular national committee meetings and directors meetings, there were a number of discussion panels. Gevernment officials participating included Raymond M. Foley, Hossing and Home Finance Agency administrator; Franklin D. Richards, Federal Housing Administration commissioner; and T. B. King, director of loan guaranty service, Veteraus Administration

On the entertainment program planned by the host NAHB affiliate, the Texas Association of Home Builders, were sightseeing and boat trips, dimners and an "old-fashioned Texas outing,"

NOVEMBER, 1950

Cy Sweet Says-

C. B. SWEET. President. National Retail Lumber Declars Association

A Start in the Right Direction

The following news item appeared in a recent edition of a nortigwest newspaper :

"Students of the local union high school won't dine at the government's free lunch counter this year.

"The school board voted to turn down the federal government's offer of spuls, cheese, botter, dried milk and dried eggs, calling the offer 'an attempt to create favorable propaganda for the whole farm subsidy program.'

"The commodities offered, on payment of transportation costs, would come from the vast supplies acquired by Uncle Sam inder the government's farm support plan.

"The chairman of the high school hoard said the high school wanted none of it, that the board feels a start should be made somewhere to put an end 'to the creeping penetration of the Federal administration into local school affairs."

The news item was date-lined from the same community to which I referred in one of my first articles for this column written nearly two years ago, and from which I should like now to quote

"Just recently 1 made a trip through a very vich agricultural area; one that is famous for its fine potatoes-the big potatoes that you like baked. The crop this year was one of the largest this area has ever produced. But alas, the market was weak, a condition anyone in the lumber industry will understand. However, at that point the comparison ends. The potato grower, instead of selling his crop for better prices, called on his benevolent Uncle in Washington. The result of this call was that the potato grower sold his crop to the government for \$2.53 per 100 pound sack. The government then proceeded to sell the same potatoes back to the growers for 10e a sack, the potatoes never leaving the growers' warehouses during these transactions.

"The theory back of this transaction was that the potatoes were fed to livestock. Wonder if anyone knows whether cows like their potatoes baked or hash-browned? This same area also has a hig hay production, but then maybe modern cows demand a more varied diet. I rather suspect there are millions of human beings in the world who wouldn't be too particular just so long as they had something to eat.

"From the time the potato cropwas harvested in late October, up to December 9, the growers in this area, shipped, on the open market, 2727 carloads of potatoes. At the same time they diverted 1906 carloads to livestock. Assuming a minimum car to be 60,000 lbs., or 600 sacks of potatoes, this means that 1,143,000 sacks of good healthful potatoes went to the cows. That would certainly make a lot of CARE packages, to say nothing of helping to feed our own bungry families."

It seems a little inconsistent that a community which willingly accepts government hand-outs in one instance should turn around and "deplore" the use of one or several of the subsidized commodities for fear of government encroachment on "local school affairs." Let us hope, however, that the "start" made by the school board will be far-reaching and that more and more citizens in the locality will come to resent the "creeping penetration of the federal administration" into other of their affairs.

Two years ago when I was honored by being elected to the presidency of the National Retail Lumber Dealers Association, the editor of this magazine asked me to prepare an article for each month's publication. When I imquired as to what subjects I should cover in the articles, he replied, "Whatever you like-just express your personal ideas." This I have consistently attempted to do although at times it has been a difficult task for me. I have sincerely tried to convey to the readers my true feelings on various subjects that accused to me to be important. By the time this is in print a new president of the National Retail Lumber Dealers Association will have been elected, and as this is my last literary attempt, and before I write "30." I wish to thank the editor for the opportunity he has afforded me to present to you my opinions for whatever they were worth

Detroit. Chicago Groups Hear British Advocate Of Private Housing

Eigland's government not only has "strangled" the private construction industry but has placed that country farhehind in its job of building new homes. Mrs. Millicent Pleydell-Bouverie, organizer and public relations officer of the British Housing and Building Industries Stanfing Committee, taid members of the Onicago Metropolitan Home Builders Association at a recent hancheon unseting

Mrs. Bouverie's four major points on Britain's bousing situation were :

 In 1945, homes were needed for 2,-000,000 families. The waiting list now totals 3,000,000.

 Since the advent of the Labor govocrument only 200,000 homes a year bave been built—a volume far below the level before World II. Of approximately 300,000 homes built since the war, 700,-000 are government-built and subsidized.

 Because of rent control, which prevents landlords from earning enough to make necessary repairs, England is "wearing out" more homes annually than it is building.

4. Government restrictions have held down production of much-needed building materials and at the same time, in order to get dollars, approximately \$50,-000,000 worth of such scarce materials as flooring, windows, cement and glass were exported last year.

It is an exhausting fight. Mrs. Bouverie said, for a family to build its own home: a privately-owned home can be built only after the local government council has erected 10 public housing units. The individual must also pay the government a 10 per cent land development fee.

Building contractors have been unable to utilize large tracts of land previously acquired for mass production of homebecause building permits can be obtained only by the individual who is to own the bouse.

Speaks at Detroit

Mrs. Bouverie was entertained September 21 by the Builders Association of Metropolitan Detroit and the Detroit Real Estate Board at a function in the Hotel Statler.

Speaking in favor of the private enterprise system, she expressed isnorm over the controls placed in effect because of the international emergency. According to her statement, periods of Federal restriction are usually accompanied by attempts on the part of public housing advocates to get the government farther into howing.

Also attending the luncheon were representatives of state and city governments and a number of civic groups.

Godfrey Visits Atlanta

A recent between-planes guest of the Rome Builders Association of Atlanta was Grover A Godfrey, Home Builders Association of Dallas executive vice president.



Spokane Executive Officer

ROBERT W. TWIGG, executive secretary of the Home Builders Association of Spohume. Wash. Twipy was a naval officer in World War II, is a graduate of Whitman College. Walls Walls. Wash., and is currently attending night law school at Genzoga University. He joined the Spokume afflicte of the National Association of Home Builders last February. The group now han 142 members, having more than doubled the past year

Whitney Harris Named N. Y. Dealer Executive

Whitney F. Harris, well-known for many years in the lumber and building materials field in the New York area, has been appointed secretary-manager of the New York Lumber Trade Association, Inc., it has been amsounced hy Louis F. Kreyer, president. Harris succeeds Reginald W. Holt who resigned recently.



Whitney F. Hurris

A native New Yorker, Harris was associated for more than 18 years with Dykes Lumber Co. and for the past five years with the Philip Carey Manufacturing Corp.

The New York association is one of the nation's oldest lumber trade groups, having been founded in 1886. It was incorporated in March, 1936. Serving both retail and wholesale lumber merchants in New York City's five boroughs, it is an affiliate of the National Retail Lumber Dealers Association. FRANE W. CORTRIGHT. Executive Vice President. Rational Association of Home Builders of the United States



Where Do We Go From Here?

Since official Washington cannot answer that question, it follows that this reporter does not know the answer.

However, through the haze and obscurity of high level policy determinations we can see a few sign posts

First, there is unanimity on all levels of government from the White House down that—barring unexpected acceleration of our armament program—the housing target for next year will be somewhere between \$00,000 and 1,000,000 new units.

Secondly, whether or not the fear is well founded, the inflationary effect of a very large home building program gives the government far more concern than the problem of supplying the industry with the building materials necessary for a large program.

Thirdly, it seems clear that present shortages of building materials, particularly lumber and gypsum products, will have eased up by the first of the year, and our problems from then on will be the metal items such as tubs, pipes, nails, copper wiring, etc.

Fourthly, additional mortgage credit controls designed to reduce the volume of construction will have been issued by the time this reaches you.

Strangely enough, there is complete and utter inconsistency between the first and the fourth point listed above. On one hand the government assures us they do not wish to cause a breakdown in this industry; in fact they insist that the health of the entire national economy depends upon our maintaining a very high level of production. At the same time, they insist upon applying additional and more stringent mortgage credit controls, even though FHA and VA applications already indicate a reduction in volume of nearly 50 per cent.

In private industry such inconsistency would result in either bankruptcy of any large corporation or an entire change of management. In government, it is not unusual and is a result of the multitudinous pressures applied upon the vast mechanism of governmental functioning.

A case analysis discloses that the Congress gave the President wide discretionary powers, including the right to apply mortgage credit curbs. The Federal Reserve Board and the HHFA then considered the adviaability and the method of utilizing this power. Immediately, the President's Council of Economic Advisors, the Department of Commerce, the Department of Defense and the National Security Resources Board all gave suggestions and advice.

Concurrently, the labor unions, the veterans groups, the builders, contractors, the mortgage bankers, the American Bankers Association and others came into the picture, each urging its viewpoint in accordance with its best judgment and individual interests.

In the meantime, it becomes very clear to those of us who are responsible for the welfare of this industry that no additional controls are needed, but rather, that some relaxation of existing controls may well be necessary to reach the minimum goal established by the government itself.

However, the administrative machine is in motion, the controls are drafted and will be issued. Too many cooks can ruin any stew and as we write this editorial it appears that that may now be happening in the governmental kitchen.

i/or more than nine years, we have sought to convince the government that housing cannot be turned off and on like a cold water tap-that four to six months elapse between the time the builder decides to purchase and improve land, and the time housing starts are registered by the BLS.

Therefore, it is to be hoped that whatever the new regulations may be, they will be based upon a fully informed understanding of the industry's problems—that the controls will be no designed as to permit the industry to play its important part in supporting the nation's economy.

NOVEMBER, 1950

'Bosses' Guests of Honor At Union Convention

When the International Brotherhood of Carpenters and Joiners met in Cincinnati in September the guests of honor -for what may be the first time in the history of union conventions--were the "boses," in this instance members of Home Builders Association of St. Louis labor committee.

Addressing the 1500 convention delegates, John M. Bogdanor, past labor chairman of the St. Louis builder group, remarked that labor-management relations between St. Louis carpenters and builders reflected such credit on organized labor that the union would be wise to make a bid for public recognition. "Not enough publicity is given the unions for their fine work in cases like this," he said.

Hogelasser, vice president and operating head of Schuermann Realty Co., which builds more than 600 houses a year, appealed for concerted action by carpenters and merchant builders in seeking an adjustment of the July 1 building costs (reeze. He termed July 1 costs "entirely unrealistic" as a norm by which to evaluate loan values.

The St. Louis party, accompanied on the trip by D. Richard Adams, business representative of the St. Louis District Council of the union, included Earl Bussiller, builder association president; R. M. Berkley, labor committee chairman; Joseph H. Vatterott, Gene Vescovo, Bogdanor, and Larry Neville, executive serverary of the association.

Arrangements for the trip by air were made by Ervin Meinert, socretarytreasurer of the Carpenters Council.

Chicago Junior Group Completes Organization

The first organized meeting of the Junior Home Builders of Chicagoland, composed exclusively of younger meetand formed within the parent group, the Chicago Metropolitan Hume Builders Association, was held September 19. It is the first group of its kind in the country, its sponsors, the parent association, said.

Meeting business was concerned chiefly with details of organization and outlining of objectives.

Officers of the new group are William B. Davia, president; Brittain C. Mac-Isaacs, vice president; Joseph E. Mirrion, Jr., secretary; Ralph Smykal, treasurer; Larry Laurence, Donald Kovar and Edward Sawyer, Jr., directors.

A large share of the organizational work was done by a special committee appointed by the Chicago association president, A. O. Aldrich. It consisted of Roy H. Davis, chairman, A. J. Epson and Robert H. Wilson.

Slum Clearance Plans O. K.'d

The Housing and Home Finance Agency reports approval of slum clearance projects in 41 communities.



AT ST. LOUIS airport before leaving for Cincinnati convention of International Bretherhood of Carpenters and Joinsra where St. Louis builders were hence quees are (from loft, treat row): builders Joseph H. Vatterett, Tom Church, Gono Vencove, Rohert Saunders, Carpenters Council president; John M. Bogdanor, builder; Lorry Noville, anecutive secretary of the builders association: Orville Remainshous and Earl Bumiller, builders association president. On ramp: bottom, Moury E. Rohet, editor of the Labor Tribune; second row, corponters business agents Henry Wolnreich and Carl Boliter; top, Robert M. Berkley, chairman of builders association labor committee; and Richard Adams, carponters business agent



GOVERNMENT-INDUSTRY meeting in Salt Lake City attracted more than 300 persons

Housing Heads Speak in Utah

Unless the war situation takes a sharp turn for the worse, the nation's home builders will put up around 1,000,000 houses in the next year, according to Thomas P. Coogan, president of the National Association of Home Builders.

Coogan and Federal Housing Administration Commissioner Franklin D. Richards were guest speakers at a government-industry meeting in Salt Lake City September 15 sponsored by the Utah Home Builders Association and attended by more than 300 builders, architects, lumbermen, bankers and FHA officials.

Coogan said he believed that the recently-enacted government credit controls would work out satisfactorily and would be sufficient to save materials needed for the war effort.

Richards stated that it was up to the industry and government to work together in directing a larger portion of residential construction to the lower price market. Military needs will not drain the supply of building materials as it did during World War II, he said, because the nation is not starting from "practically nothing" as it did in 1941.

FHA directors from five states were present. They were Richard S. Harre, Arizona; Eugene F. Duffy, Colorado; Ben S. Hill, Montana; Hosea M. Hantz, Wyoming; and Gordon Weggeland, Utah.

Other guests included Alan E. Brockbank, second vice president of the National Association of Home Builders; C. Taybar Burton, NAHB regional vice president; Arthur W. Jones, president of the Intermountain Lumber Dealers Association; Roy Simmons, Utah state bunking commissioner; and Joseph Kjar, vice president of the Utah Savings and Loan League.

Co-sponsors of the meeting with the home builders association were the FHA, the Utah Savings and Luan League, Utah Mortgage Bankers Association and Intermountain Lumber Dealers Association. It was opened by A. P. Neilsen, home builder president.



Solient Features: Cool Walls . . . More Useful Heat and Higher Efficiency... Moderate temperature air fram Secondary Heat Exchanger aids circulation and heat distribution • Burner and manifold assembly one complete unit, easily removed . Holly-designed, disformed, electronically welded heating element without baffles . Absolutely no gas spillage . Annoying naises eliminated by unique method of mounting element . Panul fits snugly to either dry or plastered wall . Negative pressure maintained an panel avaids. stranked walls.

New ho hell as a Circulates 25% warm air-saves heat formerly lost through cent

Now-an answer to all your heating problems. A gasfired, recessed heater, fully vented, which is A.G.A. tested and approved under new 1950 Central Heating requirements. Approved for use in a 2" x 4" stud wall of combustible materials, with a minimum thickness of 4%" or maximum of 5%". No extra floor space or utility room is necessary. There are no ducts to run, no motors or godgets requiring service. Initial cest to purchase and install is extremely low. Available in sizes from 25,000 to 45,000 B.T.U. input.

A NEW EXPERIENCE IN Heating Comfort with Safety

Return air to primery and secondary elements is taken at floor level, assuring comfortable floor temperature. Clearfle Louvers actually direct warm air away from the wall and into the room. Temperature of "plus" air from S*H*E* Clearflo Louvers is moderately warm. 10% of heater's total output is given off from S*H*E*. NarroWall gives you heat where and when you want it.



Now Secondary Heat Exchanger*

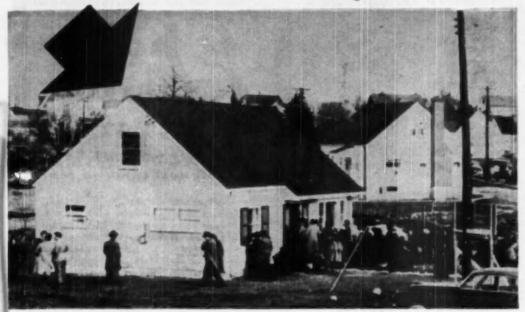
the greatest advance since Wall Heaters were invented!

A.G.A. approved under latest rigid 1950 central heating requirements for use with natural, manufactured or L.P. Ges.



NOVEMBER, 1950

They'll beat a path to



THIS PHOTOGRAPH was taken on opening day at the Stratford Acres Model Home in Stratford, Conn, A G-E Kitchen-Laundry was featured..., and included in the purchase price of the bouse. From all over America come similar enthusiastic reports from builders who have installed G-E equipment. YOU, too, can include G-E Kitchen-Laundry equipment in your homes for as little as \$4.00 a month under the "Packaged Mortgage" Plan.

Why not install General Electric equipment in your homes, and, watch home buyers heat a path to your door?

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

GENERAL GER

... 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! Why not let G-E help pre-sell your houses?

ELECTRIC

You can put your confidence in-

your door every time!





George Decker and Oliver Martin of Stratford, Conn., built their model home with a completely equipped General Electric Kitchen. Although other new homes near by were not selling, all fifty of the Stratford Acres homes were sold within 48 hours!

Here's how the Bridgeport Telegram, Bridgeport, Conn., reported the model home event the next day:

"An estimated 8400 persons visited the Stratford Acres Homes Model Home on Greenfield Avenue, Stratford, yesterday

afternoon, and all 50 homes planned by the firm already have been sold . . . the home sells for \$10,500."

Offered under "Packaged Mortgage" Plan

"Builders of the homes report that this is the first large-scale

Here's the big drawing card . . .

... the completely equipped General Electric Kitchen-Laundry that is included in the sales price of the Stratford Homes.

This worksaving General Electric Kitchen includes: Automatic Dishwasher-Sink and Disposall®, Automatic Washer, Range, Refrigerator, Clock, and all-steel Cabineta. No wonder all 50 houses were add within 48 hours?

d Electric Kitchen-

housing development in this part of the state to offer an allelectric kitchen fully equipped under a packaged mortgage ...**

A typical success pattern!

This experience with the General Electric equipped house is not unusual. Rather, it is *typical* of the sales miracles that are happening all over the country.

General Electric will help YOU, too!

Why not let General Electric help pre-sell your houses? See your local General Electric distributor, or write to the Home Bureau, General Electric Company, Bridgeport 2, Conn.



The World's Finest Locks Are of pin-tumbler design

Pin-tumbler security has been combined with economy, in the KWIKET "400" Line Locksets, making possible top-quality locks at rock-bottom prices. Architects prefer KWIKET's simplicity and beauty of design. Builders and contractors approciate the economy of KWIKET's fast, easy installation. Wholesalers, Jobbers and Dealers cash in on KWIKET's low cost and fast turnover. Everyone deserves KWIKET's precision construction with high quality materials that results in such amazing durability."

Whether you need one lock or thousands, investigate

KWIKSET's "400" Line pin-tumbler Locksets thoroughly before you buy. Remember, every KWIKSET Lockset is unconditionally guaranteed.

IMPORTANT: KWIKSET LOCKS, INC. will soon be in production of their new "600" Line 6-pin tumbler cylindrical Locksets, of all steel and brass construction. Send for your copy of the new, colorfully illustrated catalog, giving full details of this new KWIKSET Lock.

*Random selected KWRERT Locksets were subjected to wear texts equivalent to 100 years of hard, everyday usage on our specially designed testing machine. Every lock functioned perfectly at the end of the text.



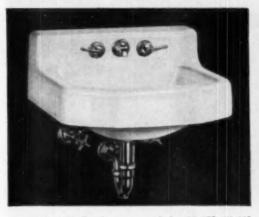
THE New HAMPTON

The popular Hampton enameled iron lavatory has been redesigned to make it available without overflow as well as with a brass overflow. With the overflow eliminated the trap is attached directly to the bottom of the basin.

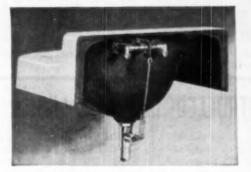
The Hampton is widely specified for homes and apartments. Features that appeal to home planners, architects and builders include the unobstructed shelf extending across the back, the ample basin, and the compact chromium-plated mixer fitting. The lustrous, easy-to-clean Kohler enamel is fused to a base of non-flexing iron, cast for permanent strength.

Kohler Co., Kohler, Wisconsin, Established 1873.

WITHOUT OVERFLOW



K-2700-A with Synchro pop-up drain. 19x17", 22x19". Latter with 2 depressed soap dishes.

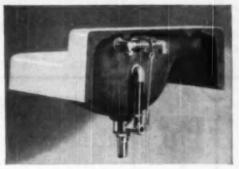


Trap is attached directly to bottom of basin.

WITH BRASS OVERFLOW



K-2701-A with Synchro combination pop-up drain and overflow. 19x17', 22x19', Latter with 2 depressed soap dishes.



Built-in brass tubing connects overflow opening to outlet.

KOHLER OF KOHLER

PLUMBING FIXTURES . HEATING EQUIPMENT . ELECTRIC PLANTS . AIR-COOLED ENGINES NOVIMBER, 1950 35

BETTER your home...better your LIVING

A DIGEST OF SALES-BUILDING IDEAS FOR YOUR STORE FROM THE PAGES OF DECEMBER HOUSE BEAUTIFUL WHICH REACHES YOUR BEST CUSTOMERS ON OR ABOUT NOVEMBER 20th

From HOUSE Beautiful

NAMES THAT SELL

In construction materials, equipment, all the products you use in your business, feature nationallyadvertised, nationally-known brand names prominently... names that regularly parade across the pages of *House Beautiful*. They're the names your best prospects have faith in ... the names that sell themselves!

FREE DISPLAYS

MOUNTED DISPLAY CARDS FEATURING PRODUCTS AD-VERTISED IN THE DECEMBER ISSUE ARE YOURS FOR THE ASKING... TO HELP BRING YOU THAT EXTRA BUSINESS. TURN THE PAGE FOR EASY INSTRUCTIONS ON ORDER-ING.



Simple Climate Control devices, planned properly, can extend outdoor living comfort by many weeks. Note the examples above, featured in a December issue editorial. The glass windshield affords adequate protection without depriving the terrace of its view. The shelter house offers additional wind protection, shade, fire place heat and a rainproof cover.



A SENSIBLE, practical way of extending the duration of comfortable outdoor garden living both spring and fall—is unfolded in December House Beautiful, by

34

CLIMATE-CONTROLLED OUTDOOR LIVING

means of simple Climate Control devices. And it offers plenty of additional selling tools for you to use with your climate-wise customers.

With the current trend toward maximum outdoor living areas much in evidence, the integration of houses with terraces and gardens constantly more in demand, all over America, this is an excellent time to talk proper paving, fences, walls, shelter houses, etc., with your spring-business prospects. Study the devices pietured in the illustration on this page. Adapt the ideas this editorial will bring you to your local building plans. They'll mean better living for your prospects... better selling for you?

ADVER-TIES-

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

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WINDOWS

- 2. THERMOPANE LIBBEY-OWENS-FORD GLASS CO.
- 3. TWINDOWS PITTSBURGH PLATE GLASS CO.

PAINTS

4. RAMUC ENAMEL FOR POOLS INERTOL INC.



HEATING

5. GLASSHEAT HEATING SYSTEM

CONTINENTAL GLASSHEAT CORFORATION

clear hearing system yet devised. It can be used to entry build be a contract of the second to be a second to entry the second to be a second to be a second to be in interpretering to the second to be a second to be dissolved. Corporation, 1 East 25th Breat, New York 16, N. Y. GLASSHEAT is the cleanest, healthiest more effi

6. MINNEAPOLIS-HONEYWELL THERMOSTATS

> MINNEAPOLIS - HONEYWELL REGULATOR CO.

7. MODINE CONVECTOR RADIATION MODINE MANUFACTURING CO.

Madine Convectors provide truly modern heating — sofe, healthful oir circulation with either steam of hat water system. They have sense, func-tional lines - blend with any decentrice schemes. High-speed, nonferrous heating units are corre-sion resistant - offer peak performance with minimum service. Steel cohinats withstand raugh-set transment. Easy to clean.

* WEBSTER BASEBOARD HEATING WARREN WEBSTER & CO.

with in House Beoutiful, Webster adver-Every o Cherry maximum in request setunction, which are apprec-tising talls your prospectic about Weshert Boos-baced Hearing -- true parlimeter hearing with forced hat worker. Proven in service in mare them 12,000 installiations. Descriptive literature on re-ports to Warren. Weshert & Company, Dept. 1948-12, Comden S, Naw Jorsey. 8. WILLIAMS OIL-D-MATIC OIL BURNERS

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MAJOR APPLIANCES

9. DEEPFREEZE HOME FREEZER DEEPFREEZE DIV. MOTOR PRODUCTS CORP.

10. HOTPOINT AUTOMATIC **ELECTRIC DISHWASHER** HOTPOINT, INC.

11. MURRAY MATCHED **KITCHEN APPLIANCES** MURRAY CORPORATION

OF AMERICA

OF AMERICA Worsen severywhere ere taiking abaut the new Murtuy Ges Renges, Murtuy Electric Renges and Murtuy Murtuhed Sheel Eithems. Why? Bocurus Murtuy fine Hense Applisances mean the latest, newest, convenient and laber serving feathurs -all the things Mrs. Rensemaker has dreamed about Murruy Dealers all aver the country no new shawing flees scenariosal new products.

12. PHILCO HOME FREEZER PHILCO CORP

KITCHEN CABINETS

11. MURRAY MATCHED KITCHENS

MURBAY COSPORATION OF AMERICA

Or ANTINCA Women everywhere size terking about the new Murray Marthed Steel Exchans. Why? Becurso Murray fine Meme Applianess mean the latest, newest, convenient and laber soving features-ell the things Mrs. Hemennaker has dreamed about. Murray Deuters all over the coustry are new sheeing these semational new products.

HARDWARE

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SOSS MFG. CO.

New local and CO. CO. Intel invites Ringer have fluck, smeath an intel invites effects that definitive gave of building on invites effective beauty advantage of local ROUTERS. And internet invites your roles and analysis here a and increase your onles and profit to's a weight-roted Boss Hinge for eve incrediction. Socs Manufacturing Co installation. trail 13, Mich

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another great "Building Products on Review" Issue of





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\$\$\$\$\$\$ The January issue Will be VALUABLE!

The "Building Products on Review" issue is corefully compiled to serve a special purpose. That purpose is to provide in one issue a hondy source of reference. In it you will find pictures and brief descriptions of hundreds of building materials and equipment. The popularity of this feature is a citested by the thousands of letters and inquiries we receive requesting additional information. We pass these inquiries along to the manufacturers. This is of extreme impertance in assisting the manufacturer to supply the purchasor and to aid in the distribution of building noeds everywhere.

EVERY ISSUE OF AMERICAN BUILDER IS VALUABLE

Each month American Builder provides a wide range of information, of service, of materials and equipment. Every issue is planned to function for some specific purpose in the light construction industry. This is how American Builder serves as a qualified builness publication to its 19.000 readers.

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NOTICE TO ADVERTISERS Closing date for ad copy for the January issue is Dec. 3,

Note: If you are considering advertising your product for the first time, write or wire AMERICAN BUILDER, 79 W. Manroe St., Chicago 3, III. We will send information on ad sizes, costs, etc. Let us know your problems. Many of our former "small advertisers" are "big advertisers" now.

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This is only one of the many interesting arrangements that can be made with Lupton Metal Window units. That is why so many builders consider Lupton Metal Windows the ideal combination of window beauty and economy for operation houses as well as for custom-built homes.

Lupton Metal Windows will save you money. Prompt delivery from warehouse stock saves time on the job. Allows faster installation. Metal frames are precision built at every point. Cannot warp, swell or shrink. Available in steel or aluminum. Let us send you our catalog of residential, industrial and commercial windows. Write us today,

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IUPION METAL WINDOWS

Predicted Effects of New Construction in Credit Control -

Regulation X

THE probable long and short range effects of Regulation X, the new bousing credit control bill, a summary of which appears on Page 9 of this issue of AMERICAN BUILDER, are difficult, if not impossible to predict accurately. Like most regulations or laws only the test of time can determine either the soundness or the workability of this regulation.

Many opinions have been expressed both publicly and privately, and these run the entire range from near panic to optimism. The direct predictions are that the credit extension terms are so severe that new home starts in 1951 will not exceed 300,000. Generally, the consensus is that the regulation as written now will reduce ators next year to something between 600,000 and 800,000. A few optimists helieve that there are enough potential bayers of new homes with enough cash on hand to meet the new restrictions on mortgage limits to assure a market of as much as 900,000 starts. All of these predictions and attitudes are hased on guesswork. The chances are that the extremists at both ends are wrong, and that the middle course group is closer to being right.

While AMERICAN BUILDER prefers to reserve judgment for the time being, there are a few conclusions that appear to he sound at this time. One of these is that operative builders will he forced to decrease their programs below the 1950 levels, at least until they are able to determine whether there is enough ready cash in the hands of prospects to enable them to meet the new requirements. Or, if there is not the needed cash for down payments on the kind of houses the prospects had in mind, whether they can be sold less expensive houses, tailored down to their ability to meet down payment schedules prescribed in the regulation. Of course, in the lowest price house market there is little doubt that much of it will be frozen out of existence. In any price class, however, it is obvious that an operative builder cannot afford to proceed, under the new regulation until he has experimented tentatively with a small percentage of the houses he would have built and offered for sale without credit regulation.

Suspicions have been voiced with regard to the sincerity of government in its announced purpose in issuing the regulation, and if this suspicion is sufficiently widespread, it might result in a substantial freeze of new starts. Suspicion is based on several things. One of these is the exemption of public housing from the regulation. It has been pointed out that if the real motive of government were the carbing of credits on housing, the first place to begin should have been with cancellation of the public housing program. This is the must inflationary activity in the entire housing picture. Others who voice suspicion base their feelings on the fact that the best hedge against runaway inflation is long-term investment in real property, and these skeptics ask why the inflation problem was not first attacked through the non-essential and luxury perishable goods industries. The real skeptics ascribe the infliction of the regulation in early October to some kind of obscure pre-election political maneuvering. Again, all of this conjecture is guesswork, but it does reflect the general unpopularity of the regulation, and lack of confidence in those who have projected it.

On the other hand, many smaller builders have greeted the regulation with feelings ranging from disinterest to enthusiasm. They feel that home building starts were eo far in excess of the production capacity of manufacturers and the supply of skilled labor that two favorable changes will result almost immediately. The first of these is that material supply will ease to the extent where the small builder will be able to get delivery of needed material and equijament, and be able to finish his 1950 program much quicker. The second is that in large metropolitan centers, premium wage scales will disappear, and labor again will become available at the union scale.

Practically everyone who has voiced ai opinion recognized the need for some action to slow the number of starts. Perhaps the greatest decline on starts will be in the areas where selling to veterane on no down payment has been in effect. There can be no question that many veterans in these areas will be frozen from the market.

Some analysts of the regulation have concluded that its read purpose is to bolster the government's sagging public housing program. They point out that there is no real credit curb an houses coating \$25,000 or more, since the purchasers of such properties nearly always have 50 per cent or more to pay down. The real curb, they say, is in house construction in the lowest cost bracket. It is here that private builders have demonstrated their ability to build more efficiently and less expensively than the federal public housing program permits. Therefore, they argue, with practical elimination of the lowest cost market from the private enterprise field, and elimination of public housing from the provisions of the regulation, the way will be opened for development of the public housing program to the maximum permitted by the law.

Willful misinterpretation of the intent of the regulation by certain bureau heads was charged by at least one respected authority. He is Robert P. Gerholz, Flint, Michigan, president of the National Association of Real Estate Boards. Writing for Headlines, official organ of his association, Mr. Gerholz asid, "Headstrong and misguided bureaucrats in Washington have gone beyond the plain intent of Congress in placing restrictions on home buying. It is clear that Congress did intend that there should be some restrictions on credit for new construction. It is equally clear that Congress did not intend that credit on existing construction be drastically tampered with. It is just as rlear that it was intended that people should be free to buy homes already existing without sharp changes in down payments and other requirements.

"This is especially clear to me because I was there. I appeared hefore the Senate Banking and Currency Committee, the only committee of Congress that held hearings on this matter. Members of the committee who were present at this hearing stated repeatedly that they would object to any regulation of credit which covered the entire field of real estate activity.

"The new regulations under which a home buyer may be required to pay from 10 per cent up to 50 per cent in cash are a more severe restriction than any that we had during World War I or World War II, During World War II the down payment requirement was 20 per cent.

"Home ownership and home buying are largely dependent upon enabling people to take the initial step by making the down payment. If the down payment is made too large, it is, of course, a method of denying home ownership to a large number of people.

"The unhappy part of this restriction is that it hurts the little fellow who does not have a large accumulation of money. It completely ignores the need of a typical family for a house of its own. The people with larger incomes and with



larger savings are not affected. As in the case of most bureaucratic regulations, it is small people and small business that get sacked.

"As a measure to curb inflation, the restriction is meaningless. Savings which go into homes do not circulate. These regulations will simply mean that those who sell intangibles and useless luxuries will profit. Home ownership itself is not, and never can be inflationary.

"The true cause of inflation is unlimited government spending for civilian purposes, which has now been going on for a long time. As long as our national budget is out of halance, the dollar will decline in purchasing power, and inflation will continue.

"Those who govern us seek to distract attention from this fact by blaming our citizens, who simply pursue their regular and proper vocations, and who seek to provide for their own social security by purchasing homes.

"Strangulation of a productive, free, competitive society, and the capture of the citizen's freedom are always accompliabed through step-by-step moves into unnecessary government controls and restrictions. This is another of such steps that hack away at American freedom. I feel sure that our industry will not regard these new regulations as either just or helpful, and we shall hope for early modification or nullification."

Following is a sampling of many other opinions received by ANNELGAN BULLERE during the first week of the controls. Most of them have been expressed not for publication. Names have therefore been withheld.

A middle west home builder said, "There will be no immediate effect from Regulation X, since a backlog of commodities and starts will sustain present activity. New 1951 starts may drop as low as 300,000. This industry cannot turn off and on like a shower faucet."

A western builder said, "The effect of Regulation X will not be felt until the spring of 1951, because builders' programs are planned six months ahead, and mortgage requirements were made before the effective date of the regulation. I feel that the regulation is too severe, and that immediate action should be taken to relax the terms, especially the 20 year amortization period to 25 years."

An eastern builder said, "Some cutback was obviously necessary. After some wavering I agree that a credit type of control is probably better than L-41, in force during World War II, although there are dangers in giving up long-term financing. The regulation itself is far too diratic if 300,000 units are really desired, although the real impact may not be felt before late spring. Meantime I feel that we should offer our cooperation in the rearmament program, while pointing out discrepancies between government stated targets and what the regulation will produce. I also feel that some unbiased attatical group should be employed immediately to study the probable effects of the regulation. My opinion is that not over 100,000 units will be produced next year if the regulation is strictly enforced. I feel, however, that the chances for relaxation are good."

An east coast builder said, "I view Regulation X with both alarm and suspicion, and feel that the stated objective of 850, 009 units for 1951 and the severity of the controls do not coincide. I think the volume for 1951 will be cut to 500,000 or less if the regulation is not relaxed. There is a note of insin-

NOVEMBER, 1950

verity in the regulations. Why, if inflation is the objective, does not the government eliminate public homoing, and vhange many of their highly inflationary policies. If the regulation cuts volume back to 500,000 or less there is a possibility of large eurpluses of materials, because the military forces have not indicated that they will need the quantity to be saved by the regulation. I feel that serious unemployment will result in building and allied inductries."

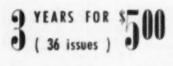
A former president of the National Association of Home Builders made the following observation. "It is an abortive regulation. It is just the kind of thing they keep doing to us everytime we are in high gear to supply the home building needs of all of the income brackets. It seems to me that when Mr. Foley talked to us in Houston last week he was talking down to us and that his remarks all added up to telling us that we have had some pretty good times, and whether we like this Regulation or not here it is and we will have to take it. I think that whoever was responsible for the order was ill advised, but what they failed to consider is that the state of objective has already been brought about. The condition as already imposed with respect to 600 and 505 would have reduced the volume to substantially what this regulation calls for, Now, unless there is a drastic change in Regulation X we probably will be turning out 300,000 units rather than the \$50,000 which they say they want. When we asked the government men what effect they think the regulation will have they tell us that they do not know, that we will just have to wait and that if it is had they will change it. The question in our minds is just when will they issue these revisions? You can't turn this industry off and on over night, therefore, if the regulation reduces us much lower than the stated volume it probably will not show up until spring and then it will be too late for us to get back into operation to adjust it until late fall or the spring of '52. I don't believe they are telling the truth. If they really want 800,000 or 850,000 units that is one thing, and that is about what we are geared to do with the regulation. If on the other hand they want to wreek the whole picture they should be bonest and say so.

Indicative of the attitude of the home builders, at least the large and more successful ones, is the following resolution adopted on October 19 by the directors and executive committee of the National Association of Home Builders at Houston, Texas.

THE NATIONAL ASSOCIATION OF HOME BUILDERS ACCEPTS THE TARGET SET BY THE FEDERAL GOV-ERNMENT OF 800,000 TO 850,000 NEW HOMES DURING 1951 AND PLEDGES THE SUPPORT OF ITS MEMBERS IN REACHING THIS GOAL.

THE ASSOCIATION DOES NOT BELIEVE THAT UN-DER THE CREDIT CURES CONTAINED IN RECULA-TION X AND RELATED VA AND FHA CONTROLS THERE WILL BE BB0,000 TO E0,000 AMERICAN FAM-ILIES WHO WILL BE FINANCIALLY ABLE TO BUY NEW HOMES, THEREFORE, AS THEY UNDERTAKE TO REACH THIS GOAL, THE HOME BUILDERS CALL UPON THE GOVERNMENT TO EASE THE EXISTING CREDIT CURES AS SOON AS IT IS DEMONSTRATED THAT THE RESTRICTIONS WILL MAKE IT IMPOSSIBLE TO AT-TAIN THE GOAL.

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WINDOWALL of Anderson Gliding Window Units.

ANDERSEN valls

JUST TWO WINDOWS form an entire wall for this room -windows that open wide to fresh air, sunshine and a view ..., a wall that keeps out cold and driving rain.

This is a WINDOWALL of the largest size of Andersen Gliding Window Units.

They fill a wall in a hurry, and their large glass area gives a picture window effect. Yet they are operating windows, made of lasting, beautiful, *insulating* wood. Their efficient performance both as windows and as walls produces lasting satisfaction for home owners, quicker sales for builders.

See your local millwork dealer or write us for details and further information. Detail Catalog of Andersen WINDOWALLS is in Sweet's Builders' File.

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The rich, rain forests of Oregon yield the large and sound Douglas fir that comes to APMI mills for plywood manufacture. From the woods, "peelers" are transported to the mills by rail or truck. Only selected logs are chosen for plywood production. Only skilled craftsmen operate the specialized machinery that creates APMI's exterior and interior type panels. And only when these panels pass dual inspection (that of the company and of the Douglas Fir Plywood Association) does APMI plywood go to Sticks market. There is a type, size and grade of APMI plywood for every building need. Each panel is identified by a grademark and by the company trademark --- your double guarantee of quality.



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APMI SALES WAREHOUSES: Eugene and Willamina, Oregon; San Francisco; Dallas; St. Louis.

APAI SALES OFFICES: Johnston Building, Charlotte, North Carolina; 31 State Street, Boston, Massochi

Letters to the Editor

Waterproof Barrier

Sirs: This will refer to your article "The Garage—Part Of The Home Today," page 74, August issue. In your discussion of the floor slab construction you did not suggest the use of a waterproof barrier beneath the concrete. If the garage is designed to do more than merely house the family transportation, then it seems advisable to give the floor the same moisture-proofing consideration as is now generally done for basementless houses.

> W. H. Mortoeson Technical Director Keystone Asphalt Products Co., Chicago Heights, Ill,

EDITOR'S NOTE: Right you are, Mr. Mortonson. We cannot say, however, that our lack of extensive discussion of this subject, or even merition of it, was an oversight. When an attempt is made to condense a subject so that it can be presented in 24 pages, some important phases must be left out.

Tennis Courts

Sirs: I would greatly appreciate your informing me whether and where you have published information which would be of help in my building a tennis court. I cannot remember seeing any material in your magazine, but perhaps I have forgotten.

> Lewis D. Lipschutz 143 Beach 126 St., Rockaway Beach, N. Y.

EDITOR'S NOTE: We have not, in several years, done a story on tennis courts. But it sounds like a good idea. You can expect some time in the near future to see such a story in American Builder.

Open End Mortgages

Sira: I've read with much interest your comments regarding the open end mortgage. I noticed in your August issue (Letters to the Editor) that you say "that open end mortgages have been standard practice in California for some time." We believe we are one of the largest firms in Southern California specializing in residential alterations, modernization and conversions. We would appreciate it if you could send us a specific list of those financial institutions in Southern California which are interested in open end mortgage

NOVEMBER, 1950

business. Or, we would appreciate it if you could let us know where we could obtain this information.

> Sam Raber, President Metropolitan Construction Co., Los Angeles 37, Calif.

EDITOR'S NOTE: We do not have a specific list of financial institutions in Southern California interested in the open end mortgage. We suggest you inquire of the Savings and Loan Association in your vicinity. We understand that they are more likely to make open end mortgages. Banks and insurance companies on the other hand are not so likely to lend on this basis.

Sorry, Our Mistake

Sirs: Being one of the principals involved in the accounting of the Convention of the Building Officials. Conference of America in Indianapolis, Ind., and the presentation of the new Abridged Building Code, as published on pages 230-34 of American Builder, August issue, I was of course very much interested in the reading of the account of this affair. The pictures are authentic except the caption of the picture on page 230 belongs to the picture on page 231. while the caption of the picture on page 231 belongs to the one on page 232, and the caption in connection with the third picture belongs to the picture on page 230.

A. H. Baum, President Building Officials Conference of America

Sirs: Gimlet-eyed Ralph Duke, our Home Show Chairman, reports that the gentleman pictured in the August American Builder with Mayor Feeny of Indianapolis is not the Indianapolis Building Commissioner but our own handsome St. Louis Building Commissioner, Al. G. Baum.

> Laurence E. Neville Executive Secretary Home Builders' Ass'n. of Greater St. Louis

EDITOR'S NOTE: We are sincerely sorry this mixup in cutlines occurred, though the editors were not fully responsible. Proper cutlines for each photograph were appended before the issue went to press, but in the course of printing were accidently switched. Anyway, Mr. Baum, please view the deep red complexion of our faces. 100 Plas Nacends Tops is mil hammore. 16 od. drap forged, fan offer steel. Evertis processed Parfactly belonced.

for your money in STANLEY TOOLS

No. 5 Please 14" tang 2" cuttor. Warld's most papetor plans. Basewaad handle and knebs. Feels light in the

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Proved best on the job where quality counts — Stanley Tools are used most ... bought most by builders. The choice of skilled workers for 98 years, Stanley Tools are expertly designed ... help do a better job, faster, easier. The No. 5 Plane and the 100 Plus Hammer are typical tools from the complete Stanley line. See for yourself the extra value in Stanley Tools at your local



hardware dealer's . . . they're your best tool buy, Stanley Tools, New Britain, Connecticut.

