GYPSUM PRODUCTS - their use in new construction and remodeling
These charts reveal the facts ... TM really means Thermostat Magic! The new Honeywell Comfort Thermostats (with TM) stay right on the beam regardless of outside weather conditions. You see, TM works with the weather, compensating for outside temperature changes ... at the time they occur! No more complaints of "too hot" and "too cold." Every Comfort Thermostat in the Honeywell line assures delivery of the required amount of heat at the right time to balance heat loss.

Feature Thermostat Magic in every home you build. Your prospects will be quick to appreciate the superior heating comfort of nationally advertised Honeywell TM Thermostats. Standardize on the name that's best known—Honeywell. And, remember, it's the sure way to give owners of your homes better heating, always!
HERE'S THE NEWEST, FINEST, MOST COMPLETE BASEMENT WINDOW UNIT MADE!

GLAZED—no glass or putty problem
PACKAGED—no loose parts to handle

AVAILBLE IN 3 WAYS
1. Package A—Fenestra® Basement Window, glazed, with Screen and Storm Panel insert, in carton.
2. Package B—Basement Window, glazed, with Screen, in carton.
3. Basement Window Unglazed—Screen and Storm Panel available separately also.

THESE OUTSTANDING ADVANTAGES
- Easily installed—all of the sizes fit concrete block
- Glazed—no finnelling around with glass or putty
- Sturdy—made of hot-rolled casing window sections
- Weatherlight—double contact of glass against frame
- Leaktight—square corners for tight construction
- Verminproof—impervious to rats, termites, other pests
- Protected ventilation—open at the top
- Easy to operate—steel can't warp or swell or shrink.
- Locks tight—with quick and easy lever action
- Feels smooth—no sieve arms or hinges to get out of order
- Easily removable—venet removed from inside only
- Low cost—produced in great volume...in standard sizes
- Low maintenance—steel can't shrink, rot or splinter

NEW FENESTRA UTILITY WINDOWS
AVAILABLE IN 3 WAYS
1. Package A—Glazed Utility Window, with Screen, plus Side Guards to reduce drafts in barns.
2. Package B—Glazed Utility Window, with Screen only.

For garages, shops, dairy barns, building areas, etc. 3' 9¾" wide by 3' 6¾" 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.

DETROIT STEEL PRODUCTS COMPANY
Please send me complete information on the new Fenestra Packaged Basement and Utility Windows.

Name

Company

Address

WHEN THE CUSTOMER SAYS:

Cracked Ceiling!

YOUR BEST ANSWER IS

BECAUSE:

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

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

No material produces such trouble-free, long-lasting 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 re-covering cracked ceilings!

No other ceiling material has greater sales appeal.

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 time-proved qualities produce unusual ceilings of enduring beauty — steady jobs through the years.

For Instruction Sheets, mail the coupon!

Only Upson Panels can be applied with this unique Upson Floating Fastener. It anchors panels securely from the back. Eliminates visible face nailing. Designed to compensate for normal structural movement.

THE UPSON COMPANY
4111 Upson Point, Lackawanna, New York

Send me Instruction Sheets for application of Kuver-Krak Panels.

Have your Representative call to give me more information on the cracked ceiling market.

NAME ____________________________

NAME OF FIRM ____________________________

STREET ADDRESS ____________________________

CITY ____________________________ STATE ____________________________
IN YOUR DECEMBER ISSUE

The first of a series of articles on CONSTRUCTION LUMBER and Its Current Usage. This series will contain the latest recommended features and data on framing with lumber; bow and where to use the various grades; best practices of framing, cutting, 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 prize-winning homes selected from Parents’ Magazine’s builders’ contest. These particular homes will not be featured in any other building magazine. They are packed with down-to-earth ideas, and have exceptional merit 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. Layout includes five rooms, full basement, a garage, and porch. Traditional in design, this house has met with exceptional success in the Chicago area.

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

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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.

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

A single demonstration makes the sale every time! Just show them how the heavy, thick felt 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 felt section automatically raises to clear carpet or floor.

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!
MORE... PROFIT MORE
sure-fire favorites!

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

Numetal
WEATHER STRIP
for windows and doors

FOR WINDOWS Also comes complete in convenient packages. Fits all standard 28", 30", 32" and 36" double hung windows. Cut-to-dimension service available. Quickly and easily installed by anyone. Each set contains necessary strip for complete job, plus nails and instructions. Individually packaged—ready to hand customer!

FOR DOORS Packaged 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.

Nu-WAY
WEATHER STRIP
Easiest in the world to put on!

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.

DON'T FORGET Nu-CALK SPEED LOAD
America's favorite calking compound in the most efficient load on the market. Packaged 10 loads to each carton and 4 cartons per shipping case. You'll need a good supply to keep up with this fast-seller!

Nu-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—½ pint, pint, quart. 5 lbs.—in drums from 50 to 880 lbs.

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

MACKLANBURG-DUNCAN CO.
OKLAHOMA CITY 1, OKLAHOMA
Everyone likes the charm and beauty of pegged oak floors

- Nothing adds more style and appeal 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 Ranch 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

IT'S PEGGED AND FINISHED AT THE FACTORY
Regulation X

REGULATION 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 one-family 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 prohibition 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 Reserve Bank may declare that there is an emergency 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 proceeds of 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 Reserve 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 $37,000 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. Further 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.

<table>
<thead>
<tr>
<th>Value (transient price)</th>
<th>Non-veteran (FHA and conventional)</th>
<th>Veteran (G.I. Loans)</th>
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<tr>
<td></td>
<td>Down payment</td>
<td>Amount</td>
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<tr>
<td>1,000</td>
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"Gosh, with all of Ed's relatives dropping in for Thanksgiving Dinner, it's lucky he remembered that

EVERYTHING HINGES ON HAGER!"

C. Hager & Sons Hinge Mfg. Co. • St. Louis, Mo.
Founded 1849—Every Hager Hinge Swings on 100 Years of Experience
One of the low-cost homes built by Gordon Bronson, C.E. in New Brunswick, New Jersey. Kentile Floors are installed in every room.

This house cost less to build—and is easier to sell—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 Kentserts) can be added to give custom-made 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.
More and 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 installation, 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.
builds what your clients want!

COMPLETE CROSLEY KITCHENS
are engineered to fit almost any
plan... any requirement.

New Crosley Builders' Plant! Special data and service are
available free to all builders. For information write:

National Builder Sales
Crosley Division
Avco Manufacturing Corporation
1320 Arlington Road
Cincinnati 21, Ohio

CROSLEY
Better Products for
Happier Living
New Levelock Switch Box Takes Job-site Abuse

Neither hammer blows nor construction-site abuse can dislodge the side plates of the new General Electric Levelock switch box. Wedging action of a new locking mechanism locks box parts securely 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 prongs provide for out-of-the-ordinary installations. All prongs are easily removed by a quick twist of a screwdriver.

A new single-screw ear adjusts from slightly above to 3/4-inch below the edge of the new Levelock box, while an extra-sturdy 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.

---

New Hung Ceiling Box

For fast, easy installation and real savings on jobs using conduit, this new hung ceiling box is hard to beat. By specifying this new box you can virtually eliminate special couplings and pipe bending operations. Thanks to its special eight-sided design, this easy-to-handle ceiling 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.
Read, in the letter above, what Mr. Coles Doty has to say about DeWalt saws!

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 4½” cut. Send coupon below for full information on DeWalt.

DE WALT INC.
a subsidiary of American Machine and Foundry Company
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!

Application is easy

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

You can save 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 job.

B-level Lightning Joint assures faster, better installation

- Notice the spaces at A and B, as well as the long length of tongue at C, to provide 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 area 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.

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

Give a Worthington-Ransome Blue Brute 11-5 or 16-5 Portable Mixer a thorough going over — and get a real revelation of how far mixer design has advanced! For example: ① skip cable winding shaft, mounted on self-aligning bearings, has grooved spools for longer cable life; ② power loader with automatic knock-out and brake set when skip reaches charging position; ③ skip vibrator, simple and effective, assures quick transfer of materials from skip to drum; ④ drum rollers of genuine car wheel metal with chilled treads — each roller mounted on two Timken bearings; ⑤ roller sub-frame under drum prevents concrete accumulation on roller shaft or bearings; ⑥ countershaft of heat-treated alloy steel in self-aligning ball bearings — all units easily accessible; ⑦ engine mounted with radiator facing mixer's discharge side avoids dust, clogging and overheating; ⑧ drum drive gear of one-piece semi-steel casting, machined to true circle; ⑨ 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.

Buy Blue Brutes

IF IT'S A CONSTRUCTION JOB, IT'S A BLUE BRUTE JOB
Here's what Sells Homes...

Hotpoint All-Electric Kitchen

Today's overwhelming demand by America's homemakers for complete, conveniently modern electric kitchens should be a cue to the planning of progressive home builders.

A recent survey made by one of the leading building publications proved conclusively that among all new features being offered in today's new homes, modern kitchens created more sales appeal than any other factor.

Whether you are remodeling or building a single dwelling, an apartment house or an entire subdivision, the use of Hotpoint Home Appliances in kitchens and home laundries means a faster sale or rental . . . and a big increase in the property value.

Write now for free literature on Hotpoint Home Appliances. Hotpoint will gladly give you helpful counsel in kitchen and home laundry planning for your particular project.

Close the Sale with Hotpoint!
USE THIS LOW-COST MOBILE SHOP!

DELTA MULTIPLEX brings factory production-line economies right to your job

Builders using Delta Multiplex are saving their orders and profits with new cost-cutting ideas today.

By converting material lists into cutting lists, they custom-cut identical studs, joists, rafters, etc. in production runs from just one layout and marking.

Because these pieces fit perfectly, they save fitting time and speed up erection. Waste lumber is used up efficiently, material-handling is reduced.

They do their own millwork, without paying mill costs. By attaching the proper tool to the Delta Multiplex spindle, they turn out sash, base mouldings, shelving, kitchen nooks, etc. from mill-run lumber.

Their new help can cut lumber right the first time — the accuracy is built right into Delta Multiplex.

As costs go up and your profits drop, it will pay you to use this Delta Multiplex mobile shop. Initial cost is low, and it frequently pays for itself on one job.
Window shopping stops here...

The most intensive of all "window shopping"—that of the architect and builder—must stop at the sight of Reynolds Aluminum Casements. Their superiority in design and especially in finish is outstanding. Their flash-welded corners assure maximum rigidity and weathertightness. Their roto-operation is smooth and dependable. And of course they have the basic advantages exclusive to aluminum windows: rustproof permanence with no need for protective painting, narrow frames of neutral tone to harmonize with any concept.

Reynolds supplies residential casement, fixed and picture windows in all combinations, standard and western types... also Reynolds Aluminum Screens to fit these and all metal casement windows.

Stop right here and write for complete descriptive literature in A.I.A. file form. Reynolds Metals Company, Building Products Section, 2003 South Ninth Street, Louisville 1, Ky. Offices in 32 principal cities.

...and so does all Casement Screen shopping!

Reynolds Aluminum Screens fit not only Reynolds Windows but all Aluminum and Steel Casements. Exclusive corner lock feature assures great rigidity and high spring tension to keep the cloth tight. Where you are buying new windows, specify Reynolds Aluminum Windows complete with Screens. Where you must screen other casements, do it with Reynolds Aluminum Screens. See your dealer!

REYNOLDS ALUMINUM
RESIDENTIAL CASEMENT FIXED AND PICTURE WINDOWS
Richmond plumbing knows no boundaries—when 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.

That speaks well for Richmond quality, and for Richmond economy, too. For over the years, Richmond plumbing fixtures have given lasting satisfaction.

Richmond offers you a wide variety of top-quality plumbing fixtures in "whiter-white," or choice of four pastel colors. You can order for a custom-built home, a large-scale project or a modernization job and always be confident of complete and lasting customer satisfaction. Whatever the plumbing requirement, whatever the building location, you know it's right with Richmond.
ALMOST 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. Most of the increase is in Arizona, 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 31 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. Tennessee, 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 lumber 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 banquet hall. The 3,775 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.
For heavy duty service, STANLEY now offers...

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.

*Now all Stanley Extra Heavy Ball Bearing Hinges have Full-Jeweled bearings.

"Full-Jeweled"
Ball Bearing Butt Hinge

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 both laterally and vertically on ball bearings.
RIGHT FROM THE START... TELEPHONE OUTLETS

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 Business Office for free telephone planning service.
85% of all prospective home owners want oak floors

oak—pushes the sale in every room

"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."

NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION • Dept. 5-11, Sterick Bldg. • Memphis 3, Tenn.
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.

It pays you, it pays us—because we specialize in Plumbing Fixtures and Brass
ASSOCIATIONS
Their Plans and Activities

Industry to Work With Government on Security Problems

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 national 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 mobilization 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 Co.; Leonard G. Carpenter, Minneapolis, director, National Lumber Manufacturers Association; W. A. Clarke, Philadelphia, board member, Mortgage Bankers Association of America; Millard W. Colton, Washington, D.C., consulting economist; Herbert S. Colton, Washington, D.C., attorney; Alexander Summer, Teaneck, N.J., director, National Association of Real Estate Boards; George W. West, Atlanta, past president, U.S. Savings and Loan League; and Douglas Whitlock, general counsel, Structural Clay Products Institute.

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 558. 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 1 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 team captains, each of whom chose three other Institute members to make up four-man "baseball" 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.

"Rums" were scored according to the classification of each new member signed by the contestants, as follows: Each new 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 800 builders, government housing officials and industry leaders in attendance.

In addition to regular national committee meetings and directors meetings, there were a number of discussion panels. Government officials participating included Raymond M. Foley, Housing and Home Finance Agency administrator; Franklin D. Richards, Federal Housing Administration commissioner; and T. B. King, director of loan guarantee service, Veterans Administration. On the entertainment program planned by the host NAHB affiliate, the Texas Association of Home Builders, were sightseeing and boat trips, dinners and an "old-fashioned Texas outing."

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.
**Cy Sweet Says**

**C. B. SWEET. President. National Retail Lumber Dealers Association**

**A Start in the Right Direction**

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

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

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

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

"The chairman of the high school board 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 dated 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 I made a trip through a very rich 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 the 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 10¢ 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 big 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 crop was harvested in early October, up until December 9, the growers in this area shipped, on the open market, 272 carloads of potatoes. At the same time they diverted 1900 carloads to livestock. Assuming a minimum car to be 60,000 lbs., or 600 sacks of potatoes, this means 1,141,000 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 hungry families."

It seems a little inconsistent that a community which willingly accepts government hand-outs in one instance should turn around and "deplete" 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 inquired as to what subjects I should cover in the articles, he replied, "Whatever you like—just express your personal ideas." This I have conscientiously 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 seemed 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.

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**Detroit, Chicago Groups Hear British Advocate Of Private Housing**

England's government not only has "strangled" the private construction industry but has placed that country far behind in its job of building new homes, Mrs. Millicent Pleydell-Bouverie, organizer and public relations officer of the British Housing and Building Industries Standing Committee, told members of the Chicago Metropolitan Home Builders Association at a recent luncheon meeting.