Write for your free copy of Catalog 34 -- a handy guide for tool wort.

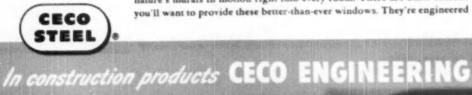
THE TOOL BOX OF THE WORLD



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Nature splashes color with carefree abandon in the glorious, glamorous outdoors. Here, with her magic brush, she paints dazzling scenes—breathtaking views. And they are truly enjoyed through Ceco Picture Windows of Steel because more view gets in. Slender frames and muntins do the trick. So, bring window wonderland to the homes you build—bring nature's murals in motion right into every room. There are other reasons you'll want to provide these better-than-ever windows. They're engineered







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Easy to open and clear Can't stick or werp



Basy to wesh from inside

Wonderland.

to assure tightest weatherseal. Then, too, they are extra strong with sections $1\frac{1}{16}^{\circ}$ deep. Yes, when you use Ceco Steel Windows-you know you've used the very best-you're sure of economy too.

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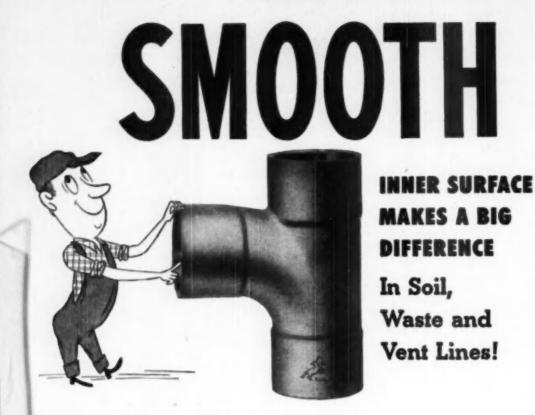
GENERAL OFFICES: 5601 West 36th Street, Chicago 50, Illinais Offices, worehouses and fabricating plants in principal citias

makes the big difference

In-



leay to install servers and storm windows from inside



... You get it with CHASE COPPER!

Chase Copper Tube does a better drainage job because its smooth inner surface means free flow—no obstruction to wastes. It's better, too, because it's resistant to corrosive action, has solder-joint fittings that eliminate pockets at the joints.

You can install Chase Copper Tube in soil, waste and vent lines *faster* since it comes in 20-foot lengths. That means fewer joints to make. You can hurry the installation by preassembling if you want to the units are sturdy enough to stand rough handling. Tube and fittings will readily fit within standard wall partitions.

For Copper Tube that *always* does a better drainage job *allways*, write to Chase for further information. Address Dept. AB1150.



On and Off the Record



. INDUSTRY CONTROLS— Piecemeal application of controls when and if they are deemed to be necessary—is the policy of government. Or it was in late September. Two preliminaries are called for before a clamp-down will be ordered.

FIRST STEP—This will be a formal request by government for voluntary agreements between manufacturers to channel their products to military and essential civilian needs.

WORKABILITY DOUBTFUL ---Washington is inclined to take a dim view of the workability of this move. Just why, nobody seems to know. Probably just the typical lack of faith of bureaus in anything they do not control.

SECOND STEP—If the voluntary agreements do not work, conservation orders or measures written in fluid terms will prohibit use of certain materials for certain civilian products.

OUTLOOK—How Washington thinks this will work if it is imposed is not generally known. So, another step is provided. It is regimentation.

THIRD STEP—If the second does not produce materials in desired amounts for military and essential civilian use, provision is made for a system of outright allocation and priority urders much like those of World War II.

GOVERNMENT ATTITUDE— Fear is expressed that sudden imposition of rigid controls would upset the economy and abate mobilization, whatever that may be taken to mean.

UNCERTAINTY—The uncertainty and fear develops from the fact that no one can say whether the Korean War will remain localized or spread. No mobilization other than that deemed to be necessary to handle the situation in Korea is contemplated now.

\$64 QUESTION—Should the United States take the initiative in determining how far the Korean War will go, or a wait developments as dictated to Communist satellites by the Kremlin? Present policy seems to be the latter.

NOVEMBER, 1950

REASON—The reason is the traditional policy of this country not to initiate wars of any size.

ERROR—'The major error in war planning in the past five years was to blueprint operations for a major all-out conflict, when and if.

LOCAL CONFLICT---None of the strategists in Washington, apparently contemplated anything like Korea or similar actions that might develop. Result is that nearly all the extensive planning developed since close of World War II has been scrapped, and new plans are in process of formation.

THE PLANS—Evidence indicates that long series of local conflicts lie ahead. War strategists know, however, that the picture can change at any time. In the meantime, civilian control picture is not likely to change sharply or suddenly.

BUILDING VOLUME—Some slow-down of starts is not attributed so much to government controls as to rise of ultra-conservative attitude in some banking circles. Rumored that the attitude is inspired by Federal Reserve Board.

UNINSURED CREDIT—Some areas report serious tightening of uninsured credit for operative builders. Tightening due to fear that home building might be stopped or seriously curtailed or materials allocation system set up that would seriously hamper builders in completing homes already under construction.

EXAMPLE—Such financing agencies instead of agreeing to finance, for instance, 100 houses on comparatively long-term credit, will commit themselves for only 25, and tell the builder that if he finishes those, and conditions are right, another 25 will be financed.

DANGER—Slow-down from conservative attitude of hankers along with government controls of credit will not reflect itself in decline of starts until late fall or December, Danger is that government officials might conclude that current controls, both government and industry imposed, are not stringent enough, and institute further controls that will cripple the industry.





SAVES SPACE, INSTALLS EASILY

The modern heater that fits in the wall between studs. It extends out only $33_{\rm B}$ inches so takes no living space. Smart, modern style with a smooth, bright, luxurious finish that won't discolor, chip, flake or peel. And won't discolor wall or crack plaster. No ugly pipes show.

Baves on installation because it needs no excavation, no special construction, no basement. Ideal for slab-floor homes as there's no ripping floors. A dandy for heating 2nd-floor areas where space is acarce. Makes and moves the heat for an abundance of fresh flowing warmth. Safe for children — the casing they can reach heats to only 53° above room temperature.

TWO MODELS—Single and Dual Wall, for Gas and LP-gas. Use anywhere.

Single Wall Model heats 2 average rooms with 25,000 BTU per hour input rating. Dual Wall Model, set in wall or partition, heats adjoining rooms. BTU per hour input rating 45,000. Separate controls to 'regulate temperature individually. Send coupon to find out why Coleman Gas Wall Heaters do such a dependable job of heating thoroughly — yet keep costs low.

THE COLEMAN COMPANY, Inc., Withits 1, Kamus

COLEMAN HIGH-PERFORMANCE Gas WATER HEATER

Fully automatic-for natural, manufactured and LP-gas. Amasingly fast recovery rate keeps plenty of hot water always on tap. 20-, 30-, 45gallon capacities. Beautifu gleaming finish. Automatic temperature control and 100% Automatic Safety Shut-off Valve. Send coupon.





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Add a charming extra room by finishing off the attic with these modern marvels of building materials.

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Build a rumpus room as a wing or in the basement. Adds welcome recrection area at low cost!

A Create strikingly "different" rooms that avoid the monotony of ardinary ceiling and wall treatment. Adds distinction and salability!



CELOTEX Insulating Interior Finishes are ideal for fast, economical remodeling as well as building finished rooms in new homes!

These handsome structural panels build, insulate and decorate—all at one time, at one low cost. Amazingly easy to put up with nails or staples. Beautifully pre-decorated at the factory—no plastering, painting or papering required!

Celotex Insulating Interior Finishes come in Tile Board, Finish Plank and Building Board. New, exclusive whites and blended colors. Selection of striking textures. Wide



choice of shapes and sizes. All this enables you to achieve an almost endless variety of dramatic, original room treatments!

And remember, no other interior finish material gives all the advantages of Celotex Insulating Interior Finishes. For no other is made of long, remarkably strong Louisiana cane fibres. And no other is protected by the exclusive patented Ferox[®] Process against fungus, dry rot and termites.

See samples of the new Celotex Insulating Interior Finishes at your Celotex Dealer's today!



The Celotex Corporation, Chicago 3, Illinois

NOVEMBER, 1950



Installing Double-glazed Windows



INSTALLATION of two types of glass in window wall' shown at left was made for the purpose of comparison during portial of entreme tomporatures. Large unobstructed glass area at left of picture shows an installation of hermetically-scaled double-glassed window. The opening at right is glassed with two lights of single

Few modern homes are being built today without at least one large double-glazed picture window. The value of these units in reducing heat costs and to add to year 'round health and comfort for the occupants is widely accented.

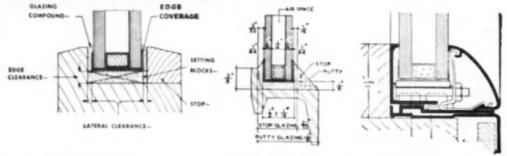
A double-glazed unit is composed of two lights of glass, held in place with an aluminum spacer. Separating the glass is a hermetically sealed, insulating space. The unit is framed in a stainless steel channel.

Double-glazed units are available in 47 standard sizes. These range from 35-3/2 inch by 36 inch to 72 inch by 96 inch. They are so inclusive as to meet practically all deData and photos through courtray of Pittshurgh Plate Glass Company

mands for double-glazing in the modern home. When necessary, special sizes may be obtained at an increase in cost.

Standard units are composed of two lights of 34-inch plate glass separated by a half-inch air space. Units are one inch wide and require a glazing rabbet 1-34 inch by 3% inch deep. This permits covering the stainless steel frame to insure maximum insulating efficiency. Most sash manufacturers have sash to fit these sizes.

A standard unit weights approximately six pounds per square foot. From an insulating standpoint a standard (Continued on page 32)

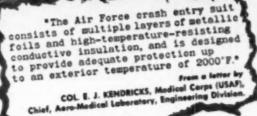


PICTURE window glasing

STEEL sash glazing

STORE front glasing

DETAILED descriptions of items used in connection with picture window double-glosing are as follows: GLAZING COMPOUND— Use of elemetic glopping compound or other material that restims some realisance permanently is recommended. EDGE CLEAR-ANCE—This should be l_{k} inch. l_{k} inch. l_{k} inch at all edges, depending upon size. Distribute proportionately. Do not force. LATERAL CLEARANCE—Should be at least l_{k} inch for glosing compound. EDGE COVERAGE-Stainless steel channel covered for uniform appearance and maximum edge insulation. SETTING BLOCES-Two lead or treated woodblock. 3 inches to 4 inches loog, located 14 of the width in from each and of the unit on all units wider than 38 inches, or heavier than 50 pounds. Shime are equally helpful in spacing smaller, lighter units. STOP-Glass step does not bear on unit



U.S. AIR FORCE CRASH FIRE FIGHTERS DEMONSTRATE:

Radiation dominates heat flow in air spaces (in buildings)

Conduction and Convection are minor

Multiple layers of low-emissive aluminum do not absorb nor emit appreciable heat

Infra-red heat rays travel through space, including icy-cold air, in every direction, up, down, sideways, from warm to cold. They engender no temperature until absorbed by a surface

A news release from Wright Patterson Air Force base says of the accompanying photograph:

"In the center the 'bunkin' suit, now in use by airplane crash fire-fighters, has become too hot for its wearer and is being wet down. The aluminum foil laminate suit at the left, developed by AMC's Acro-Medical Laboratory, was found to give its wearer the greatest comfort and protection and suffered least damage during the test. The foil reflects the extreme heat and helps the wearer retain a relatively low body temperature while fighting airplane crash fires."

Multiple layers of accordion aluminum permanently compartmented with cellular reflective spaces, reject 97% heat rays and emit only 3% on opposite side. This structure, available commercially, is technically called Infra Accordion Aluminum Insulation. Installed between wood joists in new construction, material and labor, Type 4 Infra costs less than 7½¢, Type 6 less than 9¢ sq. ft.

Details of how multiple accordion aluminum with reflective air cells stops waste of heat or its unwanted intrusion, including heat by convection and conduction, in residential, commercial, and industrial buildings; and prevents vapor flow and condensation, sent on request.

Get Valuable Free Copy of new, revised "Simplified Physics of Vapor and Thermal Insulation," authoritative, simply-written, 44-page manual on heat and vapor flow, condensation, radiant heating, etc. Tells about Radiation, Convection and Conduction. Just off the press. Master Chart gives k, C, R, and U factors of all insulations, of all thicknesses, weights, densities.

THERMAL FACTORS, TYPE 6 INFRA Down-Heat C.044, R22.72 equals $7^{1}/_{2}$ "DIY Rockwael Up-Heat C.080, R12.50 equals 4" DRY Rockwael Wall-Heat C.073, R13.69 equals $4^{1}/_{2}$ " DRY Rockwael VAPOR PERMEABILITY equals ZERO

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NOVEMBER, 1950

New Willys Truck Helps Builders Cut Costs!



THE 1/2 TON WILLYS TRUCK WITH SENSATIONAL NEW HURRICANE ENGINE

For all-around economy, performance and durability—for top truck value—the brand new ¹/₂ Ton Willys Truck leads the field.

From rugged steel chassis to long lasting body, it is functionally designed throughout for extra strength and low weight. This weight advantage plus the thrifty power of its highercompression HURRICANE Engine, enables contractors and builders to pull their operating costs down to bedrock. The new ½ Ton Willys Truck is particularly suited to the needs of builders. Visibility is excellent... deep windows permit you to see where you are backing...low hood and fenders let you see the ground directly ahead...functional fenders allow you to go through tight places without scraping.

Ask your Willys dealer for a demonstration of this new Willys Truck-the greatest truck value we ever offered.



MORE POWER PLUS MORE MILEAGE !

Power increased 20%—a big decrease in fuel consumption —that's the amazing result of the new higher-compression HURRICANE Engine. It's an F-head engine with valve-inhead intake and valve-in-block exhaust. Compression ratio is 7.4-1, using regular gas. See this most advanced power plant—the HURRICANE.

WILLYS-OVERLAND MOTORS, TOLEDO, OHIO . MAKERS OF AMERICA'S MOST USEFUL VEHICLES



WIDER STEEL DOOR COMBINES BEAUTY WITH STRENGTH AND DURABILITY

NOW-GIVE YOUR CUSTOMERS all these features in the new Strand 9' x 7' Receding (track-type) Door --designed to accommodate today's wider cars:

RUGGED-NEW "X-TYPE" STEEL BRACING adds to the great strength and rigidity of the one-piece allsteel door leaf. Withstands shipping and handling from factory to completed job; assures the owner life-time durability and low upkeep.

GALVANNEALING PROTECTS against rust; even when the doors are exposed to weather for weeks before painting. Galvannealing consists of a heavy galvanized zinc coat, oxidized to provide an excellent base for paint; no priming coat needed.

QUICKER TO INSTALL-the one-piece door leaf elim-

STRAND DARAGE DOORS

inates field assembly of single doors. Packaged hardware is factory assembled. Installation is simple and easy.

EASHER OPERATING ... ALWAYS—Steel can't warp, shrink, rot or stick; hardware is dependable. Steel does not absorb moisture—weight of the door remains the same in hot or cold weather, for uniformly easy operation.

Sbipments of the new $\mathcal{G} \propto 7^{\circ}$ door start November 1. Strand Doors are also available in Canopy and Receding (track) types for $\mathcal{B} \propto 7^{\circ}$ openings; and in a Double-Garage-Door (track-type only) for 16' $\propto 7^{\circ}$ opening unobstracted by center post. Order from your dealer, or mail the coupon for information and dealer's name.

| Detroit Steel Products Dept. AB11-2242 and Detroit 11, Alichigan | | | |
|--|------------------|-------------|--------------------|
| C Placese rush data Gerage Doer for | iled description | al the re | re firand all-size |
| Please sand full | information also | | urs for # x 7 an |
| 16' x 7' garage 1 am a 🗌 Builder | | epective Ow | nar 🗆 Othar |
| NAME | | | |
| ADD#155 | | | |
| CET | 57 | 410 | |

NOVEMBER, 1950



(Continued from page 48).

unit has a "U" value of 55 compared with a "U" value of **1.14** for single glazing. This represents a saving in heat transfer of 51 per cent. The inside surface temperature of the glass is 20 degree F. higher than single glazing when outside temperature falls below 17 degrees F.

The stainless steel channel which covers the outside edges of the glass protects the hermetic seal and makes it easier to handle and install.

The double-glazed unit is installed as easily as a single pane of glass. The accompanying details illustrate the major points to be observed. These are essentially as follows:

 Openings must be square, free of twists, and glazing obstructions. Units should not be set in poorly con-

Installing Double-Glazed Windows

structed frames, inadequate to bear the weight of the sash, nor of unseasoned lumber which would have a tendency to warp.

- To obtain maximum efficiency, sash, especially in large openings, must literally float in the opening.
- Use of elastic glazing compound which retains its resilience permanently, is recommended. Do not use putty except in glazing steel sash.
- 4. Two lead or treated wood setting blocks as wide as the thickness of the unit are to be placed one fourth of opening width from each end of unit.
- Place sufficient glazing compound on the back of glazing rabbet. This allows unit to be positioned, filling the voids behind edges of the glass.

(Continued on page 126)



DOUBLE-glassed units are delivered to job its strong crates. First step is to till crate at slight angle, placing block in front. Remove one side of crate to start unpacking UNIT is protected on the inside by specially developed rigid cardboard web. The unit, with its stainless steel frame. in further protected by a heavy craft paper AFTER unit is removed from create, place on wedges and against wall. This permits steel frame to rest flat against wedges with weight of unit equally distributed



STAINLESS steel frame of unit offords pro-

tection to glass and helps reduce time.

and labor in handling. Wedges case task

CHECK size of wood such before installing unit. Opening about he by inch larger on

all aidea than the double-aloand unit



CHECK the window opening against the size of window unit. Unless specifically indicated on glass there is no top or bottom



REMOVE exterior glasing stop from factary such before installing double-glazing



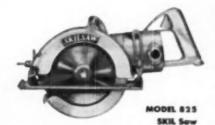
SETTING blocks on sill are placed one quarter of opening width from each and



CHECK the opening each for evenness and uniformity before installing glazed unit



Gang-cutting pays off fast with powerful, easy-handling SKIL Saw!



A favorite with contractors for general home construction. Cuts up to 2% in, deep, Bevel cuts up to 2% in, deep at 45°, Light, compact, powerful, Gang-cutting with SKIL Saw gots buildings up fast. A look at these SKIL Saw features shows you why it's partect for day-long production sawing on the job site—

NORMAL, COMPORTABLE SAWING POSITION—With SKII. Saw's rear handle you saw without difficult reaching, straining or stretching. Less effort per cut... more cuts per day.

EASY, ACCURATE DEPTH ADJUSTMENT-With SKIL Saw's quick, simple depth adjustment you're ready in seconds to mark the second layer as you cut the top one.

SMOOTH, EASY SAWING ON EVERY CUT-Hi-torque SKIL Saw avoids jamming and stalling. Keeps production at a peak all day long.

Ask your SKIL Tool Distributor to demonstrate SKIL Sow today. You'll be glad you did!

> SKIL Products are made only by SKILSAW, INC.

5033 Elston Avenue, Chisego 30, Illinois Factory Branches in Principal Cities In Conade: SKILTOOLS, LTD., 65 Partialid St., Taranto, Oxt.



INSIDE AND OUT ... it costs less to build better WITH GPX PLASTIC-FACED PLYWOOD

You may have heard about the savings being made by contractors who use Georgia-Pacific's miracle plywood, GPX, for Concrete Forms, but did you know that GPX is also made in two painting grades plus a beautiful wood grain surface? GPX's plastic coating is applied under heat and pressure at the time the plywood is being bonded. The plastic flows, condenses and sets to become part of the plywood itself—not merely an extra surface layer. The result is a smooth, hard material with all of the inherent strength of plywood plus the efficiency and durability of plastic.

USE GPX FOR SMART INTERIORS

Painted Surfaces—for interior surfaces that are to be painted, specify the white paint-grade of GPX. It won't check or crack and, if enamel is used, one coat is enough to provide a perfect cover. Smooth, hard and long lasting, the white paint-grade is ideal for shelves, table tops, counters, closets, kitchen, laundry and work room cabinets.

Natural Wood Surfaces—for the natural wood surfaces that are so much in demand for today's interiors, specify the natural grade of GPX. Use it for sliding doors, panels, all interior surfaces. Economical and efficient, long lasting GPX saves the expense of painting, keeps refinishing and upkeep costs to a minimum.

USE GPX FOR ATTRACTIVE EXTERIORS

Painted Siding—for exterior siding that is to get a painted finish, specify the brown paint-grade of GPX. This grade is engineered especially for use where the surface will be painted and it covers smoothly and evenly with less paint. And the paint lasts longer.

Natural Wood Siding—if you want attractive wood-grained siding, specify the natural-grade of GPX. With an armor-hard surface that never needs painting, natural GPX is economical, amazingly dutable and attractive.

All grades of GPX combine the moistureproof, waterproof and weatherproof surface properties of plastic with the strength and stability of plywood.



GEORGIA - PACIFIC PLYWOOD & LUMBER CO.

HOME OFFICE SOUTHERN FINANCE BUILDING . AUGUSTA, GEORGIA

INVESTIGATE GPX TODAY!

It is a quality product of Georgia-Pacific Plywood & Lumber Co. with practically unlimited application in the home, on the farm and for industry. For further information, write today on your letterbead or fill in, tear out and mail the attached coupon:

OTHER GEORGIA - PACIFIC PRODUCTS:

Disaglish Fir physical Haribound physical and sensers Unatively physical and sensers Unatively for some first senser Donglish Fir and Haribound doors Donglish Fir banhor and timbers Original banhor and timbers Capters and Radowood Jambers Weiters on Southern muddlings Southern and Appalachias Hardwood Jambers Long long and short load From banhor and timbers Residential and factory flooring Fully and plings



GEORGIA-PACIFIC PLYWOOD & LUMBER CO.

1252 Southern Finance Building

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NUMBER OF

Augusta, Georgia

Please send me information on Georgie-Pacific's micacle plywood, GPX.

| MAME |
|---------------|
| PRG NAME |
| PRM A056055 |
| YOUR POSITION |

"Electric Ranges help sell homes," SAYS MR. E. A. BALLIN,

These distinctive homes are in Harbor Lea, Hewkett Harbor, N. Y. -9'ls rooms on about 'y acre. Completely air conditioned, completely pollen- and dust-free. Completely double glazed. All-elsectric kitchen and laundry. Three full-sized baths. "Complete" is the word for these homes, so naturally, they have Electric Ranges. Appliances in the unique kitchen include dishwasher-sink, food-waste disposer, ventilating fan, home freezer, automatic laundry, clothes drier, rorary ironer, refrigerator, electric clock and chimes, and built-in breakfast nook for six. The range? Of course ... it's ELECTRIC!



"Our Ballin '50 homes include the very newest and finest developments in building products, methods and appliances," says Mr. Ballin, "and for that reason they are equipped with modern, automatic Electric Ranges."

Home buyers are constantly demanding more and more built-in equipment. One way to satisfy these demands, as leading builders the country over have discovered, is 6 provide for electric cooking.

ELECTRIC RANGE SECTION, Marineel Electrical Masselecturers Association, ISS E. 44 St., New York 17, N. T. ADMIRAL & COOLERATOR & CROSLEY & DEEPREEZE & PRECIDENCE & GENERAL ELECTRIC & GREGON HOTPOINT & KELVENATOR & LEDO & MONARCH & NOEGE & PRICO & LINUVERSAL & WESTINGHOUSE



WAR TALK is always unpleasant, and it is particularly so only five years after a worldwide conflict. Unpleasant or not, however, it is impossible to discuss any segment of American business today without reference to war and its possible or probable impact on the general econoniv.

ALREADY, there have developed shortages of many items. Steel, in spite of record-breaking production, is short in some categories.

LUMBER, in late September, seemed to be easing somewhat. There was little doubt, however, that as long as the Korean War continues, construction lumber would not he in sufficient supply to keep pace with the building rate of the first eight months of the year.

AUTOMOBILES were already falling short of demand and orders in July. Reason was that many plants had partly converted to production of military vehicles. Replacement parts for recent models were also short in many places. Even a socalled minor war has noticeable civilian repercusions.

ESSENTIAL INDUSTRIES have been classified, and home building is reported to be so far down the list that there is very little likelihood that it will get much consideration in case of a big war. This seems like a flagrant disregard of experience that should have been gained in 1941-1945

ANOTHER MAJOR WAR with a stoppage of home building, except the temporary kind for immediate war uses, would usher in another housing shortage. There are dozens of industries that were allowed to flourish during the recent war which, in light of later experience, should be declared non-essential in favor of home building.

AMUSEMENT industry is one that should be named in particular. Theory in the late war was that people should be kept pleasantly occupied in their leisure hours as a boost to their morale.

BIGGEST BOOST to motale in wartime should be long working days and full weeks for all civilians, and noticeable shortening of the war as a

(Continued on page 59)



It's the **RIGHT ANGLE** for Tough Spots...Faster Jobs

CUTTING COSTS



Y ou'll be amazed at the cost-cutting, time-saving and accurate performance - in both construction, and plant maintenance --- of this remarkable new Tri-Speed HOLE-SHOOTER with its 2-speed Right-Angle-Drive" attachment, See complete kit below.

This tool not only speeds up work in the tightest corners, but also provides the right speeds for boring with bits of every size, including expansive bits and holesaws. Pays for itself on a couple of jobs. Also suitable for drilling in steel, and concrete with carbide-tip drills.

See Your Distributor

If he cannot supply you, write us and mention his name. Immediate delivery. "You'll buy if You'll Try".

MILWAUKEE ELECTRIC TOOL CORP. \$356 West State Street, Milwaukee 8, Wisconsin

QUALITY TOOLS

Milwaukee TRI-SPEED Kit for Contractors . . . 5412 15" HOLE SHOOTER, Boll and roller-bearing envioyed ... ab's peared Chuck .. 450 E.P.M 9 "Two-Sneed "Right Angle w side, 300 R.P.M. hant ... high side. 675 R.P.M. 3 special bits for bar, ing in wand $-\frac{1}{2}$ ", $1\frac{1}{6}$ " and $2\frac{1}{6}$ ". A Special wrench for amach-ing and adjusting "Bight Angle Drive" and Chuck.

587<u>00</u>

Adjustable "Long Arm Milwaukee * Accessory ... *Pat. Pending \$24.50 EXTRA

57

5 New Models! Delco-Heat Announces a Brilliantly Engineered Line of New Gas-Fired Conditionairs



AGA-approvad for all gaves, including LP and LP-air. Also for high-altitude installations.

"GA" Series Gas-Fired Conditionairs

| | DIMENSIONS BLO | | | | | | APPROVED BATINIGS HER HOUR (In Thomanda) | | | | |
|--------|----------------|-------|-----|---------|-------------------------|--------------|---|--------------|------------|------------|-----|
| Model* | see. wigen t | Dapth | | EPM CPM | Mat. Mig., Mixed Ges | | LP Air Gas | | LP-Gee | | |
| | | fm. | BPM | | in- put | Out- prit | in- put | Duit- pol | la- put | Out put | |
| GA 63 | 54 | 22 | 24 | \$50 | \$50 | 62.5 | 50 | 62.5 | 50 | 60 | 48 |
| GA 90 | 56 | 32 | 30 | 850 | 800 | 90 | 72 | 90 | 72 | 90 | 72 |
| GA 120 | 54 | 28% | 26 | 660 | 1050 | 120 | 96 | 120 | 96 | 102 | |
| GA 150 | 54 | 35 | 26 | 620 | 1300 | 150 | 120 | 150 | 120 | 150 | 120 |
| GA 218 | 34 | 48 | 24 | 800 | 1400 | 210 | 148 | 210 | 168 | 210 | 148 |

*Analishis with other 12 or 16 gauge heat exchanger,



Products of General Motors!

Here is a new line of gas-fired forced warm air furnaces that will add sales appeal and make your new bomes easier to sell! Because for features, for value and for appearance—the new Delco-Heat "GA" Conditionairs challenge all competition !

The new "GA" Series includes 5 AGA-approved, forced warm air models—in both 12 and 16 gauge steel. Capacities are 62,500, 90,000, 120,000, 150,000, and 210,000 Btu input... a range that makes them applicable for all sizes of homes.

Note that the new "GA" Conditionair has extreme eyeappeal. It's compact, streamlined, and tastefully finished in Delco-green. Nothing protrudes—even the draft hood is concealed beneath the louvered panel.

Outstanding features of the "GA" Conditionair include the exclusive Multi-Rad heat exchanget—ribbon-type twin burners — and a blower-

filter unit that is powered by Delco's famous Rigidframe motor.



Ribbon-type twin burners are engineered specifically for Multi-Rad sections. Made of cast iton, with expertly designed stainless steel ribbons. Design assures more even fiame, more complete combustion, positive ignition and quiet operation.



Exclusive Multi-Rad heat exchanger has continuous-welded construction. Each of the multiple sections completely encloses the flame from a separate burner head. This affords greater radiation area – extracts maximum hear from fuel,

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

Delco-Meat manufactures a complete line of automatic home heating products-for all types of fuels, all systems of heating and all sizes of homes. And our engineering and sales departments will be glad to serve you in any way possible. For information about Delco-Heat products, write to Delco Appliance Division, AB-11, General Motors Corporation, Rochester 1, New York.

Also manufacturers of Electric Water Systems for farms and home s-fractional horsepose er electric motors-electric automobile clocks



(Continued from page S7)

result of the same kind of effort, except the blood-letting, that is expected of and given by the men and women in uniform.

ANOTHER BOOST to morale is the certainty that when men return from fighting fronts at the conclusion of a war there will be dwelling units for them to rent or purchase.

TOO MUCH THOUGHT was given to eight-hour days during the late war, and to five-day weeks. Much of this probably was dictated by labor unions who feared that if they gave up their hard-won gains in working hours, they might never get them back. There is some justification for this, And labor leaders, most of whom know government and its working pretty well, perhaps cannot be too sharply censored for the attitude they took.

BUSINESS had to learn the hard way that when it submits to alleged wartime controls it has another war to fight after the shooting stops to get some freedom back for itself and its people.

WASHINGTON this time, will have to give some positive assurance to all that if it asks wartime sacrifices, it will mean just what it says, and make no attempt to fasten regimentation on either labor or management.

THE DRAFT LAW is eliciting some pertinent questions from some labor leaders. They want to know why a college student is to be deferred from military draft until the end of a school year he has begun prior to his call.

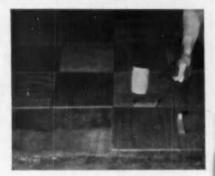
REASON for the question is that some labor leaders fail to understand why the college student should be deferred while the apprentice tradesman or registered student in a trade school is not accorded the same preference.

THE QUESTION is a legitimate one. The future economy of the comtry depends as much on an adequate corps of skilled journeymen as it does on a crop of college graduates, lf the latter are to be deferred it is in the interest of the national welfare that students in trade schools and apprentice tradesmen be deferred.

(Continued on page 61)



MODERNIZE WITH HARDWOOD FLOORS!



Ready-Finished; In Resilient Floor Thickness; Laid Quickly Over Concrete, Wood or Terrazzo



Economige

New floors for old offer no problem with the use of Parkay. Only 3/16" thick. All the wearing surface of standard flooring without useless bulk or weight. Permits use with other resilient materials without changing floor levels. Factory finishing by craftsmen insures a lasting lustre

and beauty not obtainable by on-the-job methods.

Parkay floors are applied with special adhesive to any smooth, sound subsurface. Simple and clean to install for new construction as well as for remodeling. Time and moncy saved on every job.

Parkay flooring, made of choice American Oak, is available in two styles --9" x 9" Tiles and 9" wide Broadboard in random lengths. Both styles can also be used for impressive, low-cost wall paneling. For complete details, see Sweet's Architectural File or write direct for free samples and complete information. Wood-Mosaic Co., Inc., Louisville 9, Ky.

READY-FINISHED HARDWOOD FOR FLOORS AND WALLS

Here's what the men who use ATLAS MORTAR say:

"Our masons like the rich smooth plasticity of Atlas Mortar and the way it carries sand."*

* Actual quotations from satisfied masons and contractors who use Atlas Mortar Cement.

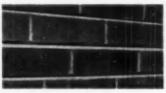
These statements are typical of the reports we are constantly receiving, commenting on the advantages of Atlas Mortar.

The outstanding durability of Atlas Mortar is proved by rigid laboratory tests. Backed by years of research, Atlas Mortar Cement complies with ASTM and Federal Specifications for masonry cement. For further information, write Universal Atlas Cement Company (United States Steel Corporation Subsidiary), 100 Park Avenue, New York 17, N.Y.

OFFICES: Albeny + Birminghees + Besten + Chicego Dayten + Kenses City + Minnespells + New York Philadalphie + Pittsburgh + St. Louis + Waco



"Smooth as slik." Masons like the smooth, may response of plastic, buttery Atlas Mortar company.



"True tight joints." The outstanding durability of Atlas Mortar is proved by performance under field conditions.



"Gives us a fine job,"* say contractors. They praise Atlas Mortar's consistently fine color and excellent appearance.



"THE THEATRE GUILD ON THE AIR" - Sponsored by U.S. Steel Subsidiaries - Sunday Evenings - NBC Network american suiter



(Continued from page 39)

BUILDERS well remember that it took more than three years after the building trades schools were opened after the war to get even fairly good mechanics. That was one reason why the industry was unable to swing into high gear overnight.

NO ONE quarrels with the principle of guaranteeing an unbroken flow of medical, dental and engineering graduates throughout a war. While the few labor leaders who have expressed themselves on the subject do not advocate a policy of non-interference, they do believe that deferments of several months to a year for apprentice tradesmen, in some reasonable numbers, is both practical and desirable.

NEW BUREAUCRATS, or old ones in new places, are reported to be grooming for war agency leadership if all-out war does develop. Kaul and Niewenhous are two of them. Kaul, it may be remembered, flashed on the scene briefly during World War II in connection with some agency job having to do with building. He didn't last long there, but has been in government in one or more capacities since. He is now serving as a member of the National Securities Resources Board. He is advising NSRB how to handle housing and building problems in case war reaches. our coasts. His recorded experience belies the fact that he can handle anything connected with housing or building problems.

NIEWENHOUS, far from being a popular figure in the agency handling of building material distribution problems during the war, is back in the limelight. He is now active in formulating policy on lumber in case of a big war. With him is Hal Holman, with a better ability rating.

UNDOUBTEDLY, there are many other old line bureaucrats being schooled for key spots in case of war. If the industry wants to be saddled again with what it unfortunately got in many offices in the last war, it need say nothing.

IF. HOWEVER, controls do come, and it is desired that they be workable and intelligently administered. the home building industry had better set about finding its own nominces and grooming them now.

NOW Sand Floors with MORE SPEED. MORE PROFIT!

Double your production with

AMERICAN SUPER

in job after job-contractors report this new American Super 8 cuts Invice as fast as a standard 8" machine! This greatly reduces time and costs ... and increases the contractor's profit!

The Super 8 is powered by a specially designed 2 H.P. motor ... drum driven by vari-speed transmission . . . drum speed range from 1600 to 2800 r.p.m. assures greatest efficiency under varying conditions ... drum speeds easily selected by "dialing" Drum Pulley ... great range of drum pressures selected by variable control-52 lb. to 103 lb .- to meet all conditions in floors. Operates efficiently even with low voltage! Has double volume dust pick-up ... low center of gravity ... plas many more all-new Super Features! Send coupon for details.

SINCE 1903

MACHINES









Type C unit with optional lowvered plenum base for floor mounting illustrated.

It's the NEW Modine Cabinet Unit

THE new Modine Cabinet Unit — yours for fast, positive distribution of *beated or cooled air!* Perfect for stores, showrooms, schools, lobbies ... all modern commercial and public buildings. Available in 5 capacities — from 120 to 640 Edr.

Winter's chill, summer's hot blast are problems no morel Single unit for forced hat water beating ..., cold water cooling, Steam medals for heating only.

• For fresh air ventilation, non-freeze steam coll and built-in mixing damper available.

 Hushed performance insured by skillful silencing of mechanical and air-resh noises.

WRITE FOR

New BULLETIN SIG TODAYI You'll find your Modrue Representative listed in the classified section of your phone book. Or write directs Modioe Mfg. Co., 1501 Dekoven Ave., Racine, Wis



 \blacksquare New, specially designed water cell gives you high capacity hat water heating — 2 lbs, steam performance on 180° water,

Smartest styling is yours..., with belgegray enamet finish, Parker-Bonderized for lasting beauty.

You get easy accessibility to meter, blowers, coil, and piping simply by removing the front panel.





Type C — basic unit for wall mounting. Adaptable to other installations.



Type C, with optional inlet grille, for ceiling mounting. Duct connectors also available.



Type CR with face outlet grille and plenum base for secessed installation.

LOWEST COST SOUND CONDITIONING

Right: Library cailing shows typical use of **Zonolite** Acoustical Plestic. Frequently, law cost and ease of application over irregular surfaces permit use where other acoustical treatments would be prohibitive.



IT 'COULDN'T BE BUILT' But they did it with NOLI VERMICULITE AGGREGATES! The new Senile Ward Building-

Eastern State Hospital, Medical Lake, Wash .- illustrates graphically how Zonolite vermiculite aggregates are used in plaster and concrete to eliminate dead weight. They permit construction of class-A buildings at great savings over conventional materials. Many observers declare that the Medical Lake job could not have been built without lightweight aggregates.

Zonalits Acaustical Plastic used

h for Zonalite concrete roof claims

Applying motal lath far fira-

Installing radiant hoating pipes Zanalite contrate floors.

Zanalite Plaster 2" solid an

ng girdars with Zonalite Plaster.

Where Zonolite plaster was used in lieu of conventional materials for suspended cuilings, for 2" solid partitions and for hreproofing beams, up to 66 % of the dead weight was eliminated. Zonolite concrete used throughout for lightweight roof and floor slabs weighed only 20% as much as conventional concrete applications.

This wholesale elimination of dead weight made practical the use of much lighter structural sceel members. By reducing weight in these 3 ways, further drastic reductions in time and costs were made possible.

But why not get the whole story? Mail the coupon below for a detailed story about the Medical Lake job and complete reference material on the use of Zonolite Vermiculite Aggregates.

WEIGHT COSTS MONEY-ZONOLITE REDUCES WEIGHT



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NEW PRODUCTS Offered by Manufacturers

AIR CONDITIONING UNITS AB119030



"YAC" air conditioning units, stocked in eight sizes, horizontal or vertical types, provide any combination of service desired, from simple heating and cooling to complete air conditioning with dehumidifying and filtering. pacities range from 400 cfm to 16,625 cfm. Sec. tional design permits greater ease in handling, installing and servicing and contributes to low first cost and maintenance Young Radiator Co., Depr. A8, Bacine, Wis-

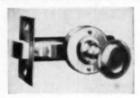
SHOWER HEAD

A8115024



New multi-spray, self-cleansing ball-joint Kahles shower head, 3%, inches in diameter has six clack set plungers shot deliver eight separate streams of water each. Accessible control handie an sleeve just above face permits adjusting spray from fine to normal and flood de livery. Volume can be adjusted through expased streadriver-type regulator. Unit is designed for use in home bothrooms, schools, clubs. hospitals and other institutions. Kohler Co., Dept. AB, Kohler, Wis.

TUBULAR LATCH AND LOCK AB115027



To provide higher resistonce to wear and expasure, this plinew line of tubular latch and lock sets has new type baked on plastic cooling over the highly polished brass finish of all exterior ports, all inner steel working ports are

thoroughly zinc-chromoted for protection against carrosian. Sturdy tubular latch bolt is of extruded brass and operates through an imwed type dual-spring action. In addition to front-door handle sets, the new Herris line of fers a chaice of inside sets, including scieen door sets with full two-inch, easy-to-group knobs. All knobs are secured with patented Dardelet screws to minimize possibility of be-coming losse Marria, Inc., Dept. A8, 200 East Long Street, Columbus 15, Ohio.

GAS-FIRED HOT WATER BOILER A\$115033



Newly-announced line of gas-fired hot water bailers are of vertical tubular design with balflex for maximum hear absorption. Completely equipped with all necessary controls, units have rectangular cabinets with finish of silvertan baked enamel. This cast-iron bailer heating equipment has steel base, permitting installa tion on wood floors. All five sizes-from 72,000 to 144,000 B.T.U. output-ore thoroughly in-sulated to minimize heat loss. Timken Silent Automotic Div., Dept. All, Jackson, Mich.

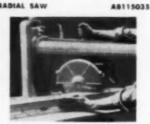
A8115029

KILN CURING UNIT



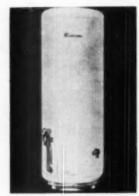
This automotic self-contained curing unit was designed specifically for concrete product curing kilns. The whit produces an equatorial jungle atmosphere in kiln, forced-circulating heavy water soaked air, with presignation occurring uniformly throughout kiln. Does not require steam at condensation processes or period of initial drying of product. Unit may be set at or below fibor level, indoors or weather exposed. 8.Y.U. output of unit 60,000 to 350,000. Uses mittent ignition gut-type ail burner, Lith-I-Bar Company, Dept. AB, Holland, Mich.

RADIAL SAW



Use of wartime develop has led to production of five H.P. radial saw motors weighing only two pounds more than other regular two H.P. motors. New motor designs result in high-torque drive units with more than double power of previous similar mochines. New models are completely 10 dial" in adjustment, motor unit travels 19% inches in straight line in the radial arm, arm, column and mator can all be rotated 360 degrees and locked in any convenient position. permitting use of straight line motor action at any conceivable combination of angles Machines can be used far cross-cutting, anglecutting, compound angles, ripping, bevel-rip ping, dadoing, rabbetting, plawing, shaping, routing, etc. J. D. Wallace & Co., Dept. A8, 136.5 California Ave., Chicago 12, ill

AUTOMATIC GAS WATER HEATER 49115034



Made in three sizes, 20, 30, and 40 gallon capacities, the new Koven line of automatic gos water heaters use fully automatic, under fired and have center flue units. These heaters are equipped with Snap Action thermostatic control automatic solety pilot and shut-off solety valve. Extra heavy, but dip palvanized copper-bearing steel tanks are tested for 355 pounds pressure onei 150 pounds working pres-Sec. Tanks are completely blanket-insulated for efficient storage protection. Magnesium anode to extend hink life is optional. LO Koven & Brother, Inc. Dept. AB, 154 Ogden Ave., Jersey City 7, N. J.

National Lock's new no. 51

ask your jobber

4-STAR

FEATURE

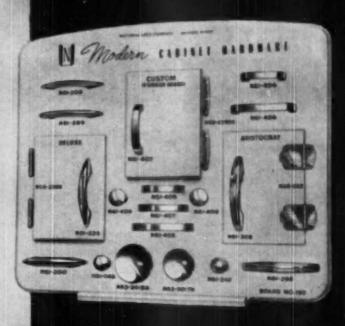
DISPLAY BOARD AND ASSORTMENT

· One Complete **Deluxe Board to Replace** Several of Your Other Boards

 Reduces Inventory While Providing All **Major** Cabinet **Hardware Items**

- Only 21" Wide, It Saves Counter Space . . . **Makes** Space More Profitable

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A Forged Brass Hardware New Type Concealed Hinge Beautiful Concave Knobs Smart Die-Cast Handle Other Fast-Selling Items

NATIONAL LOCK COMPANY ROCKFORD, ILLINOIS & MERCHANT SALES DIVISION



DISTINCTIVE HARDWARE ... ALL FROM SOURCE

Superlative Quality ...

Items in this auto have been carefully selected as the ultimate in National Lock quality. included are only the very finest ... the best hardware available anywhere. Open stock, if desired. Ask your jobber for details

NOVEMBER, 1958

TRUSCON Clerespan great strength ... Joists

One of the several types of "Clerespen" Juists available



Clevepan" exceptional width of chord member

Typical "Clevepon" obstruction - free installation



"Clovespon" Joists permit longer spans per given joks depth in roof construction.



Trazcon "Ferenbord" Steelderb with "Clerespan" Joint produce ideal fire-resistant cosf.

clear spans up to 80 feet

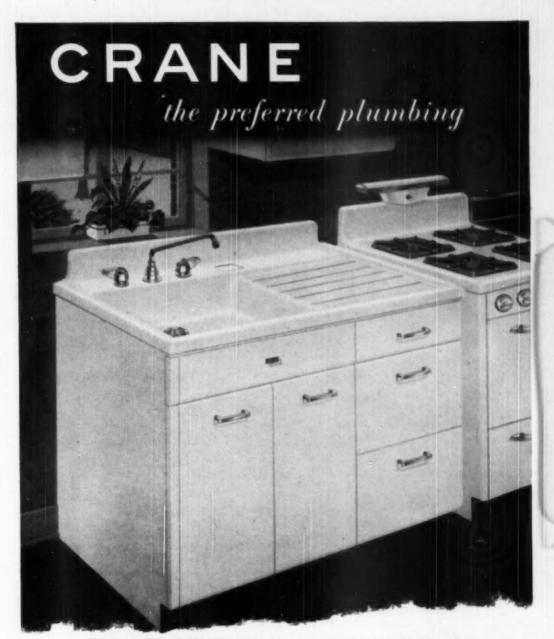
In the battle of load

against length, Truscon "Clerespan" Joists have achieved longer, support-free spans and greater obstructionfree floor areas than ever before possible! "Clerespan" Joists possess great lateral stiffness, due to the high radius of gyration about the vertical axis. The distinctive "Clerespan" design; structural steel shapes; the inbuilt camber; the integrally-welded joints—all these permit roof and floor construction of unusual efficiency and economy. "Clerespan" Joists are available in underslung design with top chord parallel to bottom; or with square ends; or pitched in one or two directions. Write for free illustrated literature giving complete details.



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FREE Beak on Trusson "Clerospan" Joints. Write for II. The Trusted Bool Company Meandpotyces a Complete Line of Steel Windows and Mechanical Operators. . Seel Joints ... Mittel Lath ... Sheeldock Ruofs... Reinforcing Steel ... Industrial and Hemper Steel Deces... Bouk You's Reinforcing ... Badia Towars ... Bridge Roers. TRUSCON STEEL COMPANY Budandary of Republic Street Comparation YOUNGSTOWN 1. OHIO Wizzebrowsee and sulse offices in principal infea



THE CRANE STEWARDESS SINK, 42° long by 22½° wide, ideal for budget-planned kitchens. Sink of acid-resisting porcelain enameled cast iron features 8° deep basin, ledge for glasses, *Dial-ese* controls. Available with right or left hand drain-board. Bonderized steel cabinet has one shallow, two deep roller drawers, plus large cupboard or utility space. Consult your Crane Branch or Crane Wholesaler.

CRANE

CRANE CO., GENERAL OFFICESI 836 S. MICHIGAN AVE., CHICAGO S PLUNBING AND HEATING. VALVES • FITTINGS • PIPE

NEW PRODUCTS

(Continued from page 64)

PRECISION CUTTER AB115022



The lines trimmery, a multi-duty hispered pracision cutter for joinest, colorest motiers, ar supporters, explore pointciple of the sharing sat. Cuts wood estaily, leaving a smooth sufear for gluing and a precision sourceste down to the thousandths of an unit. To eperate, work a head formly against the guide, with the end protructing through the opening in frant of the knille edge. Push handle down as to ns it will git. The transme carries on usiquelified performance and motienal guarantee. Prostauk Garp, Dept AB, Streatmand, Cane.

SCREW-HOLDING SCREW DRIVER

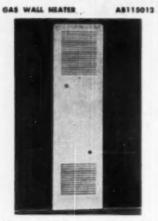


Quick Wedge screwdriver has a double taking steel block that halds, starts and drives the screw. Two halfscrewdrid blocks inside a marked forward, pushing block formly signified walls al access and Halfare growth signified walls al access and Halfare growth screwdrig paiding the screw. To release the surver the subse a slid back toward the handle. Uniondritanally guaranteed. Kedinan Co., 233 5. Sh Sz., Deer, AB, Sait Lake Cry. 1, Unit-

GAS-FIRED FURNACE AB115028



Delog-Heat gos Canditionairs, made is five models (anging in 8.1.U. per hour input copacity fram 82,500 to 210,000, use a multisection hast frame/se system with electrically weided steel. Multi-Rod (adjusters and dogble röhlson-type burners. Hest transfer ant is a series of individual drawn-steel coalises or ranged vertically in genetids series, with cheel inner baffle which retards rise of burning get. Each rediator has its aven burner son. Features include a built in draft divertor, anlery pilor and a rubber mourted contribuyed blaver op arting in conjunction with a vector treated spen glass filter. Deica Appliance Dir., Canaral Metors Corp., Dept. All. Bachaster F. N. Y.



"Non-Aire 50" dual vented gas wall circulator anit has an input of 50,000 BT.U. 1, and may be installed by fating in standard 244 inch studwall with study spaced 16 inches a.r. Installation is accomplished quickly and economically without need for basenent or Roar space. Its accupied homes and other buildings it is not measure to dismantle and reasumble the entire wall. Fion-Aire operates on natural and manufactured gases, and provides constant automatic heat at any desired temperatures. Romeer Furnace Co., Div. of Romeer Water Heater Corp. Ios Angeles, Coll.

NEW COLOR PANELS AB115020 Margan has now been added to colors availuble in Marline plastic-finished well and colling parelis. New decorative color gives a pleasing contrast when used in designs with other Marline railors, both in home and in commercial instellistics, both in home and in commercial instellistics. It is available in the polinhed high globs belaves finish which is not polished. March Wall Products, Inc., Dept. 203, Dover, Ohio. DISPLAY STAND ANTISO32

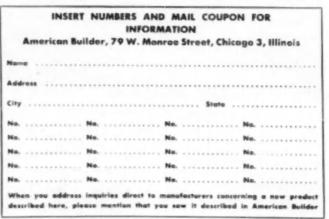
New, lithographed display stand for Fan-Gla Meetoire is being mode available to dealers. Stand is die cut to display ane Fan-Gla Neetaire, a unit that produces both redient infrared rays and fan-farced heated on. Markei Electric Products, Inc., Dept. AB, Buffnio, N. Y.

INTERIOR DOOR KNOS AB115016



New model Yale doorknob designed for operating a latch and decorating a home has a steel base and is finished in either polyhed brass of chrome for use on all interior doors of a house. Surface of the knob is on embassed mounic of geometric forms, gaining the knob a tiled or initial appearance. When an the door, the mounic oppears in thorough polterns us it is viewed from different alterbase. Knob is how inches in diameter, Saminort Dr., The Yale & Towne Manufacturing Co. Sami ford, Com.

New Products continued page 148

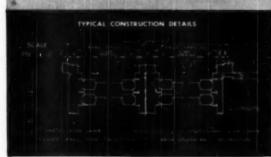


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R.O.W Remonable Wood Windows

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R.O.W SALES COMPANY 1335 ACADEMY . FERNDALE 28, MICHIGAN

PLEASE Send more information on R-O-W - the window with sales appeal to Archited Builder Down Carponia Carlinging

24

NOVEMBER, 1950

Take it from these SUCCESSFUL builders!



54 years' experience backs Gross-Morton choice of Kelvinator!

Unique new project of famous 54-year building firm to feature products by America's Pioneer of Electrical Refrigeration!

Three men who are today turning the picture at the right into superbly modern apartments for 1638 families are, from left to right, Alfred Gross, Georgo

M. Gross, and Lawrence Morton. Their new project, Windsor Park, in Queens, N. Y., will have 100 percent off-street parking space for all the families, a 10-acre private picnic area, and a \$100,000 master television antenna system.

In keeping with Gross-Morton's objective of providing finest facilities, each of Windsor Park's 1638 apartments will be equipped with a new Kelvinator refrigerator. Gross-Morton's choice of Kelvinator thus brings together a 54-year record of construction experience

FOR THE WINDSOR PARK APARTMENTS, Queens, N. Y.

1638 RELVINATORS CHOSEN

and Kelvinator's unsurpassed 36 years in building the finest electrical appliances.

Mr. George M. Gross says, "We are certain that Kelvinators will satisfy our tenants for the all-important reasons of beauty, efficiency and dependability over the years."

Let Kelvinator's unparalleled experience satisfy the kitchen needs of your next project, too? For further information, write to: Dept. AB, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.



DIVISION OF NASH-KELVINATOR CORPORATION, DURBORT 32, MICHIGAN

BEFRIGERATORS ELECTRIC RANDES

NUR PREZEST BATER BEATERS

Wartime Controls

D

THERE is a widespread and generally accepted belief that if a free people expects to win a modern war against a totalitarian nation, the former must fight under the rules of the latter, and, temporarily at least, accept total economic and social regimentation. There is no evidence to prove that such a belief is sound. On the other hand, there is much to indicate that it may be unsound, and certainly enough to comprise a challenge to the American people to insist on a careful review of the conditions under which another major war will be fought, if and when there is an other one.

The American theory of regimentation as a basis for fighting modern wars against aggressor nations had its inception in the deciling days of World War I and the years which followed it immediately. It was then that a plan for total mobilization of all resources was drafted for use when and if another major war occurred. The plan and its originators paved the way for the "planned economy" school, whose adherents flourished under the Federal administration of the thirties, and gained ascendancy during World War II. That the "planned economy" people are still in government needs only passing mention. That they have colored the views of Congress to such an extent that there was scarcely any debate on the bill giving the President almost unlimited stand-by controls soon after the Korean War started, needs the considered attention of everyone. The question is whether a major war can be won more easily and quickly with controls than without them, and under what conditions a victory should be gained to make it worth the effort of the people who fight for it.

It cannot be blindly assumed that the controls of World War II were more beneficial than detrimental. Such an assumption discounts, without trial the workability of free enterprise and free thought in wartime. It implies without substantiating evidence that the right of the individual to think, do and act, which makes the nation strong and progressive in peacetime, makes it weak and vacillating in wartime. It implies erroneously that the judgment of a handful of hastily appointed bureau heads of dubious talents for their jobs and the multitude of political appointees who work for them is more reliable than the proved collective judgment of the people as a whole.

It overlooks the fact that the conclusion of a war fought under a controlled economy never returns a full measure of prewar individual freedom. It overlooks the existence in every era of a corps of individuals motivated only by selfish interests who will use any pretext to seise permanent control over thought and action. The home building industry hardly needs to be reminded of these facts. Now, with so much talk of an impending war with Russia, the time has come to determine whether, if there is a war, we shall fight totalitarianism with totalitarianism, and thus, even with military victory, lose much of what we will be struggling to save, or fight it with the institutions of freedom, and thus insure a victory for freedom.

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E. M. Spingel Convention Chairman

Faul Van Auken Director, Convention-Exposition Thomas P. Cooqua 1950 President W. P. (Bill) Athinson 1950 First Vice President

Uncertainties in Building Industry Outlook To be Studied at 1951 Convention

OF DOMINANT interest at the 1951 Convention and Exposition of the National Association of Home Builders-scheduled again this year at the Stevens Hotel, Chicago, but on earlier dates, Jan. 21-25-will be an analysis of home building's status. under the nation's approaching semiwartime economy. With some controls in effect and future supply of materials undetermined, final plans for the "emergency" portion of the convention program will be deletred until just before opening to make sessions as timely as possible, according to Convention Chairman E. M. Spiegel of Passaic, N. J. The 1951 meeting will be NAHB's Seventh Annual.

While details of the program have not yet been released, plans are under way to include both new convention activities and improved versions of features which have proved their popularity in past meetings. The convention committee reports that, throughout the country, interest in the event is at an all-time high and the turnout of builders and related businessmen is "expected to be the largest yet."

An early sellout of exhibit space is again assured, with the demand for space described by Paul S. Van Auken, Chicago, convention-exposition director, as the heaviest in the show's history. All exposition space in the Stevens and Congress Hotels. will be used. Van Auken reports.

A special "premiere" new products display, innovated in 1950, is mapped for expansion this year. Van Auken said. This display and the regular new products exhibits are again expected to come in for a major share of attention.

Advance registrations for the big meeting (around 16,000 attended in 1950) were begun through local associations Nov. 1. Persons in the industry but not affiliated with local associations have been invited by NAHB officials to attend and may obtain registrations by writing directly to convention headquarters in Chicago.

Problems introduced by the Korean crisis and the expanding rearmament program will occupy an important spot in the popular clinic and panel sessions. These discussions by experts, some with audience participation, will include technical, financial, merchandising, public relations and other subjects vital to the industry.

Winners of several national contests, to include neighborhood develop-

"EXPOSITION IN PRINT"

Building Products on Review, a feature of the Jenuary American Builder, will present more than 400 products, many of which will be on exhibit at the NAIG convention. ment, home design, and merchandising, will receive awards during the show and their entries will be on display.

A major topic at 1951 meeting will be the industry's status under mobilization planning. Discussions will be timed to take advantage of the most current information

> By holding the convention in January instead of February as in previous years, the association hopes to exceed past attendance records. In a poll, builders favored the new dates as most convenient for them to make the trip to Chicago. An intensive attendance promotion drive through affiliated local and state associations was started in October, and promises to bring wider group representation. Expected to be another sput to attendance is the fact that 1950 set an all-time record for home building.

> Members of the convention committee, in addition to Spiegel and Van Auken, are Franklin Burns, Denver; W. Hamilton Crawford, Baton Rouge, La.; Edward R. Carr, Washington, D.C.; Joseph B. Haverstick, Dayton, Ohio; R. G. Hughes, Pampa, Tex.; B. A. Martin, Atlanta; George Streit, San Francisco; B. O. Stringfellow, Seattle; and Ralph Wells, Kansas City, Mo.

> Working closely with the committee are other NAHB leaders, including President Thomas B. Coogan, First Vice President W. P. "Bill" Atkinson, Second Vice President Alan E. Brockbank, Treasurer Nathan Manilow and Executive Vice President Frank W. Cortright.

Gypsum in Construction

Versatility, fire resistance, and case of application are characteristics of products made from this common mineral



THE USE of gypsum, one of the most common minerals of the earth, is as old as recorded history. Gypsum plaster was used in the construction of the Egyptian pyramids as far back as 2,000 B.C. Early Rome also records the use of gypsum, Gypsum



since historically old Roman laws required builders to plaster their buildings to prevent fire spread. In ancient Greece artists carved statues from gypsum alabaster.

Histories of all nations are marked with the use of gypsum down through the ages, though it remained for American ingenuity to find the way to process it for large scale commercial use.

Source of Gypsum

Gypsum rock, generally white or gray in color, is found in all parts of the world. In the United States high productive areas are in Western New York State, Northern Ohio, Michigan, Iowa, Texas, California and Kansas. The city of Paris, France, is built over pure, white beds of gypsum. The French for years mined and processed gypsum to produce "Plaster of Paris," though they knew nothing about retardation and the control of setting time.

Most gypsum extraction processes

involve mining operations, sometimes to a depth of 700 feet. Other deposits are on the surface or have shallow overburdens that lend themselves to quarrying operations.

After extraction from the earth. gypsum rock is passed through a heavy jaw-type crusher and is reduced to pieces about two or three inches in size. At the hammer mill, the gypsum rock is further reduced in size, the maximum pieces being about one-half inch in size. After the crushing, the rock is heated (calcinated) in a calciner or kettle, which' process removes about three-quarters of the water from the rock. Essentially, the resultant material from this process (the calcined rock) is the material delivered to the plasterer on the job.

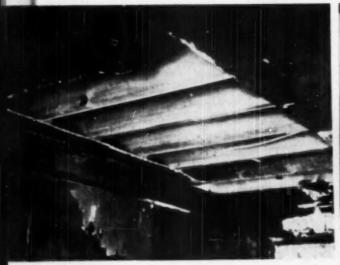
Calcined gypsum is "thirsty" for water, and when the plasterer adds water for mixing, the affinity is satisfied, and upon setting, the watered gypsum reverts to its original chemical composition (CaSO, 2H,O).

The calcination process was

known to builders and artisans through many centuries, with the result that gypsum-a rock-could be "dissolved" into a plastic substance, worked into the desired form, and allowed to set-thus becoming a "rock" again, but in the shape to which it was worked in its plastic state.

There were limitations in the use of gypsum, however, since no one had discovered how to control the setting time. Then early in the twentieth century American ingenuity found the answer.

American chemists found that a special compound of ordinary animal glue would retard the set of gypsum plaster, while alum or common table salt would accelerate the setting process. With control processes, gypsum can be set to full hardness in a period of time between six minutes and six hours, depending upon the set period required. Thus, many new practical uses for gypsum were found in the building industry. It now offers a plaster which permits





GYPSUM COVERED WALLS and collings in room. left, protected joints and study from fire damages. Ceiling section us tern away after fire to prove the point. Gypsum, like ice, remains cool is fire until all moisture is "molted" away

speed of construction, a strong and hard wall, variety in decoration, and early occupancy. Fire resistance is one of its chief attributes.

Gypsum is capable of releasing

In Residential Construction

water to about one-half of its volume. This water, though not in a liquid form, is neady to be released when gypsum is attacked by fire. When gypsum is heated to 212 degrees F, the bailing point of water, crystalline water "melts out" and quickly becomes steam, which repels the fire and dissipates the heat.

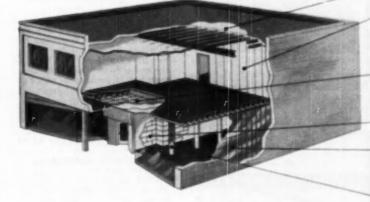
USES OF GYPSUM PRODUCTS

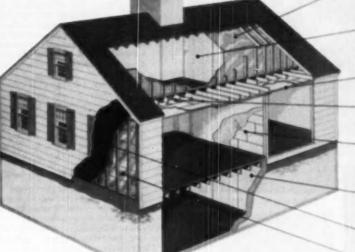
- 1-Over interior of real rothers and attic roots, insulating Gypsum Wallboard (Fail-backed)
- 2-Attic partitions Gypsom Wallboard Joints tranted with Rara tape system
- -3-Den ceiling, Gypsom Acoustical Plaster

- 4-Large Colling Areas-Gypsom Lath

- S-Interior Partitionsregular Gypsum Loth, Gypsum Plaster, Gypsum Rolah
- 6-Walls of playroom Woodgrain Gypsum Wallboard
- -7-Gypsum Sheathing Beneath any type of siding
- B-Insulating Gypsom Lath (Fail-backed) on the inside of outside walk
- 9-Poured-in-place Gypeum Reof or Gypeum Roof Tile
- 10-Upstoirs affice partitions 2" solid Gypsom Lath, (long upon 24" x ceiling height) Gypsom Plaster Gypsom finish
- 11-Cellingt-perforated Gypsen Lath, Gypsen basecost plaster, and Gypsen Acoustical Finish Plaster
- -12-Downstoirs partitions Gypouse Partition Tile
- 13—Inside of outside walls insulating long length Gypson Lath (fail-backed) over furring strips
- ~14-Gypsus been and column freproefing

In Commercial Building





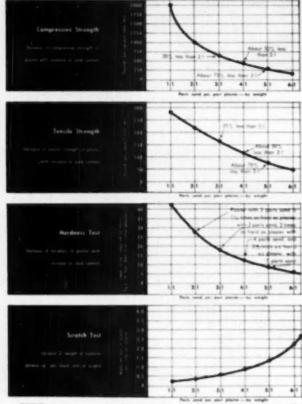


-Lath and Plaster

Descriptions, Performance, Application



PERFORATED gypouns lath, identical otherwise in all respects to standard lath, as shown above, right, allows plaster to "rivet" to lath with mechanical key



THESE churts show the "performance losses" when pluster mix is over-sanded

Perforated gypsum lath is identical in all respects to plain gypsum lath, except that perforations are made in the lath to allow plaster to "rivet" itself to the lath with a mechanical key. Greater fire protection is afforded. A wood stud partition with perforated lath and gypsum plaster is rated as one hour fire-resistant by the National Bureau of Standards (BMS Report, 92). The perforations also reduce plaster droppings and waste.

Aluminum foil-backed insulating lath is plain gypsum lath with a sheet of aluminum foil cemented to the "stud" side. This lath, applied with the foil facing the studs, has the same properties of plain lath, but, in addition, acts as a vapor barrier and as a reflective insulation.

Application of Gypsum Lath

Gypsum lath may be nailed to wood framing or furring, or it may be secured to wood or metal furring with special clip attachments.

The lath should be applied with its long dimensions horizontal and with vertical joints staggered. Lath ends must have a bearing on wood framing, headers or nailing blocks. The lath should be placed with the folded or lapped paper edges toward the framing.

If the nail-on application method is used, these rules should be followed:

 Each lath should be secured with four nails to each framing member it covers.

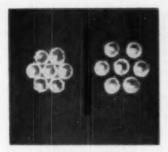
 Nails should be blued gypsum lath nails, thirteen gauge wire one and one-eighth inches long with a ½inch head.

 Nails should be driven home so the head is just below the paper surface, without breaking the paper.

4. Framing members should not exceed a spacing of 16 inches o. c. If, however, a ½-inch gypsum lath is used on walls the spacing may be 24 inches.

 Edges and ends of lath should be in moderate contact. A void between two sheets of lath should be reinforced with metal lath strips.

6. All interior corners should be reinforced with cornerite. Exterior angles should be finished with corner-beads, set to true grounds. Such cornerite or metal lath stripping should be secured to gypsum lath



IF SAND and gyprum planter are correctly propertioned, and particles will accompletely surrounded and coated with gyprum. How sund particles look in oversanded mix is shown at lst. Above right, how they look II mix is correctly sended

with staples or tie wire. They must not be applied by nailing through lath and into framing members because stresses from warping or twisting of framing members is readily transmitted into plaster coats, and may induce plaster cracks. Cornerbeads, which serve as grounds, are secured by nailing to the structural frame.

 Grounds should be provided around all openings and wherever baseboards or mouldings are to be used. They must provide for a full ½inch thickness of plaster. Otherwise the wall will be weakened materially.

When gypsum lath is clipped to steel furrings: 1—The lath edges must be secured to the steel runners at each intersection; 2—clips must be strong and well secured because each clip must sustain the load of a ceiling area 16x16 inches, or about 15 pounds, and 3—cornerite is unnecessary in this lathing procedure, except where lathing abuts a rigid plaster base at the angles.

It is urged that the lath installation be carefully inspected before plastering is started. If the lath is secured by nails, the nailing must be done as recommended above. The nails give the holding power necessary to meet established fire rating requirements. If the nail heads are not driven home to compress (without crushing) the gypsum paper, there is the danger of a plaster "pop" over a loose nail. These pops fracture the plaster leaving a crater in the basecoat and finish coat.

Gypsum Plaster

There are four gypsum basecoat plasters. Gypsum cement plaster, which is often called hardwall or neat gypsum plaster, is mixed with an ag-

FIRE RESISTIVE ratings, shown at right, are generally accepted by building codes NOVEMBER, 1950



SCRATCH tests show how plaster weakens with over-sanding. Button: 1 par gypean. 1 part sand: right above. 1 part gypean. 2 parts sand







BATIO of sunding at 1.5



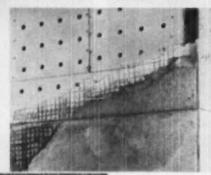
RATIO here was 1.6

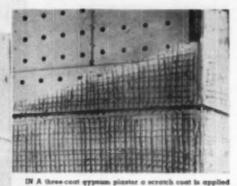
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| CEILINGS | Flogr Construct | tion Assembly | | | |
| | | | | | |
| Wood lights | by Part gaption liefs | Gaprister 1.3 | | | |

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SECOND step in a three-cost plaster job is application thrown cost over acratch cost, an illustrated below





to attack one related after it has "taken up." and allowed to set and partially dry

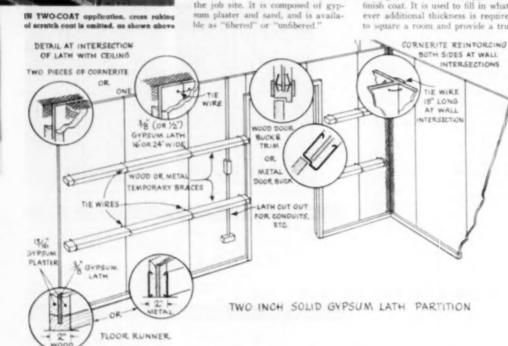
gregate and water at the job site. It is processed to be mixed with not more than three parts of sand by weight and is available as "fibered" and "unfibered."

Fibered gypsum cessent plaster is used for the scratch coat application over metal or wood lath. The unfibered plaster is recommended for all other applications of gypsum cement plaster.

Sanded gypsum plaster is a prepared basecoat plaster, which requires only the addition of water at the job site. It is composed of gypsum plaster and sand, and is available as "fibered" or "unfibered." Gypsum wood fiber plaster is a neat basecoat plaster to which water only is added at the job site. It is integrally mixed with selected wood fiber to give more bulk and coverage.

Bond plaster is a specially formulated gypsum plaster for use on interior monolithic rough concrete surfaces. Factory-prepared, it requires only the addition of water on the job.

Gypsum basecoat plaster may be defined as that portion of the plaster coat which is applied to masonry or lathing base, and which supports the finish coat. It is used to fill in whatever additional thickness is required to square a room and provide a true



RECOMMENDED bracing methods for 2-inch solid gypsum inth partition. This partition is non-loadbearing and requires no stude. It is plastered on both sides

even surface for the monolithic surface.

The basecoat is the most important element of a plastered wall.

It supplements the strength of the lath or other base to provide resistance to minor structural movements. Furthermore, a base coat must fully develop the purpose of the finish coat. An extremely hard finish coat such as gypsum or lime-Keene's cement should be applied only to a strong plaster basecoat to develop the full value of the finish coat in resisting impact loads and unusual abrasions.

Three-Coat Application

Three-coat plastering is required over metal and wood lath. A threecoat plaster application comprises the following:

 A scratch coat of plaster is applied directly to the plastering base, cross-raked after it has "taken up," and allowed to set and partially dry.

 The brown coat of plaster, which is surfaced out to the proper grounds, is applied, darbied, allowed to set and to dry partially.

3. The application of the finish coat.

The two-coat application is similar in every respect to the three-coat work except that cross raking of the scratch coat is omitted and the brown coat of plaster is applied within a few minutes to the unset scratch coat. The latter method is the generally accepted practice in applying plaster to masonry and gypsum lath, except in certain localities where three-coat applications are traditional. In the two-coat application, each coat is mixed in a proportion of one part gypsum to 2½ parts of sand by weight.

Fibered Plasters

Fibering consists of mixing hair or sisal fibers with the plaster during the manufacturing process.

Basecoat plasters which require an aggregate are available with or without fiber. Fiber is needed only in the scratch coat over metal and wood lath to provide cohesiveness and minimize droppings. Fiber does not add strength to gypsum plasters.

Lime does not set. It hardens from carbonization, which results when the lime absorbs enough carbon dioxide from the air to change its chemical substance from calcium oxide to calcium carbonate. This is an extremely slow process. In fact, lime plaster seldom, if ever, carbonates completely. Consequently, lime plaster is soft and requires fibering to add cohesiveness to the mass.

Plaster Aggregates

Sand is the most commonly used



RODDING tool is used between grounds or screeds to develop proper thickness and plane

plaster aggregate because it is generally available, extremely economical and it does a good job if properly handled. Good sand for plastering is clean and free from dirt, clay and other foreign materials. Each particle when mixed with plaster must be completely coated with the cementious material.

The 1:2 mix should always be used for scratch coats over lath.

The I:3 mix should be used for scratch and brown coats over masonry and for the brown coats in three-coat plastering jobs. If a leaner mix is used, the plaster strength will be impaired (see scratch tests, preceding page).

Acoustical Plaster

There are especially prepared gypsum acoustical plasters available in white and standard colors. With a noise coefficient of .60, they conform to any architectural design. There is a choice of finishes, troweled and rough floated. They are usually applied over new plastered surfaces, but may also be applied over most existing surfaces. Any good plaster craftman can apply the acoustical plaster.

The noise-quieting plasters are for use on ceilings and other areas not exposed to excessive abrasion.

The float finish acoustical plaster must be applied over new plastered surfaces. It provides the appearance of a heavy sand float finish. Redecorating directions supplied by manufacturers will help the builder insure long life to the sound absorbing qualities of his job.



MOST important element of plastered wall is basecost. It supplements strength of lath to realst structural movements



GYP5UM quaging planters bland easily with lime putty and set before putty shrinks, ingredients are mixed thoroughly

NOVEMBER, 1950





TOOLS common to plasterer's trade





-Wallboard Applications

While drywall systems are being installed by builders in many parts of the country, this type of interior construction is still comparatively new

THE GYPSUM wallboard system is another contribution to the builder's demands for faster construction, economy and quality.

In making wallboard, calcined gypsum is conveyed to the wallboard plant where it is mixed with fibre and other ingredients and water. This wet mix is poured between two sheets of 4-foot wide paper in a board machine and moved down a belt allowing sufficient time for the gypsum to set.

There are three thicknesses of gypsum wallboard—34, 36, and 36-inch with an ivory finish. The length varies from 4 to 12 feet. The 34 inch board is made with square edges only. It is a lower priced product designed to serve specific purposes, such as 1) temporary repairs and alteration work; 2) as a covering over old wall surfaces, and 3) for ceiling repairs where light weight is needed.

The 3g-inch standard gypsum board and 3g-inch wall board is available with square, bevelled and recessed edges. The 3g-inch board, having a larger gypsum core, provides additional fire resistance, strength, and sound deadening.

Insulating gypsum wallboard is made with all types of edges and thicknesses. Aluminum foil is firmly attached to the back surface of this board to provide reflective insulation and inhibit vapor condensation.

Gypsum tile board is made in $\frac{1}{26}$ inch thickness only, and from 6 to 10-foot lengths. These boards have a square edge and an ivory surface but with tile indentations $4\frac{1}{2}$ inches square. Wood-grained gypsum board is made in 4s-inch thickness and from 6 to 12-foot lengths. Edges are square or bevelled. A pajer having a photographic reproduction of knotty pine, bleached or ribbon mahogany, walnut, or figured apen is used.

Preparing The Framework

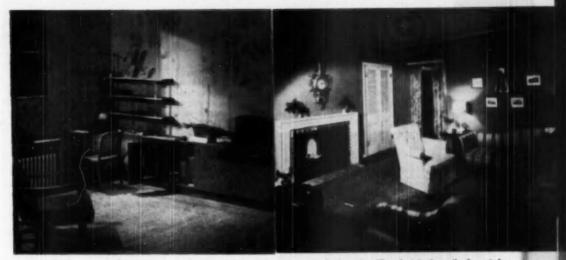
Gypsum wallboard, like any other wall or ceiling finish, requires level and true framework. The wood supports should be properly spaced and leveled in a good workmanlike manner. Faces of studs should be lined up with the face of plates at top and bottom. Studs and joists should not exceed 16 inches o. c., except that their spacing may be increased to 24 inches when 12-inch wallboard is used. Substantial nailing surfaces should be supplied at all interior and exterior corners so that the ends of boards forming the corners may be securely nailed.

Window and door frames should be ordered for 1% or ½-inch grounds, depending upon the wallboard used.

Proper planning is essential to a good and economical job. The first step is to lay out each room by making a rough sketch of each wall and the ceiling dimensions. From these sketches, the number of pieces of gypsum wallboard can be determined, using the largest sizes to reduce cutting and joint treatment.

Double Wall System

The gypsum double wallboard system calls for two layers of gypsum wallboard, each 34-inch thick. The base layer is nailed vertically to the



WOOD-GRAINED gypeum willboards, left, are true reproductions of natural woods. Surface of wallboard, right, is easily decorated

studs, and the face layer is applied horizontally over the base layer with a special adhesive which "marries" the face layer to the base layer. Joints are sealed with a reinforcing tape and a special cement. The finished result is a smooth wall that meets exacting requirements.

First step in the installation of the double wallboard system is the application of the base layer. The base wallboard is first nailed to the ceiling, parallel to the joists with the long edge joints occurring on the joists. Wallboard is then applied to the sides of the room, parallel to framing members with joints on the studs. This is the recommended procedure for rooms no higher than 8 feet 6 inches, and no longer than 12.

After the board is measured to proper dimension, it is scored along the dimension line with a knife and folded at right angles, then scored on the underside of the fold. The board then breaks with a clean, straight edge; or, it may be sawed.

A special cement is mixed using two quarts of clean lukewarm water per five pounds of adhesive. Adhesive is stirred into the water and mixed to a creamy consistency. It is then "buttered" on the back of the face layer of gypsum wallboard with a notched trowel.

The "buttered" side is placed against the base layer and the face board is nailed, using only a few nails, which merely hold the face board against the base layer until the cement sets. The nails are driven so that the nailheads are slightly below the wallhoard surface, or, if not

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so dimpled, they can be subsequently countersunk.

The mechanic next applies the face layer of wallboard to the side walls. The first, buttered layers are attached to the upper section of the walls in a horizontal position. The face layer is nailed to afford temporary fixation until the cement sets.

After the face layer has been in place long enough for setting and drying of the adhesive, usually about 24 hours, all temporary nails in the face layer are countersuik, unless they were dimpled when originally driven.

The horizontal application of the face layers to the ceiling and walls makes for fewer joints, and joints which require less ladder climbing or scaffold erecting for treatment. The "cross application" of the face and hase layers of the gypsum wallboard add strength to the wall, which, with the two layers of 3%-inch wallboard, is 3%-inch thick.

Nailing Is Important

Proper nailing for single and doulife wallboard application is highly important to achieve maximum strength and durability of the wall. Use only 5-penny cement coated nails 15% inches long (13 ga., 15/64 head). Start nailing at center of the board and work outward, spacing nails 5 to 7 inches apart, but not closer than 3%-inch from edges or end of board.

Area of the board immediately surrounding each nail must be held tightly against the framing while the nail is being driven. A crown headed carpenter's hammer should be used. Each oail should be driven until the head rests in a slight depression formed in the board surface by the last hammer blow. Surface of the paper must not be broken by the nailhead or hammer.

Gypsum Board Accessories

One of the most important developments in the wallboard field was the introduction of a method or system of concealing the joints of gypsum wallboard with a plastic material to obtain a permanently smooth surface.

The concealing of wallboard joints has been investigated for years. The gypsum companies first developed a joint cement to fill in the joints. It did not prove to be a satisfactory method because structural movement in the frame did, under certain conditions, cause the thin wedge of cement to crack.

It was found that in order to prevent or minimize cracks it was necessary to reinforce the joint with a material which would resist the tension set up by normal movement in the framing. The cement, without reinforcing, is still used, however, for joints of square edge gypsum board on temporary jobs or in places where complete concealment of the joints is unnecessary.

After many years of research, a reinforced joint system was developed that is stronger than the gypsum board itself. This system, properly applied, thoroughly conceals the joint so that it does not show through the decoration.



Concealing the Joints

Gypsum wallboard joints can be so effectively concealed that it is impossible to see them once the walls are decorated.

A prime objective in applying gyp-

sum wallhoard should be to, first, make sure each room is planned so that a minimum of board joints are made; and that all joints are properly placed and treated to eliminate unsightly blemishes.

In concealing a joint, a special cement is first applied (see illustrations). Only joint cement recommended by the gypsum manufacturer should be used. This is mixed to a putty-like consistency. It is applied by

054





2 SECOND STEP: If horizontal application is used, start at top

SCORED with knils. gypsum 3. board can be enapped clean a broad knife into the channel formed by recessed edges of adjoining boards. Moderate pressure is used, making sure that the channel is filled evenly.

A perforated reinforcing tape is then applied over the cement to the full length of each joint. Tape is imbedded in the cement. Excess cement is removed, then the tape is covered with a thin layer. At this time, all nailheads should be concealed by "spotting" with cement as described later.

A second coat of cement is applied over the joint area, and feathered out as far as necessary to obtain a smooth, even surface. Cement is applied to end joints in this manner, but feathered out a few inches farther than horizontal joints. A third coat is recommended and the surface should be left as smooth as possible.

Before concealing nailheads, it should be made certain that each board is tight against the framing and will not move on shanks of the nails. Depressions should be filled surrounding the nailheads, with the first coat of cement. After drying, a second coat is applied. For better concealment, a third coat is recommended, left as smooth as possible. If necessary, the last coat can be sanded lightly with fine sandpaper.

There is little difference between finishing corners (both inside and outside) and flat wall joints. The exception is that the tape is folded lengthwise down the center to fit the corner. These joints are also treated with three coats of cement, feathered out and left as smooth as possible.

Gypsum wallboard is quickly made to conform to curved surfaces. It is done by scoring the back paper of the board at intervals and breaking the core beneath each cut. The board is then nailed to the curved contour and corners are treated with the reinforcing system described previously, except that the tape is snipped at intervals along one side and applied so that



IN DOUBLE wullboard installations, first layer of panels is secured vertically



FACE LAYER in gypsum double wall system is "buttered" with a special coment



CEILING PANELS are applied first, also. gypsum double wallboard system in.

it conforms to the arch.

Gypsum wallboard may be painted or calcimined or wallpapered. A varnish size should first be applied to the surface of the board before papering or applying calcimine. This size will permit ready removal of paper or calcimine when redecorating. A primer should be applied to the surface of the hoard when paint is used to get an even suction.

Outstanding characteristics of gypsum wallboard construction are the speed with which a job may be completed, and its fire resistance. Numerous tests conducted by the Underwriters' Laboratories Inc, and the National Bureau of Standards clearly establish the fire safe qualities of construction using this material.

The relative cost of a gypsum wallboard job, as compared to a gypsum lath and plaster wall, may be considered as substantially the same, according to the Gypsum Association. Until such time as crews become proficient, it is likely that the cost of the first few jobs may be even greater. But as efficiency of crews increase, costs progressively become lower.

Builders in markets in which this material has been used successfully have not placed emphasis on direct labor and material saving, but rather on the finished result and the time saved in job completion.

It is their opinion that the time saved in job completion is compensation for labor and material cost.

How to Conceal Gypsum Wallboard Joints



FIRST STEP in concealing wellboard joints is to apply cament to channel, as shown, init. Second, reinforcing tupe is imbedded in cament over insigh of joint, and third, right, encess cament is removed. Tupe then is covered with coment

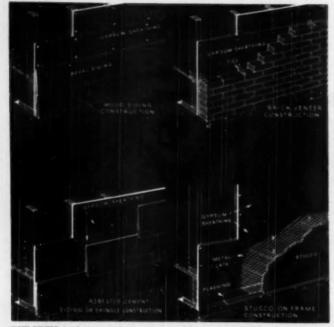


IN FOURTH stage a second cost of cement is applied over imbedded tape, and edges are feathered out, as shown, left. Center illustratics shows how natis are "dimpled." Before concealing natibends, make sure each board is tight against the framing



CORNER JOINTS are finished similarly to flat wall juints, as shown, left. Center, tupo is folded to cover angle, and is commended to estside carner. Outside angles of curved surface are toped as shown, right. Back of gypsum beard is scored to allow bead

-Sheathing Applications



NOW SIDING, brick venuer, ashestos-coment and stucce are applied to gypoum abouthing



TONGUE AND GROOVED aypsum shouthing provides wind-tight walls. Drawing, right

GYPSUM sheathing is manufactured in panels 2 feet wide, 8 feet long and one-half inch thick. Each panel covers 16 square feet of side wall area. A panel weighs less than 35 pounds and is easily handled by one mechanic.

Gypsum sheathing panels are a full two feet wide and each piece covers two feet of stud height. It is dimensioned to eliminate all face loss and give full coverage.

A full eight feet in length, gypsum sheathing fits standard stud spacing of 16 or 24 inches, which factor also reduces waste to a minimum. Experience has shown that the normal wastage is about three per cent. Edges of gypsum sheathing provide snug and continuous contact between adjoining sheets.

Hew to Apply

Experience has shown that best results in the use of gypsum sheathing are obtained when these directions are followed:

 Sheathing should be applied with the long dimensions across the supports and with the groove edge down, interlocking the tongue and groove edges. Ends of panels should abut over centers of supports, and all end joints should be staggered. If properly applied, gypsum sheathing will fit snugly around all window and door openings.