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

1. In 1945, homes were needed for 2,000,000 families. The waiting list now totals 4,000,000.
2. Since the advent of the Labor government only 200,000 homes a year have been built—a volume far below the level before World War II. Of approximately 900,000 homes built since the war, 700,000 are government-built and subsidized.
3. 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 needed building materials and at the same time, in order to get dollars, approximately $500,000,000 worth of such scarce materials as flooring, windows, cement and glass were exported last year.

It is an exhausting sight, 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 homes because building permits can be obtained only by the individual who is to own the house.

**Speaks at Detroit**

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

Speaking in favor of the private enterprise system, she expressed concern 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 housing.

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

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**Godfrey Visits Atlanta**

A recent between-planes guest of the Home 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 Spokane, Wash. Twigg was a naval officer in World War II, is a graduate of Whitman College, Walla Walla, Wash., and is currently attending night school at Gonzaga University. He joined the Spokane affiliate of the National Association of Home Builders last February. The group now has 143 members, having tripled 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 announced by Louis F. Kreyer, president. Harris succeeds Reginald W. Holt who resigned recently.

Cortright's Column

FRANK W. CORTRIGHT. Executive Vice President, National 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 800,000 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 tube, 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 HHPA then considered the advisability 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.

For 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 so designed as to permit the industry to play its important part in supporting the nation's economy.
'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 "bosses," in this instance members of Home Builders Association of St. Louis labor committee.

Addressing the 1800 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.

Bogdanor, vice president and operating head of Schueremaan Realty Co., which builds more than 600 houses a year, appeared for concerted action by carpenters and builders in the interest of an adjustment of the July 1 building costs freeze. He termed July 1 costs "entirely unrealistic" as a goal 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 Bumiller, builder association president; R. M. Berkley, labor committee chairman; Joseph H. Vatterott, Gene Vescovo, Bogdanor, and Larry Neville, executive secretary of the association.

Arrangements for the trip by air were made by Ervin Meinert, secretary-treasurer of the Carpenters Council.

Chicago Junior Group Completes Organization

The first organized meeting of the Junior Home Builders of Chicago Land, composed exclusively of younger men and formed within the parent group, the Chicago Metropolitan Home 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. Davis, president; Britannia C. Macias, vice president; Joseph E. Morris, Jr., secretary; Ralph Smiekal, treasurer; Larry Laurence, Donald Kover 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. Altritch. 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.

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. Hanta, Wyoming; and Gordon Weggeland, Utah.

Other guests included Alan E. Brockbank, second vice president of the National Association of Home Builders; C. Taylor Burton, NAHB regional vice president; Arthur W. Jones, president of the Intermountain Lumber Dealers Association; Roy Simms, Utah state banking 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 Loan League, Utah Mortgage Bankers Association and Intermountain Lumber Dealers Association. It was opened by A. F. Neilsen, home builder president.
Now Secondary Heat Exchanger*
the greatest advance since Wall Heaters were invented!

New Holly NarrowWall HEATER

Circulates 25% more warm air — saves heat formerly lost through ceiling

Now—an answer to all your heating problems. A gas-fired, 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 4½" or maximum of 5½". No extra floor space or utility room is necessary. There are no ducts to run, no motors or gadgets requiring service. Initial cost 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

Salient Features: Coal Walls... More Useful Heat and Higher Efficiency... Moderate temperature air from Secondary Heat Exchanger aids circulation and heat distribution... Burner and manifold assembly one complete unit, easily removed... Holly-designed, die-formed, electronically welded heating element without baffles... Absolutely no gas spillage... Annoying noises eliminated by unique method of mounting element... Panel fits snugly to either dry or plastered wall... Negative pressure maintained on panel avoids streaked walls.

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10% of heater's total output is given off from 5'H*E* Clearflo Louvers is moderately warm.

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

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 $4.20 a month under the "Packaged-Mortgage" Plan.

Why not install General Electric equipment in your homes, and watch home buyers beat 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...
- 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?

You can put your confidence in—

**General Electric**

32 American Builder
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 8,000 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 housing development in this part of the state to offer an all-electric 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 Finance 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 Kwikset “400” Line Locksets, making possible top-quality locks at rock-bottom prices. Architects prefer Kwikset’s simplicity and beauty of design. Builders and contractors appreciate the economy of Kwikset’s fast, easy installation. Wholesalers, Jobbers and Dealers cash in on Kwikset’s low cost and fast turnover. Everyone deserves Kwikset’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 8-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 Kwikset Locksets were subjected to wear tests equivalent to 100 years of hard, everyday usage on our specially designed testing machine. Every lock functioned perfectly at the end of the test.

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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.


WITHOUT OVERFLOW

WITH BRASS OVERFLOW

K-2700-A with Synchro pop-up drain. 19x17", 22x19". Latter with 3 depressed soap dishes.

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

Trap is attached directly to bottom of basin.

Built-in brass tubing connects overflow opening to outlet.
NAMES THAT SELL

In construction materials, equipment, all the products you use in your business, feature nationally-advertised, 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 ADVERTISED IN THE DECEMBER ISSUE ARE YOURS FOR THE ASKING...TO HELP BRING YOU THAT EXTRA BUSINESS. TURN THE PAGE FOR EASY INSTRUCTIONS ON ORDERING.

CLIMATE-CONTROLLED OUTDOOR LIVING

A SENSIBLE, practical way of extending the duration of comfortable outdoor garden living—both spring and fall—is unfolded in December House Beautiful, by 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 pictured 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!
SURFACING MATERIALS
1. BLUE RIDGE PATTERNS GLASS
   BLUE RIDGE DIVISION
   LIBBEY OWENS FORD GLASS CO.

2. THERMOPANE
   LIBBEY OWENS FORD GLASS CO.

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   CONTINENTAL GLASSHEAT
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   MODINE MANUFACTURING CO.
   Modine Convector provide truly modern heating — safe, healthful air circulation with either steam
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High-speed, nonfuming heating units are corrosion resistant — offer peak performance with
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    Women everywhere are talking about the new
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    Murray Matched Steel Kitchens. Why? Because
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High-speed, nonfuming heating units are corrosion resistant — offer peak performance with
minimum service. Steel cabinets withstand rough
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on Review" Issue
of
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Predicted Effects of New Construction in Credit Control —

Regulation X

The probable long and short range effects of Regulation X, the new housing 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 housing starts in 1951 will not exceed 500,000. Generally, the consensus is that the regulation as written will reduce starts next year to something between 500,000 and 300,000. A few optimists believe that there are enough potential buyers of new homes with enough cash on hand to meet the new restrictions on mortgage limits to assure a market as of 190,000 to 200,000 starts. All of these predictions and attitudes are based on guesswork. The chances are that the pessimists 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 be sound at this time. One of these is that operative builders will be 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.

Suspicion has 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 curbing of credits on housing, the first step to begin should have been with cancellation of the public housing program. This is the most 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 public 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 regulations in early October to some kind of obscure pre-election political maneuvering. Again, all of this conjecture is guesswork, but it does bear in 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 so 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 equipment, 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 an 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 veterans 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 real purpose is to bolster the government’s sagging public housing program. They point out that there is an real credit curb on housing costing $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.

Wilful 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 said, “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 clear 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 before 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 25 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 home 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 socked. "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 balance, 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 accomplished through step-by-step moves into unnecessary government controls and restrictions. This is another of such steps that back 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 American Builder 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 800,000. 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 drastic if 800,000 units are really desired, although the real impact may not be felt before late spring. Meanwhile I feel that we should offer our cooperation in the armament program, while pointing out discrepancies between government stated targets and what the regulation will produce. I also feel that some unbiased statistical group should be employed immediately to study the probable effects of the regulation. My opinion is that not over 800,000 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 850,000 units for 1951 and the severity of the controls do not coincide. I think the volume for 1951 will be cut to 800,000 or less if the regulation is not relaxed. There is a note of insincerity in the regulations. Why, if inflation is the objective, does not the government eliminate public housing, and change many of their highly inflationary policies? If the regulation cuts volume back to 800,000 or less there is a possibility of large surpluses 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 industries."

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 every time 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 spoke 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 608 and 565 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 800,000 units rather than the 850,000 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 bad 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 overnight, 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 wreck the whole picture they should be honest 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 GOVERNMENT 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 UNDER THE CREDIT CURBS CONTAINED IN REGULATION X AND RELATED VA AND FHA CONTROLS THERE WILL BE 800,000 TO 850,000 AMERICAN FAMILIES 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 CURBS AS SOON AS IT IS DEMONSTRATED THAT THE RESTRICTIONS WILL MAKE IT IMPOSSIBLE TO ACHIEVE THE GOAL.
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This is a WINDOWWALL of the largest size of Andersen Gliding Window Units.

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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 generally done for basementless houses.

W. H. Mortonson
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 mention 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

Sirs: 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 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 Freney 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.

November, 1930
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INDUSTRY CONTROLS—
Piece-meal 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 in 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 orders 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 await developments as dictated to Communist satellites by the Kremlin? Present policy seems to be the latter.

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 homes 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 bankers 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.
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3. Build a rumpus room as a wing or in the basement. Adds welcome recreation area at low cost.

4. Create strikingly "different" rooms that avoid the monotony of ordinary ceiling and wall treatment. Adds distinction and sellability.

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!

To make your homes easier to sell...BUILD WITH GENUINE

NOVEMBER, 1950

The Celotex Corporation, Chicago 3, Illinois
Installing Double-glazed Windows

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 accepted.

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 35-1/2 inch by 36 inch to 72 inch by 96 inch. They are so inclusive as to meet practically all demands 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 3/4 inch plate glass separated by a half-inch air space. Units are one inch wide and require a glazing rabbot 1-1/4 inch by 3/4 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

INSTALLATION of two types of glass in window wall shown at left was made for the purpose of comparison during period of extreme temperatures. Large unstructed glass area at left of picture shows an installation of hermetically-sealed double-glazed window. The opening at right is glazed with two lights of single thickness plate glass.

Data and photos through courtesy of Pittsburgh Plate Glass Company

GLAZING COMPOUND Use of elastic glazing compound or other material that retains some resilience permanently is recommended. EDGE CLEARANCE—This should be 1/8 inch, 1/16 inch, 1/4 inch at all edges, depending upon size. Distribute proportionately. Do not force.

LATERAL CLEARANCE—Should be at least 1/16 inch for glazing compound. EDGE COVERAGE—Stainless steel channel covered for uniform appearance and maximum edge insulation. SETTING BLOCKS—Two lead or treated woodblock 3 inches to 4 inches long, located 1/4 of the width in from each end of the unit on all units wider than 36 inches, or heavier than 50 pounds. Shims are equally helpful in spacing smaller, lighter units. STOP—Glass stop does not bear on unit.
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 Aero-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 Accordian 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 h, C, R, and U factors of all insulations, of all thicknesses, weights, densities.

**THERMAL FACTORS, TYPE 6 INFRA**

<table>
<thead>
<tr>
<th>Heat Type</th>
<th>R-Value</th>
<th>Thickness</th>
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<tbody>
<tr>
<td>Down-Heat</td>
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<td>7 1/2&quot;</td>
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<tr>
<td>Up-Heat</td>
<td>0.080</td>
<td>4&quot;</td>
</tr>
<tr>
<td>Wall-Heat</td>
<td>0.073</td>
<td>4 1/2&quot;</td>
</tr>
</tbody>
</table>

**VAPOR PERMEABILITY = ZERO**

**INFRA INSULATION, INC.**

10 Murray Street New York, N.Y.

Telephone: CORtlandt 7-3833
New Willys Truck Helps Builders Cut Costs!

THE ½ TON WILLYS TRUCK
WITH SENSATIONAL NEW HURRICANE ENGINE

For all-around economy, performance and durability—for top truck value—the brand new ½ 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 higher-compression 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-in-head intake and valve-in-block exhaust. Compression ratio is 7.4:1, using regular gas. See this most advanced power plant—the HURRICANE.
Announcing the NEW...

Strand 9'
Garage Door

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 all-
steel 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 galvan-
ized zinc coat, oxidized to provide an excellent base
for paint; no priming coat needed.

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

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

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

Shipments of the new 9’ x 7’ door start November 1.
Strand Doors are also available in Canopy and
Receding (track) types for 8’ x 7’ openings; and in a
Double-Garage-Door (track-type only) for 16’ x 7’
opening unobstructed by center post. Order from
your dealer, or mail the coupon for information
and dealer’s name.
unit has a “U” value of 0.55 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:

1. Openings must be square, free of twists, and glazing obstructions. Units should not be set in poorly constructed frames, inadequate to bear the weight of the sash, nor of unseasoned lumber which would have a tendency to warp.
2. To obtain maximum efficiency, sash, especially in large openings, most literally float in the opening.
3. Use of elastic glazing compound which retains its resilience permanently, is recommended. Do not use putty except in glassing 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.
5. 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)
Gang-cutting pays off fast with powerful, easy-handling SKIL Saw!

Gang-cutting with SKIL Saw gets buildings up fast. A look at these SKIL Saw features shows you why it’s perfect for day-long production sawing on the job site—

NORMAL, COMFORTABLE SAWING POSITION—With SKIL 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.

MODEL 625
SKIL Saw

A favorite with contractors for general home construction. Cuts up to 2 1/2 in. deep. Bevel cuts up to 2 1/4 in. deep at 45°. Light, compact, powerful.

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

SKIL Products are made only by SKILSAW, INC.

5033 Bieten Avenue, Chicago 30, Illinois
Factory Branches in Principal Cities

In Canada: SKILTOOLS LTD., 64 Portland St., Toronto, Ont.
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 siding doors, panels, all interior surfaces. Economical and efficient, long lasting GPX saves the expense of painting, keeps refinishings 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 durable 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 letterhead or fill in, tear out and mail the attached coupon:

OTHER GEORGIA — PACIFIC PRODUCTS:

- Douglas Fir plywood
- Hardwood plywood and veneers
- Glue-bonded hardwood panels
- Fir and Hardwood doors
- Douglas Fir lumber and timbers
- Western Pine lumber
- Western White pine lumber
- Cypress and Redwood lumber
- Southern and Appalachian hardwood lumber
- Southern and Appalachian hardwood flooring
- Residential and factory flooring
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GEORGIA-PACIFIC PLYWOOD & LUMBER CO.
1252 Southern Finance Building
Augusta, Georgia

Please send me information on Georgia-Pacific's miracle plywood, GPX.

NAME: .....................................................

FIRM NAME: ...........................................

FIRM ADDRESS: ......................................

YOUR POSITION: ....................................
"Electric Ranges help sell homes," says Mr. E. A. Ballin, of Hewlett Harbor Construction, Inc.

These distinctive homes are in Harbor Lea, Hewlett Harbor, N.Y.—9½ rooms on about ½ acre. Completely air conditioned, completely pollen- and dust-free. Completely double glazed. All electric 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 dryer, rotary 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 to provide for electric cooking.

ELECTRIC RANGE SECTION, National Electrical Manufacturers Association, 155 E. 44 St., New York 17, N. Y.