2. Sheathing is secured to studs with nails spaced approximately four inches o. c., seven nails per 24-inch sheathing width per support, except where exterior finish is secured to the frame with nails driven through the sheathing and into the studs.

When exterior finish is nailed through the sheathing, nails should be placed about eight inches o.c., four nails per 24-inch sheathing width, per stud.

 Starter nails should not be less than three-eighths of an inch from edge or end of sheathing.

 Nails should be galvanized, with a seven-eighths of an inch diameter head, one and three-quarter-inch



AMERICAN BUILDER

Gypsum

By following these directions best results can be obtained with a popular gypsum product which is fire-resistant, easy to store and apply

roofing nails, having No. 11 gauge harbed shanks. Unless otherwise shown on plans all exterior walls should be sheathed according to these specifications.

Siding Application

Wood siding should be applied directly over gypsum sheathing, and should be secured with nails driven through the sheathing into the studs. Nails should have a minimum penetration of 134 inches into studs. End joints of siding should be over centers of studs.

For masonry vencer, wall ties should be attached with nails driven, through the sheathing into studs, using mails which will penetrate at least 1½ inches into studs. At least 6D common mails are recommended. Ties should be spaced vertically to conform with coursing of masonry vencer.

ES-nail fasteners are recommended for applying wood slingles directly to gypsum sheathing by the customary concealed method of application. These nail fasteners are designed to provide a simple means of "locking" wood shingles directly to the sheathing. The fastener has two legs, one half enclosing the other. It is hinged near the end and has a triangular loop at the top. The last blow of the hammer flattens the top, causing a locking action. The shingle and sheathing are thus securely fastened together.

Fasteners should be placed about 4 inches o.e. Not less than two fasteners should be used for each shingle. The fasteners are 134 inches long and are available in 25-pound boxes. Estimated weight is 234 pounds per square.

Stucco may be applied to gypsum sheathing by the use of self-furring 3.4-pound mesh lath, which is nailed into the study to a penetration of at least 1½ inches.

When stone or brick veneer are used, masonry ties for the veneer are fastened securely through the sheathing to the wood framing 12 inches o.c. vertically. Nails should be 6D or larger.

Fire Resistance

Gypsum sheathing, like gypsum lath and wallboard, is fire resistant --its mineral core will not burn or support combustion. Nationally recognized fire testing laboratories have proved that an exterior wall consist-

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ing of 2x4-inch studs with 55-inch gypsum sheathing and conventional wood siding on the exterior (with gypsum lath and plaster on the interior) have a one-hour fire-resistive rating when fire is applied to either side.

Gypsim sheathing is manufactured in the same kind of a board machine that manufactures gypsim wallboard and gypsim lath. It is given a water-repellent treatment on both faces, edges and ends. This treatment provides added protection to the material if it is stored outside on a job or in case it is subject to the weather after erection and before the exterior finish is applied. The board is weather-resistant, and the use of building paper is usually unnecessary.

Because it comes in large panels, which tie together as many as seven studs, gypsum sheathing provides good bracing strength and resistance to wind pressures. The results of one laboratory test showed that an 8x8foot frame of 2x4-inch studs, 16 inches o.c. (covered with gypsum sheathing) had a lateral distortion of less than ½-inch under a racking load

of 1.850 pounds.

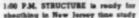
In another test, a painel of gypourn sheathing was subjected to the equivalent of 5½ years of average United States rainfall in a giant "weatherometer." The panel was then subjected to the same 1,850-pound load and the distortion was only 1.125 inches.

An example of the speed of applying gypourn sheathing was offered recently in New Jersey, where a time-study recorded that one house was sheathed completely in two hours and one minute. To do the job in this length of time four men were required (see illustrations below).

Gypsum sheathing was developed more than 20 years ago, and its use has been constantly increasing. Much water repellent sheathing was used in construction of wartime buildings. In many temporary structures it was used without exterior coverings or veneer, though this practice is not recommended for permanent units.

Interior of outside walls must be built to resist the transmission of vapor so that it will be difficult for condensation to occur within the stud space. Also, the exterior of the walls must be built so that vapor can pass out in case it is not all prohibited from entering the inside surface of the wall. Yet, of course, the outside walls must be watertight.







2.96 P.M. FRONT and one side are shouthed with appears abouthing



2:30 P.M. 108 done by four men in the time study is nearing completion

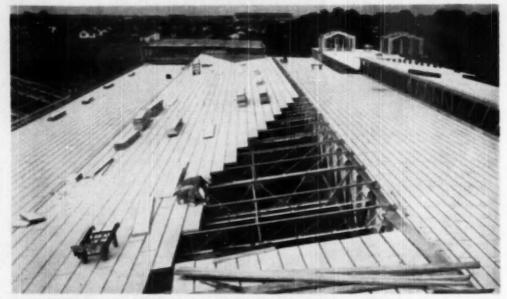


3.00 P.M. A Few minutes after this photo was taken, the job was dame



In Commercial Construction

Short-span gypsum roof tiles, partition tile, gypsum concrete, plank and other gypsum products are extensively used today



GYPSUM PLANE, reinforced on all four edges with galvanized sheet steel, is applied to flat or pitched roofs



POURED-IN-PLACE gypsum roof decks are adaptable to flat, curved or pitched roofs

THOUGH the gypsum products described on preceding pages of this article are extensively used in both residential and commercial construction, there are some that are used primarily in commercial work, and these products are described here. Shortspan gypsum roof tiles are an example.

Short-span gypsum roof tiles are precast. They are reinforced gypsum roof deck units, usually supported by steel tee sub-purlins. A grouting groove along the top edges is provided. The slabs are cast from dense, hard gypsum to give maximum hailholding power. Plain wire, rust-resisting nails offering a 2-inch penetration are satisfactory for ornamental slate or roof tile coverings. The roof tile is designed especially for pitched roof decks, but it is adaptable, also, to flat, slightly curved or warped surfaces. Roof tile dimensions are 3x12x30 inches, Units weigh 17 pounds per square foot and carry a uniformly distributed load of 55 pounds per square foot.

Gypsum partition tile, another product used mostly in commercial type construction, is precast and is available in various thicknesses, both solid and hollow, with indented surfaces to receive plaster. Solid partition tile di-



FINISHED GYPSON wellboard instalintion fits any scheme of decorption

> WHEN GYPSUM planter is applied to lath the steel becomes inhedded in the planter. Reinforced sink in the caseli



GYPSUM PLASTER keys to minimi loth. on shown looking from stud aldo of loth

mensions are 2x12x30 inches. Hollow tile has the same width and length dimensions, but is also available in thicknesses of 3, 4 and 6 inches. Although partition tile has a compression strength of considerably higher than 125 pounds per square inch gross area, gypsum partition tile is designed for nonload bearing construction. The gypsum tile is light in weight.

Gypsum concrete is available for roof deck construction. Poured in place on the job site on gypsum formboard and reinforced with electrically welded galvanized wire mesh, it is adaptable to flat, curved or pitched roof framing. Manufacturers' literature details specifications and construction methods.

Gypsum plank is also used for roof covering. Its dimensions are 2x15 inches by 10 feet. The precast gypsum planks are reinforced on all four edges with galvanized sheet steel, formed in tongue and grooves. They are reinforced, too, with galvanized, electrically welded steel mat. This product is recommended for flat or pitched roofs with true planes. The planks can be installed on curved or warped areas, where the radius of the curve is more than 150 feet.

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While weighing 12 pounds per square foot, gypsum plank will carry self-imposed loads up to 75 pounds per square foot, uniformly distributed. Since the units are precast and laid without groat, gypsum plank may be installed in the winter months without delay. The planks are designed to cantilever over supports and engage other units so ends of planks occur off the supports. Uniform spacing of roof purlins is unimportant.

Lightweight Aggregates

Gypsum plasters, mixed with the lightweight aggregates vermiculite and perlite, are gaining wide acceptance as fire resistive material for steel beams, girders, floors, roofs, columns, girders and trusses.

Screened to produce an aggregate which conforms to specifications for plastering stud, vermiculite and perlite (both processed from their natural rock state) add fire-resistiveness to the fire-resistant properties of gypsum plaster.

Vermiculite, for example, is incombustible, and, in addition, contains thousands of detd air cells which acf as insulators. Also, the shiny, golden laminations of the material are effecIn Commercial Construction ... Remodeling

tive reflectors, turning back heat.

-

Gypsum

The gypsum plasters with lightweight aggregates offer an economical, lightweight and comparatively thin material that provides as much as four hours fire protection for the structural members mentioned above.

Such fireproofing is used to protect structural members from direct attack by fire and to protect them from intense heat which may cause structural failure during the fire period. The failure temperature of steel, for example, is considered to be about 1,000 degrees F. The maximum degree of protection required by most fire codes is four hours.

This gypsum plaster lightweight aggregate system of fire protection is used in office buildings, hotels, commercial structures, schools, apartment houses and even homes.

Applied over metal or gypsum lath to the structural members, lightweight aggregate plasters are approximately one-third the weight of ordinary sanded plaster.

Used on ceilings, for floors and partitions as well as structural members cited above, they make possible buildings of light weight without sacrificing structural or fireproofing qualities of the buildings.

Use in Remodeling

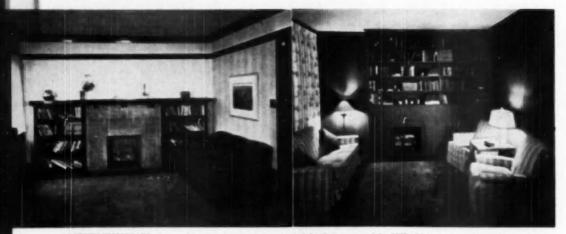
Almost all gypsum products, and particularly lath, plaster, wallboard and sheathing, are used extensively in remodeling of both homes and commercial buildings. The qualities that



QUALITIES that recommend gypeum products for new construction also make them suitable for remodeling. Here an old-iashioned kitchen was brought up-to-date

recommend them for new construction also make them suitable for remodeling work.

In remodeling homes, if gypsum wallboard is used, the same procedure is followed in application as in new construction after the old wall covering has been removed. All existing studs should be checked to make certain they are solid and true, and that they are free from any nails that protrude into the rooms.



GYP5UM WALLBOARD plus good interior planning has converted this living room of the 1920's into a room with warmth



Home Week Report From The Nation

Statistical survey shows the amazing expansion of National Home Week in its third year of observance

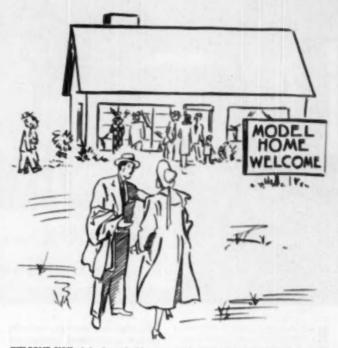
CSTIMATED number of homes opened to public during National Home Week: 1949-6,446; 1950-9,283. Estimated value of homes: 1949 -467.392,700; 1950-\$97,739,845.

The expansion of the Week in 1950 is graphically summarized by these figures, taken from reports of 44 urban centers in all sections of the country. The statistics presented here do not purport to represent the total national participation in the building industry's annual home show; more truly nation-wide than ever this year, the promotion spread to innumerable small towns and rural areas from which data has not yet become available.

The high public interest which has been responsible for 1950's overshadowing all previous home building years was clearly shown by overflow crowds at exhibit homes of homeseekers in all income groups. Houses opened by builders ran the gamut of price and all received a gratifying amount of attention.

In the accompanying table, the figure in the column, "Number of Homes on Exhibit," usually applies to the actual number of model homes, but in some cases represents the number of houses in complete developments where these were placed on display in their entirety. The number of builders significs, in most instances, only those that displayed houses. Many more contributed in other important ways to the over-all success of the week.

NOVEMBER, 1950



WELCOME SIGN of the home builder was out for the entire notion September 10-17

| - | Number | Baller | Price | Number | Value fur- | Number |
|-----------------------------|--------|------------|---------------|----------|--|----------|
| City, State | Nomes | Value | Bango | Famighed | nishings | Builders |
| Contre-Costa County, Calif. | 60 | 430,000 | Mostly 11,000 | | - | 35 |
| Los Angeles, Colif. | 100 | 1,500,000 | 5,855-40,000 | 60 | 100.000 | - |
| Oukland, Calif. | 487 | 4,261,250 | 6,756-52,500 | 85 | 83,345 | 47 |
| Incremente, Calif. | 24 | 290,000 | 7,005-10,000 | 8 | | 30 |
| San Francisca, Calif. | 500 | 5,080,000 | 8.005-55,000 | 25 | - | 80 |
| ben Metes, Calif. | 5.3 | 590,000 | 9,500-22,000 | 25 | 45,000 | 5.5 |
| Bridgeport, Conn. | 14 | 202.000 | 9,500-21,000 | 8 | 1,200 | |
| Washington, B.C. | 39.5 | 3,710,000 | 9,500-53,000 | | 35,000 | 25 |
| Chicago, III. | 55 | 1,038,195 | 10,000-89,000 | 25 | 330,000 | 43 |
| Fort Wayne, Ind. | 15 | 133,006 | 7,005-50,000 | 3 | 7.500 | |
| Indianopolis, Ind. | 900 | 7,500,000 | 6,000-75,000 | - | - | 45 |
| Des Maines, lowa | 2.4 | 170,000 | 8.006-18.000 | 2 | 5.000 | 14 |
| fopeka, Kes | 6 | 450,000 | 6.600-12,000 | - | - | 3 |
| New Orleans, Lo. | 185 | 1.383.000 | 7.506-46.000 | 12 | 30.000 | |
| Baltimare, Md. | 1,000 | 25,000,000 | 0.000-15.000 | | | 36 |
| Deleast, Mich. | 1.000 | 10.000.000 | | | 10.000 | 150 |
| Minnompolis, Mine. | 10 | 134,000 | 9,808-36,808 | 4 | 6.000 | 10 |
| St. Paul. Minn. | 25 | 475,000 | 10.000-18.000 | - | - | |
| Kansos City, Mo. | 15 | 300,000 | 10.708-40,000 | 7 | 42,000 | 13 |
| St. Louis, Mo. | 30 | 400,608 | 9.000-40.000 | 1 | 9.000 | 35 |
| Northern New Jacasy | 18 | 360,000 | 10.108-72.500 | 15 | 23,000 | 18 |
| Albany, N.Y. | 40 | 575.000 | 8.005-38.005 | - | | 25 |
| Bulleio, N.Y. | 1.3 | 390,000 | 4.998-30.000 | inet | | 20 |
| Long Island, N.Y. | 100 | 1,290,000 | 5.008-35.080 | 50 | 175,000 | 60 |
| Niegere Falls, M.Y. | 14 | 189,700 | 4.506-14,506 | | | 10 |
| Rochestor, N.V. | 40 | 960,000 | 10,508-35,000 | ner- | | 12 |
| Synanuse, N.Y. | | | 9.008-15.000 | | - | 30 |
| Cleveland, Ohio | | 1.683.000 | 8,316-40,000 | | - | 42 |
| Buyton, Ohia | 2 | 115,950 | 8,950-14,500 | 1 | - | |
| Felodo, Ohio | 30 | 480,000 | 8.000-25.000 | 100 | - | |
| Voungelown, Ohis | 40 | 500,000 | 8.906-28.586 | . 6 | 25.086 | 10 |
| fuise, Ohie. | 1,182 | 3,080,080 | 4.808-35.000 | 1 | | - |
| Pittsburgh, Ro. | 28 | 344,000 | 9,408-30.006 | inte | - | 24 |
| Previdence, 8.1 | 80 | 1,112,000 | 7,505-33,000 | - | - | |
| Memphis, Yoon | 2,008 | 25,005,000 | 8.008-25.000 | | and the second s | |
| Dallas, Texas | 23 | 305,000 | 6.006-35.000 | 1000 | 80.000 | 20 |
| BI Poso, Texas | | 100,000 | 7,500-14,000 | | | |
| Sett Lake City, Mak | 3.6 | 250,000 | 9,708-30,008 | | 8.000 | 36 |
| Richmond, Va. | 10 | 116,000 | 9.008-14.000 | | 8,500 | 7 |
| Inaltie, Wash. | 160 | 1,506,000 | 7,008-40,008 | - | - | 80 |
| Spokene, Wush. | 18 | 230,950 | 7,858-35,790 | | 14.700 | 14 |
| Tecome, Wash. | .90 | \$50,000 | 4,955-40,000 | 2 | 6.000 | 22 |
| Beleit, Wis. | | 155,000 | 10.000-18.000 | | | |
| Milwaukse, Wis. | 24 | 175,000 | 12,500-28,000 | - | - | 2.0 |
| TOTALS States-34 | 9,983 | 47.720.846 | | 200 | 995,346 | 945 |

89

OW long will it take?" and "How much will it cost?" usually are the first questions asked by the owner of a home or business who contemplates a remodeling job. Builders and carpenters specializing in such work have found that insulating board interiors frequently provide the key for satisfactory answers to both queries.

Ease of handling and speed of application have helped popularize insulating board as a remodeling material. As an example, W. L. Klinger, building contractor of Sioux City, Iowa, was called upon recently to install an 8,800 square foot ceiling during a weekend in order that a local A. and P. super-market might Multiple-purpose panels offer unlimited range of possibilities for beautiful and unusual room designs in remodeling of business and residential buildings

Quick New Interiors With

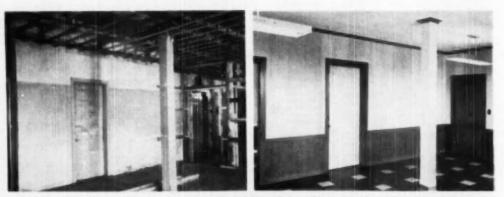
Insulation Board

re-open on schedule. Using insulating board tile, he completed the job in two and a half days. Man hours totaled 209.

The comparatively low cost of insulating board, plus quick application, has encouraged many home owners to undertake such projects as attic hedrooms, basement playrooms, ceiling replacements and similar improvements of a dry-wall nature. It also has prompted thousands of busiressmen to provide more pleasing environments for their customers.

Insulating board interior finishes are the younger members of a family of building materials introduced about 35 years ago. Companion products include insulating board sheathing, lath and roof insulation. All are made of wood, cane or similar fibers. The interior finish products are produced with one surface pre-decorated and attractively textured. They have efficient insulation value and they help to quiet sound.

Since the end of World War II manufacturers have put considerable



COMMERCIAL BUILDINGS of all types land themselves to remodeling with decorative insulating board. These helper (left) and after (right) pictures show how Photo Engraves, Inc., of Bulfais, N.Y., modernized its plant. New ceilings are of ivery tileboard applied in an ashiar patient. Walls above the wainscoting are finished with insulating planks in hermonizing blonds.



MODERN CHAIM is imparted to this club dising recent in St. Paul. Minn.. by its "different" colling tractment. The woll area is finished with insulating beard ties in a light-reflecting off-white. Similar tiles in a tun shade complete the design. In addition to its attractiveness, this colling helps to shearb noise

time and money into re-styling their decorative lines. Color experts and decorators were called in to help develop new and more pleasing surface treatments and improvements have been made in the product itself.

Insulating board interior finishes may be applied with nails, staples, clips or adhesives. Because of varying joint treatments, application instructions should be obtained from the supplier of the board used. They include directions for framing and the best methods for laying out wall and ceiling designs.

The remodeler has a choice of decorative insulating boards in a wide range of shapes, sizes and colors. They may be used individually or in combinations. Frequently the most effective results are obtained by using a variety of products. Interior finish materials include:

Insulating building board: Comes in sheets 4 feet wide and from 6 to 12 feet long. The common thickness is one-half inch. Three-quarter inch and one inch thicknesses also are made. Generally available in white, ivory and natural tones. Other colors are made by some companies. Edges are square.

Invidating board planks: These are long, narrow units, made in widths of 8, 10, 12 and 16 inches and in lengths of 8, 10 and 12 feet. Thicknesses are one-half inch and threequarter inch. The long edges are beveled, with interlocking joints. Decorative beading may parallel the long edges for decorative effect. Available in white, pastel tones and blends. Insulating board riles: Made in 12x12-inch and 16x16-inch squares and in 12x24-inch and 16x32-inch rectangles. Thlcknesses: one-half, three-quarter and one-inch. Made in white, ivory and blends. Edges are teveled, with interlocking joints.

Insulating building board is a practical material for covering big areas rapidly and economically. When applied vertically, a single board will provide floor-to-ceiling coverage. Applied vertically, one sheet will span up to 12 feet of wall area.

Whether the big board is put on vertically or horizontally, there will be joints to be treated. With a little planning these joints can be made an integral part of the room design.

The simplest joint treatment is to bevel the board edges and bring the butts into moderate contact. Paneled effects may be obtained by covering the joints with batten strips or mouldings. They may be of wood, metal or insulating board.

Joints can be accented in other ways to create unusual decorrative effects. One is to insert a wood moulding between the boards. Another is to inset moulding strips into the joints. An open joint is another possibility. It can be achieved by leaving a space of about three-quarters of an inch between the units and painting that space a contrasting color.



Special tools are made for beveling, grooving and rabbeting insulating board. They include the Stanley Fibre Board Cutter (Stanley Rule and Level Works, New Britain, Conn.), the Bevel-Devil (Kimball M(g. Co., Royal Oak, Mich.) and the Shorty Knife (B. A. Rainwater, St. Louis, Mo.).

Insulating hoard can be given additional decoration, if desired, by painting the surface, burning with an electrically heated pencil or stenciling.

Insulating board planks and tiles, of course, supply their own joint treatments with their beveled edges. These products lend themselves to a practically unlimited number of designs.

Insulating board plank is primarily a wall material. It may be put on either vertically or horizontally and in either uniform or random widths. Where ceilings are low, vertical application will give the room a feeling of greater height. Conversely, horizontal placement will tend to lower the ceiling and make the room appear more spacious.

The fact that a wall is more than 12 feet across need not bar the horizontal application of plank. An attractive design can be worked out by





FOR FAST application. insulating board tiles may be stapled to furring strips

using the plank full length across the center portion of the wall, supplemented by panels at either end. Interesting end panels may be made by filling out the wall areas with vertical plank or by covering them with square tile erected in a diamond design. Mouldings over the vertical UNUSTAL WALL and coiling treatments give individuality to this attic room. insulating building board, in the large panels, cover coiling and three sidewalls. The fourth wall is of insulating this

joints and in the corners will frame the panels.

Additional interest can be given to an insulating board wall through the use of a wainscot. Some manufacturers make a special insulating board wainscot with a toughened and hardened surface, usually in brown for contrast and serviceability. Hardboard wainscots also are frequently used.

While insulating board tiles are employed most frequently for ceilings, they are readily adaptable to building "different" walls. A distinctive design, for example, is obtained by applying square white tiles diago-

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CEILING PATTERNS: This design utilises units 12x12 inches and 12x24 inches or 16x16 inches and 16x32



HERE 12x12 inch or 16x15isch units are applied diagonally to achieve an attractive diamond pattern.

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THIS simple square pattern is easy to apply with either 12x12-inch or 16x16-inch tileboards for a trim effect

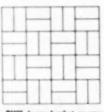


ESPECIALLY good for large rooms, ashiar patterns may be obtained by the staggering of joints

HERE square and rectengular units are combined. Large units are best for big area installations



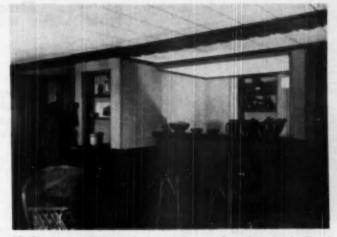
IN THIS pattern squarea and rectangles are alternated. Suitable for uniform or varied colored cellings



THIS loase basket weave pattern results from combining equares and rectangles in manner shown



A VARIATION of the basket weave pattern, this design is most effective when used in large interiors



COLOR and design add abset to this basement fun room. As insulating board colling of light-reflecting while brightens the room and helps to minimize noise. The walls combine variogated insulating board, set in a decorative diagonal, and vortical insulating planks.

Advance planning and the proper selection of materials are highly important. Much time, labor and material can be saved by making an accurate layout of the area to be treated before any work is done. The layout should be drawn to scale and the pattern should be symmetrical. Few rooms lend themselves to an exact uniform number of panels, particularly in the case of ceilings. Particularly in the case of the room in equal dimensions. An accurate layout will enable men to place farring properly and provide for the best treatment of irregular areas,

The character and use of the rosen will dictate the choices of material and design. Both home and commercial interiors, to be truly pleasing, must provide a fitting background for their primary activities. A church interior should be subdued and digmined; an anusement room can be colorful and gay. The endless variety of effects possible with insulating board enables the remodeler to be a designer and decorator as well as a builder.

Data and photographs constery The Insulation Board Institute

THE 3.4.1 system of horizontal application of insulating hoard is especially adaptable to 8 foot walls up to 12 feet wide. Upper and lower courses (1 foot and 3 feet respectively) are cut from a 4 foot wide hoard. Middle course is a standard 4 foot wide hoard. Beveled edges or moulding decourse horizontal joints

nally above a brown wainscot. Another interesting treatment is to use rectangular tiles above the wainscot

The number of ceiling patterns which can be worked out with insulating board tiles is limited only by the imagination of the planner. The selection of a pattern, of coarse, should be governed by the type and character of the room to be treated. A simple square design, using either 12-inch or 16-inch tiles, is one of the easiest to put up and is suitable for any room. An ashiar pattern, obtained by applying rectangular tileboards with staggered or "broken"

joints, is especially effective in large

rooms. For recreation rooms, stores,

lounges and other places where gay, striking ceilings are wanted, colors

and sizes can be combined to develop

The most satisfactory results are

obtained in application when insulat-

ing board interior finishes are al-

lowed to adjust themselves to the at-

mospheric conditions of the rooms

in which they are to be installed.

This can be done simply by unpack-

aging the panels, at least 24 hours

before application is started, and ar-

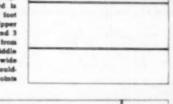
ranging the units around the room

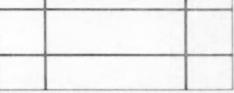
so that air will circulate on both

eye-pleasing patterns.

surfaces

in an ashlar pattern.





WALLS over 12 leet also may have the 3.4.1 treatment. Here inanisting building board is applied as above, contered on the wall. Entremities are of building board orected variculty. All joints are covered with moulding. Norteental mouldings continue across the vertical panels to complete the pattern. Where celling height is a few inches more than 8 feet, the lower course can be installed above the floor line, the space covered with base board







Hog farrowing house, remodeled to ofter all the comfort and semitation of home, is called "indispensable to high production in a cold climate"

ORIGINAL house after move to dry land

THIS ultra-modern, labor-saving farrowing house on the C. W. Hammond farm near Nebraska City, Neb., shows what intelligent remodeling can accomplish. The 15-yearold structure, now twice remodeled, was originally a 24 by 48 ft. halfmonitor house, part of a farmstead built on bottom land near the Missouri River. Two years ago, Mike Hammond, who manages the 320 acre farm for his brother, insulated the house, removed the upper row of windows, extended the rosil to form a gable, and put in a ceiling to make a loft large enough to hold five tons of straw-enough for an entire winter. The following year, he installed a vermiculite insulating concrete floor to solve a serious moisture problem caused by poor drainage of the land and its proximity to the river.

But remodeling did not stop there. The Missouri, when in flood, spilled water into the hog lots; so this year the Hammond Brothers, widely known as progressive pure-bred hog breeders, decided to move the entire set of farm buildings to high ground near the highway. They also set a production goal of 1200 pigs a year in two farrowings from approximately 70 sows. This meant that farrowing would have to start the first of February-a month of hitterly cold weather and driving winds in Nebraska. A central farmwing house with radiant hot water heat in the floor slab was the answer.

The old hog house was moved up from the river bottom on trucks last February, During that trip, the wind caught and twisted the house, doing considerable damage; but the original lumber and construction were good



.After

EXTERIOR view after remodeling. Nebraska farm building is 15 years old

enough to warrant necessary repairs and additional remodeling. This got under way in July. The house was securely anchored to a new foundation, with its axis north and south instead of east and west as formerly, The satisfactory performance of the vermiculite concrete slab, neces-



36 sows and litters at one time

FARROWING house layout.

The entire setup of central

house and portables will handle

a "Powder Room"-for Hogs

sarily abandoned when the house was moved, influenced Mike Hammond to use the same material for insulating the new radiant heat floor in order to reduce heat loss downward through the slab and laterally through the foundation. A 4-inch slab of 1:6 mix (1 part portland cement to 6 parts vermiculite concrete aggregate) was placed on a vapor barrier, well lapped and sealed. The vapor barrier was laid over a 4-inch sand fill. On the vermiculite concrete slab was placed 900 feet of 1-inch diameter copper tubing, spaced one foot o.c. lengthwise. The tubing was covered with sand concrete; 152-inch thick over the crown of the pipes. Heat is to be supplied to the pen areas only. The center alley floor will not be heated.

A 17 foot addition was built on the north end to provide space for the hot and cold water supply, feed bins (capacity 80 hu.) and the propane gas-burning furnace. This furnace is equipped with automatic inside and outside controls. A 1000 gallon capacity tank furnishes fuel for heating the hog house and two dwellings, hesides.

Six additional windows, 30 inches by 28 inches, 6-light (matching the existing windows), were placed in the east wall to admit light and sunadjustable side-ears. The original half-doors at each end of the building were retained. Electricity was installed.

By reducing the width of the center alley to six feet (which is still wide enough to allow the use of a feed cart), pens were made longer. There are twelve 8 by 9 foot pens, six to a side. Farrowing crates are used.

The floor of the center alley was



COPPER taking on insulating sub-sish is covered with sand concrete topping



COMPLETED foor on one side of house. Heat is supplied to pen areas only

made 1)% inches higher than the penfloors, affording readier access to the pens over the ton of the stationary alley partitions. These partitions are



INSULATED radiant heat floor requires little bedding

NOVEMBER, 1950

solid, to eliminate floor draits; but partitions between pens are slatted to permit air circulation.

There are no gutters. Pen floors slope 355 inches from the alley to the sides of the house for drainage to the outside. The slove also enables the sow to indulge her preference for lying with her head "up-hill." Soiled hedding is shoveled out through the animal outlets (equipped with double doors, 25 inches wide and 41 inches high) and loaded into a manure spreader. Fresh hedding is thrown down from the loft through an inside scuttle hole. The loft is supported on each side of the alley by wooden posts, that also serve as anchors for pen partitions.

There are three runs of outside pens, floored with concrete, on each side of the farrowing house. An ingenious feature of these pens is the (Costinued on page 134)

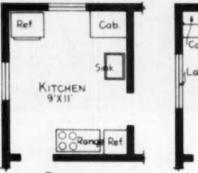
91

Remodeling Services Attract More Clients

Though modernization work is only 10 per cent of this builder's business, it performs three important functions for him



REMODELED EITCHEN is typical of work done by Procour workmon



BEFORE



AFTER



GARAGE, above, was remodeled as shown right by adding larger similar glass areas, a wide overhang, and new interior woodwork and furnishings

REMODELING work performs three important functions for an Oshkosh, Wisconsin, builder—though it represents only 10 per cent of his total construction business. It enables him to contact more new clients, retain more regular ones, and to keep his name constantly before the public.

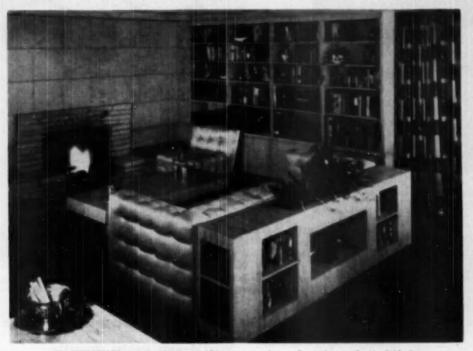
Remodeling plays this significant role for the builder, Edward A. Preour, because he recognizes it for what it is-a highly specialized business. Members of the Precour firm, which is geared to handle any kind of construction job from a filling station to a large store, explain it this way: Remodeling work is an integral part of the construction business, and requires an equal, if not greater emphasis than new construction. If you can make a client happy today with a remodeled kitchen, your prestige is enhanced just as much among his neighbors as though you had satisfied him with a new home.

To Precour, this means having specialized workmen do remodeling jobs; and emphasis on customer satisfaction. "With our setup," he explains, "we are able to serve the people in Oshkosh and vicinity in all their construction needs—not just in new construction. It means, as long as we do good work, we have more people coming to us all of the time."

Remodeling jobs done by this firm are initially handled by Precour himself. He turns the job over by work order to a superintendeut, Lores Radloff, who carries out the planning, detailing, drawing and cost estimating. Under Radloff there are several carpenters with a considerable number of years experience who spend 90 per cent of their time on remodeling jobs. They know how to take care of a wide variety bf job situations.

Before the job begins, a study is made to determine exactly what materials are needed. Larger items are delivered by truck or by the firm's regular truck driver following a scheduled route to other jobs. Small items of lumber and hardware are picked up by the man in charge of each job before he goes to work each day, so that once he is on the job be does not have to wait for materials. Unforeseen needs for materials are immediately taken care of by a truck kept permanently at the office for that purpose.

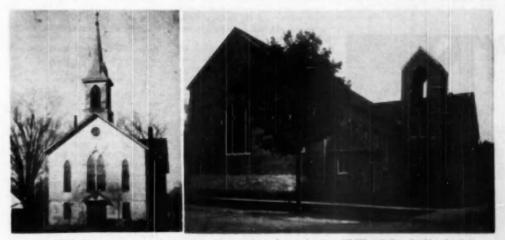
Versatility of the Precour organi-



ALL WOODWORE, including furniture in this room, was done at Precour's new shop in Oebkosh

zation is increased by their ability to handle unusual woodwork requirements. Highly ornate cornices, a church pulpit with intricate wood carvings, or specially-built furniture can be made in their new shop. Example of how this versatility pays off for the Precour firm is one kitches recently remodeled by the firm in Oshkosh. Because of high ceilings and specific dimensions to follow, standard cupboards could not be used. Owner of the old home gave Precour's superintendent a rough sketch of what she wanted, with the request that the kitchen be made "as modern as possible." The results were outstanding, primarily because Precour could turn out tailor-made woodwork and had experienced remodeling men on the job. Several more kitchen modernization jobs have been offered Precour as a result of this. Meanwhile his firm does about 20 per cent of all store front and other commercial remodeling in his community.

To keep up-to-date the Precour firm keeps a file of remodeling ideas obtained from various magazines.



CHURCH, above, was moved and remoduled as shown, right, by Precour for about \$75,000, including plaubing, hosting



DECORATIVE 2x3-inch makequity vortical members separate dining room and entry which have clay tile floors. Below. Uving room has oak parquetry flooring



BELOW, view from kitchen to loggia through dialny room along plate glass wall. Ladder in patio leads to aun deck. Kitchen floer is of Armstrong linoleum





SHADOWS from California oun through open skylight form intriguing patterns against vertical redwood skiling at the front entrance of this home

Ranch Style for Hill Site

Steel dowels, angles strengthen framing to accommodate use of glass wall in quake area

THE FRONT elevation of this home foverlooking the Pacific ocean at La Jolla, California, belies its size, for a portion of the house is hidden behind the 10-foot slope of the lot. Enclosing approximately 2,500 square feet of living space, excluding the unfinished rumpus room, the house has four baths, seven wardrobes, three linen closets and a nook in addition to time other rooms and the outdoor living space around which the living quarters are grouped.

Accent is on the horizontal in the elevations of this home; the lowpitched roof extends four feet six inches at the enves. Special 4x8-inch block, 18 inches long, the lines of the redwood siding and the window groupings are part of a design appropriate for the low coastal dunes of the west.

Framing

One-half-inch reinforcing rods cast in the foundation extend vertically through the cores of the lightweight concrete masonry units at the front section at 24 inches o.c. Although other walls are conventionally framed, in the rear 2x6-inch stud, 16 inches o.c., between notched 4x6-inch posts with a 6x6-inch plate beam form the lower level of the wall; the second story of the rear wall is framed with 2x4-inch studs between 4x4-inch posts with a 4x12-inch plate beam. Steel dowels, 5x14 inches, penetrating the posts and beams, and steel angle brackets are used to strengthen the joints of the post studs and plates (see drawing). This method is used for three reasons: for earthquake protection, for convenient installation of plate glass and for design.

Notched-in bracing adds further rigidity to this rear wall which supports 3x10-inch floor joists, 2x6-inch ceiling joists and 2x4-inch rafters.

Interior Finishes

Floors in the kitchen, bathrooms, runpus room, maid's room, laundry and hall are finished with Armstrong asphalt tile and linoleum. Natural clay red tile cover the floors of the loggia, entry and dining room. Other finished floors are select white oak except the floor of the living room which is oak parquetry.

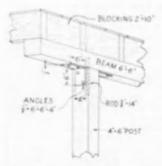
Portions of the living room, dining room and entry are paneled with mahogany; other rooms are finished with three coats of paint on plaster.

The home, a Kessling Modern Structures project, was built by Wilham Kessling.



ABOVE. cadar shingles cover the lowpitched root that access the horisontal motil of this home. High window stills of the front bodroom are an aid to varying furniture arcangements. Complete lot. measuring 85x120 fast, is serviced by a sprinkler system of capper tubles, Upward-acting garage door has tengue and groove sections. Other portions of house are finished with redwood siding. Parapet encioses sun dock above reof. Floor plan at right reveals how rooms of house are grouped around path enciosed on two sides by floor to-celling plate glass walls of loggia, entry, dining room and kitches. Floor of paths is red concrete

1



IN THE framing for the rear wall of the house N_{2} 214-inch steel dowel pins penetrate and join the posts and beam plates used around the ortensites window openings. N_{2} statist steel angle brackets at the first floor, and N_{2} statist brackets at the second floor odd further rigidity to the structure

HOVEMBER, 1950



Same Pa

LOWER FLOOR PLAN

-



THIS HOUSE, designed by Victor Civkin. A. I. A., and being built by the Yest Construction Co., is proving unuscally popular in staid Now England area:



An Unusual Small House

Duilder of small Cape Cods changed his basic design to achieve different wall and window treatment so that he could offer his buyers houses other than the "usual" in his area

A BOUT a year ago Joe Yost, of Bridgeport, Com., was building small conventional Cape Cod houses to sell for about \$10,500. His speculative building program was moving along all right, but he overheard many visitors to his project remark that his houses were "just like Soand-So's" or "there isn't anything different here than we have seen before."

Young Yost decided that because he was just getting



SPECIAL ATTENTION to location of the windows and an oddshaped living room, along with a completely equipped all-electric hitches are points which give this house unusual appeal to buyers nicely started in the business, he should assure himself of more probable success in the future by offering something more modern and probably a little better than his competitors at the same price. While he was completing his first group of about 25 conventional houses, he launched into a study of what he might do with his houses to make them more outstanding in an area which is traditionally wedded to Cape Cods and Colonials.

One of his first visits was with Victor Civkin, A. I. A., of the General Electric Home Bureau. Civkin's assignment was to offer a two-bedroom house with room for two more bedrooms in an unfinished attic for less than \$12, 000. The results of Yost's information on what his prospective purchasers desired plus Civkin's ability to come up with something "different" in this type of house is shown on these pages.

In addition to developing an exterior with a great deal of individuality, this house, priced at \$11,500, is completely G.E. equipped. The kitchen has a dishwasher, waste disposal unit, refrigerator, range, washing machine, metal cabinets, ventilating fan and clock. The boiler, which heats hot water for both the heating system and domestic use is also G.E. All this is included in the regular price.

The houses are built on concrete slabs with wrought iron pipe to carry hot water for radiant heat.

To begin with Yost started five of these new houses on a small scale in Bridgeport. Even before he had the first one completed and ready for showing interest was running so high he knew he would have no trouble selling the units. In fact before he had the five houses completed and sold, he purchased land in the Bridgeport area where he is currently erecting eighty on 100 by 150-foot lots. By



LIVING BOOM looking toward the kitches, shown ot right. Note special treatment of wall around stateway to unifished second floor

reversing plans, changing window arrangements and color schemes he is achieving enough variety to make the development much less monotonous than it would be if he had kept on building the Cape Cods.

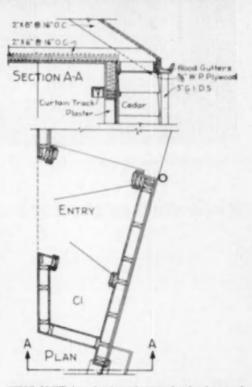
The houses are framed conventionally except for the odd-angle living room wall and the connection between the roof and this portion of the wall, where second floor ceiling joists extend to form the overhang and rafters are tied to them.

The concrete slab floor is covered with asphalt tile. Walls are plastered and the bathroom is completely finished with ceramic tile on the floor and wainscoting. Windows are metal casements. Bedroom closets are wardrobe type with sliding doors. Other doors in the house are flush with birch finish.

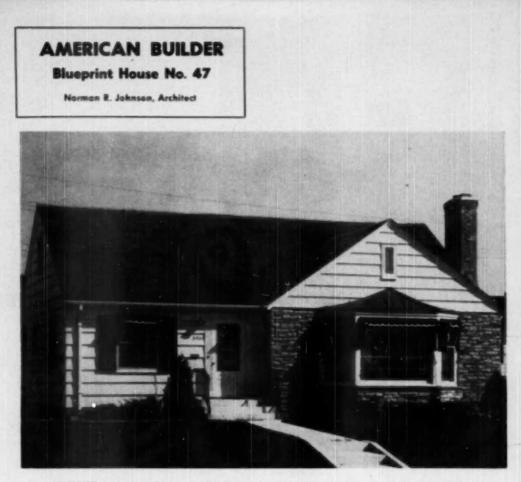
Prior to his entry into the home building field, Yost was a plumbing foreman. He eventually established his own plumbing business and from that stepped into the job of building the entire bouse.



WIDE OVERHANG above the edd-angle wall of the living room gives ample protection from the sun for the large window areas. The vestibule and quest closet are at the left in the photograph



DETAIL ABOVE shows feaming at juncture of soul and corner of vestibule. Wide overlenng above entrance affords protection from weather. Entrence, vestibule, and closet dotail also shown



SHINGLES, stone and wood put together by mester workmen, all cambins to produce a home pleasing to the eye

Evolution of the 1940 Colonial

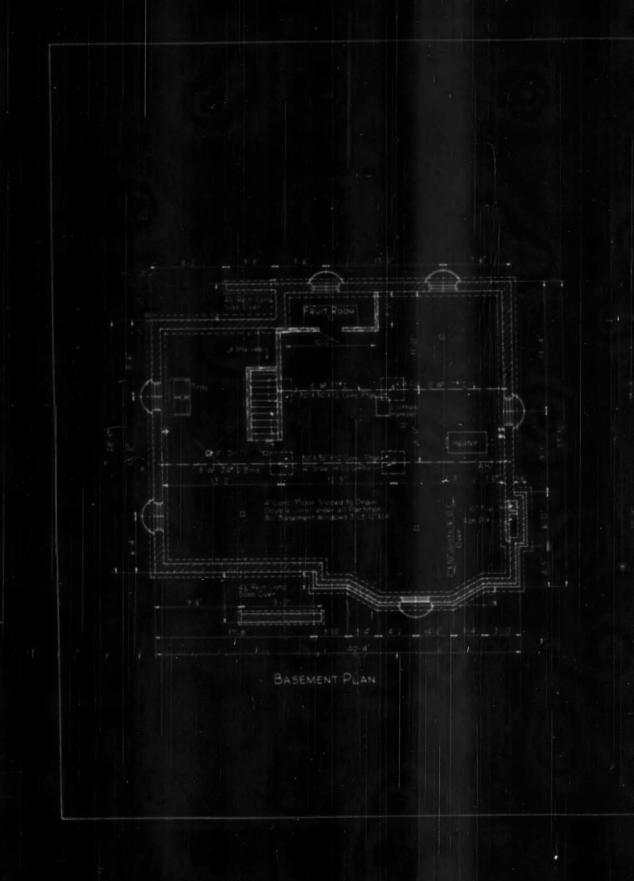
SINCE the close of World War II, domestic architecture as it applies to single family dwellings, has continued to keep pace with the technological advance in industry. This change has been accentuated by the rapid improvement in many of its basic materials such as glass, for instance, which has opened opportunities for expression heretofore unknown.

The strictly formal colonial house of 1940, with its finely executed details and correct proportions, has evolved into a comfortable one or one-and-a-half story structure that is entirely functional and devoid of any excess frills. This month's blueprint house designed by Norman R. Johnson, St. Paul, Minn., architect, is a good example of this design principle. While it is modern in every respect, it has characteristics that are reminiscent of colonial days, and features which have received expressed approval from the home building public.

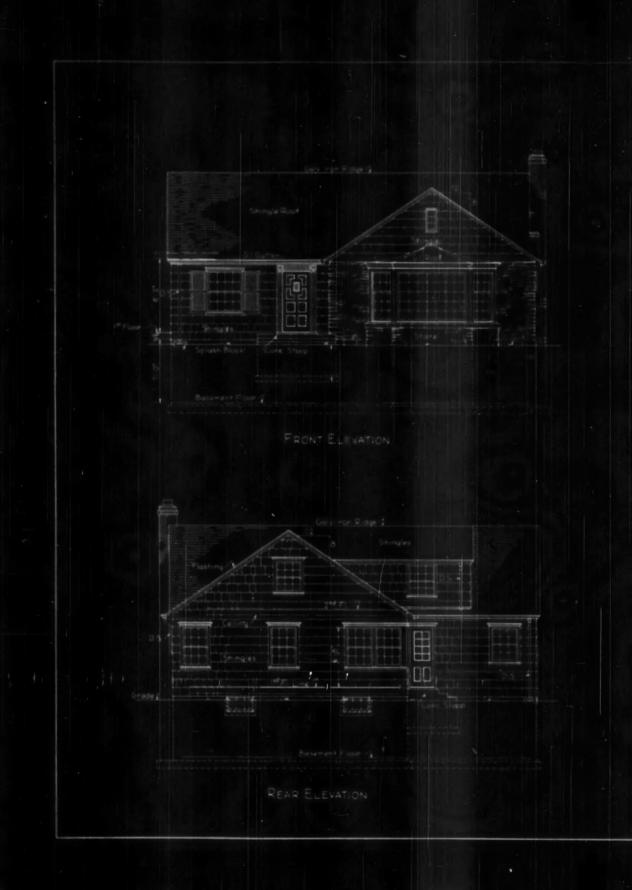
The room arrangement follows an established pattern

with living and dining room on either side of the reception hall, and exposure toward the street front. The hall adjoining the reception hall, while providing access to the two bedrooms that face the rear, makes it possible too reach the kitchen without using the dining room as a traffic artery. A full basement is provided in which ample space is available for a recreation room, laundry and all utilities. A forced warm air gas-fired furnace supplies heat to all rooms. This area is left in an unfinished state for future expansion. Roof and sidewalls of the house are covered with 16- and 24-inch cedar shingles. Local stone is used for wall facing on front bay.

For complete one-quarter inch scale working plans of this house write American Builder Home Plan Service, 30 Church Street, New York 7, N. Y.





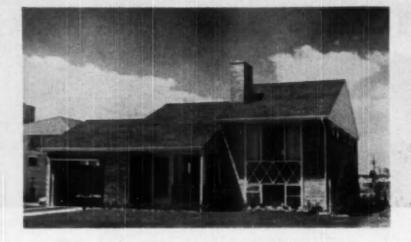




BUILDER Selected Homes

Part of a multi-house subdivision, yet--

Individually Styled



SPLIT level arrangement of floor areas provides living and service units on ground floor, with hedreems at upper level. Basement area under bedrooms furnishes ample spare for recreation and utilities. Booms cossily accessible and with plenty of window area result with this type of plan.

CONTRARY to general thought, builders who are design-conscious are definitely on the increase. The "peas in the pod" type of home construction is fast becoming a thing of the past as a greater choice of small home designs become available to the home builder.

A leader in this groot is Edward B. Hawkins of Denver, Colo., who design d built a two-block development of individual hose of which this house is a part. To keep costs within line, several basic plans were developed with the split-level idea of room arrangement in mind. By moving elements of the plans, such as garages, porches, terraces, and also the main living rooms to a number of different positions, a variety of exterior designs and interior layouts was accomplished.

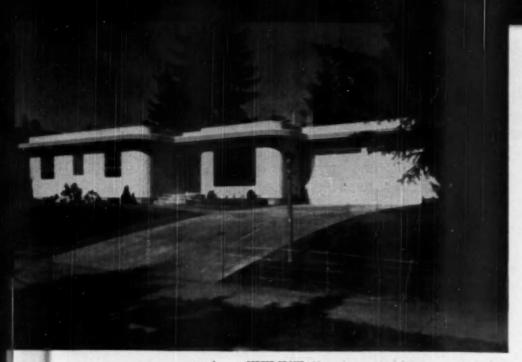
Plan of house featured is arranged so that it can be conveniently placed on a 50-foot lot with ample protection on each side from encroachment by neighbors. This is made possible by the hattery of high windows on the side walls of bedrooms and bath—which also provide for cross ventilation, and the placing of the garage and the terrace on opposite sides. To assure privacy at terrace the garage side wall should be extended to rear wall of house.

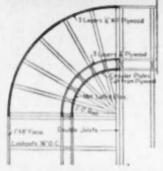




CRAWL space for heating ducts in unescovered area of basement

ECONOMICAL pinn perimeter established for two bedroom house





CORNER OVERHANG framing detail of cantilever construction to obtain rigidity STREET FRONT of house features rounded corners on projecting bays

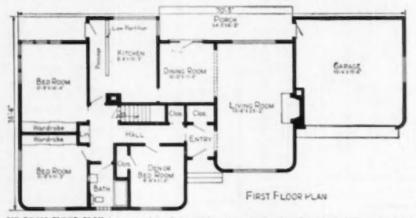
Stucco Offers Design Innovations

Plasterers association sponsors "Melody House," a feature of Tacoma Home Show

ATH, plaster and stucco, age old surfacing materials in the home building field, are used effectively in the design of "Melody House," model home sponsored by the Contracting Plasterers, Inc., Tacoma, Wash.

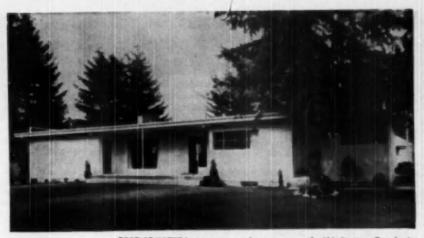
Among the features of this house

is the white exterior surface of cement stucco troweled smooth. The character of the exterior treatment or design, as it applies to the projecting bay corners, roof overhang and wall parapet above, is indicative of the effects that can be obtained with this facing material. Of particu-



SIX ROOM FLOOR PLAN is arranged for living without zone overlapping. Area totals 1509 square feet

108



REAR OF HOUSE instares a covered terrare recessed within its over-all perimeter

lar interest are the unusual effects ilhustrated on the street front of the model home.

Interior surfaces reflect the same inherent characteristics of plaster. Walls of all rooms except kitchen and hath are done in "textured plaster," with the color blended into the plaster mix. It is claimed that this type of surface is virtually dirt-proof. Where exterior corners are rounded the interior surfaces follow the same contour. This creates a smooth unbroken wall surface which is further accented in the living room through the use of a moulded plaster light trough and cove at the intersection of walls and ceiling. Plaster cove in all bedrooms is an actual continuation of wall into ceiling. A more formal treatment is provided in dining room with a delicately moulded cornice. Jambs and heads of large openings to main rooms are plaster, moulded to a three inch radius. All window and door openings are provided with metal frames with return plaster jambs and heads. All wood trim around openings was eliminated. Walls and ceiling in kitchen and bathroom are smooth troweled putty finish plaster above the clay tile wainscot.

The construction of the house follows traditional specifications. Basement walls are 8-inch concrete on footings, with all framing above of wood. Plaster base is secured to sheathing and studs for the reception of exterior stucco and interior plaster. The framing for rounded corners of bays is set to a two foot radius with curve formed with the use of a template applied to stucco while moist.

Framing for roof overhang is of cantilever construction. When look-



LIVING BOOM has plaster lighting trough and cove at wall and celling intersection



EITCHEN walls and celling combine plaster with glassed the for cleanliness

outs run parallel to joists they become an extension of the latter. When they are placed at right angles the lookouts are extended to the first line of joists inside the wall and blocked securely. Exterior sheathing on curved surfaces and facing on overhang is composed of three layers of 54-in, plywood. The plywood for concrete forms was re-used as sheathing.

House is composed of six roums with two-car attached garage. Master bedroom is of generous size, and there are two smaller rooms for children. One bath serves all rooms. The stub wall in kitchen forms a passage for access to other areas.

What Comes Next?

84 R. E. Saberson

Now that the government can regulate loans for new construction. Suberson says, "The question before the house revolves around the tightness of the lid and who will sit on it." And there are other problems

THE QUESTION propounded in the title applies to homes only. It seeks no answers concerning the complex international situation. Nor does it infer that there will be found in this brief dissertation any pronouncements as to what is going to happen to home building in the days to come.

What takes place in the far-flung industry will, of course, be determined by what happens internationally, nationally, industrially how tight the list on housing credit is going to be the extent of controls the availability of building materials and labor—especially the latter.

While we hear a great deal about the shortages of lumber, plasterboard, cement, roofing and such materials, the fact remains that if all of them were available in ample amounts it would not offer a solution to getting the house finished that has been dragging along for most of the summer.

A friend of ours who carefully accumulated all the necessary materials to build a garage is still without protection for his car for the perfectly good reason that he hasn't been able to keep the peripatetic contractur and his meager crew on the job long enough to finish the simple structure.

The bigness of the boom has caused all kinds of trouble for all parties concerned in the building industry ... manufacturers, distributors, contractors and the ultimate consumer.

As is always the case when demand so greatly exceeds supply, everybody is looking for somebody to blame for their inability to get building materials in sufficient quantities to finish the job . . . or even start it in many cases.

Generally speaking, the accusing finger is pointed at the manufacturers and suppliers of materials rather than labor. However, it is our considered opinion that the latter is by far the bigger problem and it is shared by a contractor who told us only today that he is all set to begin the construction of a 128-unit apartment building as far as the necessary materials are concerned, but that he is stymied completely by labor shortages.

The building of a house actually comes close to being the most complex undertaking in any industry since it involves so many different types of labor, each handed together into its own particular craft, guild, union or group.

The unavailability of cement workers to put in the foundations stops the project for everybody else. Same with electricians, plasterers, carpenters, plumbers and so on down the long line of workmen.

For that reason the answer to "what next" will be largely determined by the availability of manpower for without a well-halanced supply of a wide variety of workmen, house construction will be forced to a substantial slow down.

Naturally a war economy promptly absorbs manpower of all types and kinds. The "Situations Wanted" ads in the classified section of the Sunday papers almost completely disappear while the "Help Wanted" columns grow to unprecedented lengths.

Remember our postwar fears concerning the unemployment problem and what could be done to help the returning GI's find work? And the book that was written by a Government official who described at great length the desirability of setting 60 million as our employment goal?

Sixty million seemed like pretty much of a dream at the time but it was reached so easily and so quickly it now appears the sights were low when we take into consideration the fact that 61.214,000 people were gainfully employed at the end of the first half of 1950.

Then along came the conflict in Korea and the need for greatly expanded production to meet military demands. With 61,214,000 already on the payrolls it is needless to point out that the manpower problem apparently will loom large, at least for the time being.

How then can we expect much in the way of home building if we already are so woefully short of men?

Part of the answer will be found in a recent report by the Bureau of Labor Statistics which reveals that "there are some 45 million persons age 14 and over who are outside the work force." Obviously this represents a reserve of manpower that will be drawn on at least to some extent in the months ahead.

All of which adds up to the inescapable fact that the demand for housing will increase in direct proportion to the number of people who are employed. If we step up production, we automatically step up the need for homes. Consequently we soon find ourselves chasing our tails around in a circle and getting exactly no where except to come to the general conclusion that it will take more and more houses to satisfy our national needs and that there will be fewer and fewer people to build them.

And then quite naturally there is that ever-present problem of money ... or "housing credit" as we have come to know it in the booming postwar days.

Now that the government can regulate loans for new construction even though it may be financed independently of FHA and VA guarantees, "the question before the house" (a fitting phrase) revolves around the tightness of the lid and who will sit on it.

With \$37.2 billion of outstanding home mortgage delts, the need for a sitter is plainly apparent. Surprisingly enough, more than half of this huge sum (\$21.9 billion) is the conventional type with the remainder about equally divided between FHA and VA.

Easy credit sent home building to unprecedented highs and provided millions of families with places to live. Still it is hard, and in some cases almost impossible, to find suitable living quarters at prices the average family can afford to pay.

In the meantime those families who have purchased homes since the close of World War II seem to be sitting pretty. The oft-predicted slump in values failed to materialize. On the other hand, practically any postwar home buyer can now sell out at a profit if he so desires.

Furthermore it would seem that his investment will not depreciate in value in the foreseeable future if we are to continue to spend for mili-

(Continued on page 136)

RAIN or SHINE it's always fair weather for Rö-Way OVERHEAD TYPE DOORS

No matter what the weather, Ro-Way Overhead Type Doors always work like a charm-smoothly and easily. It's plain to see why-

- When opened, Ro-Ways are up and inside-completely protected from the elements.
- Designed so that moisture-swelling of the jambs has no effect on their easy operation.
- · Heavy winds can't blow them open or shut.
- Ro-Ways are never bothered by ice and snow. Won't freeze shut. Open easily even with heavy snow drifts against them.
- · Always easy to close, even if flour is raised by frost.

That's why it's always fair weather for Ro-Way Overhead Type Doors. And why it will pay you to specify Ro-Way for all of your residential, commercial and industrial installations.

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Cheaper Building WALL STREET Host of Contractors Offer Cutthroat Bids on Factories, Roads, Dams **Competition Spells Shrinking** Profits in 1950 Though It's time to cut Costs! Building May Set Record Mortality Rate on Increase

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You're bucking tough competition in every branch of the building industry-a condition that makes wasteful figuring methods a bigger liability than ever!

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Better Detail Plate

No. D.72 Counter Storage and Breaklast Table

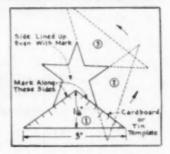
THIS month's better detail plate, Tshown on opposite page, illustrates several unique features that could easily be made a part of any modern kitchen arrangement.

One of the features, a storage compartment, is designed for use in the often inaccessible portion of the lower cupboard area, usually created because of change in the direction of cupboard and counter, or due to the position of fixed equipment. Access to storage compartment is obtained through top of counter by means of hinged door, top side of which is finished same as counter top. In closed position, door is flush with counter.

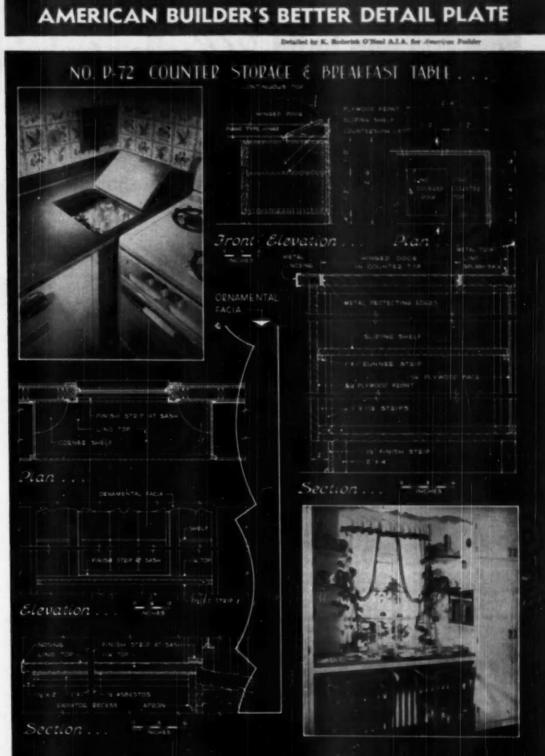
Interior of compartment is provided with a sliding intermediate shelf that is one-half the width of the storage area. This arrangement permits access to the lower part of unit. This area is considered primarily for the storage of empty bottles of all kinds.

The other feature makes good use of the area over the radiator and between storage cupboards by establishing a snack bar with table top flush with window stool. Top is covered with Formica or linoleum and sealed at wall and cupboards with aluminum edging. Underside of table top is covered with 1/2-inch thick asbestos board. Finished wood stop is applied to top of counter at contact with wood sash. Counter or table top can be used at other than mealtime for writing, study or miscellaneous duties in connection with the kitchen. Note the recess at side of cupboard in photograph which can be used for cook books, etc.

How to Draw 5 Point Stars



Five point stars can be drawn quickly with a triangular template of stiff cardboard. Start drawing at bottom and move clockwise. Marking is done along the two diagonal sides.— H. E. Fey, New Braunfels, Texas



How you can build *Thermopane* for EXTRA VALUE at LOW COST

Read how it is being done by Russeli Benjamin and other building developers

Builder Russell Benjamin and Architect Herman York recognized the appeal of big window areas when they planned the homes for Lyle Forest, Tenafly, New Jersey. They recognized the need for insulating those big windows for comfort and full use of floor space in winter. They recognized, too, that Thermopane* is the insulating glass that people know and want.

And so they worked out a method of *Thermopane* window wall construction which is comparable in cost to standard wall construction with conventional windows. The secret lies in working with standard *Thermopane* sizes and in the way the 2 x 6's are routed and joined for framing. They used DSA *Thermopune* $\frac{1}{2}$ " thick with $\frac{1}{2}$ " air space between the two panes.

This adds a *lot* of extra value—the appeal of window walls that bring in the outdoors—plus attractive design, extra comfort and fuel saving. We thought you'd want to know about it. The pictures shown here give the basic steps. By mailing the coupon you can get the whole story including detail drawings that will enable you to duplicate this low-cost method of building extra sales appeal into houses.

Thermopune is made in plate glass and in DSA--in more than 80 standard sizes, as well as special sizes, so you can use it in all kinds of windows.



Vindow wall beader and uprights in tion to receive the window wall frame penially rabbeted 2 x 6's. (Framing deavailable-mail coupen.)





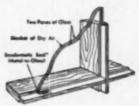
 Window wall frame nailed into place, ready for insertion of either standard 451%"x251%" Thermospane units or aluminum projected type windows of like size.

 Thermopure unit in place. Frame has received a hed of glassing compound before insertion of the unit. Workman is filling voids prior to installation of wood steps.





MADE ONLY BY LIBBET-OWENS-FORD GLASS COMPANY 35115 Nicholas Building, Toledo 3, Ohio







 Aluminum ventilators of projected type are inserted into openings of wood frame in a hed of glazing compound. Wood screws hold them in place.



8. Theresonate (atandard 42 $\frac{1}{2}\frac{1}{2}$ " x $22\frac{1}{2}\frac{1}{2}$ " unit) is installed in abusinam ventilators as in any other face-glaned metal such. Alaminum occeren is installed from inside.

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CB

D.E

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9



6. Final result, a sales-appealing window wall that makes the living room seem larger by being opened to the outdown. Thermopene's insulation assures comfort in winter.

SEND FOR FULL INFORMATION ... Mail the Coupon ... FREE DETAIL SHEETS

We will be glad to provide full details on framing and glazing of the window wall described here. Also, information on the ways other builders have built Thermopane window walls at low cast. Get the information nov----th's a smart way to provide more house for the money. -------------

Likboy-Owens-Ford Glass Company 33115 Nicholas Bidg., Tolodo 3, Ohio

Plaase give me complete information on installation methods for low-cost window walls of Thermopore.

Name____

I am planning to build_____houses in sust 12 months

in S. class

Likbey-Owens-R 33115 Richeles



G-13 Store Front Construction

To keep abreast of present conditions, the application of modern methods for the display of merchandise is essential. This is best accomplished through the installation of a new and up-to-date store front and interior.

THE PROBLEM :

The intention in this case was to produce a building for the Lobel Youth Center that would be effective architecturally in order to successfully compete with adjoining establishments. It was the further intent to make the store appear higher than actual conditions permitted within a limited badget.

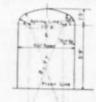
THE SOLUTION:

An open trellis effect above she coping line of the front wall of the building was decided upon. This gave an illusion of greater height than actually existed. The high vestibule ceiling which follows through into the store is another feature that stresses height in store front construction.

MATERIALS:

The face and returns of end piers are tranquil green structural glass. Vestibule floor and show window bulkhead facing is red Verona terrazzo with Portland cement and red pigment added. Trim for small window is Crab Orchard stone. Sigu background, sign letters and awning flap are porcelain enameled. Sign background color is a very light tan. Sign letters are black with red enamel inserts with two double tube Neon white letters. The letters YOUTH CENTER are exposed Neon tubes in pink Zeon. The awning is a lateral arm type which is completely concealed when not in use. Show window lighting is a combination of recessed HI-hats using 150-W R40 floodlights. and fluorescent lighting behind a flush egg crate ceiling.

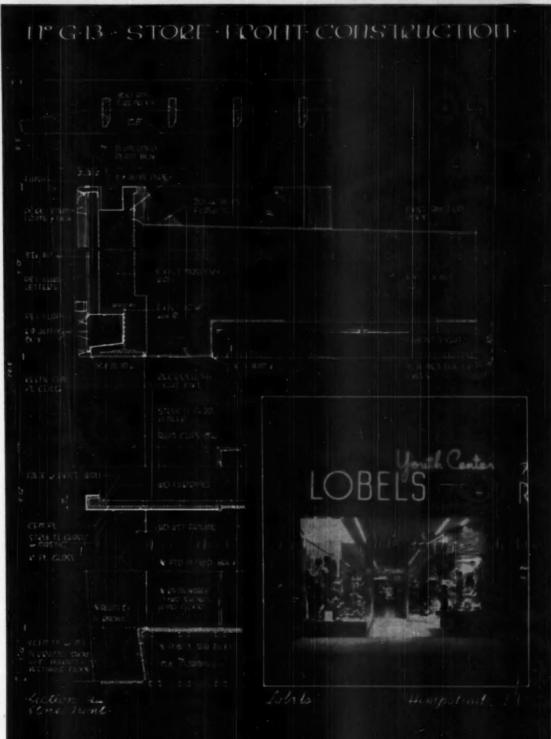
How to Lay out a Four Center or Tudor Arch



The construction and true form of Tudor arch.-C. D. Robb, Frankfort, Ohio

AMERICAN BUILDER'S STORE FRONT DETAILS

Designed by Louis J. Gluskin for American Builder





Simple Built-In... or Complete Addition-Remodeling's A Job For Plywood!

IN THE MONTHS AHEAD, remodeling of older homes will get greater emphasis. So remember—when Douglas fir plywood is on the bill of materials, any job will require less time and less labor.

Inside cr out . . . from basement to attic . . . there are scores of jobs for versatile plywood. Built-ins, cabinets, storage walls . . . sheathing, subflooring, underlay floors, real wood paneling . . . siding, soffits, gable ends—all call for big, easy-to-handle plywood panels.

Douglas fir plywood is America's Busiest Building Material—the nation's number one choice for remodeling, too!





AMERICA'S

These Advantages Make Plywood The Choice for Remodeling

and labor.



Plywood is variable. There's a type and grade for every remodeling jab. Waterproof-band EXTERIOR for all outside applications ... and moisture-resistant INTERIOR for inside uses. Within each type are several appearance grades to meet specific use needs.

Plywood is real wood made larger, lighter, split-proof, stranger. The big cross-laminated panels are easy to use,

work with ordinary carpentry tools, require no special skills. They cover large

areas quickly-speed work, save time

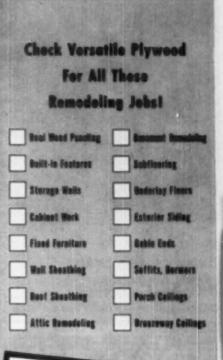


Plymood is preferred above all other materials for cabinets and built-ins. Plywood can be cut to fit exact space requirements encountered in remodeling work. Sections can be pre-cut in your shop

for even greater installation economies.

Plywood is ideal for covering old, worn floors to give a smooth new base underlay for linoleum, tile, wall-to-wall corpeting. The big ponels go down fast, keep joints to a minimum. There are no humps or ridges to mar finish covering.

Plywood works all around the job1 Gires interior walls the warmth and charm of real wood paneling . . . lends strength as sheathing or subflooring ... adds lowcost glamour as siding or exterior trim on gable ends, soffits, parch and breezeway ceilings.



Full-Color Booklet For You!

Gives the full story of plywood's educations for one phase of remodeling—attic renovation. Single copies free to builders end lumber dealers. Quantities at a frection of cost.



Large, Light, Strong Real Wood Panels

Douglas Fir Plywood Association, Tacama Building, Tacoma 2, Washington, 848 Daily News Building, Chicago 6, Illinois; 1232 Shorehom Building, Washington 5, D. C., 500 Fifth Are, New York City, 18,

BUSIEST BUILDING MATERIAL



119



Here's How to Beautify the Entry

with Coffman's Exquisite CLIMBING VINE DESIGN Ornamental Iron Porch Posts

inceful hand-wrateght Coffman iron purch posts sprave the looks of any house, often increasing also value themesofcouly? For these encountents but are quite inengenative and are available strongh vous housher or building couply dealer, the Coffman's distinctive No. 150 design for mech, breezeway, or abalcoury. All accessories are probable for easy installation.

Tested by Pittsburgh Testing Laboratories brefst hosting under professional laboratory conigives accurate hoad varying statistics, proves ofman hoad carrying factors emazingly highmeres will sequent 33,000 line. Ret posts 350 line.





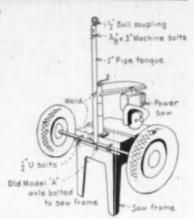
How to Make a Mobile Unit of a Heavy Power Saw

Loniel Perm

Moving a heavy power saw from one job to another can be done easily and quickly.

Obtain an axle and a pair of wheels, preferably from an old model car, and weld a two inch diameter pipe tongue to center of axle. Secure to back of saw frame with two ½ inch U bolts. Pipe tongue is then welded to vertical shaft of power saw.

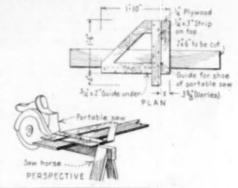
To use, couple to hack of truck and haul to job. Tip up trailer and start sawing lumber.—Submitted by J. G. Caldwell. San Mateo, Cal.

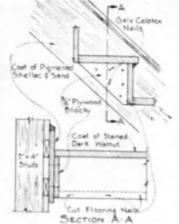


How to Make a Saw Guide:

This saw guide made from 54 inch plywood, is handy, simple to make, and fast to use.

The area marked "X" on drawing is distance from edge of shoe on portable saw to blade. This will vary. To use, mark the length of piece needed, slide guide on stock up to mark, hold saw next to strip and then cut.—Submitted by J. G. Caldwell, San Mateo, Calif





How to Simplify Work on Attic Stair of Minimum Width

Before cutting up stock for stair, the carriage is primed with pigmented shellac and sanded. Treads and risers are sanded, stained a dark walnut and mopped with floor seal. No need for tedious cutting in by painters after stairs are assembled.

Treads are supported on 34-inch plywood blocks that are secured to sides of stair stringer. These blocks are cut from scrap material. Risers are nailed to treads from underside of stairs with cut flooring nails. This type stair should not exceed 2 foot 8 inches in width.—Submitted by John Mack, Elmira, N. Y.





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 haffles 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 1150 Market Street.

By the makers of Flexscreen

BENNETT IRFLAND INC.



HOW-TO-DO-IT INFORMATION

822-KITCHEN HINTS—of interest to builder and homeowner alike are found in a new multi-color illustrated I6-page booklet issued by the Kitchen Maid Corp., Andrews, Ind. The ten kitchens shown reveal several attractive kitchen arrangements possible with Kitchen Maid kitchen equipment. Kitchen plans with dimensions are included with specifications for standard units.

8a3—UNIT HEATERS—Floor and suspended gas-fired automatic unit heaters are the subject of a new color-illustrated brochure published by the Reznor Manufacturing Co., Mercute, Pa., makers of industrial, commercial and domestic gas heating equipment and appliances. The booklet contains information on the use of unit heaters, their construction and installation, and lists complete specifications and dimensions for 12 models.

8a4—ALUMINUM SIDING—Technical information and engineering details of Kaiser Aluminum clapboard siding are given in a 16-page booklet issued by Kaiser Aluminum & Chemical Sales, Inc., 1924 Broadway, Oakland 12, Calif. Architectural drawings are included to show various cave and window details, methods of application at exterior and interior corners, foundation and frieze board details, with general construction information and specifications.

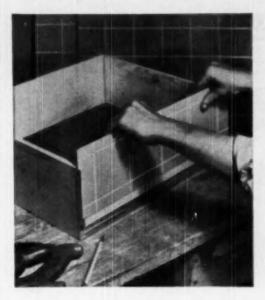
8a5—HOW TO COOL FOR COMFORT—in its second edition, is the title of a manual prepared by the Hunt Fan and Ventilating Co., Memphis, Tenn. The first three sections of the manual cover cooling and ventilating problems encountered in residential, commercial and industrial buildings. A separate section is devoted to the ventilation of farm buildings. Model specifications are listed in the technical section with detailed drawings of installations.

826—AUTOMATIC DOOR OPERATORS—Robot Appliances, Inc., 13165 Prospect Ave., Dearborn, Mich., has published three specification sheets describing in detail the model SM, SL series and SW series door and gate operators. Made with friction rollers and automatic electrical overload cutouts, these operators are actuated by standard push botton controls, by the Robot magnetic remote control or by any of 10 different remote control arrangements. Sheets are illustrated and contain complete list of features and specifications.

827-TILE ROOFS-are pictured in a four-page pamphlet titled "Ludowici Tiles, Distinctive Roofs" recently released by the Ludowici-Celadon Co., 104 So. Michigan Ave., Chicago J, Ill. In addition to illustrations of various types of tiles, the booklet also contains drawings showing installation of shale tile at hips, gables, ridges and eaves and lists specifications.

838—ELECTRICAL HOME PLANNING—The Better Homes Bureau, Westinghouse Electric Corp., Box 2099, Pittsburgh 30, Pa., has published a 24-page booklet on Design Details for Electrical Living Homes, Photographs, plan views and wiring diagrams are used to illustrate ways of best utilizing floor space in kitchens and laundries. After a discussion of lighting schemes, the book offers an outline of minimum requirements for providing complete electric service in the modern home.

829—DATA FOR GAS FURNACE CONTROLS is subject of three new specification sheets released by (Continued on page 124)



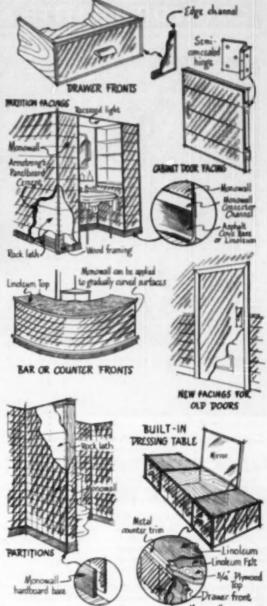
How to get more out of Monowall jobs

Armstrong's Monowall® is more than just a wall and ceiling material. It's adaptable to a great many uses that make remodeling jobs more profitable. Some of them are shown here.

Once a customer is sold on Monowall for his walls, it's easy to point out the advantages of having other surfaces finished with it, too. Fronts of cabinets, counters, or even doors can be faced with Monowall to blend with the walls. Partitions and utility units of many kinds can be surfaced with Monowall. You can apply these ideas to residential kitchens, bathrooms, laundry rooms, and to many types of commercial interiors.

Armstrong's Monowall is a fine material, made under exacting specifications for beauty, durability, and easy maintenance. It's easy to handle and work with on the job. Customers like its full range of attractive, up-to-date colors and designs.

If you don't already use Monowall, get full information and samples from your Armstrong lumber dealer or write direct to Armstrong Cork Company, 1611 Lincoln St., Lancaster, Pennsylvania.



Armstrong's Monowall

CONNOR LAYTITE MAPLE FIRST AGAIN

Laytte 33/32a8%" Mople as laid to the new Elizabeth Waters Grada School, Fund du Laz. Witerment.

Laytite is made under Maple Ferring Manufacturers Association specifications and is famous for uniform quality. Write for prices.



CONNOR LUMBER AND LAND COMPANY P. O. BOX 112D + TELEPHONE 3 OR 418 + TELETYPE 26 + MARSHFIELD, WISCONSIN CONNOR FOREST PRODUCTS SINCE 1872

Catalogs

(Continued from page 122)

Minneapolis-Honeywell Regulator Company, Minneapolis 8, Minn., covering thermostats, furnace controls, limit controls and gas valves for gas heating. Various regulating units are illustrated opposite listings of their complete specifications.

830-MARBLE FOR THE HOME—is discussed in a profusely illustrated 12-page booklet made available by the Marble Institute of America. Inc., 108 Forster Ave., Mount Vernon, N.Y. Dozens of photographs show recent trends in home decoration, including uses in freplaces, interior decor, bathrooma and on counters and bars. All member companies of the Institute are histed.

831-DISPOSAL CONTAINERS—are described in a pamphlet published by Binswanger-Henkin Industries, Memphis, Tenn, designers and manufacturers of the Magikan line of containers. New square design units for household use are illustrated in color with complete listing of sizes, types and colors available.

83a—BONDACTOR INSTRUCTIONS—are contained in a 16-page brochure issued by Air Placement Equipment Co., Kansas City 8, Mo. Used for applying concrete with air pressure, the bondactor machine is described and illustrated in this booklet that contains information on its care, maintenance, use and on its application for straight sandblasting.

833—POWER DRIVE PIPE CUTTER—is subject of new literature released by Beaver Pipe Tools Inc., Dana Ave., Warren, Ohio. A four-page flier describes the new Beaver 102-PD (power drive) pipe cutter and also the Beaver No. 77 threader. Flier lists capacities, features and prices. 834—TRUCK MIXERS AND AGITATORS—are discussed in a 20-page bulletin released by the Worthington Pump and Machinery Corp., Harrison, N.J. Three mixer arrangements for central mixing plants are described as are three sizes of truck mixers. The bulletin contains illustrations and explanations of such features as main frames, transmissions, water' systems and drum rollers.

835—CUSTOM-STYLED KITCHENS—built to customer specifications in oak, mahogany, knotty pine, walnut and birch are illustrated in a booklet published by the Bel-Wood Manufacturing Co., Ackerman, Miss. Kitchen units of waterproof hardwood veneers built for standard and special purpose uses are described with photographs of actual installations.

| SERVICE COUPON-CLIP and MAIL to CHICAGO | |
|---|-----------------------|
| Readors Service Department American Builder 79 W. Manroe St., Chicago 3, 115, | (November, 1950) |
| Plasse and me additional information or items, or catalogs, listed in this department: | the following product |
| Nembers | |
| Nama | |
| Street | |
| City | he |
| OCCUPATION* *Please ante that accupation must be stated if | |
| | ATRICAN BUILDER |



This dining room, though near the entrance, has privacy and protection with plenty of light. Insulux interior partitions help you gain maximum utility from every square foot of area.

ARE GOOD PROSPECTS FOR Daylight Engineering



An Insulux Wall of Daylight will hide an unwelcome view gracefully, while letting in light, providing insulation and protecting privacy.

Planning new building? Find out how Insulux Walls of Daylight add beauty and efficiency to any type of structure.

If you wish to build a bigger volume of modernization work, practically every building you see-house, store, office or industrial—is a good prospect for a Daylight Engineering job.

Dark places, hallways, stairwells, etc., can be daylighted with privacy. Rooms that neighbors can see into, or windows that frame unsightly views can be daylighted freely, vision blocked. For beauty, privacy, efficiency for your customers, profit for yourself, sell Insulux Walls of Daylight wherever your salesmen go.

Get full information on how daylight engineering can help you sell more houses faster. Just write the Daylight Engineering Laboratory, Dept. AB 11, Box 1035, Toledo 1, Ohio. Innulus.

Division, American Structural Products Company, subsidiary of Owens-Illinois Glass Company.



INSULUX "WALLS OF DAYLIGHT" by the pioneers of Daylight Engineering





without branzo covers that completely hide spring, as shown above.

PERMITS REMOVAL OF SASH WEIGHTS, INSULA-TION OF MULLIONS.

Slash Labor Costs

Simple installation allows one man to easily install 30 or more windows in 8 hours. No bigh-priced skilled labor needed. This means you can get more satisfied customers at lower cost . . . higher profit !

Jops in Operation!

Smooth, positive action; accurate balance; finger-sip control plus the perfect seal against draft, dust, moisture. No wood-to-wood contact. Prevents sticking windows and window rattle.



ATTENTION MILLS AND LUMBER VAROS IDEAL FOR PRE-FIT WINDOWS Con Also Be Sold in Single Unit Packages Mail this coupon today!

ukes Step Service, Inc. 4821-33 W. Linkon Ava den 8. Wiss Phrase rush me folder All and price list of Milwauker Combination Sash Balance Weather-Name

138

(Continued from page 52)

CHECKING for "square" is also an tent step. This will eliminate any diff ties that may arise in the event the window opening is not perioct. A square opening makes it easy to do satisfactory gle



WOOD setting blocks 12-inch thick, one inch wide and about three inches long are placed in the position indicated by pencil mark on ince of inside stop. A 36-inch such width is used in this installation, thus the setting blocks are 9 inches to from onds



NEXT in importance to a good glazing job is a good glazing compound that has been adequately worked. Putty should never be used as it has a tendency to harden and consequently does not permit the doubleglassed unit to "float" in the opening. An elastic glazing compound which retains its resiliance permanently is recommended (Continued on page 128) ;

SELF LIGHTING H.C. Little **OIL FLOOR** FURNACES Help Sell Homes!



These are the ONLY oil floor fur-1 naces that automatically light themselves. Exclusive, patented H.C. Little electric ignition NO PILOT LIGHT.

Low fuel bills are assured because the patented H. C. Little oil burner converts the new catalytic furnace oils into an invisible soot-free gas that burns with a clean, silent flame at very high efficiency.

Power failure can't cripple these (3) furnaces; they are equipped with a special control device to insure heat even if electricity fails.

Fully automatic, thermostatically controlled H. C. Little oil heat in small IS. AT LOW FIRST COST AND LOW UPKEEP COST, is a sales asset that more and more builders are using.

Pre full information, write Dept. A-11



Things to Look For When Buying A **Radial Power Saw**

There's a big difference in radial saws ... look for features that make them easier to use, more accurate, safer, faster, longer lasting. Many manufacturers sell on the basis of one or two innovations. What you want is an all around saw with outstanding features all around. That's another way of saying ...

COMET Radial Power SAWS EASE OF OPERATION

...Controls are handly grouped in front and to the right, See 11). ...Safety return apring and posi-tive stop minimize cutting effort, help return saw to back position. See (2).

keeps work always in plain view, ...Control handle for fast raising and lowering conveniently located in front ...folds away when not in use. See (3). Assembly is compact, easily port-oble

Radial Arm retracts with naw,

enclosed in a cast housing and protected frem dust and dirt by felt wipers. Retractable arm is of

able

ACCURACY ...Rigid retractable arm assembly moves easily on 8 permanently lubricated ball bearing rollers

tubular steel, accurately ma-chined, with milled and ground bearing roller tracks. See (4). All controls are heavy duty, positive in action, stops individu-ally adjustable.

SAFETY ... Adjustable guards are cast aluminum with anti-kickback dogs at point of entry. Except for portions in cut, blade completely

returning saw to safe back posi-tion after cut. ...Retractable arm never ob-structs view of saw or work. ...All motor controls at operator's funcerting.

fingertips.

SPEED

Controls are grouped for fast

... Safety return spring and stop

Safety return spring aids in

... Built of the finest materials available. Comets are specifically designed for long life.

... All exposed parts are protected against weather by enamel chrome or cadmium.

reduces operator fatigue and increases production appreciably. ... Powerful Comet motors cut faster and cleaner.

LONGER LIFE

Wires enclosed in flexible

capacity.



Up to 115 h.p., cuts 4" deep, 19" wide, rips material 25"

THE COMET CLIPPLE



portion guarded

operation

Up to 715 h.p. cuts 6" de 22" wide, rips material



Cut off flow-up to 10 h.p., cuts 8' by 10" timbers.

THE TIMBER CUTTER Up to 10 h.p., cuts 16" by 16" timbers.