Admiral • Coolsby • Deepfreeze • Frigidaire • General Electric • Gibson • Hotpoint • Kelvinator • Ledo • Monarch • Nobbe • Philco • Universal • 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 economy.

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 be in sufficient supply to keep pace with the building rate of the first eight months of the year.

AUTOMOBILES were already facing 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 so-called minor war has noticeable civilian repercussions.

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

(Continued on page 50)
5 New Models! Delco-Heat Announces a Brilliantly Engineered Line of New Gas-Fired Conditionairs

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 homes 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 eye-appeal. 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 exchanger—ribbon-type twin burners—and a blower-filter unit that is powered by Delco’s famous Rigid-frame motor.

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

Delco-Heat manufactures a complete line of automatic home heating products—for all 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, New York.

Also manufacturers of Electric Water Systems for farms and homes, fractional horsepower electric motors, electric automobile clocks.
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 censured 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 hasten 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 country depends as much on an adequate corps of skilled journeymen as it does on a crop of college graduates. If 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)
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: Albany • Birmingham • Boston • Chicago
Dayton • Kansas City • Minneapolis • New York
Philadelphia • Pittsburgh • St. Louis • Waco

"Smooth as silk." Masons like the smooth, easy response of plastic, buttery Atlas Mortar cement.

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

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

SKILLED HANDS PREFER
ATLAS MORTAR CEMENT
THE SATIN OF MASONRY CEMENTS

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

NIEUWENHOUS, 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 nominees and grooming them now.
It's the NEW
Modine Cabinet Unit

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

- Winter's chill, summer's hot blast are problems no more! Single unit for forced hot water heating...cold water cooling. Steam models for heating only.
- For fresh air ventilation, non-freeze steam coil and built-in mixing damper available.
- Hushed performance insured by skillful silencing of mechanical and air-rush noises.

Now, specially designed water coil gives you high capacity hot water heating — 2 lbs. steam performance on 180° water.
- Smartest styling is yours...with beige-gray enamel finish, Parker-Bonderized for lasting beauty.
- You get easy accessibility to meter, blowers, coil, and piping simply by removing the front panel.

WRITE FOR
NEW BULLETIN 350 TODAY!
You'll find your Modine Representative listed in the classified section of your phone book. Or write direct
Modine Mfg. Co., 1501
Dekoven Ave., Racine, Wis

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 recessed installation.

Modine
CABINET UNITS
FOR HEATING & COOLING
LOWEST COST SOUND CONDITIONING

Right: Library ceiling shows typical use of Zonolite Acoustical Plastic. Frequently, low 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 ZONOLITE*
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.

CONSTRUCTION DETAILS
A  Zonolite Acoustical Plastic used on library ceiling.
B  Paper-backed, welded wire mesh for Zonolite concrete roof slab.
C  Applying metal lath for fireproofing girder with Zonolite Plaster.
D  Installing radiant heating pipes over Zonolite concrete floors.
E  Zonolite Plaster 2" solid partitions—first side.

Where Zonolite plaster was used in lieu of conventional materials for suspended ceilings, for 2" solid partitions and for fireproofing 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 steel members. By reducing weight in these 3 ways, further drastic reductions in time and cost 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

ZONOLITE COMPANY, Dept. AB-110
135 S. LaSalle St., Chicago 3, Illinois

Please mail me detailed reference material on use of Zonolite Vermiculite Aggregates in plaster and concrete.

Name:
Address:
City... Zone... State...

*Zonolite is the registered trademark of Zonolite Company
NEW PRODUCTS
Offered by Manufacturers

AIR CONDITIONING UNITS AB115030

“VAC” air conditioning units, stacked 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. Capacities range from 400 cfm to 16,625 cfm. Sectional design permits greater ease in handling, installing and servicing and contributes to low first cost and maintenance. Young Radiator Co., Dept. AB, Racine, Wis.

SHOWER HEAD AB115034

New multi-spray, self-cleaning ball joint Kohler shower head 1.1/2”, inches in diameter has six clock-set plungers that deliver eight separate streams of water each. Accessible control handle on sleeve out above face permits adjusting spray from fine to normal and “Round delivery. Volume can be adjusted through exposed screwdriver-type regulator. Unit is designed for use in hotels, bathrooms, schools, clubs, hospitals and other institutions. Kohler Co., Dept. AB, Kohler, Wis.

TUBULAR LATCH AND LOCK AB115027

To provide higher resistance to wear and exposure, this all-new line of tubular latch and lock sets has new type baked on plastic coating over the highly polished brass finish of all exterior parts; all inner steel working parts are thoroughly zinc-chromated for protection against corrosion. Studly tubular latch bolt is of extruded brass and operates through an improved type dual-springing action. In addition to front-door handle sets, the new Harris line offers a choice of inside sets, including screen-door sets with fully two-inch, easy-to-grasp knobs. All knobs are secured with patented Gendarer screws to minimize possibility of becoming loose. Harris, Inc., Dept. AB, 300 East Long Street, Columbus 15, Ohio.

GAS-FIRED HOT WATER BOILER AB115033

Newly-announced line of gas-fired hot water boilers are of vertical tubular design with baffles for maximum heat absorption. Completely equipped with all necessary controls, units have rectangular cabinets with finish of silvertone baked enamel. This cast-iron boiler heating equipment has steel base, permitting installation on wood floors. All five sizes—from 72,000 to 144,000 B.T.U. output—are thoroughly insulated to minimize heat loss. Timken Silent Automatic Div., Dept. AB, Jackson, Mich.

KILN CURING UNIT AB115029

This automatic self-contained curing unit was designed specifically for concrete product curing kilns. The unit produces an equatorial temperature atmosphere in kiln, forced circulating heavy wing-looked air, with precipitation occurring uniformly throughout kiln. Does not require steam or condensation processes or period of actual drying of product. Unit may be set at or below floor level, indoors or weather-exposed. B.T.U. output of unit 60,000 to 350,000. Uses fuel-oil, gas or similar lubricant type oil burner. Libbey- 1-Bar Company, Dept. AB, Holland, Mich.

RADIAL SAW AB115035

Use of wartime developments with magnesium has led to production of five H.P. radial arm saws, 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 machines. New models are completely “radial” in adjustment; motor unit travels 19” inches in straight line in the radial arm, arm, column and motor can all be rotated 360 degrees and locked in any convenient position permitting use of straight line motor action on any conceivable combination of angles. Machines can be used for cross-cutting, angle-cutting, compound angles, ripping, bevel-rip- ping, dadoing, rebating, plowing, shaping, routing, etc. J. D. Wallace & Co., Dept. AB, 134 S. California Ave., Chicago 17, Ill.

AUTOMATIC GAS WATER HEATER AB115034

Made in three sizes, 20, 30, and 40 gallon capacities, the new Koven line of automatic gas water heaters are fully automatic, under-fired and have center-fuse units. These heaters are equipped with Snap Action thermostatic control; automatic safety pilot and shut-off safety valve. Extra heavy, hot dip galvanized, copper-bearing steel tanks are tested for 335 pounds pressure and 150 pounds working pressure. Tanks are completely blanked-molded for efficient storage protection. Magnesium anode to extend tank life is optional. L. O. Koven & Brothers, Inc., Dept. AB, 154 Ogden Ave., Jersey City 7, N. J.
National Lock's new no. 150

4-STAR FEATURE
ask your jobber

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
- Appeals to Those Who Want the Finest... Increases Per Unit Profit

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

NATIONAL LOCK COMPANY
ROCKFORD, ILLINOIS • MERCHANDISE SALES DIVISION

DISTINCTIVE HARDWARE... ALL FROM 1 SOURCE

NOVEMBER, 1950
clear spans up to 80 feet

In the battle of load against length, Truscon “Clerespan” Joists have achieved longer, support-free spans and greater obstruction-free 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.

FREE Book on Truscon “Clerespan” Joists. Write for it. The Truscon Steel Company Manufactures a Complete Line of Steel Windows and Mechanical Operators ... Steel Joists ... Metal Lath ... Steel-deck Roofs ... Reinforcing Steel ... Industrial and Hammer Steel Doors ... Bank Vault Reinforcing ... Radio Towers ... Bridge Floors.

TRUSCON STEEL COMPANY
YOUNGSTOWN 1, OHIO
Warehouse and sales offices in principal cities.

ABM 66
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.
NEW PRODUCTS
(Continued from page 64)

PRECISION CUTTER

The Lion trimmer, a multi-purpose precision cutter for joiners, cabinet makers, or carpenters, employs principle of the shearing cut. Cuts wood easily, leaving a smooth surface for gluing and is precision-accurate down to the thousandths of an inch. To operate, work is held firmly against the guide, with the end protruding through the opening in front of the knife edge. Push handle down as far as it will go. The trimmer carries an unconditional performance and material guarantee. Pontotoc Corp., Dept. AB, Stratford, Conn.

SCREW-HOLDING SCREW DRIVER

Quick-Wedge screwdriver has a double spring steel blade that holds, lifts, and drives the screw. Two half-rounded blades made a moveable steel tube expand as the tube is moved forward, pushing blades firmly against the walls of screw slot. Hollow-ground tip grasps the screw and Rusch from top to bottom, securely holding the screw. To release the screw, the tube is slid back toward the handle. Unconditionally guaranteed. Resmon Co., 725 S. 5th St., Dept. AB, Salt Lake City 1, Utah.

GAS-FIRED FURNACE

Delco-Heat gas Conditioners, made in five models ranging in B.T.U. per hour input capacity from 42,500 to 210,000, use a multi-section heat transfer system with electrically welded steel 'Mult-Rad' radiators and double ribbon-type burners. Heat transfer unit is a series of individual drawn-steel radiators arranged vertically in parallel series, with steel inner baffle which retards rise of burning gas. Each radiator has its own burner arm. Features include a built-in draft diverter, safety pilot and a rubber-mounted centrifugal blower operating in conjunction with a varnished steel-veined glass fiber. Deleco Appliance Div., General Motors Corp., Dept. AB, Rochester 2, N. Y.

NEW PRODUCTS cont.

GAS WALL HEATER

Fun-Aire 50 gas-fired wall circulating unit has an input of 50,000 B.T.U. s., and may be installed by fitting in standard 2 1/2-inch stud wall with studs spaced 16 inches o.c. Installation is accomplished quickly and economically without need for basement or floor space. In occupied homes and other buildings, it is not necessary to dismantle and reassemble the entire wall. Fun-Aire operates on natural and manufactured gases, and provides constant automatic heat at any desired temperature. Pioneer Furnace Co., Div. of Pioneer Water Heater Corp., Los Angeles, Calif.

NEW COLOR PANELS

Morson has now been added to colors available in Marbike plastic fronted wall and ceiling panels. New decorative color gives a pleasing contrast when used in design with other Marbike colors, both in home and in commercial installations. It is available in the polished high-gloss Deluxe finish. Marbike panels are also made in the semi-glass Velvetex finish which is not polished. Marbike Wall Products, Inc., Dept. 203, Dover, Ohio.

INSERT NUMBERS AND MAIL COUPON FOR INFORMATION
American Builder, 79 W. Monroe Street, Chicago 3, Illinois

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.
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[Signature]
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, George 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 and Kelvinator's unsurpassed 36 years in building the finest electrical appliances.

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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.
Wartime Controls

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 another one.

The American theory of regimentation as a basis for fighting modern wars against aggressor nations had its inception in the declining 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 seize 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.
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 semi-wartime economy. With some controls in effect and future supply of materials undetermined, final plans for the conference and exhibit portion of the convention program will be deferred 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 rearrangement 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 development, home design, and merchandising, will receive awards during the show and their entries will be on display.

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 spur 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 Street, San Francisco; B. O. Stringfellow, Seattle; and Ralph Wells, Kansas City, Mo.

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

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"EXPOSITION IN PRINT"
Building Products on Review, a feature of the January American Builder, will present more than 400 products, many of which will be on exhibit at the NAHB convention.
Gypsum in Construction

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.
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 (CaSO₄·2H₂O).

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

### In Residential Construction

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PERFORATED gypsum lath, identical otherwise in all respects to standard lath as shown above. Right, allows plaster to “rivet” to lath with mechanical key.

**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:

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

2. Nails should be blued gypsum lath nails, thirteen gauge wire one and one-eighth inches long with a 1/4-inch head.

3. 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 1/2-inch gypsum lath is used on walls the spacing may be 24 inches.

5. 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 gypsum plaster are correctly proportioned, sand particles will be completely surrounded and coated with gypsum. How sand particles look in oversanded mix is shown at left. Above right, how they look if mix is correctly sanded 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. Corner beads, which serve as grounds, are secured by nailing to the structural frame.

7. Grounds should be provided around all openings and wherever baseboards or moldings are to be used. They must provide for a full 7/8-inch thickness of plaster. Otherwise the wall will be weakened materially.

When gypsum lath is clipped to steel frame 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 building 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**
SECOND step in a three-coat plaster job is application of brown coat over scratch coat, as illustrated below.

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...
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 be properly developed to develop the purpose of the finish coat. An extremely hard finish coat such as plaster or lime-Kerne'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 three-coat plaster application comprises the following:

1. 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.

2. 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

Fiberizing 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 fiberizing to add cohesive-ness to the mass.

Plaster Aggregates

Sand is the most commonly used 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 cementing material.

The 1:2 mix should always be used for scratch coats over lath. The 1:3 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 craftsman can apply the acoustic plaster.

The noise-quelling 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.

**RODDING tool is used between grounds of reeds to develop proper thickness and plane**

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**Acoustical Plaster**
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 — 1/4, 1/2, and 3/4-inch with an ivory finish. The length varies from 4 to 12 feet. The 1/4 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 of old wall surfaces; and 3) for ceiling repairs where light weight is needed.

The 3/8-inch standard gypsum board and 3/4-inch wall board is available with square, bevelled and recessed edges. The 3/4-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 3/8-inch thickness only, and from 6 to 10-foot lengths. These boards have a square edge and an ivory surface but with tile indentations 3/8-inches square.

Wood-grained gypsum board is made in 3/4-inch thickness and from 6 to 12-foot lengths. Edges are square or bevelled. A paper having a photographic reproduction of knotty pine, bleached or ribbon mahogany, walnut, or figured aspen 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 3/4-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 1/4 or 1/2-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 1/4-inch thick. The base layer is nailed vertically to the
Nailing Is Important

Proper nailing for single and double wallboard application is highly important to achieve maximum strength and durability of the wall. Use only 5-penny cement-coated nails 1½ inches long (13 ga. 15/64 head). Start nailing near the center of the frame and work outward, spacing nails 5 to 7 inches apart, but not closer than 3/8-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 crowned headed carpenter's hammer should be used. Each nail 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 gypsum wallboard 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 a broad knife into the channel formed by recessed edges of adjoining boards. Moderate pressure is used, and 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 snapped at intervals along one side and applied so that...
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 board 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 increases, 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 wallboard joints is to apply cement to channel, as shown, left. Second, reinforcing tape is imbedded in cement over length of joint, and third, right, excess cement is removed. Tape then is covered with cement.

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

CORNER JOINTS are finished similarly to flat wall joints, as shown, left. Center, tape is folded to cover angle, and is cemented to outside corner. Outside angles of curved surface are taped as shown, right. Back of gypsum board is scored to allow bend.
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.

**How to Apply**

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

1. 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.

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

4. Nails should be galvanized, with a seven-eighths of an inch diameter head, one and three-quarter-inch
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 barbed 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 1¼ inches into studs. End joints of siding should be over centers of studs.

For masonry veneer, wall ties should be attached with nails driven through the sheathing into studs, using nails which will penetrate at least 1¼ inches into studs. At least 6D common nails are recommended. Ties should be spaced vertically to conform with coursing of masonry veneer.

ES-nailed fasteners are recommended for applying wood shingles 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.c. Not less than two fasteners should be used for each shingle. The fasteners are 1¾ inches long and are available in 25-pound boxes. Estimated weight is 2½ 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 studs to a penetration of at least 1¼ 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-

of 2x4-inch studs with ½-inch gypsum sheathing and conventional wood siding on the exterior (with gypsum lath and plaster on the interior) have a one-hour fire-resistant rating when fire is applied to either side.

Gypsum sheathing is manufactured in the same kind of a board machine that manufactures gypsum wallboard and gypsum 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 8x8-foot 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 panel of gypsum sheathing was subjected to the equivalent of 3½ 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 gypsum 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 prohibited from entering the inside surface of the wall. Yet, of course, the outside walls must be watertight.
In Commercial Construction

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

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. Short-span 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 hail-holding 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-
Dimensions 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. Pour ed 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.

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 grout, 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 resistant material for steel beams, girders, floors, roofs, columns, girders and trusses. Screened to produce an aggregate which conforms to specifications for plastering sand, 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 detid air cells which act as insulators. Also, the shiny, golden laminations of the material are effec-
tive reflectors, turning back heat.

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 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.
FOCUS was on builder and his product

# Home Week Report From The Nation

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


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 home-seekers 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 homes in complete developments where these were placed on display in their entirety. The number of builders signifies, in most instances, only those that displayed houses. Many more contributed in other important ways to the over-all success of the week.

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WELCOME SIGN of the home builder was cut out for the entire nation September 10—17
HOW 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 8,000 square foot ceiling during a weekend in order that a local A. and P. super-market might 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 bedrooms, basement playrooms, ceiling replacements and similar improvements of a dry-wall nature. It also has prompted thousands of businessmen 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

**Quick New Interiors With Insulation Board**

**Multiple-purpose panels offer unlimited range of possibilities for beautiful and unusual room designs in remodeling of business and residential buildings**

**Commercial Buildings** of all types lend themselves to remodeling with decorative insulating board. These before (left) and after (right) pictures show how Photo Engravers, Inc., of Buffalo, N.Y., modernized its plant. New ceilings are of ivory tileboard applied in an ashlar pattern. Walls above the wainscoting are finished with insulating planks in harmonizing blends.
MODERN CHAIR is important to this club dining room in St. Paul, Minn... 
by its “different” ceiling treatment. The wall area is finished with insulating board tiles in a light-reflecting off-white. Similar tiles in two shades complete the design. In addition to its attractiveness, this ceiling helps to absorb 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.

**Insulating 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 three-quarter inch. The long edges are beveled, with interlocking joints. Decorative banding may parallel the long edges for decorative effect. Available in white, pastel tones and blends.

**Insulating board tiles**: Made in 12x12-inch and 16x16-inch squares and in 12x24-inch and 16x32-inch rectangles. Thicknesses: one-half, three-quarter and one-inch. Made in white, ivory and blends. Edges are beveled, 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. Panelled effects may be obtained by covering the joints with battered strips or mouldings. They may be of wood, metal or insulating board.

Joints can be accented in other ways to create unusual decorative 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.

INSULATING BOARD 

Tiles and planks were utilized to modernize this living room in a West Coast farm home. White planks applied horizontally on side walls give it a modern appeal and an effect of greater spaciousness.
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 Mfg. Co., Royal Oak, Mich.) and the Shorty Knife (B. A. Rainwater, St. Louis, Mo.).

Insulating board 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 planks 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 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 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 diagonally to achieve an attractive diamond pattern.

CEILING PATTERNS: This design utilizes units 12x12 inches and 12x24 inches or 16x16 inches and 16x24. HERE square and rectangular units are combined. Large units are best for big area installations.

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 joints and in the corners will frame the panels.
nally above a brown wainscot. Another interesting treatment is to use rectangular tiles above the wainscot in an ashlar pattern.

The number of ceiling patterns which can be worked out with insulating board tiles is limited only by the imagination of the planer. The selection of a pattern, of course, 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 ashlar 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 eye-pleasing patterns.

The most satisfactory results are obtained in application when insulating board interior finishes are allowed to adjust themselves to the atmospheric conditions of the rooms in which they are to be installed. This can be done simply by unpacking the panels, at least 24 hours before application is started, and arranging the units around the room so that air will circulate on both surfaces.

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. Partial width units should be placed along opposite sides of the room in equal dimensions. An accurate layout will enable men to place furring properly and provide for the best treatment of irregular areas.

The character and use of the room 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 dignified; an amusement 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.

THE 3-4-1 system of horizontal application of insulating board 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 board. Middle course is a standard 4 foot wide board. Beveled edges or moulding decorate horizontal joints.

Walls over 12 feet also may have the 3-4-1 treatment. Here insulating building board is applied as above, centered on the wall. Extremities are of building board erected vertically. All joints are covered with molding. Horizontal moldings continue across the right vertical panel to complete the pattern. Where ceiling height is a few inches more than 8 feet, the lower course can be insulated above the floor line, the space covered with baseboard.

COLOR and design add cheer to this basement fun room. An insulating board ceiling of light reflecting white brightens the room and helps to minimize noise. The walls combine variegated insulating board, set in a decorative diagonal, and vertical insulating planks.
Radiant Heat and Hog Farrowing House

Hog farrowing house, remodeled to offer all the comfort and sanitation of home, is called “indispensable to high production in a cold climate.”

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-year-old structure, now twice remodeled, was originally a 24 by 48 ft. half-monitor 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 roof 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 bitterly cold weather and driving winds in Nebraska. A central farrowing 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 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-

Before . . . . . . After

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

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<tr>
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Farrowing house layout. The entire setup of central houses and portable will handle 36 sows and litters at one time.

AMERICAN BUILDER
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; 1 1/4-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 bu.) 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, besides.

Six additional windows, 30 inches by 28 inches, 6-light (matching the existing windows), were placed in the east wall to admit light and sunshine on both sides. Windows have adjustable 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 made 1 1/4 inches higher than the pen floors, affording reader access to the pens over the ton of the stationary alley partitions. These partitions are solid, to eliminate floor drafts; but partitions between pens are slatted to permit air circulation.

There are no gutters. Pen floors slope 31/2 inches from the alley to the sides of the house, for drainage to the outside. The slope also enables the sow to indulge her preference for lying with her head "up-hill." S-sided bedding 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 bedding 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...
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.

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. Precour, 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 superintendent, 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 of 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 he 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-
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 kitchen 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.
DECORATIVE 2x2-inch mahogany vertical members separate dining room and entry which have clay tile floors. Below, living room has oak parquetry flooring.

SHADOWS from California sun through open skylight form intriguing patterns against vertical redwood siding 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 overlooking 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 nine 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 low-pitched roof extends four feet six inches at the eaves. 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, 3/4 x 14 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, rumpus 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 William Kessling.
ABOVE. cedar shingles cover the low-pitched roof that accents the horizontal motif of this home. High window sills of the front bedroom are an aid to varying furniture arrangements. Complete lot, measuring 85x130 feet, is serviced by a sprinkler system of copper tubing. Upward-acting garage door has tongue and groove sections. Other portions of house are finished with redwood siding. Parapet encloses sun deck above roof. Floor plan at right reveals how rooms of house are grouped around patio enclosed on two sides by floor-to-ceiling plate glass walls of loggia, entry, dining room and kitchen. Floor of patio is red concrete.

IN THE framing for the rear wall of the house 1/4x14-inch steel dowel pins penetrate and join the posts and beam plates used around the extensive window openings. 1/2x6x6 steel angle brackets at the first floor, and 1/2x6x3 brackets at the second floor add further rigidity to the structure.

NOVEMBER, 1950
ABOUT a year ago Joe Yost, of Bridgeport, Conn., 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 So-and-So's" or "there isn't anything different here than we have seen before."

Young Yost decided that because he was just getting 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 ROOM looking toward the kitchen, shown at right. Note special treatment of wall around stairway to unfinished 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 Cod.

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 house.

WIDE OVERHANG above the odd-angle wall of the living room gives ample protection from the sun for the large window areas. The vestibule and guest closet are at the left in the photograph.

DETAIL ABOVE shows framing at juncture of roof and corner of vestibule. Wide overhang above entrance affords protection from weather. Entrance, vestibule, and closet detail also shown.
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 to 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 with a duct riser extending to future second floor rooms. This area is left in an unfinished state for future expansion. Roof and sidewalks 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.
Part of a multi-house subdivision, yet--

**Individually Styled**

SPLIT level arrangement of floor areas provides living and service units on ground floor, with bedrooms at upper level. Basement area under bedrooms furnishes ample space for recreation and utilities. Rooms easily 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 “pea 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 group is Edward B. Hawkins of Denver, Colo., who designed and built a two-block development of individual houses 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 battery 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.

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CRAWL space for heating ducts in unexcavated area of basement

ECONOMICAL plan perimeter established for two bedroom house

NOVEMBER, 1950
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

Lath, 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-
lar interest are the unusual effects illustrated on the street front of the model home.

Interior surfaces reflect the same inherent characteristics of plaster. Walls of all rooms except kitchen and bath 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 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 lookout outs run parallel to joists they become an extension of the latter. When they are placed at right angles the lookout 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 ½-in. plywood. The plywood for concrete forms was re-used as sheathing.

House is composed of six rooms 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.
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 in the country, nationally, industrially. How tight the lid 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, plaster, board, 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 this year.

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 contractor and his helper 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 some 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 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 banded together into its own particular craft, guild, union or group.

The unavailability of cement workers to put in the foundations stops the project in its tracks. 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 every element of the project, for the well-balanced supply of a wide variety of workmen, house construction will be forced to a substantial slow down.

Certainly a war economy promptly absorbs manpower of all types and kinds. The "situations wanted" ads in the classified section of the Sunday newspapers almost completely disappear while the "Help wanted" columns grow to unprecedented lengths.

Remember our past war 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 continuing 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 housing. Consequently, we 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, Saberson says, "The question before the house revolves around the tightness of the lid and who will sit on it." And there are other problems

(Continued on page 136)
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NOVEMBER, 1950
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Better Detail Plate

**No. D72 Counter Storage and Breakfast Table**

This month's better detail plate, shown 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 ½-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 convenient recess at side of cupboard in photograph which can be used for cook books, etc.

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**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. Fry, New Braunfels, Texas
No. D-72 Counter Storage & Breakfast Table

Continuous Top

FRONT ELEVATION

PLAN

Section

ORNAMENTAL FACIA

PLAN

FINISH STRIP AT SASH

CORNER SHELF

ELEVATION

Section

NOTING LIND TOP

ROOF LIND TOP

1/2 X 1 ASBESTOS

EXHAUST RECESS

PLATE
How you can build Thermopane for EXTRA VALUE at LOW COST

Read how it is being done by Russell 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 Thermopane 4/16" thick with 3/16" 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.

Thermopane 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.

Window wall header and uprights in position to receive the window wall frame specially rabbeded 2 x 6's. (Framing detail available—mail coupon.)

2. Window wall frame nailed into place, ready for insertion of either standard 45½"x25½" Thermopane units or aluminum projected-type windows of like size.

3. Thermopane unit in place. Frame has received a bed of glazing compound before insertion of the unit. Workman is filling voids prior to installation of wood stops.

MADE ONLY BY LIBBEY-OWENS-FORD GLASS COMPANY
35118 Nicholas Building, Toledo 3, Ohio
ALL WINDOWS in the Lyle Forest homes at Tenafly, N. J., are self-insulating—all Thermopane. The low-cost installation method described here permitted the use of Thermopane all around these houses ranging from $13,990 to $17,990. Other building developers are using similar methods in homes ranging from $7,990 up.

4. Aluminum ventilators of projected type are inserted into openings of wood frame in a bed of glazing compound. Wood screws hold them in place.

5. Thermopane (standard 421/4" x 221/4" unit) is installed in aluminum ventilators as in any other face-glazed metal sash. Aluminum screen is installed inside.

6. Final result, a sales-appealing window wall that makes the living room seem larger by being opened to the outdoors. Thermopane’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 cost. Get the information now—it’s a smart way to provide more house for the money.

Libbey-Owens-Ford Glass Company
35110 Nicholas Blvd., Toledo 3, Ohio
Please give me complete information on installation methods for low-cost window walls of Thermopane.

Name__________________________
Address________________________

I am planning to build__________ houses in next 12 months
in $__________ class.
THE PROBLEM:
The intention in this case was to produce a building for the Labrador Youth Center that would be 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 budget.

THE SOLUTION:
An open trellis effect above the 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. Sign 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 Zvon. The awning is a laterial arm type which is completely concealed when not in use. Show window lighting is a combination of recessed H1-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
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 or 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!
These Advantages Make Plywood The Choice for Remodeling

Plywood is versatile. There's a type and grade for every remodeling job. Water-proof-bond 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, stronger. 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 and labor.

Plywood 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 underlayment for linoleum, tile, wall-to-wall carpeting. The big panels go down fast, keep joints to a minimum. There are no humps or ridges to mar finish covering.

Plywood works all around the job! Gives interior walls the warmth and charm of real wood paneling... lends strength as sheathing or subflooring... adds low-cost glamour as siding or exterior trim on gable ends, soffits, porch and breezeway ceilings.

Large, Light, Strong Real Wood Panels

Here's How to Beautify the Entry

with Coffman's Exquisite CLIMBING VINE DESIGN

Ornamental Iron Porch Posts

Graceful hand-wrought Coffman iron porch posts improve the looks of any house, often increasing its value tremendously! Yet these ornamental posts are quite inexpensive and are available through your lumber or building supply dealer. The Coffman distinctive No. 150 design for porch, breezeway, or balcony. All accessories are furnished for easy installation.

Tested by Pittsburgh Testing Laboratories

Critical testing under professional laboratory control gives accurate load carrying statistics, proves Coffman load carrying factors amazingly high. Corners will support 55,000 lbs.; flat posts 850 lbs.

HOW TO Fit a Porch Post . . .

It's Simple with Coffman's UNIVERSAL PORCH POST

For Building or Remodeling

One stock post, Coffman's No. 150, meets any height requirement from 6'-10½" to 9'-0". You simply cut off legs as needed. Comes complete with fittings. This is an outstanding design suitable for building or remodeling. Look for the traditional Coffman "large grain" at inner ends of scroll—the mark of true quality in ornamental iron.