-----------CONSOLIBATED MACHINERY & SUPPLY CO., LTD. 2031 Santa Fe Avenue, Los Angeles 21, California Please rich me prices and dapa on Comet Junior Comet Clopper Comet Senior C Comet Senior #" C Comet Timber Cetter 26 CROSS CUT + RIP + MITRE + COMPOUND MITRE + BEVEL + PLOUGH + SHAPE

COMPT T THE JUNIOR

COMFI

Up to \$ h.p., cuts 4% deep. 19" wide, rips material 29"

Send caupan for free information and literature on the Comet that fits your need.

THERE'S A COMET SAW DESIGNED FOR YOU









(Continued from page 126)

STARTING along the side jumb of we frame, apply a sufficient amount of glasing compound to the perimeter of the back or permanent glazing stop. It is also important to surround the astting blocks with compound but to keep block top clean



DOUBLE-glosed unit is put into place on the setting blocks and qually pushed into position aquinst compound covered steps. Steel frame gives the unit added strength making the hundling easier. With slow but firm pressure the steel framed unit is forced inward until all voids are filled

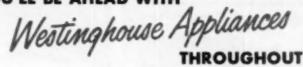


ADHESION of the gluzing compound helps to hold double-glazing unit in place. Howover. as a precoution, temporary stops should be placed on top and sides. Next stop in glazing is to fill in the wolds between the steel frame and the wood opening which is the 16 inch clearance allowed for setting

(Continued on page 130)



YOU'LL BE AHEAD WITH



It's buyer's psychology ...

When a house prospect finds two or more appliances in a house, each with a different brand name, he'll figure you are buying too sharply and not necessarily to his advantage.

In the long run, you are better off to install one good brand name throughout. May we point out that Westinghouse is a known leader in consumer preference?

Westinghouse makes a complete line of appliances with models and sizes for houses in every price range. All appliances have outstanding features that will help sell houses faster.

Get complete details on all Westinghouse Appliances from your Westinghouse Distributor, or write us direct.



Front opening! Top is unbroken work surfoce. Connects to sink drain. Available in Under-Counter, 24" Cabinet and 45" Bectric Sink Models.



ed or Table-Top Madels. Can be in-

stalled anywhere to save space or shorten piping runs. In sizes from 10 to 80 gallors.

WESTINGHOUSE ELECTRIC CORPORATION Appliance Division • Mansfield, Ohio

YOU CAN BE SURE.IF IT'S Westinghouse

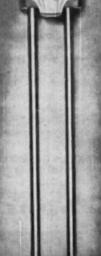








Door Chimes



It Costs No More to Have the Best!

Dollar for dollar, there isn't a door chime on the market that can touch an Edwards for decorative value, musical perfection and trouble-free service!

The New WEDGWOOD→

for example . . . sounds a soft, clear two-note melody for the front door . . . single note for rear entrance. Designed to grace "problem" walls with beauty. Crystallized ivory plastic with bright gilt ribbing. OVERALE SIZE: 44" high, 75_2° wide, 25_2° deep. (Also with silent center third tube.)

Edwards Company Inc., Norwalk, Conn. In Canada: Edwards of Canada, Ltd. TECHNICAL GUIDE





COMPOUND is applied to exterior glassing stops. Allow at least 16 lack of glassing compound between the steel channel frame and stop. An important factor to consider is that glazing compound and step should extend beyond edge of steel frame. This increases insulating qualities of the unit



GLAZING stops should be applied carefully. Be especially particular to keep the acrows headed vertically and to leave the acrew head so the slot is vertical



WITH the exterior glasting strips in place the next step is to force the compound and eliminate all the volts. At the bettem of seah it is always good judgment to is the compound slamt from the glass to the bevelied stop. Be sure that all metal edges are completely covered with compound. This improves the weighterability of glassed unit (*Continued on page 132*)



Products Used Insulite Insulating Wash, Darable Pate Green

LOOK UP IN THE ATTICS FOR ... Extra Profits!

16.50

The "attic market" is bigger than you think. Hundreds of young growing families in your area need extra space right now—are planning to finish off their attica. Here is your chance to develop new business with quick-turnover and profits. As new construction begins to taper off, keep your crew busy with home expansion and remodeling work. These jobs can be easily financed under F.H.A. or through local bank financing.

INSULITE Interior Board Products are ideally suited for finishing attics. They are beautiful, practical, inexpensive and easy to apply. The colors and textures will help you sell. Color selections were made by a nationally known color expert, based on market surveys where women spoke their minds—told what they liked and wanted. Show samples and pictures of finished jobs. Your customers will sell themselves. If you need literature, drop a card to INSULTE, Minneapolis 2, Minn. Now is the time to start developing this new business.

INSULITE Interior Finishes: Durolite Plank and Interior Board... Lusterlite Tileboard and Interior Board... Wevelite and Smoothite Interior Boards... Acoustilite and Fiberlite Acoustical Tileboards.

See Sweet's Alle, for Builders - 20/3

MINNESOTA AND ONTARIO PAPER COMPANY MINNEAPOLIS 2, MINNESOTA

INSULITE DIVISION



Insulite is a registerad T. M. U. S. Pet. Off.

NOVEMBER, 1950



TECHNICAL GUIDE

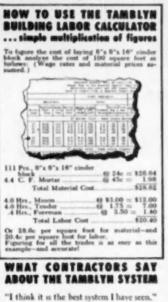
(Continued from page 130)



SAME procedure in requirit to glosing is followed on the interior except that the application of the glaning compound on the sides of wood such is finished flat as steel unit is not affected by condensation

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!

TAMPLYN BUILDING LABOR CALCULATOR



"... just the thing I wanted ... "

titlatt the survey a manual to

"... I wan? to congratulate you upon an excellent piece of work."



CLOSE-UP view of the completed glassing job with the exterior glassing stops removed. Note how the glassing compound on the inside plane extends obsers the stainless steel channel. Note also how the glassing compound has been parked firmly between metal and such completely sealing unit from elements.



THE Pittaburgh Plots Gloss Computy's deable-glossed unit "Twindow" is all fininhed. The statuless steal frame has protected it during handling and installation. It will continue to insure the insulating qualities of the unit



AMERICAN BUILDER

West 22nd St. New York 11 . WArkins 9 704

the <u>difference</u> in MENGEL Stabilized SOLID-CORE Jush DOORS!

Mengel Stabilized Solid-Core Flush Doors employ an entirely unique and exclusive principle to give you a new standard of stability and dependability — and at strictly competitive prices.

Instead of attempting the impossible task of *presenting* expansion and construction in wood, Mengel has developed a construction design which *absorbs* expansion and contraction within the core itself. All Mengel core members are deeply slotted at frequent intervals, both with and across the grain. The result is that the *slats* expand or contract in width, but the *door* remains stable?

Get all the facts, and see a cutaway sample. When you we the difference, you'll greatly prefer Mengel Stabilized Solid-Core Doors!

All standard rock cites and

FOR FULL DETAILS, PLEASE JUST WRITE YOUR NAME AND ADDRESS IN MARGIN, AND MAIL TO ---

Plywood Division . THE MENGEL CO. . Louisville 1. Kentucky

NOVEMBER, 1950

See

133



It's summed up in one sentence: sell products that are quality and performance proven. AUTO-LOK Weatherstripped aluminum awning windaws do help sell hauses faster. They are the standard by which other awning windaws are judged ...a tribute to the skill with which they ore made. The unique patented features that Auto-Lok alone possesses, and the calibre of materials utilized, make it the first and only window to combine the BEST features of ALL windaw types.

(Builders' Version; with due applicates to Date Carnegie)

Beautiful AUTO-LOK windows give your customers protection against all climatic extremes. Its unrivaled tight closure will cut their fuel bills. They provide draft-free ventilation even when it's raining. These effectively weatherstripped awning windows fit in readily with any style of architecture, and furnish the added eye appeal that it takes to sell a house faster. Storm sash available for all sizes.

Tightest closing window ever made!



Indiant Heat . . .

(Continued from page 95)

234 in. diameter old boiler tubes used for posts to anchor pen partitions and hang the slatted pen gates. For easier cleaning, the gates can be slipped off the post. A cotter key prevents the sow from raising gate.

Weather shelter for these outside pens is provided by portable houses, 10 by 16 feet in size, that are spotted into position as needed. Each run has three of these portables. As soon as the young pigs are old enough to be moved, the sow and her litter are transferred. The entire set-up of central farrowing house and portables will handle 36 sows and their litters at a time. Additional room is made by removing the portable houses from runs and pulling in others. Portables are equipped with electric heat lamps. This combination of a central farrowing house with portables is original with the Hammonds, and will make an enormous saving in labor. Through the efficient lay-out and the newest type of equipment, only one man is needed to take care of the hogs, except during farrowing time, When farrowing is over, the portables are taken out to the pastures and used for shelter houses there.

The hog hathhouse, popularly known as the "powder room," is located near the south end of the central house. It is equipped with hot and cold running water. Here, the sow is thoroughly washed before she is allowed to enter the farrowing house. This practice, "not commonly followed, but it should be," says Mike Hammond, insures that the newborn pigs will not pick up worm eggs and pieces of mud as they nurse, which makes for healthier, sturdier litters. As a further precaution against disease, the hog house is cleaned with a portable steam cleaner before the sow is moved in to farrow.

A 30 by 36 foot concrete feeding floor adjoins the bathhouse. This floor supplements a larger concrete feeding floor, 25 feet wide by 300 feet long, in another part of the farmstead, that can accommodate 300 feeding hogs.

The advisability of a central farrowing house investment has occasionally been questioned; but Mike Hammond says that such a building is indispensable for high production in a cold climate. Moreover, by surrounding it with pasture, as he plans to do, he will be able to use it as shelter for his pure-bred gilts when farrowing time is over, and thus make it a year-round house.



..., self-locking at 4 points, nailed at 2 points..., give homes song security in any weather, Produced in a wide variety of colorful block, with distinctive Codartes, graining ..., Shurloks add becuty to any home. Available in Standard (as illustrated) or Double Coverage.

Take a look Backward...

you'll see a BRIGHT FUTURE for you in Flintkote's 1950 Products



INTERIOR INSULATION BOARD ... in Grey-tex and Gress-tex... given you enciting new style, color and Textured Design for wall treatment. Flame resistant surface finish in Textured Design conforms to U, S. Dept. of Cammerce Commercial Standard C542-49 Class F.

NATURAL COLOR

Shingle and Shake Design. STRI-TEX ASBESTOS-CEMENT SIDINGS give homes the permanent beauty and much-

sought fire safety every home owner wants. And the colorful, textured beauty gives a world of style and charm to any

building, new or old.

MORTAR JOINT makes this insulated brick siding as genuine-looking that

ing so genuine-looking that we think even you, a trained observer, will be fooled from even a short distance. Wirescored-brick pattern adds even more authensicity.



NOVEMBER, 1950

Yes, you can look forward to plenty of business in the new products Flintkote has introduced this year.

More and more, home owners are becoming styleand color-conscious . . . in remodeling materials, as well as those used for new construction. More and more, home buyers are looking for something that lifts houses out of the "ordinary" class. Style and color in materials does just that.

And, in the new Flintkote line, you've got plenty of style . . . a rainbow of color. Cash in on it. Make sure customers and prospects learn that you can give them what they want, with Flintkote Building Materials.

THE FLINTKOTE COMPANY, Building Materials Division, 30 Rockefeller Plaza, New York 20, N.Y.

FLINTKOTE

... the extre years of service and no more!



135



ESTIMATE

Connect

Cut costs... Build with Bermico

One place you can cut costs . . . and safely . . . is with Bermico Sewer Pipe.

Bermico weighs so much less . . . ¹/₂ lighter than other types of pipe. It stores with far less breakage . . . and its convenient 8-foot lengths save time, money, trouble on the truck and the job. Easily laid, too. A few hammer blows and joints are tight! No joining compound needed. And joints won't "give" or open when soil settles unevenly underneath

Watertight . . . rootproof, Bermico sewer lines stand up under extremes of heat or cold . . . deliver high water capacity flow.

Each length of Bermico is individually inspected to measure up to a high standard of engineering. The result? Millions of feet of Bermico are now in use . . . perforated pipe for drainage systems . . regular pipe for house-to-sewer or septic tank connections.

> Cut costs, increase profit, build goodwill with Bermico, the pipe you can trust! For more details, write: Dept A8-11 Brown Company, S00 Fifth Ave., N. Y.

> > BROWNompany

R IR MI

A PRODUCT OF

SEWER PIPE

Berlin, NEW HAMPSHIRE

GENERAL RALES DEFICES. 200 POTH AVENUE, NOW TOOD 15, M.T.

B use i has different Normal Mer. Normer, Chrospe, In Louis, San Normann, Merrorad Merrora, et al. 2012 August 1998 (2012) August 1998 (2012)



WEIGHS

3/ LESS

GA

8-FT.

LENGTHS

Saberson ...

(Continued from page 110)

tary preparedness and to maintain our current industrial production level as round after round of wage increases come rolling along.

Obviously we cannot get along without new homes. Only question is how many can be built under the controls set up for the extension of credit and the still stiffer controls imposed by the availability of building materials and labor.

If perchance you are the owner of one of those "high priced" postwar homes that long before this was supposed to be worth far less than the unpaid balance on your mortgage, you can face your critics with a defiant gleam in your eye. A one-line ad in the classified section of your local newspaper will bring you buyers galore in practically any city in the country.

Consequently it seems safe to assume it will continue to be this way as long as there are shortages of men, materials and tighter building credit. Some day the situation will change and there again will be plenty of all three. Shortly thereafter interest in home building will begin to lag, especially if prices begin to decline. Few people can be induced to build a home on a declining market. It takes a boom to make them sign on the dotted line regardless of what the price may be.

What next?

We'll leave it to you to answer that \$164 question. Our crystal ball is all fogged up.

Issue Quotation Form For Red Cedar Shingles

A uniform "quotation form" which includes on one page blanks for individual quotations of various grades red cedar shingles and a digest of each grade and type of shingle is being offered free by the Red Cedar Shingle Bureau to all manufacturers, wholesalers, commission salesmen or retail lumber dealers selling Western Red Cedar shingles, W. W. Woodbridge, bureau manager has reported. Forms are printed on 8½x14-inch mimeograph paper.

Woodbridge said, "We have sensed a growing demand for a standardized pricing sheet, particularly in recent years. . . There is absolutely no intent or possibility of these forms being used in price fixing or stabilization of prices. They are offered free to anyone who can use them, in the belief that they will be a definite service to everyone quoting prices to the trade of our product."



Gives You All the Answers!

WRITE YOUR OWN TICKET-





Oak plank

STRAIGHT-LINE STANDARD STRIP, a premium value; finished or unfinished; in Oak, Beech, Pecan.

UNIT WOOD BLOCKS for mastic or nail installation. Available in Oak, Beech and Pecan, finished or unfinished. Sizes, $25/32 \times 2\frac{1}{2}$ in $6\frac{3}{4}$ " and 9" square; $25/32 \times 1\frac{1}{2}$ in $7\frac{1}{2}$ " and 9" square; $\frac{1}{2} \times 2\frac{1}{2}$ in $7\frac{1}{2}$ " and 9" square; $\frac{1}{2} \times 2$ in 8" and 10" square.

RANDOM WIDTH OAK PLANK, finished (V-joint) or unfinished (square edge) with contrasting plugs (and butterflies if desired). Sizes, 25/32 x 3¼, 5¼ and 7¼.

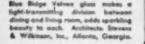
RELATED PRODUCTS: Oak thresholds, stair treads, risers and glued-up panels.

Bradley super-craftsmanship in every order . . . customer satisfaction in every Bradley floor. Write now for installation instructions.

Local Distributors from coast to coast.



WARREN, ARKANSAS



how to make small homes

Blue Ridge Patterned Glass in room partitions transmits light, makes homes brighter, more exciting, easier to sell.

And—Blue Ridge Patterned Glass is so surprisingly inexpensive you can install entire walls on a modest budget. It provides privacy plus never-fading beauty for two rooms at once. You cut decorating costs—save on plastering and painting.

Over 20 distinctive patterns meet design requirements for every



room. For special purposes, Blue Ridge Glass may be Satinol*-finished for greater opacity and Securitized for greater strength. See your Libbey Owens Ford Glass Distributor for data about glass.

Blue Bidge Sales Division, Libbey Owens Ford Glass Company 83115 Micholas Building, Toleda 3, Ohia Places cend me my free copy of "New Advantures in Desarcting" (PLEASE Point)

| NAME | |
|---------|---|
| ADDRESS | |
| 0 | BLUE RIDGE Reterned GLASS |
| 10000 | 488 SOTE DIFFUSO LIGHT - SAME DECORATION - COMPLETE ARTHACE . |



John T. DeMott

John T. DeMott, Treasurer Of Simmons-Boardman, Passed Away September 15

John T. DeMott, treasurer and a director of the Simmons-Boardman Publishing Corporation, publishers of the American Builder, died September 15 at his home in Larchmont, N. Y., following a long illness.

Mr. DeMott joined the Simmons-Boardman Publishing Corporation in August, 1920, as assistant treasurer, and became treasurer in 1928. In 1931, he was elected a director of the corporation. Prior to joining the Simmons-Boardman organization, Mr. DeMott was treasurer of the McGraw Publishing Company.

He is survived by his wife; two sons, Roy of Greenwich, Conn., and Corbit, of Miami, Fla.; two sisters, Mrs. Walter Marshall of South Lyon, Mich., and Mrs. Alfred Clarke Boughton of Oak Park, III., and three grandchildren.

New Standard Issued for Ponderosa Pine Millwork

To meet the need for uniformity of sizes and quality in the millwork field, the National Woodwork Manufacturers Association (formerly National Door Manufacturers Association), in cooperation with the Commodity Standards Division of the U.S. Bureau of Standards, has supplemented Commercial Standard 120-48, "Standard Stock Ponderosa Pine Doors," with CS16-49, "Standard Stock Ponderosa Pine Windows, Sash and Screens,"

The new standard establishes specifications for making stock windows.



TEX-LOK

TEX-LOK— the interlocking type shingles that have been tested in every weather — and have weathered every test. Built to resist high winds. Fire-resistant. Long life. Low cost. Good looking on the roof. When you offer TEX-LOKs, tell 'em...they're Texaco, the name millions know and trust. Tell 'em...there's no better shingle value on the market today!

TEX-LOK Shingles are available in the areas currently served from roofing plants located at Lockport, Illinois; Port Neches, Texas and Port Wentworth, Georgia,





In the East, it's

Available in the areas served from the Edge Moor, Delaware roofing plant-another top-performing Texaco asphalt shingle...TEX-LATCH. Similar to Tex-Lok but slightly different in method of locking tab. Heavy duty, double coverage and interlocking.



Something's happening in the building business!

Every day more builders find it pays to

OUALITY APPROVED

"insist on the Quality-Approved Seal"









TOR LOW AR



Quality Approved



It's news, good news, this trend to better windows. And scores of builders the country over are cashing in on it.

No mystery or secret about it. These builders are simply insisting on aluminum windows bearing the Quality-Approved Seal for every job.

That way they can build better, build faster, hold costs down—and at the same time give their houses a big plus in sales appeal!

You see Quality-Approved aluminum windows come ready to install. There are no extras to buy, no finish to apply! They cut out troublesome, expensive service calls because they've been *tested and approved* for all-around quality! They'll operate easily, shut out drafts and stay good looking without ever requiring painting or costly upkeep.

Your customers will be looking for these advantages. So be sure you offer them in your houses. It's easy, in fact automatic, when you build with Quality-Approved aluminum windows.

You can get complete information from any Association member, Sweet's Builders File (Section 3c/1a), or by writing Dept. AB-11. DOUBLE-HUNG

CASEMENT

Aluminum Window Manufacturers Association 74 TRINITY PLACE, NEW YORK 6, N. Y.

NOVEMBER, 1950

MEMBERS

PROJECTED



Mengelbord* is a low-priced 3-ply utility hardwood plywood, ¼" thick. It is made from beautiful White Gum (Tupelo), has a one-piece face, with no joints or oval patches to mar its appearance.

Mengelbord is ideal for all interior uses: DRY WALLS PARTITIONS CABINETS STORE FIXTURES FURNITURE

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.

THE MENGEL COMPANY Plywood Division • Louisville 1, Ky. *Rg. U.S. Par. Of.



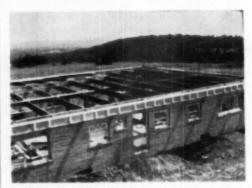
LIGHTWEIGHT sheel begins form sunshields and porch real for Ewing home near Corry, Pa., demonstrating design adaptability

Flexible Design With Steel Beams

The flexibility of architectural design which can be achieved with lightweight steel beams is well illustrated in an unusually functional hill site home near Corry, Pa. Designed by the owner, O. A. Ewing, the house features broad sunshields over all window walls, a water-insulated roof, steel, concrete and stone construction throughout and a 20 mile view from the front window.

In planning the three-bedroom, eight-room home, Ewing studied the use in residential construction of Junior Beams manufactured by the Jones and Laughlin Steel Corp., and adapted their span and carrying strength to the architectural features desired. Eight tons of 12-inch Junior Beams were used. Bolted to a wide flange beam in the center running the length of the house, all were placed to hand without difficulty.

An 11-foot cantilever of Junior Beams forms the roo.

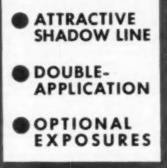


WOREMAN bolts root purifs to larger structural beam running length of house. All beams were installed conveniently by hand

for the from porch, with a 30-inch sunshield, which keeps sun rays from all windows until 3 p.m. extending over the walls. The beams are mortised with brick where they sit neatly into the wall. Sun decking is laid over the beams and topped by a three-inch concrete slab; and plaster is applied to wire lath clipped on underside of beams.

A special spray system provides a cooling ½-inch water cover in summer. Walls are designed with a two-inch air space, with Celo-Crete blocks forming the inside surface to which plaster is applied directly. Special louvers in the upper part of the sunshield admit a flow of air through the corrugations of the steel roof decking. This prevents condensation of moisture and rust.





Biggest news in residential building

The preference for pre-stained cedar shake walls has increased phenomenally during the past two years. Architects, builders and contractors all over the land are switching to this excellent wall material because it has the basic qualities that assure complete client approval.

QUALITY APPEARANCE is self-evident. The overwhelming approval of the textured beauty of pre-stained cedar shakes has made this the most imitated wall material in America.

VARIETY OF TREATMENT is exceptional. Exposures may be varied to conform with the design of each house; and color variations are virtually limitless.

DOLLAR VALUE, in original cost as well as upkeep expense, makes the wall of cedar shakes a sound investment.

YOUR CLIENTS WILL APPROVE



STAINED CEDAR SHAKES

NOVEMBER, 1950

NEW! in the 6" size

STANLEY SAFETY SAW W-65

Here it is, the most useful saw you can own designed for years of dependable service. This new, value-packed 6" saw features a multi-grip handle and a quick-set tilting adjustment to permit easy beveling to 45". Depth of cut is variable from 5%" to 2". Safety guard telescopes into top; and is fitted with finger knob for safe, manual control.

The W-65 incorporates a new lightweight construction with die-cast aluminum housing and steel base-plate. It has helical gears and full ball and roller bearings throughout, Net weight 10 lbs. Universal motor operates on A.C. or D.C. in any standard voltage. Saw furnished with combination rip and cross-cut blade; wrenches; lubricant; and durable, all-steel carrying case.

Available accessories include rip, cross-cut, and combination mitre blades, abrasive wheels and ripping guide. See the W-65 at your hardware dealer's, or write for complete descriptive literature. Stanley Electric Tools, 492 Myrtle St., New Britain, Connecticut.



Rog. U. S. Put. Off.

NARDWARE . TOOLS . ELECTRIC TOOLS . STEEL STRAPPING . STEEL

Vermiculite Plaster Partition Passes Impact Test

The superior resilience of studiess 2-inch solid vermiculite plaster partitions, compared with sand plaster, was established in recent impact tests made by the Detroit Building Trades School at Detroit, Mich. Two partitions were tested, each of identical conventional construction, rigidly braced, except that one was vermiculite plaster or gypsum lath; the other, sand plaster. Both partitions were 8 feet high and 16 feet long. It was the first test of a vermiculite plaster partition of this type.

The tests were made in accordance with a standard test procedure and acceptance conditions, which require that the partition be struck four times at its center by a 60 pound sand bag, dropped from 30°, 45°, 60°, and 90° positions with respect to its face.

A partition passes this test if, during the four drops, no cracks occur through which daylight can be seen: if no loose material results from the impacts: if the temporary deflection does not exceed 1 per cent of the partition height-0.96-inch in this case; and if the permanent set of the partition is not over 1/10 of 1 per cent of the partition height-0.096-inch.

While both partitions passed these requirements satisfactorily, the significant difference between the two types is that at the fourth drop the vermiculite partition showed no permanent set. while the sand partition had a permanent set of .09-inch. While only four impacts were required, both partitions were subjected to additional impacts from the 90° position. At the seventh drop (four of which were from the 90" position), the vermiculite partition had a permanent set of only .03-inch. compared with 0.14-inch for the sand partition. Failure due to permanent set did not occur in the vermiculite partition until the ninth drop. The vermiculite partition showed greater temporary deflection than the sand partition. but was better able to regain its initial Doutition.

Besides its greater resilience (a decided asset, should a building settle), vermiculite plaster is much lighter than sand plaster. A half-inch thickness of vermiculite plaster on the wall weighs only about 14 pounds per square yard, compared to 45 pounds for sand plaster. The enormous reduction in dead load is obvious.

With the serviceability of the 2-inchsolid verniculite plaster partition established, architects, engineers, and building officials can specify and approve these fireproof, economical space-savers.



Enduring cast iron National Heat Extractor Boilers and Art Radiators assure a complete, modern and versatile hot water or steam heating plant engineered for healthful comfort and fuel economy. A National Heat Extractor may be installed as a hand fired unit where necessary, and converted later to fully automatic firing of any type of fuel that conditions make most easily available. National Heat Extractors come in a full range of sizes and capacities to meet the heating needs of the smallest home to the largest building.

IMPORTANT TO BUILDERS

Cast iron National Heat Extractors and Art Radiators are readily available, to facilitate completion of heating plants without delays—an advantage to be considered under present conditions. The National family of heating products has long been a leader in customer acceptance. Write today for detailed literature on the "100", "200", "300", "400"

> or "500" series of National Heat Extractors and on Art Radiators and other heating products.

AMATTOWAL NEAT EXTRACTOR

- Big Soller Performance providing trouble-free efficiency and long life,
- Renaminal Operation—due to generous fire bug proportions and fuel saving principle of extended heating surfaces with multiple flue section construction.
- Compact Bosign—assures top performance without bulkiness. Requires listle space for installation and operation as compared with other boilers of equal capacity.
- Basy Convertibility-if hand fired unit is installed, convertibility to fully automatic gas or oil firing is simple.
- Smort Appearance—crinkle finish jacket in flamered and black harmonizes with color schemes in basements and utility risoms.
- Tenkless Heater and Biorage Tesk -- National Heat Extractors may be equipped with Tankless Heater or Storage Tank for year 'cound supply of domestic but waser.

THE NATIONAL RADIATOR COMPANY

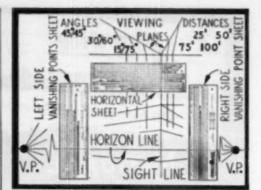
The Finishing Touch



INTEGRALOCK The only lock of its kind! Sealed for lifetime service. Finished for lasting beauty.*

Bored-in 4300 line locks Easy to install — always reliable. Designed for the particular builder who recognizes beauty and quality at a budget price.⁴





IN POSITION for use are the Plantic Perspecta-Guide Sheets

Perspective Drawing Made Easy

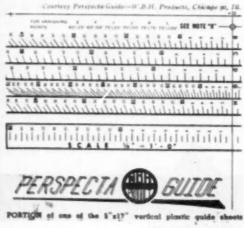
Perspecta-Guide replaces the actual construction elements of the universally used two-point perspective method; the vanishing points, sight point, and necessity of a full scale plan and elevation.

The form consists of three 5" x 17" vinylite plastic sheets with scales printed on both sides of each sheet. The scales on the sheets are marked for right or left side perspective views. There is an actual 34-inch scale on one of the vertical sheets that is used to measure the true height along the sight line.

Perspecta-Guide cuts perspective drawing time by one half. It is used to make a perspective drawing of any subject, object or scene. It is a precision scaled instrument used to make two-point perspective drawings.

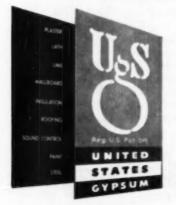
This guide is calibrated at $\frac{1}{2}$ -inch scale to make perspective drawings for the complementary angle views $45^{\circ}/45^{\circ}$ (head-on), $30^{\circ}/60^{\circ}$ (normal), $15^{\circ}/75^{\circ}$ (foreshortened), and the viewing distances of 25 fext, 50 feet, 75 feet, 100 feet for each of these complementary angles. This applies to both left and right side views. By transposing the scales on Perspecta-Guide to $\frac{3}{6}$ -inch, $\frac{3}{2}$ -inch scale, etc.; any size perspective and viewing distance can be used.

Perspective drawings are made directly on the final drawing paper, no retracing is necessary. It is quickly set up, tack or tape to paper. The only "tools" needed are a triangle and "T" square.





BUILD WITH USG



WRETHER you're building a wall, ceiling, or partition—whether you're considering insulation, sound control, roofing, paint, or steel—you'll find almost any need fulfilled by the vast array of United States Gypeum products and systems.

All are developed and tested with scientific care in one of the country's finest research laboratories. Throughout every stage of manufacture, they are quality controlled under rigid inspection standards.

Build with U.S.G., and you build for the future—because you're using the finest materials made.

... the greatest name in building

greatest names in PLASTERING



ROCKLATH[®] plaster base, with core of frequent gypesm, serves plaster, provides a buildag band. Perforated BOXLATH offords a mechanical on we at a section band, gives greater fire pretection. For off-year insulating BOXLATe sach. And, special Long-Length BOX LATH is ideal in stedbar non-food baseling partitions and on furrad mesany wells.



RED TOP[®] gypsom basement plaster, with BOCKLATH planter base or USG COLOR-BIT metal lab baild wolk and callings of unusual fire realstance, strangth beauty and lang Bin. BiD Top is easy working, and highly adaptable—conformer readily to Rat planes or curved surfaces Bands securely, takes any type of Rish cent. Use RID TOP plaster ... to be area



IVORY* Double Hydroted Bnishing lives is U.S.G.'s floet. Preferred among Ameton's ploateren for its high purity, whitenoss, ploaticity, and the exceptionally snooth Rnish it provides. For hand or machanical mixere, requires no more floes 15 minutes mixing on the job. Specify IVOF and be comfident of a job well deset.

HOVEMBER, 1950

#T.M. Boy. U. S. Fpt. CIE



NEW PRODUCTS

(Continued from page 63)

CRAWLER TYPE TRACTOR ABILS

A8113013



Only 37 inches wide, the USTRAC crowler type tractor has a homepower at drawbar of 20.4. Front end loader has 1/3 cubic yand capacity. Operated by finger tia hydrawlic controls. Easily converted to buildoare by single operotor. Has four speech forward plur linitant rareste. The 4-cycle, Lihead engine runs full time for index 50 per day. Tractato Dir., Federal Machine and Welder Co., Dept. AB, Warren, Ohia.

BURLIETIN BOARD MATERIAL AB113013 A new color, Willow Green, has been ndded te Armstrongs law of self-sceling rock com position bulletin bodrd material. The new color is a soft green that is especially suitable for todays brighter, more altractive intervans. Both the Willow Green and Desert Tan rollow have a light reflection of 28 per cent Made of cork composition in cell form, the material has a self-sealing surface, and is ideal for game room via in homes, for use in schools, or wherever an attractive bulletin board is meeded Armstrong Cark Co., Dept AB, Lencoster, Fo.

NON-FREEZE HYDRANT

A8115031



Rachert type bondlie provides seven speeds in a half tiers an new JR nanchreezing ground hydiant designed for use with stack tanks and where places on form where water pressure is provided. Start off writer betaw front line is cantrolled by value rad in snear pipe Special autient drain water left is pipe after shart-off. Specia batteren Inviet and ground measures 16 inches. James Knights Company, Sandwich, El (Continued on page 150)

... puts <u>Sell</u> into floor space!

Dapt. A8-6, Sloone-Blabox Corporation, 295 Filth Avenue, N.Y. 16, N.Y.

color coordination.

room from your Texfloor samples.

• Make floors a feature that helps sell the house. Do it with this new plan that lets home buyers pick their own custom-designed floors of Texfloor . . . the luxurious linoleum with the textured look. It means the extra of colorful, individualized interiors, but that's not all. Long-wearing Texfloor saves work. It's easy to keep spotlessly clean. AND ECONOMICAL TEXFLOOR CUTS COSTS! Easy-to-install Texfloor costs up to 30% less, installed, than ordinary flooring. Texfloor offers more, for less.

1100

#Trad



HERE'S HOW TO DO IT!

Put Texfloor in your model home. Let prospects see

how it makes your home more attractive . . . adds the newest decorating effect of sparkling room-to-room

Tell your prospects how Texfloor saves them work and

money...gives them long-wearing, easy-to-clean floors.

Let your home buyers custom-design their own floors,

selecting the colors and patterns they want for each

SLOANE-BLABON CORPORATION

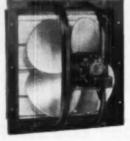
NOVEMBER, 1950



NEW! POPULAR-PRICED EXHAUST FAN LINE

... complete with automatic shutters!

Here's a brand-new direct-drive exhaust fan line . . . built for easy installation and rugged service! Available in 12-, 16-, and 18-inch blade sizes, with capacities of 1550, 2050 and \$100 CFM, equipped with special fan-duty sleeve-bearing motors and automatic outside shutters mounted integral with fan! Write for prices and specifications today?



You give your clients three distinct advantages when you specify Emerson-Electric ventilating equipment for commercial and industrial projects. First, you assure the right fan for every air-moving job, from America's most complete fan line. Emerson-Electric's famous guaranteed quality assures un-matched dependability and service. And finally, you make available Emerson-Electric's free fam-planning service, bringing 60 years of fan experience to your individual problems. For complete data, write for Bulletin No. 413.

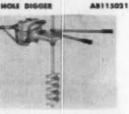
THE EMERSON ELECTRIC MPG. CO., St. Louis 21, No.



NEW PRODUCTS

(Continued from page 148)

POST MOLE DISCORD



The "Earth Drill," a new S H.P. gasaline powarad post-hole digget, is reported to be capable of drilling on a high rate of speed in any type of sorth or clay. It is particule, requiring no mactor or other vehicle for its operation. Can be converted into a standard McCalloch chain saw in less than a minute. Weight of two-man Earth Drill complete with 6-inch auger is 79 pounds. Augers of 6, 9 and 12 inch diameter are treailable. McCullach Matan Carp., 6103 W. Century Bird., Las Anmales, Calif

POWER HAND SAWS

A8115019



New Guild saws, Models A-6 and A-8 have built in calibrated angle adjustments which permit accurate bevel cutting, and instant depth control Equipped with precision-cut helical gear drive which delivers maximum power for accurate production sawing. Madel A6 cuts full two inches at 90 degrees, and Model A8 cuts 2% inches at 90 degrees furbine fan ven ilation system draws air through the motor and discharges it at front, keeping mater coal and cutting line clear at all times. Parter-Cable Machine Co., Dept. AB, Syracuse B, N. Y.

(Continued on page 152)

New Water Repellent For Masonry

"Silicone," a chemical with waterrepellent qualities has been compounded in a product called Crystal for use as a lining for the microscopic pores of masonry. Manufacturers of the product, the Wurdack Chemical Co. of St. Louis, say that it holds out water from exterior porous building masonry and masonry joints by coating surface of all microscopic pores or capillary openings with silicone. which water will not wet. One application was said to give lasting water protection.

Action of the repellent was described thusly : "On a Crystal treated surface, water stands in nearly spherical drops and does not flow out. This changes the capillary force from one of sucking in water to one of repelling water and allows masonry to breathe.



Unexcelled quality and service have made this the Largest Selling Line of Flush Doors in the World! This new name for long established products is intended to eliminate possible confusion with other "General" names, and identify a distinguished line of top quality flush doors.

Other than the name, there is no change whatever in the character or completeness of this line.

General GERALTAR Flush Doors offer these extraordinary features and advantages.

3-PLY FACES exclusively, balanced construction, for extra rigidity and utmost resistance to warping. Hot-press bonding – lifetime permanence,

FACE PANELS are painstakingly matched as to grain pattern and coloring – for extra beauty and decorative value.

BLAUTIFUL WOODS - genuine striped African Mahogany,

NOVEMBER, 1950

American Black Walnut, Red and White Oak - plain or rift sliced, Birch and Gum.

noLLOW COSE and solid core types, interior and exterior. Standard light openings. All standard sizes to accurate dimensions.

General SIBBALTAR Flish Doors are distributed by leading sash & door and building products concerns in all major markets, with stocks and service within a few miles of every point in the country.

> GENERAL PLYWOOD CORPORATION Louisville, Kentucky

> > 181



Cool comfort at low cost!

 Low cost home cooling is here! The Hunter Package Fan is a compact, powerful ventilating fan that is easily installed in any attic to pull in fresh, cool breezes and push out stale, humid air. Thousands are now in use throughout the nation.

Installation of the Hunter Package Fan is simple and inexpensive. Fan, motor and suction box are all in one unit that requires only a ceiling opening in hallway and 18" clearance in attic. Fan rests on attic floor; shutter fastens to ceiling opening. No "extras" to buy or build.

HUNTER PACKAGE ATTIC FANS are available in four models, ranging from 4730 CFM to 9500 CFM,



CFM to 9500 CFM, to Et any home size and climate. Quiet, powerful and dependable. Manufactured by Hunter, exrlusive fan makers since 1886.

MAIL FOR BOOKLET

Huster Fan and Ventilating Company 381 South Front St., Memphia, Tenn. Send free copy of "How to Cool for Comfort" to:

| , kdd 1 | ×18 | _ | _ | _ | | - |
|---------|---------|---|-------|---|--|---|
| City | R State | | | | | |

152

NEW PRODUCTS

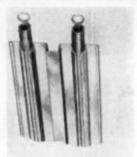
(Continued from page 150)



Ingersoil GL series of gas fired winter sit conditioners have input rotings of 78,125, 92,-756, 109,757 and 125,000 8.1 U. All models in series are environity compart due to inclusion of a compactly designed and efficient wedgetable heat achanger. Two smaller lowlary madels accupy only 20 by 51 inches of floor space, impler models, 20 by 51 inches of floor space, larger Models, 20 by 54 inches Unit is designed for borestearts or where space is limited, Berg Warner Colp., Dept, AB, 310 S. Michigen Are, Chicago 4, III.

PORTABLE ELEVATOR ABII3006 The Multiker commercial all-steel partable elerator can be used for move brick, blocks, mortor in buckets, sand, raafing materials, lumber, grypsum and many other products. Easily transported and assembled, a Mulkey 42-loce elevance will handle 12 concrete blocks, 23 feet high, in 43 seconds. Sam Mulkey Ca., Dept. AB, 1621 locust. Kanass City B, Ma.

ONE-PIECE JAME MEMBERS AB115002



Zegers Duris Seal Combination metal weather using and sink balance, previously manufacturing analy with the spicere members in now also available with all three of these pieces in a une-piece and member. New members attramplishes weather pretection and free, easy window operation. Such can be estably removed. Combination metal weather strip and such builsnoe can be installed in six minutes per window. It is used with stock plank frames and speck path and there is no machining of frames required. Zegers, Inc., Dept. AR, 8090 S. Chicago Are., Chicago 17, IE.

(Continued on page 154)



Here's a shop machine designed to cut costs



13 POWER TOOLS IN ONE!

ALKER-TURNER "900" Radial Saw

Does ALL the Radial Saw Jobs!

Ripping * Boval Ripping * Boval Cross Cutting * Dadaing Mitre Badeing * Shaping * Mitering * Compound Mitering Routing * Cross Cutting * Greeving * Tananing * Plaughing

CUTS DEEPER-WITH SMALLER BLADEI

Only Walker-Turner's "900" Series Radial Saw cuts 3 1/5" deep with a 9" blade - more than most machines that require a 14" blade. You get greater capacity, use less power.

SPEEDS CUTTING, BOOSTS PROFITSI

Full work visibility (gliding rom leaves work area free of obstructions). No binding, bumping, dodging. Ease of operation and built-in safety features save skilled labor costs.



GET THE WHOLE COST-CUTTING STORT-

Sand for new bulletin that talk how the Walket-Turner "900" Radial Saw can help you make more profit on every cutting job. Mail coupon taday!

-----. A Braches Co . .

| Dapt. AB, Plainfield, N. J. |
|---|
| Please send me the new Walker-Europer "900" Series Radial |
| Sew Bulletin |
| None |
| Company |
| Address |
| City Name State |

METAL-CUTTING BAND DAWS LATING SPINOLS DIAPERS JOINTERS

Don't cut corners-cut costs with a Welker-Turner "900" Rediel Saw

SOLD ONLY THROUGH AUTHORIZED DEALERS



DAILL PRESSES RADIAL DRILLS TILTING ARDOR SAWS BELT and DISC SURFACERS

NOVEMBER, 1950





AMERICAN BUILDER

(Continued on page 156)

All builders should know these facts about pressure-treated lumber



PROTECTION -- Treating of lumber preserve metals. The purpose is to protect lumber against costly rot and termite damage.



OTHER QUALITIES TO LOOK FOR—For greatest usefulnane, preservatives also abould be clean, adorless, paintable, non-louching and non-corrosice.



For complete information about #OLMANIZED" Pressure-Treated Lumber write for free booklet. "Reg. U.S. For. OB.



PRESSURE TREATMENT vs. Burface Application --Authorities say that pressure treatment provides the only sure, lasting protection to lumber.



WOLMANIZED Pressure-Treated Lamber combines all these requirements-issets 3 to 5 times image than untreated wood, because it's treated wood, because it's treated under 150 Hz. pressure pre square inch. Protection is deep in the wood filzers, It's clean, ederless, paintable, non-insching, non-curreiter. Wolmannised Pressure-Treated Lamber has been proved in use for over 25 years. It will prove its values to your customers and boost your good reputation as a builder of sound, durable, trouble-free educationer.



Ark., Los Angoles, New York, Partland, Ore., San Frencisco



NOVEMBER, 1950



Here's more proof -"Nearly everyone agrees that Har-Vey Hardware is the best performing, smoothest operating hardware they've ever seen," says V. A. Smith, Denver Sales Mgr. for the Hallack & Howard Lumber Co.

"More and more architects are specifying Har-Vey Hardware on all their jobs. Contractors like the case of installation and owners are sold on its trouble-free performance."

CHECK THE FEATURES THAT BRING PRAISE LIKE THIS FROM USERS ALL ACROSS THE NATION :

- a 1005 Restproof a Self-Inhricating Gilitz Bearings
- · Quick, Easy Installation · Positive Locking
- · Superior parts made by leading U.S. Manufacturers

Write for full details today!

Address HARDWARE DIVISION

| METAL PRODUCTS | | HHH HH |
|--------------------------------------|---------------------------|-----------|
| Please send me your from folder on r | sling doors & Har-Yay Bar | dears |
| NAME | | |
| STREET | | |
| CITY | STATE | |
| | | 0 |

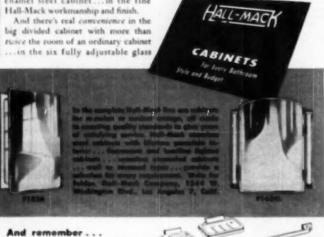
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All you've ever wanted in a fine bathroom cabinet is in this new Hall-Muck

HERE IS THE very must in bathroom cabinet beauty and convenience... two sliding plate glas mirror doors which conceal a spacious, double size receised cabinet.

There's besuty in the large handsome expanse of plate glass mirror (39"x22") completely bound by a wide chrome frame... in the glearning white baked enamel steel cabinet...in the fine Hall-Mack workmanship and finish. shelves...in the smoothly sliding mirror doors which always provide a 20"x22" mirror for use even when one cabinet is opened.

Wherever you want the ultimate in cabinet quality, and the most in beauty and practical convenience-install the new Hall-Mack Mirro-Glide.



Hall-Mack accessories . . .

(Continued from page 154)

STAPLE FOR FASTENING TUBES



Tube-Tita' stople for fostening copper and bross tubing used in radiant heating, hat and cald water service lines, refriguration and similar installations, is made of solid copper with a steel care for strength. Three sizes are designed to 65 %, % or %-och ansinal tubing. For the first two tubing sizes a flat top staple made from flat stack has been designed. For %-inch O.D. size a round wire staple with a round top is included in the line. E. H. Tichener & Co., Dept. AB, 67 Clinton Sr., Binghantein, N. Y.

-

A8115034

Low priced signs one being monulactured specifically for builders. Available in plain colors, signs are also made with Nite Gio Features which gleam when illuminated by auto and other lights. Active Display Advertising, Dept. AB, 1702 W. 19ht St., Chicago B, III.

CIRCUIT BREAKER

A8115009



Federal Noork Stab-Lok circuit breaker is built with an improved cooperative, thermal-magnetic hip action. In the magnetic action, a strong electro-magnet breaks the circuit instantly when in current ratings is greatly exceeded. The thermal action uses a bi-metal which flexes and trips the breaker when its pro-determined current time rating is exceeded. Stab-Lok breakers poss hormless momentary current surges, but hereak circuit at ance when shorts at dangerous averlands accur. Federal Electric Products Co., Dept. AB, 50 Paris St., Newook S, N. J.

(Continued on page 160)

ON'T WORRY ... IT'S Lile

When the family "nurse" develops "fumble-fingers" it's comforting to rely on Genuine Clay Tile.

Even iodine can be whisked cleanly from Clay Tile's smooth beauty. Hot grease won't burn Clay Tile—abrasive materials cannot scratch it. Could you say the same about old-fashioned floor and wall coverings? Clay Tile is surprisingly economical in the long run . . . your clients never have to "baby" it. It's in for good! Best of all, there are limitless decorative combinations in color, size and patterns,

> The Tile Council of America, Room 3401: 10 East 40th Street, New York 16, New York. Room 433: 727 West Seventh Street, Los Angeles, California.

DERN STYLE IS CLAY TEL

PARTICIPATINS COMPARIES:

American Discustille Taling Co. Andreastron Discustelle Taling Company, Inc. Allandie The Anominetic Step Co. Control of Dis Mean-feetbering Co. Control Talin Company Generation Talin Mean-feetbering Goodenia, Andrean & Co. Manny Tile Company, Inc. National The L Anominethering Co. Datas Taling Products Partic City Products Particle Talin Products Co. Particle Taling Products Particle Taling Parti





NOW with a busy summer behind us we are going to switch our field from discussing books whose main purpose is to provide building instruction and information to two books that are outstanding as sources of, for want of a better term, building inspiration. One of these fine works is the strikingly handhome, A TREASCRY OF EARLY AMERICAN nonres by Richard Pratt, which presents 250 full-color photographs of the finest historic homes in America. The other is Royal Barry Wills' justly popular volume. HOUSES row good LIVING, presenting a broad cross-section of Wills'designed homes. The accent in this book is on the style commonly known as Cape Cod, which is Mr. Wills' specially.

A TREASURY OF EARLY AMERICAN HOMES

by Richard Pratt. 136 pages, 250 full-color photographs, 1054 by 1336 inches, Whittlesey House, \$12.50, No. 14 on apportle page.

It is difficult not to go overboard in describing this book. The publishers say that it is one of the most beautiful books ever published in the United States and we must admit that what they say is true. Never before have we had the pleasure of viewing a collection of pictures that so vividly portrays the greatness of our country's architectural beritage.

The book's practical appeal to builders lies in the thousands of design and detail suggestions shown in every house described and illustrated. All of these fine houses, both large and small, are old but they remind us again that it is in these same dwellings that the American home building industry has its roots. And more to the point, the high standards of building construction that were established two or three hundred years ago when these houses were crected are the same standards, revised for modern application, that our best home builders maintain today.

It is, in short, a book to be looked at, read and enjoyed, a book that should make every member of the building industry proud to be carrying on the work of those early craftsmen who built so well in the years when the country was young.

HOUSES FOR GOOD LIVING

by Royal Barry Wills, 112 pages, illustrated, 915 inches by 1315 inches, Architectural Book Publishing Co., Inc. \$4,00. No. 15 PR opposite page.

In this volume, also mainly comprised of pictures, and excellent ones at that, the architect has taken traditional forms, much like those found in A TREASURY OF EARLY AMERICAN BOMES, and has reproduced them for modern living. There is no blinking the fact that there are today more homes in this country that are termed Cape Cod than there are of any other recognizable design, just as most architects will credit Royal Barry Wills with being the leading designer of this style of dwelling. A study of the book's illustrations confirms the fact that the essence of good architecture, be it contemporary or traditional, lies in the careful attention the architect and the builder pay to structural details. Too often have all of us seen potentially attractive homes made downright ugly simply because the architect or builder had misplaced a dornier or framed a hadly proportioned doorway. Criticisms of that kind cannot he leveled at any of the houses pictured in this volume.

Here again is an opportunity for today's builder to see what is best in traditional architecture. Mr. Wills' ideas on such matters backed up by the authority of the houses that appear in his book are well worth any builder's careful study.

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(Continued on page 162)



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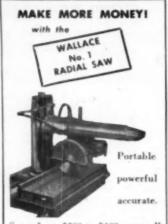
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NEW PRODUCTS

(Continued from page 160)



Screen corner braces, with holes large enough to take screw, are packaged with or without crew. The wrought steel stamping huge stiles closely, is reinforced for extra greenpth, and prevent sect-som pull that weakens screen corners. Warping of stiles will not pull braces out of elignment. C. Nager & Sona Hinge Mig. Co., Dept. Al, S. Guora, Mc.

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More than 16 uses of Better Bet sectional upward acting ganage doars are annihable, ranging free an Bah doat 6 inch door for small ane are residential ganages up to doars for larger commercial and industrial installations. Door features Desglas for stiles and raits. Panels are Jahl laminated fir, waterproof glued. Shipments are made complete with hardware, wood sections, track, springs, and aits plifed. Illustrated installation instructions. Better Bit Door Co., Dept. AB, White Horse File, Egg Hubber, N. J.

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(Continued on page 164)



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No wonder housewives everywhere choose Steelcraft's new SPACEMAKER Steel Doors in preference to the old swing-

ing, space-hogging kind. Just look at the diagramssee how you have to claw and fumble to get at anything stored in the dead ends of old-style closets. Spacemakers open right up to whatever you want. Besides, Spacemakers permit full use of the room space in front of closets which must be kept free for ordinary doors to swing in.

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Perfect team mates for Steelcraft SPACEMAKERS, these sturdy steel frames are also ideal for conventional swinging doors of wood or metal. Use this up-todate, improved product at a substantial reduction in installation costs. One-piece welded construcwon't crack, shrink, tion swell or warp. Reinforced, mitred corners won't open. Hinges are spotwelded to frame. Completely enclosed dust how welded to frame; adjustable brass strike plate furnished Mail coupon at right for fat information

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NOVIMBER, 1950



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available in the world, coday ! These Usics Elfotime Abuminess Casements are made to nices based on the modular system of dimensional coordination of building products. This modulation conforms to the modular standards for massively openings and cutting glass panes, thus, greatly seeing construction from . refacting halding cost. . making you the some physics and domanded builder in your more not be available channel use and types of Usics Lifetime Windows.



NEW PRODUCTS

(Continued from page 162)

ACOUSTICAL TILS FASTENERS AB115005



Simple, low-cost, one-mon installation tical and duct insulation materials is **NOW** possible through the use of " Quick Clips, made of formed wire. To install Fiberglas or kerfed acoustical tile, one angle of the formed wire clip firs over the furring strip or 1/2-inch plasterers channel, while the other end. formed into an avail loop, is pressed into the adge of the tile being applied. Half of each loop is imbedded herizontally into each ad ining tile. One men working by himself, with no tools, is able to install a ceiling without assistance of the rate of at least 90 square feet per hour on straight going. Nelson Stud Welding Div., Marton Gregory Carp., Dept. A8. Lutain, Ohio.



"Grani-lite," a new finish on tempered hardbaard panels, has the multi-colored appearance of real granite. Available in new shades of Sky Blue, Sea Green, Apricot Blush, Dove Gray and Maltese Gray. Patterns are Tile Pattern, Parallel ine, Streamline and Smooth Surface. Score lines will be the path of the validac's other board products, Wal-lite and Satin-lite. Panel sizes of Grani-lite will be the conventional \$44, 4e6, and 4e8. Wallace Manulacturing Ca., 10th and Fayette St., North Kanas Cry, Ma.

DOOR KHOS PROTECTORS AB95023 Knob protector will keep doar hardware finish in perfect condition thering final stepse of building. Prevent dirt, paint or scratches from accumulating on knobs. Made of a paper that sticks only to itself. Protection is provided by simply crumpling a sheet area any doar knob. No smings or lubber bands needed to hald it. Westwood Manufacturing Co., Dept. AB, 1420 S. Evergreen Ase., Los Angeles 22, Calif.



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NOVEMBER, 1950

CONTOUR BEVEL

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LIGHTING recipe for chair reading under fiver immy is demonstrated by General Electric Engineer Eugene W. Commery. He uses a wooden triangle is demonsstretic proper placement of fiver immy which meets specifications for proper construction and light output

Tested 'Recipes' Basis of Better Home Lighting Plan

A program to improve residential lighting on a national scale, based on fundamental "lighting recipes" to be demonstrated in 10,000 homes, has been launched by the Lamp Department of General Electric Co., Nela Park, Cleveland, Ohio.

The program is designed, the company said, to show homemakers better lighting and to acquaint them with its benefits; to stimulate thinking, planning and action of various parts of the lighting industry; to install modern lighting in new homes; and to improve lighting in existing homes.

Called the "Home Lighting Conditioning Program," it is said by General Electric to be "the most important project yet undertaken in the home lighting field and is expected to bring to the average home and apartment dweller for the first time the functional and psychological advantages of truly modern lighting . . . easier, safer and faster seeing, greater eye comfort and protection, and improved home beauty, charm and livability."

More than 20 scientifically-tested lighting recipes will be used to effect the desirable quantity of light and quality of lighting for each location and seeing need in the home. Basic recipes were originated by Eugene W. Commery, company illuminating engineer in charge of residential lighting. Ollie H. Young, assistant manager of the G-E Lamp Department's general sales division, is chairman of the program committee.

Give You All Three!



The Seal that Stands for LIFETIME SERVICE

With galvanized sheets, it's the Zinc that stops the rust! While all galvanized sheets give years of service, the heavier the Zinc coating, the longer the sheets will remain rust-free and the longer your root will last. Sheets stamped with the "Seci of Quality" shown theve carry a quaranteed coating of 2 ounces of Zinc per secure foot. Only slightly higher in cost, they generally have double the service life! It will pay you to ask about "Seal of Quality" galvanized sheets for super service!



The free booklets allered in the coupon at right are fully illustrated and packed with practical information on galvanized sheets, roofing installation, Metallic Zinc Paint, etc. Send for those you can use, today!



Protection

A strong, sound, leak-proof root guards valuable crops, livestock and machinery against damage and destruction. Thru years of experience, farmers have found that galvanized sheets give more protection against wind, rain, snow, fire and lightning than any other type of rooting. As a result, today more than a third of all farm buildings in the U.S. are covered by galvanised rooting!

2. Stay-Ability

You want a root to hold at the nail holes...resist high winds and the elements...stay sealed and solid for years and years. Only galvanised sheets give you the strength of steel...the rust protection of Zinc! Only galvanised sheets cut down your overhead by staying "over-head" year after year-often for the life ei the building.

3. Economy

Before you buy any rooting, consider these three longtime cost factors: (1) The original price of the rooting material: (2) The repair and up-keep cost; and (3) The number of years of serviceable life. Think of all three and you'll see why galvanized sheets are First Choice for farm buildings all over America.





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40 YEARS AGO...this Tennessee plant was covered with quiranized sheets which are in excellent condition after 4 decades...with minimum meintenance.

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| AMERICAN ZINC INSTITUTE 25 E. Wocker Dr., Room 2630-A Chicogo I. Blinsis Without cost or shilpstion, and the C Facts Actor Galvaniard Electric | illustrated backlets I have checked. |
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| Forts About Star Faint Mrs. List of Metallic Star Faint Mrs. Directions For Applying Galva- nized Shee's | |
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Sensational Indoor Incinerator disposes of all burnable refuse

Costs nothing to use!

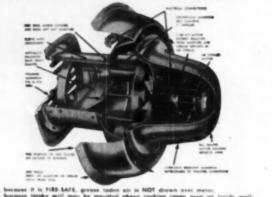
The year's hig news in an extra-profit item for builders in this low-cost Majestic Incinerator. It burns wastebasket trash along with oretand-dry garbage indoore: Taps to flue in basement or utility room. Uses only the waste itself as fuel. Unique downdraft does wate first as fact. Cupple downtral does the trick. Dries the refuse and hadrens harr-ing. The Majestic Incinerator is a handy ap-pliance for any home. Automatic-heated homes expectally need its disposal help. Available in Economy (2 bu.) and Deluxe (1 bu i models. 1.3 hu.) models.

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because it is FIBS-SA/B, groose lodon air is NDT drawn ever meter; because intelle grill may be mounted abave cooking range even an inside walt; because andinery 6" stave pipe will serve for making connection between intelle grill because another a participant of the second shared by the second shared by the second shared by the second shared by the second second shared by the second second

If is weatherproof, back draft damp m is becard in correston-free atominum



Before . .

After . .

THESE before and after photographs (above and below) reveal the effectiveness of architect Paul Bry's remodeling job for this clothing store. Glass. redwood and fluted planter in simple propertions replaced the ornate design of the original

Open Design Replaces Ornate Symmetry in Remodeling Store

Openness in and out of the storethe modern motif for commercial design, is well illustrated by the remodeling job for Arthur-Martin, Inc. New York clothiers, done by Paul Bry, architect. The symmetrical front gave way to a new slanting entrance with more window space, and the interior enclosed cases and shelves were replaced by open counters and racks that permit easy inspection of all merchandise by the customer, for architect Bry supports the theory that products should be seen to be appreciated.

Redwood-framed windows and a simple, fluted façade give a simplicity to the front not achieved by its previous face of mirrors, moldings and fanlight. Plaster-run coves, pilasters and ornate capitals were supplanted

(Continued on page 170)

GUNNISON. Homes, Inc.

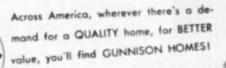
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The greatest name in home-building far fifteen years, Gunnison is the mark of quality!

Since 1936, Gunnison Homes, Inc., U. S. Steel Corporation Subsidiary, has produced homes of the highest quality... homes scientifically designed for convenience, for gracious living. Gunnison Homes have passed the test of time, the test of public approval!



Junnison Homes

TE STEEL US C

NOVEMBER, 1950

#TM

Open Design Replaces

(Continued from page 168)



Old . . .



New . . .

THE pottern of change was reposited in the interior where deah walls and unitspired decoration gave way to the dynamic linea of functional decign in familnating colors. Compare the old (above) with the new (below). Stanting pole directs attaction to display

by functional lines of the new interior decor. The new central decorative element, a slanting strut, from floor to ceiling, is intended to focus customer attention on the display counter of "impulse" items.

In addition to the spotlights projecting from the walls, the major light source is from the fluorescent fixtures installed above the Cel-O-Glass transparent ceiling.

Walls are finished light grey-blue; the asphalt tile floor is rust color.

Fibergias Products Show Visits Chicago

The \$50,000 Fiberglas product demonstration, now touring metropolitan areas, was presented Sept. 6 at the Congress Hotel, Chicago, under the auspices of the Froducers' Council and the Fiberglas Corp.

A large number of mockups and examples of Fiberglas products were described and explained by five commentators.



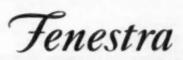


YOU CAN INSTALL THIS NEW WINDOW UNIT IN

Simple

Steps..





WINDOWS . DOORS . PANELS

See how easily the reaches over the sink and wirds her Penestra. Window open. How easily she swings it wide to catch the breeze. It's one of the things that sold her on this horses.

... it comes completely trimmed outside and inside

Added to the modern, sales-appealing Fenestra[®] features like twist-of-the-wrist opening ... controlled ventilation ... screening and cleaning from inside, is a feature designed for your convenience: Easy, two-step installation.

Each Fenestra Casement now comes completely steel trimmed. All you have to do is nail it to the sheathing around your rough opening . . . then anchor it to the studding on the inside. It's that easy. Your carpenter makes all openings alike for frame or brick veneer. Runs sheathing right over stud and cripple and saws it off flush. Plaster, tile or dry wall butts against metal trim inside. Shingles, siding, stucco or brick butts against it outside. You don't have any finishing to do inside or out.

The integral flashing saves you time . . . makes your wiodow weathertight. There's a "pocket" in the inside trim, for Venetian blinds or shades . . . no need for blocking. Steel trim is galvanized and Bonderized . . , with a baked-on coat of prime paint. Head and jamb members are 18 gage. Sill is 16 gage. Check on these beautiful new Window Units today. They're

Check on these beautiful new Window Units today. They're the newest thing in windows and built by the oldest and largest steel window manufacturer in America. Call your nearest Fenestra salesman (listed in the yellow pages of your phone book). Or mail the coupon.

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NOVEMBER, 1950

SAVES ... TIME, MONEY ... Error Control checks costly mistakes!

COSTS ... LITTLE TO BUY has features of machines priced much higher!

Smith-Corona

Compare features, price . . . Smith-Corona offers appearance and advantages for which you'd expect to pay dollars more. Exclusive Color-speed Keyboard protects you from error, quickens work. Error Control lets you correct individual column mistakes

10

before adding. "Clear Signal" keeps you from including unfrom including unsmith-Corona extras add up to high value at low cost. See your Smith-Corona dealer.

SMITH-CORONA CASHIER

A complete cash register plus adding machine services of lowest cost.



Inventory Control Order Attects Building Materials

Issuance of an inventory control regulation affecting a number of important materials in short supply was announced Sept. 18 by National Production Authority Administrator William H. Harrison.

The regulation, first to be issued by NPA, limits to a "practicable minimum working investory" the quantities of various ferrous and non-ferrous metals and minerals, chemicals, building materials, textile materials, rubber materials, and forest products that can be ordered, received, or delivered. Only ultimate consumers buying for personal or household use are exempted.

Stockpiling of strategic materials authorized by the stock-piling Act of 1946, is not involved in this order.

In announcing today's action, NPA Administrator Harrison said:

"The purpose of the order is to make clear that national interest demands there be no accumulation of materials beyond what is needed for immediate production and that it is the responsibility of both the purchaser and supplier to assure that the spirit of the order is lived up to.

"This will require the most exacting review of inventories and ordering procedures at all levels to insure that the materials available acrually produce the maximum volume of goods and services.

Harrison pointed out that "practicable minimum working inventory" is defined in the regulation as the "smallest quantity of material from which a person can reasonably meet his deliveries or supply his services on the basis of his currently scheduled method and rate of operation."

The supplier is affected as well by the NPA regulation, Harrison said, since he may not deliver any material if he knows or has reason to believe that his customer is not permitted to receive it.

Ontstanding orders should be promptly cancelled, reduced or deferred if they exceed the practicable minimum working inventory, under the new regulation. The same requirement applies where production schedules are adjusted because of changed operations, slowing or stopping of production, or for other reasons.

While this particular order does not provide for disposal of excess inventory now on hand, it was pointed out that under the Defense Production Act authority is provided for the requisition of such inventory.





In two minutes time, Nick Bire can load his dazer lets the special built trailer and start polling away with his 6-sylinder Madel F-1 Ford Pickup.

"Now I can handle four \$12 jobs in a day with my Ford Pickup and Dozer!"-says NIKK DIRE

SAVE WITH FORD ! AMERICA'S NO.1 TRUCK VALUE !

- SAVE GAS with Ford Loadomatic ignition and High Turbulence combustion chambers.
- SAVE OIL with Ford Flightlight aluminum alloy pistons, cam ground for oil-saving fit at operating temperatures.
- SAVE WEAR with pressure lubricated main and crankpin bearings, Double Channel frame, extra heavy duty axles, big brakes (up to 16 in. by 5 in.).
- SAVE ON REPAIRS with demountable brake drums, brake inspection hale, engine-top setting of accessories, plus nationwide service from over 6,400 Pard Dealers.
- ★SAVE TIME with Ford reliability and performance. Only Ford gives you a choice of economy-proved V-8 ar 6-cylinder truck engines.

"I FIGURE that case in handling and speedy transportation is the answer to the small contractor's problems," says Nick Dire.

"The smartest move I ever made was when I bought my F-1 Pickup and buildozer. The big contractors immediately started giving me breaks. They realized that with my setup I could move in quickly, do the job and move out without delaying them.

"I get my Ford into some rugged places but it has never let me down. Even in tough work like this, maintenance costs are not high and gas and oil consumption is surprisingly low."

For topnotch performance plus economy in any kind of work, choose from over 175 Ford Truck models ranging from 95-h.p. Pickups to 145-h.p. Big Jobs. Only Ford gives you a choice of V-8 or 6-cylinder power in two V-8 engines and two Sixes. See your Ford Dealer today.

| Ford | Trucking | Costs | Less | Becau | se - |
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| LA | ST | LO | N | GI | ER |
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life insurance exports prove ford Trucks last longerf

| \$269 Sele- | n of FORD MOTOR COMPANY aufor Rd., Dearbarn, Mich. son charge or obligation, detail no. Ford Trucke for 1910, |
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First Choice with Leading Architects and Builders



The complete Mueller Climatrol line is the first choice among leading builders and architects for many reasons. First, they know this complete line gives them the heating unit that is right for any job — with any type of heat, any type of fael. Secondly, they know that they deliver years of Mueller Climatrol's fuel-thrifty comfort — a guarantee of customer satisfaction. Finally, they deliver a heating system whose name has universal acceptance — thanks to Mueller's 93 years of leadership in the home heating industry. Write for full details. L. J. Mueller Furnace Co., 2115 W. Oklahoma Ave., Milwaukee 15, Wis.



Promoting Comfort Builds a Business

Competing with established builders, a war voteram sells his share of houses by stressing comfort and character

When Robert G. "Bob" Swan got his contractor's license in 1946, after leaving the Navy, he knew a lot of building would be done in his home town. Redondo Beach, Calif.—but he also knew that a lot of older and more experienced contractors were eager to do it. So he determined to make a place for his houses in the competitive market by offering buyers a number of distinctive design and convenience details; and the policy has paid off in gratifying acceptance.

Typical of Swan's emphasis on individuality and comfort, although this house is larger and more expensive



VIEWS of front and patio of Swan-built house in Redondo Beach. Calif. Layout permits accord view from all rooms. Floor plan below



than most that he builds, is a ranch-type built on a bluff overlooking the Pacific. All rooms were given an ocean view, there being no future building site to interfere ; and the bouse's "U" shape forms a private wind-protected patio.

In place of floor joists, Swan used 4x6 girders spaced (Continued on page 176)

24" × 96" 04. 30" × 96" 30' x 60' on 48' x 96

1/4 WATERPROOF WELDWOOD PLYWOOD

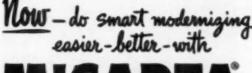
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BACKING SHEET FOR MAXIMUM STABILITY

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CONDED-TO-PLYWOOD

Micarta is the quality plastic surfacing material made by Westinghouse and advertised in such magazines as The Sat. Eve. Post, Good Housekeeping, etc. By offering its unique colors and advantages for kitchens, bathrooms, playrooms, stores and elsewhere you can get the better jobs. People want this lustrous new material that is practically proof against any denting, chipping, scratching or staining

YOU CAN HANDLE AND INSTALL

Now, Micarta is made in Panels that you can saw, trim, drill and plane. They consist of 1/16" Micarta bonded to 34" waterproof mahogany Weldwood Plywood. Any carpenter can handle and install them using inexpensive hand or power tools

FOUR SIZES FIT EVERY NEED

And these Micarta Panels are made in Jour sizes so that you can cut them for almost every job with virtually no waste. For instance, 24" x 96" panels are suitable for kitchen counters, commercial counter tops, counter fronts and bar tops. If the kitchen counter requires a backsplash, use 30" x 60" or 30" x 96". 30" x 60" is also ideal for built-in breakfast tables. For commercial walls and miscellaneous cuts, une 48" x 96"

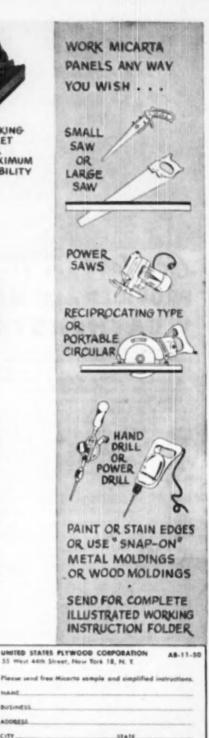




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Send for a FREE SAMPLE, a color folder and complete detailed data showing how easily you work Micarta Panels -



175



Comfort AND SAVINGS PROVIDED with METAL WEATHERSTRIP

It's mighty hard to provide maximum comfort in homes that do not have the necessary full protection of Metal Weatherstrip to seal the cracks around windows and doors. It literally puts a blanket around them ... prevents needless heat loss and discomfort.

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.

For better Metal Weatherstrip it's "smart business" to talk with anyone of the Weatherstrip Research Institute members. Suggestions and inquiries about metal

weatherstrip are invited for the benefit of all.

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Weatherstrip—the original Fuel Conservator . . . Saves Most Fuel in Proportion to Cost !

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| 6.5 THERE, INC. 611 3. Broadway, Albuquerque, N. G. Calpois will Charlest 1271 March Ave. Charge 30. M. | MARIES (0, 4.). 42-Tonin Ann, N.E., Minn, 13, Minn, MATRICA PEOPOCIS 641-65: Anthone Ann, Chemps 36, M. |
| - menumentation - And | States, INC. |

Promoting Comfort

(Continued from page 174)

4 feet, 6 inches apart and resting on concrete piers 14 or 16 inches separe spaced at the same intervals. A 2-inch tongue and grouve Donglas in subfloor is applied over the girders, making for startly construction and at the same time permitting direct application of rubber tile, linoleum and carpeting to the subfloor. The Douglas in left exposed with dowels inserted in 52-inch holes to simulate pegging, makes an attractive floor for the den; left in natural color, it is sanded, filled and waxed.



AN interesting use of wood interior finishes is made in living room. Fireplace mantel and wall, sheathing board ceiling are fir

Boards and battens form exteriors of many of Swan's houses and he goes to considerable trouble to get the effect he wants. Instead of using 1x3's he rips a 2x4 into three battens about 3/-inch thick and nearly four inches wide. These give a very trim appearance. Roof is cedar shakes laid 10 inches to the weather with a layer of 30-pound felt under each course.

Wood finishes are used for variety in some rooms. The den is paneled in Douglas fir, colored silver grey and rubbed, contrasting with the terra cotta-colored ceiling. Living room ceiling has 4x6 beams on 3 foot, 6 inch centers; on these are placed 2x6 tongue and groove fir sheathing boards, varnished in natural shade. Two 4x12 beams 9 feet apart, each of which conceals a 1-inch iron bar, truss the root. Fireplaces in den and living room



DEN windows afford ideal view, Paneling is Douglas fir, colored silver groy and rubbed. Thermodor electric heater is seen at right are rough Norman-size brick and Arizona flagstone, respectively.

Swan's kitchens, which also have received special attention, are very popular with women. They include Thermador "Bilt-in" electric ranges, in which the oven and cooking top are separate sections and may be installed where desired. The flexibility of plan permitted by this (Continued on page 171)

Eye appeal for prospects with sharp pencils

Houses that "look like more than they cost" are a feather in the cap of any builder. And when good looks and economy are backed up by real durability, you're offering a value that can't be beat.

To do just that, more and more builders are using the Keystone System of Stucco Application. Architects are specifying it. Buyers recognize it as a real sales feature. Let us send you the facts, in the new 44-page "Keystone System" booklet today. Write Keystone Steel & Wire Company, Peoria 7, Illinois.



STUCCO APPLICATION





YOUR OWN MAN can easily use this smooth working machineso that you get the economical advantage of sanding floors on your jobs as part of your routine work. Balanced perfectly, the Speedmatic F-89 maneuvers easily - without tiring vibration without jockeying or tipping. No waves, no gouges, no cutter marks -- but a smooth, flawless finish in amaringly little time. And F-89 speedmatic continues to do high class standing because it's a high quality machine guaranteed by Porter-Cable.



2 BIG PLUS FEATURES

INTERCHANGEABLE DRUM COVER. Here's a real time saving advantage! Drum covers can be received WITHOUT LAY-UPin only three minutes right on the jub. Removering costs are lower, need 14's a flexible steel collist, honded with tough rubber cushion, made in two semi-cylindrical halves which are on quickly.

Thest service in the sandle business. All Speedmatic distributors have authorized service departments and have access to parts, supplies and pages repair facilities at the various, strategically located Porter Cable regional beadquarters.

Manufacturers of SPEEDMATIC and GUILD Electric Tools

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| City | Zona State |

Promoting Comfort ...

(Continued from page 126)

type of range is illustrated in the triargular arrangement of the kitchen. Ovens are placed at a convenient work level, making stooping unnecessary. Where twin ovens are used, they can be located either side by side or one over the other.

Another kitchen ides was the use of two individual sinks in lieu of the conventional double to provide extra room for two persons working at the same time. A dishmaster adds to the sinks' efficiency.



KITCHEN is light, has generous counter space, wallpapered dropped ceiling. Twin sinks give extra working space to 2 persons

Color and decoration also help to make Swan's kitchens distinctive. He frequently wallpapers kitchen ceilings, picking colors that harmonize with the floor linoleum and Formica counter tops.

Thermador electric heaters are another item of standard equipment. One 3,000-watt unit serves the guest bedroom while the living room has two of 4,000 wafts. Heaters in rooms constantly used have thermostatic control; others utilize a manual control switch. The Thermador units are equipped with a heavy-duty 10-inch fan which in hot weather can be used for cooling. Swan says that owners are enthusiastic about the availability of a fan ineach room; the quick heat; and the economy of heating occupied rooms only.

Among other features of the house are: a door frame (Continued on page 180)



ILLUSTRATING convenient arrangement of Thermodor electric range. All burners are easily reached and two ovens are handy

Yes, any builder can reduce costs with



Modular design is simply a practical method of coordinating building plans and materials on a four-inch unit of measurement—called a "module." Widely acclaimed as the most important development in the building industry today, modular design offers you many cost-cutting advantages.

speeds construction

Modular-size building materials fit together without costly cutting and fitting on the site—save waste time and excessive labor costs.

reduces waste

Modular design eliminates much of the waste of expensive building materials, since modular-size units are put together without trimming.

simplifies your purchasing

One national standard for wood window sizes now reptaces the ten or more regional standards. Jobbers and dealers can carry a better assortment of standard stock items, and it's easier for you to obtain the sizes you need.

helps you meet competition

Modular design enables you to give the owner greater value for his money, whether you're building small homes or large commercial or industrial structures.

See year lamber dealer for additional information on modular design. Or mail the coupon for our fere folder.

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Chicago 4, Illinois

Gentlame Builders,

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| Two Light | Four Light High | Sixteen- Light | Tup Six Light | Twales Light |
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NATIONAL WOODWORK MANUFACTURERS ASSOCIATION + 332 South Michigan Avenue, Chicago 4, Illinois

MERS ASSN

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



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NOVEMBER, 1950

how modular design

how modular design

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These five popular wood window designs are all readily available in the 25 most widely used sizes. Any one of the designs will fit into the same size window openingwithout wasteful cutting and trimming.

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Compare Kennatrack Quality!



KENNATRACK STRIES 275 SLIDING DOOR HARDWARE -FOR CABINETS AND WARDROBES

Here is Kennatrack's latest achievement in quality sliding door hardware... the new Series 275 with noiseless, long wearing nylon wheel and completely redesigned hanger. All movable parts are rustproof. Remember KEN-NATRACK for "onesource" service in top quality interior sliding door hardware. ton choice



Entruded aluminum track for Series 275 is heavier and stranger. Note Endesive Peakers: TRACK IS HEDEN FROM VIEW.

door hardware ... top choice of builders everywhere.

Enlarged plant facilities, increasingly efficient production methods plus constantly improving produc-



tion equipment keeps Kennatrack hardware still available at NO IN-CREASE IN PRICE!

WRITE DEPARTMENT 510 FOR FULL DETAILS IN LATEST KENNATRACK CATALOG

JAY G. MCKENNA, INC. Specializing Exclusively in the Manufacture of Stating Door Bardware

ELKHART, INDIANA

Promoting Comfort...

(Continued fram page 178)

for a future maid's room buried in the closet adjacent to second bath; glass blocks in master bath to admit light; full length mirrors in two bedrooms; a hult-in vanity in master bedroom with "lift-up" top, containing a mirror and space for commetics; and Lumeline fluorescent lighting tubes on both sides of mirror in the third bath.

Dropped ceilings are used throughout the house wherever they improve appearance or efficiency. Linoleum and rubber tile are applied with cove bases for smoothness and easy cleaning.

Swan started his building career as a laborer and



AMPLE storage and counter area characterise bath



BREAKFAST nook with large glass area looks out over Pacific

worked his way through carpenter's helper, carpenter, foreman and finally superintendent. When he was released from the Navy and decided to launch his own business, a contract to build a house for a friend got him started. In 1949 he built one store and 16 homes ranging from \$8,200 to \$40,000. Though most of his work is on contract, he occasionally builds a house for sale to keep in touch with public reaction.

230,800 Rental Properties Started in 1949

Of the 1,025,100 new homes and apartments started last year, 794,300 were one-family structures. The remaining 230,800, says the National Association of Home Builders, was divided thusly: 36,500 rental type two-family and 194,300 rental type multi-family structures. "/ like our Can w it never h in a jitty And so s of to get it of

1

SNOW-PROOF-The completely snug fit of the Carr-dor keeps out snow and rain. Weather has no effect on the easy, smooth action and positive closing of the Carr-dor.

'Our Corr-duc is need! It

lifts and clases easily I den't have to bother the rest of the

ing out of position.

ily for help anymore."

Here's what the Smith family says about RR-dor

OVERHEAD GARAGE

DOORS...

"Ours is a Corr-dor. ve kiddies can open and te the garage door for Nonny and Daddy!"

ATTRACTIVE --- The Carr-dor lends added beauty to any garage. This attractiveness can be easily maintained too, because Carr-dors are made of Ponderosa Pine to which paint best adheres.

EASY TO OPEN .- A slight lift, and

the perfectly balanced Carr-dor with

its minimized friction slides overhead

by itself and stays put. The Carr-dor doesn't have the annoying habit of roll-

EASY TO CLOSE-No tugging a Carr-dor. And though it pulls down easily, it does not drop into position. Women especially appreciate its feathertouch ease of operation.

WIND-PROOF-Wind pressure cannot close or slam a Carr-dor when open, and when closed the lock catches both sides of the door and positively prevents opening.

The best quality hardware available is fitted to a frame made by expert craftsmen and joined together with giant size dowels, whose spiral glue cells insure permanence of joint.

CARR, ADAMS & COLLIER CO. Dubuque, lowe

Also manufacturers of Superior Unit Wood Windows . Exterior & Interior Doors . En. trances + Shutters + Clas-tite Casements + Carr-dur Garage Duors + Basement Unit Windows . Louvers & Gable Sush . Brook-Just Nacks . Combination Doors . Servens &: Storm Sash + Corner (China) Cabinets + Glidur Cabinets - Ironing Board Cabinets -Mantels & Telephone Cabinets + Multiple-Use & Linen Cabinets - Stair Parts.

NOVEMBER, 1958

BW-3247

BW-3245

181



YOU, TOO, CAN BENEFIT. Again NAHB invites everyone in the home building industry to take part in its Annual Convention-Exposition. Here is your opportunity to express your views and help settle today's vital issues... see and learn what's new in home building and get the facts you need and want to keep your business sound and profitable in the months ahead.

REGISTER NOW! Use Coupon! Advance registration (\$12.50 for men, \$7.50 for women) must be sent with hotel reservation request. Confirmation and registration certificate sent to you at once. Make checks payable to National Association of Home Builders. If registration

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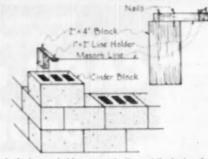


BUSINESS

182

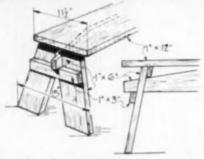
TECHNICAL GU for Builders and Craftsmen

low to Make a Helder for Mason's Line

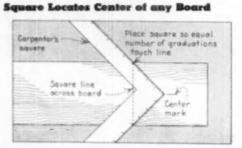


A device to hold a mason's line while laying hollow cinder blocks in a wall, can be made of two 2x4 blocks and two pieces of 1x2. The 2x4 blocks are adjusted to fit snugly into the void of cinder block and yet can be quickly removed and raised for the next course .- Submitted by John Mack Elmira, N.Y.

How to Make an Economical Work Bench



A sturdy and economical work bench can be constructed with a minimum of material and labor by following the details indicated in the sketch above.-Submitted by H. A. Owsley, Pensacola, Fla.



To find exact center of board draw a line across board and place steel square so readings will be the same on either edge where line meets square .-- Herbert E. Fey, New Braunfels, Texas,



NOVEMBER, 1950

185

YOUR HOME BUYERS WANT

11 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 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 jambs of a plank feame and ht into the grooves at both sides of the sash. tides of ones are The springs are completely encined

· The back corface of the Dura-seal

- one-pieco jamb members is conceve. This concervity provides a desirable desibility that assures smooth, easy operation during all atmospheric conditions.
- · Dura-soal permits easy removal of the sach
- One-piece jamb members are cut to the pitch of the sills, thus providing an allegative approximates



INDUSTRY BRIEFS



The Kawneer Co. of Niles, Mich., has announced the appointment of David S. Miller as director of sales. Miller, formerly manager of promotion and sales training for Arm-strong Cork Co., Lancaster, Pa., and a past president of the

Producers' Council, is widely known in the construction industry.

.

Headquarters and offices of the Maple Flooring Manufacturers Association are now located at 35 E. Wacker Drive, Chicago. In announcing the move from Oshkosh, Wis., L.M. Mc-Clady, secretary manager of the association, said the change was made "to give better direction to the many MF-MA activities."

. .

Two personnel changes have been made by NuTone, Inc., Cincinnati : Joseph M. Neville has been appointed sales promotion director and Michael Bizzarri promoted to advertising manager.

F.R. Bruce, assistant to the president, has been elected to the board of



directors of the E.L. Bruce Co., Memphis, Tenn., the firm's president, E.L. Bruce, Jr., has re-ported. The new director began his connection with the company in sawmill oper-

ations in Prescott. Ark., in 1926. He is the son of the late Frank E. Bruce, an E.L. Bruce Co. vice president.

.

In an expansion program coupled with a change of name, the One-der Frame



Corp., Birmingham, Ala., has appointed L.O. McKeehan vice president and general manager. The firm, formerly called One-der Window Sales Co., Inc., now produces one-piece metal door frames as

well as window frames. McKeehan was formerly sales manager, S.E. Russell and M.R. Christian, organizers of the company, continue as president and vice president.



Combine the expertly-designed Allith 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.





When should a fellow buy a house?

"The time is kep a longe in when you and it?" That's what a wire builder friend told on. Then used a longe along was and your wijde and halt one energy it." In and, "And a studie, they's more how a longe show you could get now have for sour mours, told halt-on partners and amenations that dola's even mid-or part spectra get."

They inside knows his insurant. Dollar for dol-her the new homes on the market have advanced from in prior than simon anything siles you can sense. And hock is some of the hemefits you get You can get permanent fire protection for sound

framing plos greater attractional strength, from a new kand of forsprint gypnics abrishing. Big looky possile that po studies clapboards, slingtes, or other exterior focule.

Non case get henne planter wilh and excloses durake to modern heilding research featured of fonce tasks too wood lack, building non-raw reck entrong paper of the paper of grassm lack. Booms are locate and hold their forosty longer.

terinde and hold their brown rouger. You can get a freedo their in source and charger to been, then is mong degrees more considerable or minute, and soundate two. Foreposed more wood in-milation come heating costs up to 40%. Summer

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LATE, FLASTER, LINE, SHEATHING, MAIL FAINT, DOLE WOOL INDULATION, METAL LATE, THEFEODY MAILADAODE, DECOGATIVE INDULATION BOADDE AND SOUND CONTROL PEODDUTE





Lumber manufactured from Red Cedar in the Western Pine Region is highly regarded by carpenters, contractors, architects, dealers, and homeowners. It is completely non-resinous, highly decay-resistant, and is one of the finest wood insulators.