Write Department A.B., P. O. Box 1113, for free catalog of designs, sizes and prices.

Manufacturers of the Original

"Complete Builders Line"

of Hand-Wrought Ornamental Iron

The R. I. Coffman Co., Inc.
ORLANDO, FLORIDA

How to Make a Mobile Unit of a Heavy Power Saw

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 back of truck and haul to job. Tip up trailer and start sawing lumber.—Submitted by J. G. Caldwell, San Mateo, Calif.

How to Make a Saw Guide:

This saw guide made from ½ 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 ¾-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.
A Distinctly Different Design NEVER BEFORE Successfully Produced

**Grani-lite**

**BAKED ENAMEL TILE BOARD PANELS • Granite-like Finish**

**4 POPULAR PATTERNS**
- Paralel-Line
- Streamline
- Smooth Surface

**5 NEW COLOR TONES**
- Sky Blue
- Sea Green
- Apricot Blush
- Dove Gray
- Maltese Gray

It's different—it's a hit—it's another achievement, exclusively Wal-lace, in quality baked finish tile board. Grani-lite has all the beauty, sparkle and color depth of real granite. For that job requiring "something different", for greater individuality, Grani-lite is equally usable and sellable for residential and commercial jobs. Grani-lite will increase your tile board volume and profits. See this revolutionary new development in wall board at all Wal-lite and Satar-lite jobbers or write to GRANI-LITE DIVISION for FREE SAMPLE.

**Manufactured by**

**WALLACE MANUFACTURING CO.**
10th and FAYETTE • NORTH KANSAS CITY, MO.
Here's the fireplace your trade has been waiting for. It's simplified for prices that mean volume...standardized for quick, economical construction. It's the contractor's favorite—all Bennett's new sizes lay up with standard brick—without cutting!

It's a complete form, including a scientifically proportioned firebox and throat, downdraft shelf and heating chambers. Other features include:

- Extra large funneling chamber
- Leak-sealing flanges
- Longer sidewall baffles
- Simple, efficient damper—built-in
- Interchangeable, rotary or poker controls
- Large backwall heating chamber
- Better view of fire
- More radiant heat

Sizes are 27", 31", 35", 39", 43" and 49".

Write for complete information on this big-volume, good margin line. The new Bennett Fireplace offers you the best profit opportunity ever. Address your inquiry to us at 1150 Market Street.

BENNETT IRELAND INC.

---

Catalogs and HOW-TO-DO-IT INFORMATION

822—KITCHEN HINTS—of interest to builder and homeowner alike are found in a new multi-color illustrated 16-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.

823—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., Pittsburgh, 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.

824—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 eave and window details, methods of application at exterior and interior corners, foundation and frieze board details, with general construction information and specifications.

825—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. These operators are actuated by standard push button 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 3, Ill. In addition to illustrations of various types of tiles, the booklet also contains drawings showing installation of slate tile at hips, gables, ridges and eaves and lists specifications.

828—ELECTRICAL HOME PLANNING—The Better Homes Bureau, Westinghouse Electric Corp., 30 East 42nd St., New York, 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.
Catalogs

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 fireplaces, interior decor, bathrooms and on counters and bars. All member companies of the Institute are listed.

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.

832—BONDATOR 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 bondator 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

Readers Service Department
American Builder
79 W. Monroe St., Chicago 2, Ill.

Please send me additional information on the following products, or catalogs, listed in this department:

Numbers

Name

Street

City State

OCCUPATION*

*Please note that occupation must be stated if full service is to be given.
BUILDINGS, PLANNED OR BUILT,
ARE GOOD PROSPECTS FOR Daylight Engineering

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 1055, Toledo 1, Ohio. Insulux Division, American Structural Products Company, subsidiary of Owens-Illinois Glass Company.

INSULUX "WALLS OF DAYLIGHT"
— by the pioneers of Daylight Engineering
PERMITS REMOVAL OF SASH WEIGHTS, INSULATION OF MULLIONS.

Slash Labor Costs

Simple installation allows one man to easily install 30 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost ... higher profit!

Tops in Operation!

Smooth, positive action; accurate balance; finger-tip control plus the perfect seal against draft, dust, moisture. No wood-to-wood contact. Prevents sticking windows and window rattle.

EFFICIENT FOR OLD LOW COST OR NEW BUILDING

ATTENTION MILLS AND LUMBER YARDS IDEAL FOR PRE-FIT WINDOWS Can Also Be Sold in Single Unit Packages Mail this coupon today!

The VW he 1h
(Continued from page 52)

CHECKING for “square” is also an important step. This will eliminate any difficulties that may arise in the event the window opening is not perfect. A square opening makes it easy to do satisfactory glazing.

WOOD setting blocks 3/4-inch thick, one inch wide and about three inches long are placed in the position indicated by pencil mark on face of inside stop. A 36-inch sash width is used in this installation, thus the setting blocks are 9 inches in from ends.

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 double-glassed unit to “seat” in the opening. An elastic glazing compound which retains its resilience permanently is recommended.

(Continued on page 128)
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 handily grouped in front and to the right. See (1).
- Safety return spring and positive stop minimize cutting effort. Help return saw to back position. See (2).
- Radial Arm retracts with saw, 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 portable.

**ACURACY**
- Rigid retractable arm assembly moves easily on 8 permanently lubricated ball bearing rollers enclosed in a cast housing and protected from dust and dirt by felt wipers. Retractable arm is of tubular steel, accurately machined, with milled and ground bearing roller tracks. See (4).
- Adjustable guards are cast aluminum with anti-kickback dogs at point of entry. Except for portion in cut, blade completely guarded.
- Safety return spring in safety return spring and stop returning saw to safe back position after cut.
- Retractable arm never obstructs view of saw or work.
- All controls on operator's fingertips.

**SAFETY**
- All exposed parts are protected against weather by enamel chrome or cadmium.
- Wire enclosed in flexible metallic tubing.
- Table frames are of heavy pressed steel, table tops heavily varnished hardwood.
- Motors provide 100% overload capacity.

**LONGER LIFE**
- 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.

**THERE’S A COMET SAW DESIGNED FOR YOU**

**THE JUNIOR**
- Up to ½ h.p. cuts 4” deep, 10” wide. ripping material 25” wide.

**THE COMET CLIPPER**
- Up to ¾ h.p. cuts 4½” deep, 10” wide. ripping material 25” wide.

**THE COMET SENIOR**
- Up to 1½ h.p. cuts 6” deep, 10” wide. ripping material 30” wide.

**THE TIMBER CUTTER**
- Up to 1½ h.p. cuts 16” by 16” timbers.

---

*COMETS Cut Quicker*

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.

2031 SANTA FE AVENUE - LOS ANGELES 21, CALIFORNIA

CROSS CUT • RIP • MITRE • COMPOUND MITRE • BEVEL • PLOUGH • SHAPE

**CONSOUDATID MACHINERY & SUPPLY CO., LTD.**

2031 SANTA FE AVENUE, LOS ANGELES 21, CALIFORNIA

Please rush me price and dates on:
- Comet Junior
- Comet Clipper
- Comet Senior
- Comet Senior 8"  • Comet Timber Cutter

Name ____________________________

Address __________________________

City ____________________________

Date ____________________________

**NOVEMBER, 1950**
**TECHNICAL GUIDE**

(Continued from page 126)

**STARTING** along the side jamb of wood frame, apply a sufficient amount of glazing compound to the perimeter of the back or permanent glazing stop. It is also important to surround the setting blocks with compound but to keep block tops clean.

**DOUBLE-glazed unit** to put into place on the setting blocks and gently pushed into position against compound covered stops. Steel frame gives the unit added strength making the handling easier. With slow but firm pressure the steel-framed unit is forced inward until all voids are filled.

**ADHESION** of the glazing compound helps to hold double-glazing unit in place. However, as a precaution, temporary stops should be placed on top and sides. Next step in glazing is to fill in the voids between the steel frame and the wood opening which is the 1/4 inch clearance allowed for setting.

(Continued on page 130)

**LUMITE SCREEN CLOTH**

Sold through hardware, lumber, building supply dealers and screen manufacturers.

*Registered Trade-mark

**LUMITE DIVISION**

60 Worth Street
New York 13, N. Y.

Gentlemen: I am interested in the rustproof, stainproof, long-lasting qualities of LUMITE Screen Screen Cloth. Please send me FREE sample and further information.

NAME ________________________________

Address ______________________________

City ___________________________ State ________
YOU'LL BE AHEAD WITH

Westinghouse Appliances

THROUGHOUT

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.

WESTINGHOUSE ELECTRIC CORPORATION
Appliance Division  Mansfield, Ohio

YOU CAN BE SURE...IF IT'S Westinghouse

AUTOMATIC DISHWASHER

ELECTRIC WATER HEATER
Round or Table-Top Models. Can be installed anywhere to save space or shorten piping runs. In sizes from 10 to 60 gallons.

NOVEMBER, 1950
It's the little "extras" that soften up prospects...pave the way for sales. Like the friendly, musical greeting of an Edwards Door Chime. Worth far more than its modest installation cost, builders agree, because it starts selling at the front door—where your sale begins!

EDWARDS

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...sounded 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. OVERALL SIZE: 44" high, 7½" wide, 2½" deep. (Also with silent center third tube.)

Edwards Company Inc., Norwalk, Conn.
In Canada: Edwards of Canada, Ltd.

TECHNICAL GUIDE

(Continued from page 128)

COMPOUND is applied to exterior glazing stops. Allow at least ½ inch of glazing compound between the steel channel frame and stop. An important factor to consider is that glazing compound and stop 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 screws headed vertically and to leave the screw head so the slot is vertical.

WITH the exterior glazing strips in place the next step is to force the compound and eliminate all the voids. At the bottom of each it is always good judgment to let the compound slant from the glass to the beveled stop. Be sure that all metal edges are completely covered with compound. This improves the weatherability of glazed unit.

(Continued on page 132)
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 attics. 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 INSULITE, 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 Smoothlite Interior Boards... Acoustilitite and Fiberlite Acoustical Tileboards.

See Sweet's File, for Builders—2/75
HOW TO MAKE ACCURATE ESTIMATES

NEW REVISED TAMBLYN BUILDING LABOR CALCULATOR

You, too, can make accurate estimates. Forty years of on-the-job cost analysis has produced the factors given in the Tamblyn Building Labor Calculator. Use these factors and make your estimate right!

HOW TO USE THE TAMBLYN BUILDING LABOR CALCULATOR

...simple multiplication of figures

To figure the cost of laying 8"x8" x 16" cinder block analyze the cost of 100 square foot as below. (Wage rates and material prices assumed.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Rate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>111 Pcs. 8&quot;x8&quot;x16&quot; cinder block</td>
<td>$24.00</td>
<td>$24.00</td>
</tr>
<tr>
<td>4.4 C. F. Mortar</td>
<td>$1.00</td>
<td>$4.40</td>
</tr>
<tr>
<td>Total Material Cost</td>
<td>$28.40</td>
<td></td>
</tr>
<tr>
<td>4.0 Hrs. Mason</td>
<td>$3.00</td>
<td>$12.00</td>
</tr>
<tr>
<td>4.0 Hrs. Tenter</td>
<td>$3.75</td>
<td>$15.00</td>
</tr>
<tr>
<td>4.0 Hrs. Foreman</td>
<td>$3.50</td>
<td>$14.00</td>
</tr>
<tr>
<td>Total Labor Cost</td>
<td>$30.00</td>
<td></td>
</tr>
</tbody>
</table>

Or 28 2/3c per square foot for material and 30c per square foot for labor. Figuring for all the trades is as easy as this example—and accurate!

WHAT CONTRACTORS SAY ABOUT THE TAMBLYN SYSTEM

"I think it is the best system I have seen."
"...just the thing I wanted..."
"...I want to congratulate you upon an excellent piece of work."

THE TAMBLYN SYSTEM

Price: Pearl St., A-67, Denver, Colo.

FREE EXAMINATION OFFER

THE Pittsburgh Plate Glass Company's double-glazed unit "Twindow" is all finished. The stainless steel frame has protected it during handling and installation. It will continue to insure the insulating qualities of the unit.
MENGEL Stabilized
SOLID-CORE Flush 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 preventing expansion and contraction 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 see the difference, you’ll greatly prefer Mengel Stabilized Solid-Core Doors!

Also see —
MENGEL HOLLOW-CORE FLUSH DOORS
the finest products of their type on the market.

FOR FULL DETAILS, PLEASE JUST WRITE
YOUR NAME AND ADDRESS IN MARGIN, AND MAIL TO —

Plywood Division • THE MENGEL CO. • Louisville, Kentucky
HOW TO
win friends & influence people

It’s summed up in one sentence: sell products that are quality and performance proven. AUTO-LOK Weatherstripped aluminum awning windows do help sell houses faster. They are the standard by which other awning windows are judged . . . a tribute to the skill with which they are 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 window types.

Tightest closing window ever made!

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.

Radiant Heat . . .
(Continued from page 95)

2 3/4 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 portable. 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 portable 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 portable 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 portable are taken out to the pastures and used for shelter houses there.

The hog bathhouse, 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 giltts when farrowing time is over, and thus make it a year-round house.
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 style- and 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 extra years of service cost no more!
REMEMBER BERMICO
AND FORGET
PIPE TROUBLES

Cut costs... Build with Bermico

One place you can cut costs... and safely
... is with Bermico Sewer Pipe.

Bermico weighs so much less... thereby lighter
than other types of pipe. It stores with
far less breakages... 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... root proof. 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-soil or septic tank connections.

Cut costs, increase profit, build goodwill
with Bermico, the pipe you can trust!

For more details, write: Dept AB-11
Brown Company, 500 Fifth Ave., N.Y.

BERMICO
SEWER PIPE

A PRODUCT OF
BROWN COMPANY
Berlin, NEW HAMPSHIRE

(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 stricter controls
imposed by the availability of build-
ing materials and labor.

If perchance you are the owner of
one of those "high priced" postwar
homes that long before this was sup-
posed to be worth far less than the
unpaid balance on your mortgage,
you can face your critics with a defi-
ant gleam in your eye. A one-line ad
in the classified section of your local
newspaper will bring you buyers gal-
lores in practically any city in the
country.

Consequently it seems safe to as-
sume 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 mar-
ket. 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
togged up.

Issue Quotation Form
For Red Cedar Shingles

A uniform "quotation form" which
includes on one page blanks for in-
dividual quotations of various grades
red cedar shingles and a digest of each
grade and type of shingle is being of-
erred free by the Red Cedar Shingle
Bureau to all manufacturers, whole-
salers, commission salesmen or retail
homer dealers selling Western Red
Cedar shingles, W. W. Woodbridge,
bureau manager has reported. Forms
are printed on 81/2x11-inch mimeo-
graph paper.

Woodbridge said, "We have sensed
a growing demand for a standardized
pricing sheet, particularly in recent
years... There is absolutely no
intention or possibility of these forms
being used in price fixing or stabiliza-
tion 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."
HARDWOOD FLOORING

Gives You All the Answers!

WRITE YOUR OWN TICKET—

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 x 2 1/4 in 6 3/4" and 9" square; 25/32 x 1 1/2 in 7 1/2" and 9" square; 1/2 x 1 1/2 in 7 1/2" and 9" square; 1/2 x 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 3 1/4, 5 3/4 and 7 1/4.

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.
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 *Natinal*-finished for greater opacity and *Securitized* for greater strength. See your Libbey-Owens-Ford Glass Distributor for data about glass.

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**Blue Ridge Sales Division, Libbey-Owens-Ford Glass Company**

83115 Nicholas Building, Toledo 5, Ohio

Please send me a free copy of “New Adventures in Decorating” (PLEASE PRINT):

**NAME**

**ADDRESS**

**BLUE RIDGE Patterned GLASS**

FOR SOFT, DIFFUSED LIGHT - SMART DECORATION - COMPLETE PRIVACY

---

**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, Ill., and three grandchildren.

---

**New Standard Issued for Ponderosa Pine Millwork**


The new standard establishes specifications for making stock windows.
TEX-LOK

DOUBLE COVERAGE! HEAVY DUTY! INTER-LOCKING!

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...

TEX-LATCH
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.

TEXACO Asphalt Roofing Products
THE TEXAS COMPANY

NOVEMBER, 1930
Something’s happening in the building business!

Every day more builders find it pays to “insist on the Quality-Approved Seal”

- Tested for strength of sections
- Tested for sound construction
- Tested for quality materials
- Tested for low air infiltration

It's the big swing to trouble-free installation extra sales appeal reliable construction

140 AMERICAN BUILDER
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 5c/1a), or by writing Dept. AB-11.
The beautiful
UTILITY HARDWOOD
PLYWOOD
with
One-Piece Face!

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.

LIGHTWEIGHT steel beams form sunshields and porch roof 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 by hand without difficulty.

An 11-foot cantilever of Junior Beams forms the roof for the front 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 Celotex 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...
NEW! in the 6" size

$67.50

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 9/16" 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.

Vermiculite Plaster
Partition Passes
Impact Test

The superior resilience of studless 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 on gypsom 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 0.9-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 0.03-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 position.

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-inch solid vermiculite 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 Art Radiators and other heating products.

**EXCLUSIVE NATIONAL HEAT EXTRACTOR ADVANTAGES**

- **Big Boiler Performance**—providing trouble-free efficiency and long life.
- **Economical Operation**—due to generous fire box proportions and fuel saving principle of extended heating surfaces with multiple flue section construction.
- **Compact Design**—assures top performance without bulkiness. Requires little space for installation and operation as compared with other boilers of equal capacity.
- **Easy Convertibility**—if hand fired unit is installed, convertibility to fully automatic gas or oil firing is simple.
- **Smart Appearance**—crinkle finish jacket in flamed and black harmonies with color schemes in basements and utility rooms.
- **Tankless Heater and Storage Tank**—National Heat Extractors may be equipped with Tankless Heater or Storage Tank for year 'round supply of domestic hot water.
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 12" vinylike 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 1/4-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 1/4-inch scale to make perspective drawings for the complementary angle views 45°/45° (head-on), 30°/60° (normal), 15°/75° (foreshortened), and the viewing distances of 25 feet, 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 1/4-inch, 1/2-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.

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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 confidence

BUILD WITH USG

Whether 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 Gypsum 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
IN RESIDENTIAL AND APARTMENT CONSTRUCTION

Low original cost plus economy of installation and continuing owner satisfaction make LEMCO Casement Windows the choice of builders throughout the country. LEMCO also offers Aluminum Awnings in two types—LEMCO Panoramic and LEMCO Series 63 Monumental.

WRITE FOR DESCRIPTIVE LITERATURE

AMERICA'S OLDEST CASEMENT WINDOW MANUFACTURER

CRAWLER TYPE TRACTOR AB113012

Only 37 inches wide, the USTRAC crawler type tractor has a horsepower of drawbar of 20.4. Front and loader has 1/3 cubic yard capacity. Operated by finger tip hydraulic controls, easily converted to bulldozer by single operator. Has four speeds forward plus instant reverse. The 4-cycle, 16-hp engine runs full time for under $2 per day. Tractor Div., Federal Machine and Welder Co., Dept. AB, Warren, Ohio.

BULLETIN BOARD MATERIAL AB115031

A new color, Willow Green, has been added to Armstrong’s line of self-sealing cork composition bulletin board material. The new color is a soft green that is especially suitable for today’s brighter, more attractive interiors. Both the Willow Green and Desert Tan colors have a light reflection of 35 per cent. Made of cork composition in roll form, the material has a self-sealing surface, and is ideal for game room use in homes, for use in schools, or whenever an attractive bulletin board is needed. Armstrong Cork Co., Dept. AB, Lancaster, Pa.

NEW PRODUCTS (Continued from page 65)

NON-FREEZE HYDRANT AB115631

Ratcheting hose handle provides seven speeds in a half turn on new 30 non-freezing ground hydrant designed for use with stock tanks and other places on farm where water pressure is provided. Shut-off valve below front line is controlled by valve rod in inner pipe. Special outlet drains water left in pipe after shut-off. Spacing between nozzet and ground measures 24 inches. James Knights Company, Sandwich, Ill.

(Continued on page 158)
...puts Sell into floor space!

- 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.

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 color coordination.
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 room from your Texfloor samples.

Texfloor GIVES EVERY ROOM A GUEST ROOM LOOK!
FREE TEXFLOOR SAMPLES! Send for further information and FREE SAMPLES/TTEXFLOOR today; Write Dept. AB-4, SLOANE-BLABON Corporation, 295 Fifth Avenue, N.Y. 16, N.Y.
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 1,350, 2,050 and 3,100 CFM, equipped with special fan-duty sleeve-bearing motors and automatic outside shutters mounted integral with fans! 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 unmatched dependability and service. And finally, you make available Emerson-Electric’s free fan-planning service, bringing 60 years of fan experience to your individual problems. For complete data, write for Bulletin No. 413.

THE EMERSON ELECTRIC MFG. CO., St. Louis 21, Mo.
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 Gibraltar 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.

- **Beautiful Woods** – genuine striped African Mahogany, American Black Walnut, Red and White Oak – plain or rift sliced, Birch and Gum.

**Hollow Core** and solid core types, interior and exterior. Standard light openings. All standard sizes to accurate dimensions.

General Gibraltar Flush 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.
NEW PRODUCTS
(Continued from page 150)

GAS-FIRED FURNACE
AB115025

Ingersoll GL series of gas-fired winter air conditioners have input ratings of 78,725, 93,750, 109,375 and 125,000 BTU. All models in series are unusually compact due to inclusion of a completely designed and efficient wedge-tube heat exchanger. Two smaller lowboy models occupy only 20 by 51 inches of floor space; larger models, 20 by 54 inches. Unit is designed for basement or where space is limited. Borg-Warner Corp., Dept. AB, 310 S. Michigan Ave., Chicago 4, III.

PORTABLE ELEVATOR
AB115006
The Mulkey commercial all-steel portable elevator can be used to move bricks, blocks, mortar in buckets, sand, roofing materials, lumber, gypsum and many other products. Easily transported and assembled, a Mulkey 40-foot elevator will handle 12 concrete blocks, 22 feet high, in 45 seconds. Som Mulkey Co., Dept. AB, 1621 Locust, Kansas City 8, Mo.

ONE-PIECE JAMB MEMBERS
AB115002

Save HALF Your Time
BUILDING STAIRCASES

Above—Measure broad or oar to 10 seconds. Below—Mark board with gauge for perfect fit.
ELIASON STAIR GAUGE

in 10 seconds gives you BOTH correct length and angle of stair record. Saves hours instead of measuring and recording. Easily Adjustable from 20" up. Saves a day or more in constructing any profit. 825 or Model 800 for 10 each staircase. Fully guaranteed. Circular on request.
Only $12.95 cash with order, or C.O.D. plus postage.
ELIASON TOOL CO.,
2119 E. 56th St., Minneapolis 17, Minn.
Dealers and Distributors Wanted

UP TO $40 A DAY EXTRA MONEY!

"MY BELSAW CIRCULAR SAW SHOP gives me big profits at low expense... I can run 30 to 40 saws in 9 hours and make 400."
—T. A. Phillips

You can start this new BUSINESS in your own home while you're working at your regular job. No experience needed... extra for itself from just 3-1/2 saw jobs. —H. Jensen

You can make $14 to $15 an hour in your SPARE TIME sharpening and setting CIRCULAR SAWs for builders, lumber yards, factories, friend, partners for your FREE Illustrated Catalog today.

BELSAW MACHINERY CO
4501 FIELD BLDG., KANSAS CITY 3, MO.

DO SURFACING FASTER

WITH

BELSAW MACHINERY CO
1341 FIELD BLDG., KANSAS CITY 2, MO.

AMERICAN BUILDER
Don't cut corners—cut costs with a Walker-Turner "900" Radial Saw

SOLD ONLY THROUGH AUTHORIZED DEALERS

WALKER-TURNER DIVISION
PLAINFIELD, NEW JERSEY

Drill Presses  Radial Drills  Tilting Arbor Saws  Belt and Disc Surfacer

November, 1950

Here's a shop machine designed to cut costs

NEW WALKER-TURNER "900" Radial Saw

Does ALL the Radial Saw Jobs!
Ripping  Boreal Ripping  Boreal Cross Cutting  Dadoing
Mitre Dadoing  Shaping  Mitering  Compound Mitering
Routing  Cross Cutting  Grooving  Tenoning  Ploughing

CUTS DEEPER—WITH SMALLER BLADE!
Only Walker-Turner's "900" Series Radial Saw cuts 3 1/2" deep with a 9" blade — more than most machines that require a 14" blade. You get greater capacity, use less power.

SPEEDS CUTTING, BOOSTS PROFITS!
Full work visibility (gliding ram 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 STORY—
Send for new bulletin that tells how the Walker-Turner "900" Radial Saw can help you make more profit on every cutting job. Mail coupon today!

Walker-Turner Division, Kearney & Trecker Corp.
Dept. AB, Plainfield, N. J.
Please send me the new Walker-Turner "900" Series Radial Saw Bulletin
Name ____________________________
Company ________________________
Address _________________________
City ____________________  Zone  State

MAIL COUPON TODAY!
4 REASONS why you should use HEATFORM®

- More Heat Delivery
- More Years of Service
- Prevents Construction Mistakes
- Adds but little to the cost of the fireplace because it is a complete unit (hearth to flue — fireplace, throat, dome and throat damper — which replaces other materials necessary for the ordinary fireplace.

Universal self-adjusting rolling door assemblies have self-adjusting spring tension built into top rollers, allowing builder to use all the space between floor and floor without waste. New principle eliminates fitting time because self-adjusting springs, on swivel action wheels, compress for quick, easy installation. Doors may be removed, reversed, or replaced in seconds. Spring tension also compensates for uneven flooring or ceilings. Made of case hardened steel, all wheels run smoothly on ball bearings. Assemblies may be used on any size wood, metal, metal, flush panel, or compartment doors. Roll-A-Door Hardware Corp., Division of Standard-Keal Hardware Manufacturing Co., Inc., Dept. A8, 629 Broadway, New York City 12, N. Y.

SINK COUNTER COVERING AB115010

"Dura-deck" made specifically for covering counters, is available in eight popular colors, in long, narrow and easy to clean. It is unaffected by heat up to 275 degrees F. Glossy colors are vigorous and strong, will not fade or become dull. Youngstown Manufacturing Inc., Dept. A8, 66-74 S. Prospect St., Youngstown 6, Ohio.

PREPARED BARBECUE PIT AB115007

Pre-fabricated stone barbecue pit that can be installed on any site in two hours is lined with a protective coating of mud and cement to prevent fire damage. Called the Henke Iron-B-Quot pit, it is cast in 12 basic parts for easy assembly. Synthetic stone is made from the new form of Portland cement, crushed quartz, waterproofing, metal reinforcement and surfactants. Henkin Industries, Dept. A8, 171 Monroe, Memphis, Tenn.

NEW PRODUCTS (Continued from page 152)

ROLLING DOOR ASSEMBLIES AB115018

SAW HORSE BRACKETS

Display it on your counter. Retail $1.50. Slightly higher in West. Order from your jobber or direct from us.

COLORFUL COUNTER DISPLAY PACKAGE SELLS

GRAND HAVEN STAMPED PRODUCTS CO.
GRAND HAVEN, MICH.

With the high prices of food, clothing and everything else, you think what you could do with extra money every week! Turn your spare time to a CASH — sharpening saws with a Foley Automatic Saw File over $8 or $9 an hour. Start in your home or garage, no experience necessary. "The first saw I sharpened with my Foley File came out 100%" — writes Clarence E. Parsons. No conversing — "I advertised in our local paper and got to $8 a week" — says M. L. Thompson. With a Foley you can file all kinds of saws, also band and cross-cut circular saws.

FREE BOOK Shows How to Start

"INDEPENDENCE AFTER 40" explains how you can get business from home owners, farmers, car owners, schools, factories, etc. "I get work from $20 to 50 miles away" — says Charles L. Smith. This Free Book tells you how to start. Send coupon today — no salesman will call.

Send Coupon for FREE BOOK

FOLEY MANUFACTURING CO.
1134-0 Foley Bldg., Minneapolis 18, Minn.

Send Free Book "INDEPENDENCE AFTER 40"

Name
Address

FREELANCE BUILDER
All builders should know these facts about pressure-treated lumber

**FIRST**
PROTECTION—Treating of lumber preserves it—just as alloys preserve metals. The purpose is to protect lumber against costly rot and termite damage.

**SECOND**
PRESSURE TREATMENT vs. Surface Application—Authority say that pressure treatment provides the only sure, lasting protection to lumber.

**THIRD**
OTHER QUALITIES TO LOOK FOR—For greatest usefulness, preservatives also should be clean, odorless, paintable, non-leaching and non-corrosive.

**FOURTH**
WOLMANIZED® Pressure-Treated Lumber combines all these requirements—lasts 3 to 5 times longer than untreated wood, because it's treated under 150 lbs. pressure per square inch. Protection is deep in the wood fibers. It's clean, odorless, paintable, non-leaching, non-corrosive. WOLMANIZED® Pressure-Treated Lumber has been proved in use for over 25 years. It will prove its value to your customers and boost your good reputation as a builder of sound, durable, trouble-free structures.

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 ease 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:
- 100% Rustproof
- Self-lubricating Guide Bearings
- Quick, Easy Installation
- Positive Locking
- Superior parts made by leading U. S. Manufacturers

Write for full details today!
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METAL PRODUCTS CORPORATION

Metal Products Corporation
807 N W, 20th St, Miami, Florida

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CITY ____________________________ STATE ____________________________

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Branch Offices: Baltimore, Boston, Jacksonville, Fla., Little Rock, Ark., Los Angeles, New York, Portland, Ore., San Francisco

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HAR-VEY ROLLING DOOR HARDWARE

Acclaimed for Winning Performance from Coast to Coast

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General Offices, 1640 McCormick Bldg, Chicago 4, Illinois

Branch Offices: Baltimore, Boston, Jacksonville, Fla., Little Rock, Ark., Los Angeles, New York, Portland, Ore., San Francisco
All you’ve ever wanted in a fine bathroom cabinet is in this new Hall-Mack Mirro-Glide.