Inland Red Cedar shows its values in poles, siding, sheathing and subflooring, paneling and interior finish. It is also used for shingles and shakes. It takes paint and stain treatments of any color, shade or tone. In glueability, it has no superior. You can stock and recommend Inland Red Cedar with confidence.

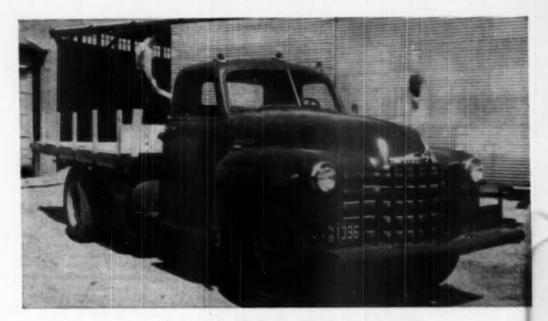


For more information about Inland Red Cedar, send for free illustrated Facts Folder. Address

WESTERN FINE ASSOCIATION Yoon Building . Portland 4, Oregon

THESE ARE THE Idaho White Pine, Ponderosa Pine, Sugar Pine WESTERN PINES THESE ARE THE Larch, Douglas Fir, White Fir, Engelmann Spruce, ASSOCIATED Incense Cedar, Red Cedar, WOODS Lodgepole Pine. WOODS FROM THE WESTERN PINE REGION WELL MANUFACTURE THOROUGHLY SEASONED CAREFULLY CRADE





Your money goes farther ... your work goes faster!

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These are the famous Advance-Design features that help make

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You're money ahead with Chevrolet trucks, for Chevrolet is the lowest priced line of all—and offers exceptional savings in on-the-job operating cost and in cost of maintenance, too.

And, you're money ahead with Chevrolet's special features. Chevrolet features like Valve-in-Head engine, Power-Jet carburetor and many others exclusive in the field.

You're money ahead because Chevrolet has a model built for your job . . . a truck engineered to the special requirements of that job and built to do it faster, better, more efficiently.

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NOVEMBER, 195

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Will your next building contract be the most prostable one you could have? Now, your greatest opportunity lies in the selective, quality building market. DODGE REPORTS will help you pick the right jobsthe ones which will bring the biggest return to you!

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INDUSTRY BRIEFS



Duli

J. Bryer Duff, assistant general sales manager of Sargent and Company for the past eight years, has been promoted to the post of general sales manager, succealing Henry T. Bourne, who has been vice president and general sales namager since 1943, Bourne will be the new president and general manager of Montgomery and Crawford, Inc., Spartanburg, S. C., distributors of wholesale hardware, plumbing, electrical and mill supplies. In his new position, Duff will head sales and merchandising development.

. . . .

ANNOUNCEMENT has been made of the election of Moisture Register Co., Alhambra, Calif., manufacturer of electronic instruments for testing moisture content, to membership in the American Society for Testing Materials. John Barnes, executive vice president, and A.K. Edgerton, consulting engineer, have been appointed to the textile and wood committee, and the textile committee, respectively.

.

E. E. Dierking, formerly manager



of the Celotex Corp. Chicago Sales Branch, has been named assistant general sales manager of the firm, it has been announced by General Sales Manager Marvin Greenwood. Also reported by

Discking

Celotex was the acquisition of the properties of Wasem Plaster Co., Fort Dodge, Iowa, consisting of a plaster plant and extensive gypsum deposits in that city. President O. S. Mansell made the announcement.

.

Announcement of the opening of a central division sales office in Cincinnati has been made by Nichols Wire and Aluminum Co., Davenport. Iowa. Joseph H. Luebbe has been named district manager of the territory, which includes Ohio, Pennsylvania, West Virginia, Kentucky, Tennessee, Indiana and Michigan.

Increase Living Space

With Har-vey Easy-Acting

Sliding Door Frame Units and

HAR-VEY sliding door units save valuable floor space by permitting doors to slide silently and easily into the walls and out of the way they solve many architectural problems in close-clearance areas, give greater convenience and permit use of all the floor space in homes, apartments, offices, and other structures.

The Douglas fir frame and hardware assembly comes ready to install in standard 2x4 walls. There are many styles of 1%" thick Douglas fir interior doors which can be selected for use with the Harvey sliding door unit. Installation is simple; saves time and money in building.

Lumber dealers everywhere can supply builders with these perfected sliding door unitsone modern way to make a home truly efficient!



Douglas Fir

OTS

Nor-vey sliding doors roll plently into the wall-out of the way

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The aluminury track and

The frame is made from advected kills-dried Dougla for humber previous-out at the factory and assessibled stallation time. Full instructions for installing come with each unit of the Har-vey deling door

Fir Door Institute

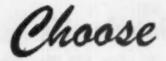
Tacoma 2, Washington



The account of the set because hanges fascembly are carefully exclosed and manufactured with erose strength for trouble free operation, without allocations to rolling. (kittle-bearing filer rollers glide silently at the much of a Suger!

Remember-More than 6 out of every 10 doors in today's homes are Douglas fir doors!

NOVEMBER, 1950



the exact instrument you need from these three LOW PRICE MODELS

Finest 12" Dumpy Level available anywhere — gives you more features you want, more accuracy, more durability at less money than any other instrument. It has dust and date-free internal focusing and has coated optics for clearer distortion-free, sharper images



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Here's the standard convertible level for the country for the past 30 years! No other instrument has the recognition and acceptance as given to the David White Carnegie Improved Convertible level. Now if a waitable to you with complete dust and dirt free internal focusing and coated optics for cleares, sharper, distortion-free images.



The David White "Universal" level-transit as the most practical and complete builder's instrument on the market. Now available in a sew renproved model—complete with internal focusing, cuated optica — guarded vertical arc — in fact every possible feature to assume you lifetime durability and extreme accuracy

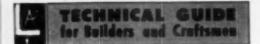


C HOOSE the exact instrument you need from these three. Compare their outstanding features, their precise, yet rugged construction, their accuracy and their price with all others. Then you'll see why we say you'll buy 'right' when you buy a David White. For complete information on any one or all three of these instruments, consult our nearest dealer — or write direct to David White Ca, \$11 W. Court Street, Milwaukee 3, Wisconsin.

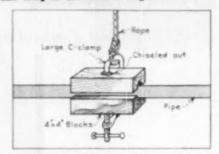


We after complete, prampt repair service an all makes of instruments -fevels, transits, theodolites, atc.

1



Sale Way to Lift Water Pipes

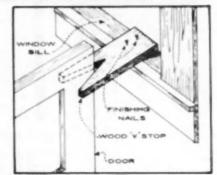


Two 4x4 blocks with the inside face chiseled out to form V, and clamped together with C clamp, can be used to lift long lengths of water pipes or reinforcing rods without danger of slipping. To use, tie rope to clamp, slip the pipe between the two blocks and tighten C clamp.—Submitted by Herbert E. Fey, New Braunfels, Texas.

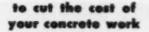
Cork Plug for Concrete Form

When wood concrete forms are re-used, the holes established by former tie rods sometime become an inconvenience and need to be plugged to prevent leakage of water in concrete mix. A quick and easy way to rectify this difficulty is to obtain bottle corks and plug the holes with the corks. The corks should be of a size so that when they are forced into the hole the wide end of the cork is flush with the side of form into which the concrete is poured. If the tie rod hole is to be used in some future operation, the cork can be easily knocked out. If when stripping, the corks fall out, they can be picked up and placed in a small bag.—Submitted by Warren W. Howe, Longview, Wash.





When edge-planing doors before hanging, time can be saved by holding them securely with a simple stop, made with a piece of scrap lumber. A notch 12 inches long and 3 inches wide at the mouth is cut in block, which is tacked to the window sill with two thin casing nails.— Submitted by Herbert E. Fey, New Braunfels, Texas.





Improved mixing blade design, drum rollers on Timken bearings, ad vanced automotive transmission and drum gear protection—these are some of the features of Jacger's lat-

MIXER

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est SPEEDLINE mixers. Sizes 65, 115, 168 with famone Skip Shaker power loader; 3½5 tilters and non-tilt types. Send for Catalog.

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Of American Builder published monthly at Bristol, Cann., for Oct. 1, 1980

 The names and addresses of the publisher, editor, managing editor, and basiness managers are: Publishing, Simmona-Baardman Publishing Corp. 10 Church SE, New York 7, N.Y.: Editor, Edward G. Gavin, 79 West Monrow SL, Chicago, III.; Managing editor, Lyn E. Arent, 79 West Monrow SL, Chicago, III.; Business Manager, R. H. Morris, Publishing Director, 79 West Monroe SL, Chicago, III.

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3. The known bondbolders, mortgagess, and other security huiders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securitism are: None.

4. Paragraphs 2 and 2 include, in cases where the stockholder or security holder appears upon the holds of the company as trastes or in any other fiduciary relation, the name of the person or ourporation for whom such trastes in acting : also the statements in the two paragraphs abow the site includes and builde at the descention and builde at the holders who to not appear upon the books of the company and fide one holds are trastens, hold stock and eccurities in a capacity other than that of a bong fide owner.

ROBERT H. MORRIS, Pusiness Manager.

Sourn to and subscribed before me this 27th day of September, 1960.

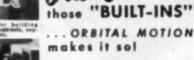
[SEAL] BUTH WEGGEBERG, Notary Public, My commission explores February 2, 1958.)

NOVEMBER, 1950



\$115

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STERLING





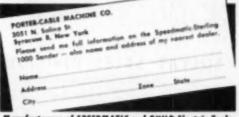
Here's Why ... You sand with the grain, Against the grain, across the grain. Where the grain is irregularwhere two pieces of wood butt at right angles or make a mitre joint-the orbital motion of the grits sands uniformly. You get perfect work, regardless of the direction of the grain-and regardless of the sender's path.

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This basic difference saves you plenty of time and labor. And More' The Speedmatic -Storling 1000 features balanced lightness for essy, one-hand operation in any position. At your Porter-Cable dealer's.

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"The Effects of Calcium Chloride on Portland Coment" is a semi-technical book that clearly presents the facts on the use of Calcium Chloride.

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It is filled with graphs, tables, charts and centains much material not herotofore available. This information will be of great interest to contractors, architects, engineers, plant operators and

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TYPICAL BEACH HOUSE with living quarters on second floer

From Sand Dunes to Beach Home Sites

Largest earth moving and leveling job in south is done by South Carolina builder

Prior to the time that J. C. Long, large scale operative builder of Charleston, South Carolina, took over, Isle of Palms was a desolate area of sand dunes and scrub timber. When Long purchased the property he envisioned tremendous possibilities in this M mile wide by 7 mile long island, with the Atlantic on one side and a long bay on the other. Shortly thereafter large scale leveling operations began in earnest by the Construction Service Co., a unit of the J. C. Long organization. Twenty foot high sand dunes disappeared as if by magic. A saw mill was established in the center of operations and the virgin pine cut down and processed for use in the projected buildings. Five miles of asphalt and another five miles of shell road were then laid after which building operations began.

The preliminary work was started in 1946. Up to 1950 some 350 units had been completed of which 50 per cent were for sale and the other 50 per cent for rent. The Beach Company, developers of the project for the Long organization, has set a building potential of 1,000 units by the end of 1951, providing the building situation remains in a fluid condition.

(Continued on page 294)



SECOND FLOOR AREA contains five rooms, both and open porch

A small home with "extras"

FROM THE WEYERHAEUSER 4-SQUARE HOME BUILDING SERVICE

This handsome modern home . . . the current month's addition to the Weyerhaeuser 4-Square Home Building Service . . . is a notable example of the sales-building help offered to contractors by their 4-Square Lumber Dealers. Are you using this assistance to create more profitable sales?

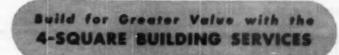
Every month, another of these sparkling small homes is added to the scores of designs in this Service at the office of your 4-Square Lumber Dealer. All of these homes are architect-designed and Weyerhaeuser-engineered.

Through national advertising in leading "shelter" magazines, each new design is presented to millions of readers; and then follow-up merchandising in the form of posters, folders, local newspaper mats and other material creates more interest in the design. All this helps you as a builder. One reason for the popularity of the 4-Square Home Building Service, among builders and buyers, is the number of "extras" in Weyerhaeuser home designs. This house, for example, is truly in the small home class; yet it offers two complete bathrooms ... a fine, large fireplace that adds mass to the exterior ... a planting area protected by the overhanging roof ... a "wall of glass" front window section, with windows that open at the top ... and many other features that are usually associated with higher priced homes.

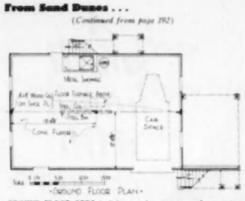
Blueprints, material lists and easy estimating forms for this home and all the others in the Service are available through your 4-Square Lumber Deater. Why not start using this complete library of home plans to create easier and more profitable small home sales!

Weyerhaeuser 4-SQUARE LUMBER AND SERVICES

WEYERHAEUSER SALES COMPANY, ST. PAUL 1, MINN.



NOVEMBER, 1950



GROUND FLOOR AREA is lost open for storage and car space

Isle of Palms is an easy commuting distance from the business center of Charleston with a long bridge connecting it to the mainland. Because of the sandy nature of soil, wide stretches of beach were left untouched on each side of the island. This situation more or less dictated the nature of the structures to be built. Most of the single family dwellings are two stories high, and located close to the beach. These are for sale only. While the emphasis in the design and arrangement of these houses is for summer and beach use, they are constructed for year-round occupancy.

The ground floor areas, which have a concrete slab placed directly on the sand, are left completely open, except for a partition around shower stall. These spaces are used for recreation, car storage and utilities. The inside faces of exterior walls are left unfinished. The living portions of the houses are confined to the second floor, with three bedrooms, bath, kitchen, living and dining room with large open porch occupying this area. This was done to obtain a better view and to get away from the sifting sand. The open ground floor area provides an ideal place for showering after a swim.

The rental units are also two stories in height, arranged as duplexes with one befroom, bath, kitchen, living and dining area and large open porch. These are placed in the center portion of the island and are not subject to the sand condition that exists at the beach.

Each house and living unit is provided with a floor fur-(Continued on page 196)



EXTERIOR DIFFERS when plan is reversed. This avoids monotony



The PARKS PLANING MILL SPECIAL

8 MACHINES IN ONE

The Parks Model R Planing Mill Special is a low priced, multi-purpose, money-saving machine that is ideal for almost every shop. It offers a Cast Iron Double Table Rip and Crosscut, 22-Inch Band Saw, Swing Cut-OH Saw, 12-Inch Jointer, Tenener, Upright Hollow-Chinel Mortisser and Bores, Reversible Spindle Shaper, and 18-Inch Sauding Dae.

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Write for free descriptive literature.

MANUFACTURERS OF QUALITY WOODWORKING MACHINES Since 1887



AIR PLACEMENT EQUIPMENT CO. 2020 Sevenant Bind., Roman City & Ba.



APPEAL TO YOUR PROSPECTS

RUSCO is a complete, factory-assembled, factorypainted metal unit . . . contains glass, screen, weather stripping, installation members (wood or metal), selfstoring insulating sash (optional).

ADVANTAGES LIKE THESE HAVE SALES APPEAL! 1-A year 'round unit . . . no

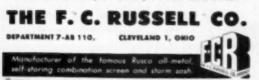
screens or storm sash to buy . . . 2-Built-in ventilation control . . . 3-Glass and screen panels removable from inside for easy washing . . . 4-No weights, cords or balances . . . 5-No hinding or sticking . . . 6-Waterproof felt westher stripping . . . 7-Lumite plastic screen clothno deterioration or streaking M-Automatic locking in closed and ventilating positions.

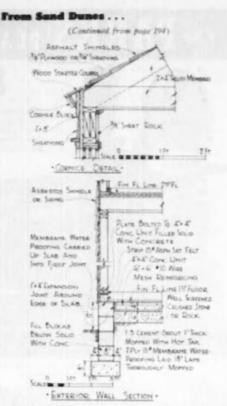
ADVANTAGES FOR THE BUILDER TOO!

1—All working parts are of tubular, hot-dipped galvanised Armco Ingot Iron Zincgrip ... Bonderised and finished with baked-on enamel ... 2—No field painting required (except wood trim when used) ... 3—Glazing and on-the-job refitting are completely eliminated ... 4—Practical for any type construction ... 5—Can be installed in less than half the time required by ordinary window units.

A Quality Product, competitive with the lowest price window unit on the market.

You can get the facts about Russo Prime Windows from the Russe Distributor in your territory ... OR WRITE DIRECT





WALL SECTION showing construction used in boach houses

nace and a 250 gallon tank of Butane gas. Floor furnaces in single family houses are suspended from ground floor ceiling. Septic tank is supplied for each house. Water is provided through large community well. The average size of lot is 80 x 1.30 with house occupying only 60 per cent of the width. Restrictions in regard to design and construction have been arbitrarily placed upon the homes by the builder. This was necessary to assure uniformity in appearance due to the absence of building codes in this area.



STREET VIEW of rental area showing apartment building group

Prop to U. S. Boom

Expenditures may reach 10 billion dollars this year in the field of private housing, government officials estimate.

HOW TO RECOGNIZE A

THIS MAN IS DANGEROUS!

You can tell a snake by its shape and a skunk by its ador, and a Commie . . . well . . .

Memorize the face of the next man who whispers governmental overthrow by force. In essence he is cancelling all your freedoms. In practice, he's a Commie.

Remember well the face of the next person from whose oily lips drools the slime of subversive talk. Perhaps he is a Marxist disciple in the movement to stifle all free enterprise. This rotton, crawling breed that hates our guts has become a pestilence in the land. By deed and word the disease of the party has spread . . is contagious and dangerous. A Commie is constantly working to undermine the hard-won structure of democracy. Watch for him . . listen for him. Memorize and remember every suspicious scrap of talk. You will recognize him, not by face, but by the unnistakable odor of his words. The stench is un-American.

REPORT ANY FACTS ON UN-AMERICAN ACTIVITIES TO YOUR FBI



PREE... a reprint of observ message, "Now to Merogenize a Commin," (without advertising) and a car sticker, "It Sure is Great To Be da American," gladly mailed upon request. This is second in a sories in the interest of democracy

WARE ALUMINUM WINDOWS 3700 N. W. 25th STREET + MIAMI, FLORIDA

NOVEMBER, 1950

HOLT Floor Machines are your BEST BUY and here's WHY!

Exclusive Holt patented features help you to do better work faster. Every Holt Machine is job proved through years of trouble-free, top-notch performance on the toughest floor work.

And - every Holt Machine is built to make more profit for you.

> NOLT PROFESSIONAL SAMDER, SNMPL 12. Fase, sensoth: super-eccurate cut. Chastereless operation, demountable drum cushion, improved vacuum system, fingertip motor speed selector, rev. H.P. motor and many other features. NMPL 8 (not shown) has 8-inch drum width.

HOLT ARISTOCRAT, Al4. All-purpose floor maintenance machine. Hand-grip control; heavy duty enclosed capacitor motor; self-leveling brush bracker; lifetime grease sealed gear reduction unit; many other feasures.



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HOLT WHIRLWIND SPINNER. Heavy duty, super-powered. Five tools in one - sands, wire brushes, grinds, planes and bevels.

HOLT HAND SCRAPER. Life-Time, Vice-Jaw scraper for old paint and varnish. Easily sharpened double-edge tool steel blades. Heavy brass or light weight aluminum models.



HOLT HOPPER-TYPE NAILING MACHINE

For accurate top nailing of floors, plywood, wallboard, sheet metil, tile board, eec. Consec complete in handy case. Magnexic freder prevents clogging, jamming, speeds up work. Takes floor brads and common flat nail brads.

HOLT NORIZONTAL ROTARY EDGER, ND EZE-77. Designed for accuracy, ease of control and dust-free operation. Ideal for close wirk in confined areas, also for glass beveling, minthle and tile --many other uses. Statudy, universal monic.

Write today for complete information on these and other of the famous profit-making, precisionbuilt Holt line of Floor Machines.

HOLT MANUFACTURING COMPANY



Due to restrictions and material charteges, all orders are subject to prior sole.



For Steel Deck welded to joints, builtup wood deck, or molded slab construction. No sub-joists are required.

T-Chord Longspan Joists are ideally mited for use in buildings where low headroom and unohstructed floor space Is desired.

May be used in Schools, Supermarkets, Garages, Warehouses, Factories, and other types of buildings.

Also T-Chord Bow-String Trusses 30 feet to 120 feet long

Send your inquiries or your plans to us for complete Engineering Service.

HAVEN-BUSCH COMPANY 501 Front N.W., Grand Rapids 6, Mich. Over 60 years of service

Association News

(Continued from page 27)

Each "run" was given a value of \$10 in selecting merchandise prizes. Those who scored 20 runs were allowed \$200 toward Chicago convention expense; 30 runs brought a bonus of \$200 more toward expenses of the contestants' wives or associates' convention trip expense. In case any four-man team scored 80 runs, even if one or more members of the team did not reach the 20-runmark, all members of the team get the Chicago convention expense money. The Savings Bond bonuses were awarded for high team and individual scoring up to August 15.

At the Long Island Institute's monthly dinner meeting September 6 prize certifi. cates were handed to 52 persons who had signed up new members in the competition. Top winner of prizes and bonus points was Maxwell Sneddon, who scored 83 runs in the contest, which by the time it closed, had assumed many of the characteristics of a baseball pennant race. Sneddon not only won a trip to the NAHE convention for himself and his wife or partner, but he also received a \$500 U. S. Savings Bond for high individual score, and a \$100 Bond for high team score. In addition he had a large number of points for merchandise prizes. Sneddon was the only member of his team to earn any runs.

Second high scorer in the contest was Walter Stackler with 62 runs, and Clifton Rand came in third with 34. These totals were all as of August 15, when the bonus phase of the contest was closed. New members brought in after August 15 applied only on the Chicago Convention trip phase of the awards. To emphasize the distinction these men achieved, they were crowned as royalty clothed in gailycolored, flowing robes and given seats of honor at the dinner September 6.

The sixteen contestants who won trips to Chicago each wore a railroad engineer's cap at the dinner. All the other prize-winning contestants wore gold and silver-plumed military hats bearing the number of runs scored in the contest. All members who failed to score wore tall dunce caps inscribed "I Scored Zero." The 16 who won trips to Chicago are: Maxwell Sneddon, Walter Stackler, Clifton Rand, James Boshart, Anthony Villett. Thomas Howard, W. B. Stafford, Charles Rorech, Bernard Krinsky, Jerome Miller, Charles Jaeger, Frank Clauson, Alwin Cassens, Edwin Fogarty, L. P. Englehardt and Fred Jackson. Many of the team members still have a chance to win trips to Chicago because that phase of the contest is being contimped.

Dallas Sets Record for New Homes per Capita

Home builders in Dallas, Texas, have, in proportion to population, put up more houses since the war than those of any (Continued on page 200)



Only this Carey Rock Wool Batt features

Exclusive New

FIRE-RESISTANT HARRIER

to provide comfort and savings with greater fire safety!

Folded Strip Blanket with Continuous Vapor Barrier

Sizes: Full-or Sami-Thick; 15" by 48"

A practical, low-cost solution to the vapor condensation problem. Tough, asphalt-saturated vapor-barrier provides a continuous, unbroken surface to protect construction and insulation from moisture damage. New "folded" method of packaging eliminates distortion found in tightly rolled blankets, prevents twisting, breakage of bond between vapor barrier and insulation. Easy to handle and apply.

(Sizes: Full-Thick 15 in. a 26 ft., 30 sq. ft. to package. Sami-Thick 15 in. a 46 ft., 50 sq. ft. in package.)



THE PHILIP CAREY MPG. CO. LOCKLAND, CINCINNATI 15, ONIO NOVEMBER, 1950 No other rock wool batt teams top quality rock wool with a fire-resistant vapor barrier approved by the Underwriters' Laboratories, Inc.!

That's why this new Carey batt stands first among safetyminded architects, builders and owners. It is non-combustible, the vapor barrier *relards* flame-spread . . . doesn't encourage it like conventional types.

This extra life-and-property-saving protection is low in cost. And with its exclusive, extra protection, this new Carey batt gives you high thermal efficiency, resistance to moisture, vermin and decay. Installation is A-B-C simple.

You can't afford to overlook this new, safer insulation in your plans. It's one of many stars in Carey's complete line of rock wool insulation products. Mail coupon below for full information. Or ask your Carey dealer.

| The Philip Carey Monefoche Lockland, Cincinnati 15, Ohi | | A8 11 |
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| Gentiaman: Places send me New Corey Rock Wo New Corey Folded So Other Corey Rock Wo | al Batt with Pice-Resistor rip Blanket | nt Vaper Barrier |
| Nome | | |
| Address | | |
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FOLLANSBEE SEAMLESS TERNE METAL



a HOUSANDS of copies of "Beautiful Lasting Roofs" are being mailed to the readers of Better Homes & Gardens and Successful Farming who requested information on lifetime roofing with Follansbee Seamless Terme Metal.

Architects thruout the country will soon receive copies of the file folder of reference material on Follansbee Terne Metal for roofing and weatherscaling.

Meanwhile, you should have both booklet and folder available for reference so that your office and field staffs can be fully informed. Just fill in the coupon or write us on your business letterhead and we'll send sample copies immediately.



FOLLANSBEE STEEL CORPORATION GENERAL OFFICES, PITTSBURGH 30, PA.

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| Please send me copies of both bulletins on Follansbee Terne NAME | 24 |
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| NAME | Metal. |
| | |
| COMPANY | |
| ADDRESS | |

Association News

(Continued from page 198)

other city in the nation, according to the Home Builders Association of Dallas, which antoennoed in a full-page National Home Week newspaper advertisement that 40,000 homes have been erected in the city in the last five years.

The association also reported that the 1948 single-year record of 8,508 new homes was passed in August of this year, when 9,238 were either completed or ander construction. With four months still to go, Grover A. Geoffrey, executive vice president, predicted that the 1950 total would run close to 10,000 new units.

Mest of the 1950 building was singlefamily residences, with 5,872 finished through August and another 1,573 under way. Apartments totalled 954 completions, 839 under construction.

Home Building and Defense Topic of Baltimore Panel

The impact of the Korean war and resultant defense requirements for the construction industry and real estate business was discussed by a panel of authorities in government and private business at an "industry-mobilization meeting" of the Home Builders Association of Maryland at the Southern Hotel, Baltimore, Oct. 4.

Robert A. Bready, president of the builder group, presided at the session, for which the following speakers were listed:

Curt Mack, chief underwriter, Federal Housing Administration 'E. Lester Muller, Maryland state director, FHA; Asa Groves, chief appraiser, Veterans Administration; Laurance C. Thomas, chief appraiser, VA Baltimore branch; James Rouse, Moss-Rouse (mortgage finance) Co.

Joseph Meyerhoff, Baltimore builder; Robert F. Porter, vice president, Harry T. Campbell and Soms; H.B. Marshall, president, Southern Supply Co.; Coleman Cordish, Western Mill and Lumber Co.; and John F. Leonard, assistant vice president, United Clay Products Co.

Watson Opens Publicity Firm

Paul W. Watson, former director of public relations for the National Retail Lumber Dealers Association, recently established a publicity firm, W. Service, in Miauni, Fla. Watson, who has been active in the humber and building industries for many years, is also operating a guest house in Miami.

St. Louis Advances Plan To Fight July 1 'Freeze'

Opposition to the July I Government "freeze," which bases loan valuations on construction costs of that date, has (Continued on page 202)

AMERICAN BUILDER

300

Made for plenty of room...and board!



DODGE TRUCKS are "Job-Rated" to lower hauling costs !

You can haul more lumber per trip . . . keep your hauling costs down . . . with Dodge "Job-Rated" trucks.

You see, Dodge trucks are "Job-Rated" to carry more payload—without overloading. What's more, every unit from engine to rear axle is sized right for hauling your loads of lamber or building supplies over your roads. No wonder operating and upkeep costs are unusually low!

More than that, Dodge "Job-Rated" trucks are priced with the lowest—right across the board! See your Dodge dealer for a truck that's "Job-Rated" to fit your hauling operation . . . to save you time and money.



POWER: , & great truck engines—each "Job-Rairod" for PLUS power. ECONOMY: , , priced with the lowest. "Job-Rairod" for dependability and long life. BIGGER PAYLOADS: , , carry more withruit overloading axles or springs because of "Job-Rairod" WEIGHT DISTRIBUTION.

EASIER HANDLING: . . . sharper turning!

Parks in tight places. "Job-Rared" manuserability!

COMFORT: . . . widest seats . . . windsheld with best vision of any popular track. Aircushioned, adjustable "chair-beight" seats.

SAPETY: . . . finest truck brakes in the industry . . . hand brake operating independently on propeller shaft on *aii* models-12-ton and up.



With all their extra value DODGE Job Rated TRUCKS are priced with the lowest

Consult your plumber for the latest up-to-date models of...

đ

Fiat Shower Cabinets

- Save labor, speed installation time
- Lower installed cost
- Beautiful, modern, distinctive
- Eye appeal to home buyers

Unsurpassed for beauty and ultrasmart appearance, the new Fiat Built-in Cadet shower will add sales appeal to any home.

It saves considerably on shower installation cost by eliminating expensive tile work on the job. Builders report savings of \$40.00 to \$60.00 and more per unit.

Check with your plumbing contractor for details on Fiat Shower models. The Built-in Cadet shower is designed especially for medium and high grade bathrooms.

Use coupon for catalog of complete line of Fiat showers.

> New Built-in Madel 198 Cadet bathroom shower

| F | ATT NETAL MANUPACTURING CO. THEEE COMPLETE MANUFACTURING PLANTS (Chicage area plant) Franklin Park, III. Long Island City 1, N. Y. Los Angeles 33, Calif. In Canedo: Furt showers are made by Perceluin and Mercel Fredwirk. Ltd. Outlie Outering |
|---------|---|
| | Please send catalog of Fiat Shawers, Receptors and Dears. Also builders bathroom floor sheet. |
| 1000 | Company |
| Acres 1 | Street |
| | City |
| | Zone Store Moli to FLAT METAL MFG. COMPANY + 9301 Buildand Ave., + Franklin Park, III. |

Association News

(Continued from page 200)

prompted a plan by which members of the Home Builders Association of Greater St. Louis hope to effect adjustment of cost criteria.

The plan was launched at a recent joint meeting of home builder, government, mortgage banking, labor and manufacturer representatives. The builders stated that current home costs were at least \$750 more than on July I, which resulted in unrealistic appraisals by the Federal Housing Administration. In cases involving the Veterans Administration, they said, veterans are unable to add this difference to downpayments to secure loan approval and "a lot of veterans aren't going to get new homes." The five points in the St. Louis plan

are: 1. Urge local government officials to write their Washington bureau chiefs concerning builders' problems with the "freeze."

2. Meet with members of Congress when they visit home districts and apprise them of the situation.

3. Explain the situation to candidates for Congress.

 Write executive officers of building trade unions outlining the problem and suggest that union members be advised to write their Congressmen with a view to saving their jobs.

5. Continue government-labor-industry meetings at regular intervals.

Perlite Institute Meets in St. Louis

Meeting at the Chase Hotel, St. Louis, Sept. 14-15, the Perlite Institute adopted further standardization of perlite plaster aggregate and also recommendations for the newly-developed techniques of placing perlite aggregate concrete with or without air entralning agents.

J. John Brouk of the Precast Slab and Tile Co., St. Louis, was elected president of the group. Other new officers are Kirk E. Hazelton, Cleveland Gypsum Co., Cleveland, Ohio, vice president: and Wharton Clay, New York, secretarytreasurer; Donald Gott, Great Lakes Carbon Co., New York City; S. Q. Johnson, Texas Panacalite Co., Dallas; and Lewis Lloyd, Alatex Construction Service, New Orleans, were named directore.

'Emergency Committee' Named By Warm Air Heating Group

A special meeting of the National Warm Air Heating and Air Conditioning Association was held recently in Chicago for the purpose of 'developing ideas and suggestions which will be helpfal in the warm air heating industry's contribution to the present war emergency, both as to production of warm air heating equipment for military and civilian requirements."



... Build PREFABRICATED HOMES in '51

The time to plan a sound building program for next year is now! Builders of low cost housing will be in the most favorable position to do business, so plan accordingly. You can build quality homes for this market at a substantial profit.

To operate successfully in the low cost field, hundreds of prominent builders are turning to prefabricated homes. Steadily mounting production figures show the trend... in the first six months of 1950, shipment of prefabricated homes has tripled in volume.

Prefabricated construction will solve your problem—its advantages will be of greater importance than ever in '51. Home construction with prefabricated panels means important savings in time, labor and materials. It means simplified purchasing and more accurate control of costs. It adds up to increased profits, with less risk.

You'll also build attractive homes that sell faster when you use the time-tested products of PHMI member companies—homes that have won wide acclaim for their superior designs, livability and durability.

So move ahead in 1951! For quality with profit your best bet is prefabricated construction . . . Find out about it now! For further information write PHMI headquarters today.



PREFABRICATED HOME MANUFACTURERS' INSTITUTE 908 - 20th St., N.W., Washington 6, D.C.

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NOVEMBER, 1950



35

CM-RW 60C ~ RH

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TYPE RH-75°C

PARANITE HYDRO-THERM BUILDING WIRE

PARANITE Hydro-Therm combines in a single wire the heatresistant qualities of Type RH and the moisture-resistant qualities of Type RW.

USED IN DRY LO-CATIONS Paranite Hydro-Therm carries more current per dollar

of cost. The higher amperage rating for Type RH wire under the National Electrical Code provides greater current carrying capacity. You can use smaller conductors, smaller sizes of conduit; and lower your labor costs.

USED IN WET LOCATIONS Paranite Hydro-Therm is rated as Type RW wire for 60°C operation because of its excellent moistureresistant qualities.



Association News, cont'd

Tobin Speaks at Youngstown

William J. Tobin, National Association of Home Builders director of membership and chapter relations was guest speaker September 25 at the fall membership meeting of the Home Builders Association of Mahoning Valley, Youngstown, Ohio.

Gas Industry Displays 1,200 New Products

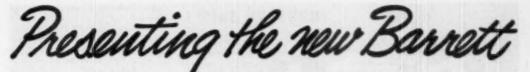
Approximately 1,200 new and improved gas products were displayed at the five-day biennial exposition of the Gas Appliance Manufacturers Association held during October in Atlantic City.

The exposition was conducted in conjunction with the 32nd annual convention of the American Gas Association.



IN RECOGNITION of efforts, started last fail, which helped build roster of South Texas Home Builders Association to several times its original membership, committee leaders receive awards at special meeting. Left to right are A. J. McCall, association president: Ralph Fikes, membership committee oschairman: Bob Layton, chairman: and Frank Robertson, San Antonio, NAHB regional vice president, who made presentations. Headquartiers of the association is in Corpus Christi





EVER-FAST⁺SHINGLES

 Here's a true double-coverage, lockdown shingle that is locked in 4 places against even a hurricane!

The lock is a part of the shingle itself -no metal clips.

And the lock is flexible-provides for the expansion and contraction of the roof, and for movement of the roof deck.

Each shingle locked in 4 places.

The heaviest winds can't lift these Barrett EVER-FAST? Shingles, nor can they ever alide out of place.

Only two nails for each shingle.

All nails are concealed and protected from the weather—no rusting or staining.

Extra large nailing area to insure nails

20" x 20"

319"

111

235 lbs.

Class "C"

3

being driven into roof-boards.

Fewer shingles for your job-only 111 to the square means faster application.

li i i i

The beautiful colors and blends of Barrett EVER-FAST[†] Shingles — in plain and weathergrain finish — give a handsome appearance on the roof a balanced design that is architecturally attractive.

The shingles have a deep head-lap of $3\frac{1}{2}''$, and wide side-lap of 6' for greater protection. Fire-resistant, they carry Underwriters' Class "C" Label. High rag-content felt gives greater tensile strength. Permits greater saturation. Makes for longer life.

Phone, wire or write today for complete information.

Plain

Blue Black

Deep Red

Deep Green

Then L. S. Pot. 108.

COLORS

Weathorgrain

Greengrain

Redgrain

Bluegrain

Slategrain

d & Day die

Browngrain

a 4-point-locking shingle that gives 100% DOUBLE coverage...and puts 3 thicknesses on 50% of the roof!



THE BARRETT DIVISION

Alliad Chamical & Dryc Corporation 40 Rotter Steady, New York A. H. Y. Mill B. & Bray's News Acc. Philodelphia & P.a. 1272 Bris Smoot Birthighton 6, Atalasmy 200 W. Warder Dirios Chinago 6, IL

Underwriters' Label

Approx. Weight per Square

Shingles per Square

Bundles per Square

Size

Head-lap







Election of Bob Olson to the post of vice president in charge of sales of Ware Laboratories, Inc., Miami. Fla., aluminum window manufacturers. has been announced by William M. Ware. president, Olson, well-known in the

field, is a member of the technical committee of the Aluminum Window Institute. Ware also announced early introduction of a new window.

.



A. C. Ziegler has been named Chicago district manager for the P. & F. Corbin Division of the American Hardware Corp., New Britain, Conn., E. V. Pomeroy, American Hardware vice president has announced. Ziegler replaces J. A.

Metz, who recently resigned. He has been identified with the hardware business since 1934. He joined P. & F. Corbin in 1948 at the Chicago office.

Harold D. McAneny has been appointed director of advertising of the Flintkote Co. Frior to joining Flintkote, McAneny was advertising manager of the Richmond Radiator Co.

.

Anticipating the opening of its new



plant in Ukiah, Calif ... this fall, Masonite Corp. has announced the expansion of its western sales division and the appointment of one of its top executives, George M. Syversen, as director of western sales.

Syversen has been manager of the sales engineering department since 1946. His vacated post will be taken by J. B. Palmer.

.

The promotion of four members of the manufacturing department of the Caterpillar Tractor Co., Peoria, Ill., has been announced by firm Vice President H. S. Eberhard. J.R. Munro, general factory manager, has been elevated to the newly-created post of director of manufacturing : C.A. Woodley is new factory manager ; W.L. Naumann and Lloyd J. Ely have been named assistant general factory managers.



NEW KAWNEER STOCK SASH



DESIGNED FOR MODERN BUILDING

Rich and custom-styled in appearance, this handsome, new glazing assembly is an autstanding addition to the famous Kawneer Line of Architectural Metals.

The Kowneer resilient-grip principle insures maximum safety and reliability. The strong steel clip minimizes breakage due to sudden shocks, high winds, and building settling. For further information write The Kowneer Company, Department A8-56, 1105 North Front St., Niles, Mich., or Department A8-56, 930 Dwight Way, Berkeley, California.

Kawneer COMPANY ARCHITECTURAL METAL PRODUCTS

SUCCESS!

HERE'S THE SORT OF THING BUILDERS ARE SAYING ABOUT THE NEW YOUNGSTOWN KITCHENS



"Our biggest teiling features are the new Youngstown Kitchens Jet-Tower Dishwasher and the Youngstown Kitchens Fead Woste Disposer. Together, they give hame buyers insurance against early obselescence in the kitchen. And payments are just a few cents higher."



"It's exciting to see how quickly prospects buy houses where the Jet-Tower Electric Sink is financed in the house payments. A house that's not equipped with a Youngstown Dishwasher doesn't sell as easily. After what I've seen, I wouldn't try to sell a house without ana!"



"Time and again we've seen proof that it's easier to cell a house with the Jet-Tower Electric Sink and Youngdown Disposer installed. These make it a 'push-button hause' in the eyes of most people. And they see how this will keep their homes from becoming absolute." and the new



JET-TOWER DISHWASHER

IT'S NEW ..

but already builders are calling the new Youngstown Kitchens Automatic Dishwasher one of the greatest house-selling features they have ever used in their model homes.

For complete information, write or wire Builder Department. BE SURE TO VISIT US AT THE BUILDERS' SHOW IN CHICAGO.



3 OUT OF 5 HOMES AT CHICAGO HOME FESTIVAL HAD YOUNGSTOWN KITCHENS WITH NEW ELECTRIC SINK!



Whether it was the Youngstown Kitchens Cabinet Sink (as in this kitchen) or the Jet-Tower Dishwasher, public favor stayed at a peak. Value-conscious viewers expressed desires to own homes that will stay modern for years to come. That's why they voted approval.



In many Festival kitchens, crowds gathiered around the Youngstown Jet-Tower Dishwasher constantly. The thought of having dishes done automatically, plus elimination of garbage with the Youngstown Kitchens Food Waste Disposer, interested many a prospect.



Remarkably high public enthusiasm in kitchens like this displayed in model homes all during Home Festival Week proved oue thing to many Chicago builders: Public favor is higher toward homes with the new Youngstown Kitchens Automatic Disbwasher.

AND BEST OF ALL, IT'S ESTIMATED THAT 1 OUT OF 3 NEW HOMES IN AMERICA THIS YEAR WITH STEEL KITCHENS HAS A YOUNGSTOWN KITCHEN



Builders report that never before has there been such active interest in a single item as they have seen in the new Youngstown Kitchens Automatic Dishwasher. No wonder so many builders are now considering a Youngstown Jet-Tower Dishwasher for every home.



Coast to coast, model home builders talk like this: "Hour after hour, we saw people stream through our homes. And it was evident the interest in this new Youngstown Kitchens Jet-Tower Dishwasher and the Youngstown Kitchens." Food Waste Disposer was very high."



"It is our observation," other builders report, "that the small added cost of including the new Youngstown Jet-Tower Diahwasher in new houses for sale is more than paid back in increased buyer interest. Also, this Diahwasher insures against homes being old fashioned soon."

Youngstown Kitchens

MULLINS MANUFACTURING CORPORATION • WARREN, OHIO World's Largest Makers of Steel Kitchens

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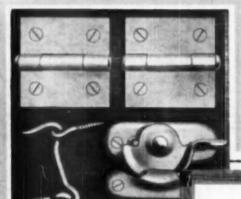
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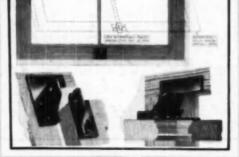
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