Here is the very most in bathroom cabinet beauty and convenience...two sliding plate glass mirror doors which conceal a spacious, double size recessed cabinet.

There’s beauty in the large handsome expanse of plate glass mirror (39\"x22\") completely bound by a wide chrome frame...in the gleaming white baked enamel steel cabinet...in the fine Hall-Mack workmanship and finish.

And there’s real convenience in the big divided cabinet with more than twice the room of an ordinary cabinet...in the six fully adjustable glass 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.

In the complete Hall-Mack line are cabinets to meet every modern design, all made to meeting quality standards to assure maximum efficiency and minimum maintenance. Hall-Mack cabinets are built with materials that will never rust or corrode, and which carry the widest range of accessories to meet the most rigid specifications. Hall-Mack cabinets are also available to meet your requirements. Write for free literature. Hall-Mack Cabinet, 1344 S. Washington Blvd., Los Angeles 7, Calif.

And remember...Hall-Mack accessories...
Don't Worry...it's tile

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.

PARTICIPATING COMPANIES:
American Ceramic Tile Co.
Architectural Tiling Company, Inc.
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& Boston Brick Co.
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Ceramic Tile Company
General Tile Corporation
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Olson Tile Company
Pacific Clay Products
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Pomona Tile Manufacturing Co.
Roberson Manufacturing Co.
Sanibelite Mica Bridge Co.
United States Quarry Tile Co.

THE MODERN STYLE IS CLAY TILE
BOOK REVIEW

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 handsome, A TREASURY OF EARLY AMERICAN HOMES 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 FOR 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’ specialty.

A TREASURY OF EARLY AMERICAN HOMES
by Richard Pratt, 136 pages, 250 full-color photographs, 10 x 13 inches. Whitney House, $12.50. No. 34 on opposite 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 book that so vividly portrays the greatness of our country’s architectural heritage.

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 erected 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

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 HOMES, 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 dormer or framed a badly proportioned window. Criticisms of that kind cannot be 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.

ESTIMATING

1. THE BUILDING ESTIMATOR’S REFERENCE BOOK and Vest Pocket Estimator (not sold separately). By Frank R. Walker. Contains latest estimating and cost data on everything that goes into house construction. Most complete compilation of estimating and cost data available. $10.00.

2. SIMPLIFIED CARPENTRY ESTIMATING. By J. W. Wilson and Cieh M. Roque. Everything needed to “take-off” a bill of materials from set of plans and specifications for a frame house—many helpful quick-reference tables and short-cut methods that simplify the work. $3.50.

3. THE BUILDING TRADES HANDBOOK. Ready reference on building subjects—mathematics, architectural drawing, structural design, materials and methods. $1.75.

4. CONTRACTOR’S MATERIAL LIST. A 10-column take-off form for complete listing of materials and labor costs. $1.50.

5. SPECIFICATIONS. Full set of detailed house specifications (and item index), with spaces for inserting the pertinent description data. 80c.

CARPENTRY AND BUILDING


7. HOUSE CARPENTRY AND JOINERY. By Nelson L. Burbank. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundation forms to interior trim. $3.90.


THE STEEL SQUARE


10. STEEL SQUARE. By Gilbert Townsend. Every step of carpentry in and around a house, clearly explained and illustrated. Covers every job from foundation forms to interior trim. $3.90.


12. STAIR BUILDING. By Gilbert Townsend, S.B. Fully illustrated explanation of every problem in design and construction of stairs. $2.50.
BOOK ORDER SERVICE

PLAN BOOKS

13. AMERICA'S BEST SMALL HOUSES. Exterior aud interior views, floor plan sketches, material specifications and descriptions of 40 new low-cost homes. $3.95.

14. HOUSES FOR GOOD LIVING. By Royal Barry Wills, A.I.A. Photographs and floor plans of 34 fine homes by a leading architect. $4.00.

15. SUNSET WESTERN RANCH HOUSES. Authoritative book on the California ranch house, with thorough pictorial descriptions and ground floor and site drawings. $3.00.

16. DUPLEX AND APARTMENT HOUSES. By J. W. Lindstrom. Floor plan sketches and brief descriptions of 35 duplexes and 5 larger ones ranging from 6 to 12 apartments. Price. $1.00.

17. SUNSET CABIN PLAN BOOK. Dozens of how-to-do-it drawings with 30 pages of floor plans and exterior elevations for building and improving vacation homes. $1.50.

18. PREMIER BOOK OF GARAGE PLANS. Full-scale working blueprints and pictures of one and two-car garages. Not new, but only book supplying plans. $5.00.

HEATING AND PLUMBING

19. MODERN METHODS OF HOME HEATING. Standard heating systems illustrated with 17 floor plans showing heating outlets, 40 photos of equipment and installations, 25 boiler and piping connection diagrams, and 11 heat loss calculation tables. $5.00.

20. HOW TO DESIGN AND INSTALL PLUMBING. By A. J. Matthian, Jr. Every step in the design and installation of the plumbing systems, to fulfill requirements indicated in blueprints and specifications, explained and illustrated. $3.50.

21. STANDARD PLUMBING DETAILS. By Louis J. Day, Excellent 119 full-page detail plates covering every phase of modern plumbing practice. No text. $7.00.

PAINTING AND DECORATING

22. PRICE GUIDE FOR PAINTERS AND DECORATORS. Tables covering practically every type of work done by the painter and decorator, with suggested prices based on various wage scales. $1.25.

23. PAINTING AND DECORATING CRAFTSMAN'S MANUAL. Sponsored by the Painting and Decorating Contractors of America. $2.00.

BRICKWORK AND MASONRY

24. THE ART OF BRICKLAYING. By J. Edgar Ray. Basic brick-laying job instruction, many illustrations, excellent, special scaffolding and cement block chapters. $4.00.


26. MASONRY SIMPLIFIED. Vol. 1. Practical masonry procedures in the various phases of construction, from building forms to constructing fireplaces and septic tank systems. Includes discussion of handling new products such as glass blocks, waterproofing mixtures and insulating blocks. $3.00.

ELECTRIC WIRING


28. WESTINGHOUSE HOME WIRING HANDBOOK. By A Curt Brockahl. A guide for planning the wiring of moderate-priced homes, with emphasis on safety, effectiveness and efficiency. $1.00.

MISCELLANEOUS

29. HOME BUILDERS MANUAL FOR CONTRACTORS. Provides conventional data and check lists to follow all operations connected with construction of a home. Local law binder permits additions of special material pertaining to protecting being constructed. $2.00.

30. PRACTICAL ACCOUNTING AND COST KEEPING FOR CONTRACTORS. Complete instructions and examples showing proper methods of keeping time and compiling costs on all classes of construction work. $3.00.

31. BOOK OF SUCCESSFUL FIREPLACES. Best available book on how to construct indoor and outdoor fireplaces. $5.00.

32. SUNSET BARBECUE BOOK. Hundreds of ideas tor building and using outdoor fireplaces and grills. Detail drawings of 25 basic types. Cooking recipes a plus feature. $1.50.

33. LUMBER DATA. Lumber Data Sheets. Handy pocket-sized handbook containing all kinds of important data having to do with lumber and timber. $1.00.


35. HOUSES FOR GOOD LIVING. By Royal Barry Wills. Outstanding homes by one of the country's leading architects. Accent on colonial designs. $4.00.

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NOVEMBER, 1950
NEW PRODUCTS
(Continued from page 356)

HAND LEVER BAR CUTTERS AB110017

Symons hand lever bar cutters have an unbreakable steel plate frame, and will cut any size rod from 1 1/16-inch up to their rated capacity without changing knives. The knives are located on the top of the machine so that when a number of bars may be laid down on top and dropped into the opening one by one. Cutter is available in two sizes. One cuts rounds up to 7/8-inches in diameter, up to 1 1/2-inches in diameter, and the other cuts rounds up to 1 1/2-inches in diameter, up to 7/8-inches in diameter. Flats up to 1 1/4-inches in diameter. Julio Blum & Co., Inc., Dept. AB, 532-540 W. 22nd St., New York 11, N. Y.

PAINT BRUSH AB113008

A new paint brush combination consists of grip-formed handle and three interchangeable painting pads. Pads can be set at different angles from handle within a 360 degree arc, which provides entry into odd and unusual shaped surfaces that require finishing. Ideal for painting bottoms of doors in new construction or remodeling after they have been fit and hung. Points stands easily. Pads are made from heavy-duty carpeting and bonded to metal back. Hobbytool Manufacturing Co., P. O. Box 891, Clearwater, Calif.

ROUGHING-IN SAW AB113003

Because it needs no starting hole, the new RCS Super-Saw speeds up all types of "key-hole" or other special jobs. Head tightly against material to be cut, with guide used as a fulcrum, tool is "rocked" into an upright position and guided along the cutting line. Built-in blower keeps saw cool, and by directing air towards blade, keeps cutting line from being obscured by chips or saw dust. Adjustment of special blades permits cutting almost all types of material, and 1/8-inch thick means to be used in places too cramped for normal saw stroke. RCS Tool Sales Corp., Dept. AB, Joliet, Ill.

(Continued on page 162)
In ventilation—
"THE BLADE'S THE THING"

(*With apologies to WILLIAM SHAKESPEARE*)

**Blo-Fan**

**REALLY MOVES AIR**

The Blo-Fan blade is designed so that the fan element literally soops up the air, keeping the blower element supercharged at all times. This patented design combines the volume of a breeze fan and the power of a blower to expel more air quickly, quietly and with greater efficiency.

**Blo-Fan**

**IS EASY TO REGULATE**

This NINE-speed switch is an exclusive feature on Blo-Fan Model 310... At low to medium speeds, Blo-Fan will easily handle the normal volume of steam and fumes, but in emergencies (like burning the toast) a higher speed will clear the room immediately.

**Blo-Fan**

**IS EASY TO CLEAN**

No tools are ever required. Both grille and motor assembly are removed easily in less than a minute for cleaning and washing. Just unscrew the center cap.

**Blo-Fan**

**PAYS FOR ITSELF**

Savings on soap, detergents and cleaning compounds will pay for Blo-Fan in a short time—not to mention the savings on redecorating costs, elimination of back-breaking work, housemaid's knees and calloused hands.

*PUYHE & CO., INC., BOX N-11, POMONA, CALIFORNIA*

*AMERICA'S MOST IMITATED HOME VENTILATOR*
Avoid costly errors with this...

NEW UNIVERSAL Level Transit

Now David White offers you, at the lowest price anywhere, the finest of Universal Level Transits with 4½" protected arc, internal focusing and coated optics.

Don’t wait if you’re in the market for a new all-round practical builder’s instrument — see the improved new David White Model 3000 Universal Level Transit now.

You’ll find this instrument properly used will be your best insurance against costly layout and building errors. The new 4½" protected arc means easier, more accurate readings, less likelihood of instrument damage through accident. Internal focusing assures you of dust and dirt-free inside lens surfaces, better protection for optical parts and mechanism. Coated optics mean clearer, distortion-free images, sharper definition, positive readings at greater distances and under adverse conditions. Instrument spindle supported on ball bearings for perfect horizontal adjustments.

Ask your nearest dealer to give you complete information on this and other fine engineering instruments. Or write direct to David White Co., 311 W. Court St., Milwaukee, Wis.

We offer complete, prompt repair service on all makes of instruments — levels, transits, theodolites, etc.

D A V I D  W H I T E C O M P A N Y

NEW PRODUCTS
(Continued from page 160)

SCREEN CORNER BRACES AB115001

Screen corner braces, with holes large enough to take screws, are packaged with or without screws. The wrought steel stamping hugs stiles closely, is reinforced for extra strength, and prevents saw pull that weakens screen corners. Warping of stiles will not pull braces out of alignment. C. Hager & Sons Hinge Mfg. Co., Dept. AB, St. Louis, Mo.

UPWARD-ACTING GARAGE DOORS AB115011

More than 36 sizes of 'Better-Bilt' sectional upward acting garage doors are available, ranging from an 8-foot 6-inch door for small one-car residential garages up to doors for larger commercial and industrial installations.

Doors feature Douglas Fir stiles and rails. Panels are 3-ply laminated fir, waterproof glued. Shipments are made complete with hardware, wood sections, track, springs, and simplified, illustrated installation instructions. Better-Bilt Door Co., Dept. AB, White Horse Pike, Egg Harbor, N. J.

FLOW CONTROL VALVE AB115033

Recommended and used on automatically fired forced circulating hot water heating systems, vertical Thrush flow control valve eliminates use of pipe nipple and elbow, reducing installation costs. Available with and without air vent tube, valves are made in four sizes: 1", 1½", 1¾", 2-inch. With air vent tube, valves assure positive elimination from top of hot water heating boilers. H. A. Thrush & Co., Dept. AB, Peru, Ind.

a shopping center for builders...

A central market place for the builder — where he can fill all his structural steel needs — that's International Steel. International will furnish you with steel, from single building items — steel trusses, columns, girders, joists, windows, stairs, doors — to complete all-steel buildings...whatever your jobs require.

International's staff of expert designers, estimators and engineers is always ready to help you with any building problem. Write today.

International All-Steel Building, built for the Danny Chase Furniture Equipment Co.
End Swinging Door Nuisances
Increase Room and Closet Space
Yet Actually Cost Less to Install

Doors and Frame Comprise a Packaged Unit Ready for Installation. Doors May Be Purchased Separately.

No wonder housewives everywhere choose Steelcraft’s new SPACEMAKER Steel Doors in preference to the old swinging, space-hogging kind. Just look at the diagrams—see 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.

Nevertheless, Spacemakers actually sell for less than comparable wood doors and hardware. They save on construction costs, too—eliminate extra studs, lath and plaster—cut building time, too because they’re so quickly and easily installed. Once installed, they assure smooth, quiet operation—and trouble free service for years to come. Send now for complete details. Just mail the coupon below.

STEELCRAFT ONE-PIECE STEEL DOOR FRAMES Cut Building Costs Still More.
Perfect team mates for Steelcraft SPACEMAKERS, these sturdy steel frames are also ideal for conventional swinging doors of wood or metal. Use this up-to-date, improved product at a substantial reduction in installation costs. One-piece welded construction won’t crack, shrink, swell or warp. Reinforced, mitred corners won’t open. Hinges are spotwelded to frame. Completely enclosed dust box welded to frame; adjustable brass strike plate furnished. Mail coupon at right for full information.

STEELCRAFT MANUFACTURING COMPANY

NOVEMBER, 1950
NEW PRODUCTS

(Continued from page 162)

ACOUSTICAL TILE NAILS AB115005

Simple, low-cost, one-man installation of acoustical and dust 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 fits over the furring strip or 1/4-inch plasterer's channel, while the other end, formed into an oval loop, is pressed into the edge of the tile being applied. Half of each loop is imbedded horizontally into each adjoining tile. One man working by himself, with no tools, is able to install a ceiling without assistance at the rate of at least 90 square feet per hour on straight-going. Nelson Stud Welding Div., Morton Gregson Corp., Dept. AB, Lorain, Ohio.

NEW TILEBOARD FINISH AB115037

"Grass-line," a new finish on tempered hardboard panels, has the multi-colored appearance of real granite. Available in new shades of Sky Blue, Sea Green, Apricot Blush, Dove Gray and Matteau Gray. Patterns are Tile Pattern, Parallel Line, Streamline and Smooth Surface. Score lines will be the same as in Wallace's other board products, Wall-line and Satin-line. Panel sizes of Gran-line will be the conventional 4x4, 4x8, and 4x8, Wallace Manufacturing Co., 10th and Fayette St., North Kansas City, Mo.

When installing acoustical tile choose a job-designed nail that combines ease of application with these special features: a head and which allows the nail to be driven home without damaging the tiles...a collar which holds the tiles firmly in place...annular threading which gives superior holding power. The nails are furnished with a plated finish to prevent rust streaks where moisture is present. Send for free samples and descriptive literature.

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Only SUPERCEDAR is of the same uniform high quality standard that guarantees every package to contain 90% Red Heart or Better, and 100% oil content that produces the finishing aroma.

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Turn Prospects into Profits

With TYLAC'S newest and outstanding feature—the Contour Bevel Score Line—the sales of Miracle Walls by TYLAC have stepped up—yes, stepped up materially, all over the country. And, no wonder. Its increased beauty, its utility, its permanence and its economy, are rapidly turning dealers' prospects into Profits. Jobbers and dealers everywhere report an astounding increase in quick and favorable consumer acceptance. Customers see it—examine it—and buy it. And you profit most by these increased sales.

If you are not yet handling these beautiful Miracle Walls by TYLAC, with the new Contour Bevel Score Lines—decide Now, to profit with this peer of all pre-fabricated wall boards. They come in a wide variety of 18 entrancing colors and 4 most appealing patterns. Stock Miracle Walls by TYLAC today—and Turn Your Prospects into Profits. Yes, quick Profits.

Write us today for our liberal Sales and Merchandising plan—our many advertising and sales helps—our prices and discounts.

TYLAC COMPANY MONTICELLO, ILLINOIS
PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY

NOVEMBER, 1950

165
CEILING TILE, with flanges, can be fastened to furring strips easily, speedily with HANSEN. You hold the tile with one hand—tack with the other. Zip! Zip! fast as you grip—single-leg, ½" T-head Tacks are driven thru the flanges of the ceiling tile. No denting hammer blows to damage, mar or break tile while being applied. T-head Tacks hold securely without being visible.

Many other uses for Hansen—tacking insulation, metal lath, screens, building paper, etc. REQUEST BOOKLET T-40.

HANSEN MFG. CO.
5059 Ravenswood Ave.
CHICAGO 40, ILL.

GILSON One-Bag Mixer

One-Bag Mixer pays back faster and longer

No other one-bag mixer on the market goes your way to speed up work like the time-proved Gilson 6S. This is true because the advanced design of the simple hydraulic mechanism eliminates troublesome clutches and cables, sets up new standards of efficient operation. Many other improvements, including an automatic skip shaker and siphon-type water tank, help make this precision mixer pay out best for you. That's why contractors from coast to coast use Gilson mixers—39 models from which to choose. Write for the 6S bulletin and the name of your Gilson distributor.

GILSON BROTHERS CO. 
Fredonia, Wisconsin
Manufacturers of Contractors Equipment Since 1875

HANSEN
the Tacker
with 1001 uses—
Tacks insulation,
celling tile,
metal lath, etc.

LIGHTING recipe for chair reading under floor lamp is demonstrated by General Electric Engineer Eugene W. Commercy. He uses a wooden triangle to demonstrate proper placement of floor lamp 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. Commercy, 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.
1. Protection
A strong, sound, leak-proof roof 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 roofing. As a result, today more than a third of all farm buildings in the U. S. are covered by galvanized roofing!

2. Stay-Ability
You want a roof to hold at the nail holes...resist high winds and the elements...stay sealed and solid for years and years. Only galvanized sheets give you the strength of steel...the rust protection of Zinc! Only galvanized sheets cut down your overhead by saving “over-head” year after year...often for the life of the building.

3. Economy
Before you buy any roofing, consider these three long-time cost factors: (1) The original price of the roofing 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.

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 roof will last. Sheets stamped with the “Seal of Quality” shown above carry a guaranteed coating of 2 ounces of Zinc per square 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!

Valuable FREE INFORMATION
The free booklets offered in the coupon at right are fully illustrated and packed with practical information on galvanized sheets, roofing installations, Metallic Zinc Paint, etc. Send for these you can use today!

SEND US THIS COUPON

NOVEMBER, 1950

AMERICAN ZINC INSTITUTE
35 E. Wacker Dr., Room 240-A
Chicago 1, Illinois
Without cost or obligation, send the illustrated booklet I have checked.

☐ Facts About Galvanized Sheets
☐ List of Metallic Zinc Paint Names
☐ Instructions For Applying Galvanized Sheets
☐ Repair, Maintenance on Galvanized Roofing & Siding
☐ Use Metallic Zinc Paint to Protect Metal Surfaces

NAME:

ADDRESS:

TOWN & STATE.
Sensational Indoor Incinerator
disposes of all burnable refuse

Costs nothing to use!
The year’s big news in an extra-profit item
for builders in this low-cost Majestic Incinerator.
It burns wastebasket trash along with
wet-and-dry garbage indoors! Taps to floor
in basement or utility room. Uses only
the waste itself as fuel. Unique downdraft does
the trick! Dries the refuse and hastens burning.
The Majestic Incinerator is a handy appliance
for any home. Automatic-heated homes especially need its disposal help.
Available in Economy (2 bu.) and Deluxe
(3 bu.) models.

SATISFACTION GUARANTEED
Attached to every Majestic Incinerator is a money-back
guarantee that it will perform as claimed. Write for details.

The Majestic Co. 300-A Erie St. Huntington, Indiana

Majestic
HOME INCINERATOR
Nationally Advertised in Leading Magazines

HOME BUYERS LIKE THE
KITCHEN-AIRE EXHAUST FAN
BECAUSE IT’S DIFFERENT

Different, because it is FIRE-SAFE, grease laden air is NOT drawn over motor.
Different, because intake grill may be mounted above cooking range even on inside wall.
Different, because ordinary 6" stove pipe will serve for making connection between intake grill
and exhaust smoke.
Different, because it is QUIET, operating mechanism is mounted OUTSIDE the wall.
Different, because it is weatherproof, back draft damper protects against heat loss, operating
mechanism is housed in corrosion-free aluminum.

Yes, the Kitchen-Aire is different. Electrically operated, easily installed, the Kitchen-Aire adds
that plus-value which makes new homes notable. It is the latest word in Kitchen ventilation, a
feature your buyers will like. Underwriters Approved. Advertised in Better Homes and Gardens.

STEWART MANUFACTURING CO.
3204 E. Washington Street, Indianapolis, Indiana

Before . . .

Open Design Replaces
Ornate Symmetry in
Remodeling Store

Openness in and out of the store—the modern motif for commercial design—is well illustrated by the
remodeling job for Arthur-Martin, Inc., New York, 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 facade give a simplicity
to the front not achieved by its previous face of mirrors, moldings and
fanlight. Plaster-ons covers, pilasters and ornate capitals were supplanted

(Continued on page 170)
THE MARK OF QUALITY!

GUNNISON. Homes, Inc.

The greatest name in home-building for 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!

Across America, wherever there’s a demand for a QUALITY home, for BETTER value, you’ll find GUNNISON HOMES!

WHEREVER THERE’S BETTER LIVING...

Gunnison Homes
UNITED STATES STEEL CORPORATION SUBSIDIARY
NEW ALAMO, INDIANA

NOVEMBER, 1950
Open Design Replaces
(Continued from page 168)

Old . . .

New . . .

THE pattern of change was repeated in the interior where drab walls and uninspired decoration gave way to the dynamic lines of functional design in soothing colors. Compare the old (above) with the new (below). Slanting pole directs attention 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.

Fiberglass Products Show Visits Chicago

The $50,000 Fiberglass product demonstration, now touring metropolitan areas, was presented Sept. 6 at the Congress Hotel, Chicago, under the auspices of the Producers Council and the Fiberglass Corp.

A large number of mockups and examples of Fiberglass products were described and explained by five commentators.

IN-SINKERATOR says:
check these vital points for best performance in automatic FOOD WASTE DISPOSERS...

SEE SWEET'S
Ch. 12 Builders
24a-16 Architectural

ONLY IN-SINKERATOR offers all these vital product advantages.

ONLY IN-SINKERATOR was conceived and engineered by an Architect to meet the exacting requirements of the building profession.

IN-SINKERATOR MANUFACTURING CO., 1215 Fourteenth St., Racine, Wisconsin

TROUBLE-FREE
STARLINE CANNON BALL DOOR HANGERS

EASIEST TO STOCK—EASIEST TO SELL—EASIEST TO PUT UP (No Brackets Needed)

Roll like a ball in a self-cleaning track. Bearings cannot pile up or wear unevenly. Factory lubrication. Storm Apron and weather strip prevent rain, sleet and snow from washing down behind the door from above.

STARLINE INC., Dept. 637, Harvard, Ill.
Please send me complete details on Contractor's Premiums.
Name ____________________________
Address __________________________
City ______ State ______

AMERICAN BUILDER
YOU CAN INSTALL THIS NEW WINDOW UNIT IN 2 Simple Steps...

1 Nail to sheathing

2 Anchor to studding

... 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 window 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 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.

DETROIT STEEL PRODUCTS COMPANY
Dept. AB-11, 2500 E. Grand Blvd., Detroit 11, Mich.
Please send me complete information on the complete, new Fenestra Unit—Steel Casement with Combination Inside Outside Metal Trim.

Name

Company

Address

Fenestra
WINdows • dOors • panElS
SAVES ...TIME, MONEY ... Error Control checks costly mistakes!

COSTS ...LITTLE TO BUY has features of machines priced much higher!

SERVICE ...Seldom...IF EVER NEEDED. Mechanical Governor protects works!

Smith-Corona
ADDITION MACHINE

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 before adding. "Clear Signal" keeps you from including unwanted figures. These Smith-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 at lowest cost.

Inventory Control Order Affects 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 "practicable minimum working inventory" 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 actually 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.

Standing 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.

Security Weatherstrips

WILL CUT DOWN YOUR ASSEMBLY TIME

Here's one way that Security can help you beat rising labor and material costs. Sentinel Weatherstrips (with the built-in sash guides) cover jamb completely. Used with stock plank frames and stock sash, they eliminate the need for costly top-grade lumber and machining of frames. Investigate other savings and features.

Security THRESHOLDS

ADD PROFITS FOR YOU

Installing thresholds will increase sales appeal and value to any house, as well as add extra profits for your thoughtfulness. Easily and quickly installed by anyone, they save you time and money job after job. The Security line is complete with window and door strips of every type and size. Thresholds and other related specialties, so one order can fill all your requirements.

WRITE—WIRE OR TELEPHONE TODAY FOR FACTS—FIGURES AND SAMPLES

SECURITY CO.
385 Midland Ave.
Detroit 3
“Now I can handle four $12 jobs in a day with my Ford Pickup and Dozer!” – says NICK DIRE

DENVER, COLORADO

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 hole, engine-top setting of accessories, plus nationwide service from over 6,400 Ford Dealers.

*SAVE TIME with Ford reliability and performance. Only Ford gives you a choice of economy-proved V-8 or 6-cylinder truck engines.

I figure that ease 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 bulldozer. 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 top-notch 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 Sizes. See your Ford Dealer today.

MAIL THIS COUPON TODAY!

Ford Trucking Costs Less Because –

FORD TRUCKS LAST LONGER

Using latest registration data on 6,592,000 trucks, life insurance experts prove Ford Trucks last longer!
First Choice with Leading Architects and Builders

Mueller Climatrol

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 fuel. 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 veteran 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 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 house's "U" shape forms a private wind-protected patio.

In place of floor joists, Swan used 4x6 girders spaced (Continued on page 176)
Now—do smart modernizing
easier—better—with

**MICARTA®**

**BONDED-TO-PLYWOOD PANELS**

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 3/4" 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 four 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, use 48" x 96".

**MICARTA®**

is manufactured by
WESTINGHOUSE
and distributed for decorative purposes by
UNITED STATES PLYWOOD CORPORATION
and U.S.-MENGEL PLYWOODS, INC.

Send for a FREE SAMPLE, a color folder and complete detailed data showing how easily you work Micarta Panels.

**UNITED STATES PLYWOOD CORPORATION**

35 West 46th Street, New York 18, N.Y.

Please send free Micarta sample and simplified instructions.

<table>
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and U.S.-MENGEL PLYWOODS, INC.

Send for a FREE SAMPLE, a color folder and complete detailed data showing how easily you work Micarta Panels.
Promoting Comfort . . .
(Continued from page 174)

4 feet, 6 inches apart and resting on concrete piers 14 or
16 inches square spaced at the same intervals. A 2-inch
tongue and groove Douglas fir subfloor is applied over
the girders, making for sturdy construction and at
the same time permitting direct application of rubber tile,
linoleum and carpeting to the subfloor. The Douglas fir
left exposed with dowels inserted in % inch holes to simu-
late 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 1 x 3’s he rips a 2 x 4 into three
battens about % 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 4 x 6 beams on 3 foot, 6 inch cen-
ters; on these are placed 2 x 6 tongue and groove fir
sheathing boards, varnished in natural shade. Two 4 x 12
beams 9 feet apart, each of which conceals a 1-inch iron
bar, truss the roof. Fireplaces in den and living room

DEN windows afford ideal view. Paneling is Douglas fir, colored
silver grey and rubbed. Thermador electric heater is seen at right
are rough Norman-size brick and Arizona flagstones,
respectively.

Swan’s kitchens, which also have received special
attention, are very popular with women. They include Ther-
nador “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 175)
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.
Let your own men do your FLOOR SANDING!
Balanced for BIG PRODUCTION with less effort!

PORTER—CABLE
Speedmatic FLOOR SANDER

YOUR OWN MEN can easily use this smooth working machine so 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 amazingly little time. And F-89 Speedmatic continues to do high class sanding 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 removed WITHOUT LAY-UP — in only three minutes right on the job. Recovering costs are lower, too! It's a flexible steel collar, finished with tough rubber cushion, made in two semi-cylindrical halves which screw on quickly.

BEST SERVICE IN THE SANDER BUSINESS. All Speedmatic distributors have authorized service departments and have access to parts, supplies and major repair facilities at the various, strategically located Porter-Cable regional headquarters.

For full information send in coupon TODAY

Promoting Comfort...
(Continued from page 178)

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 watts. 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 in each room; the quick heat, and the economy of heating occupied rooms only.

Among other features of the house are: a door frame

Illustrating convenient arrangement of Thermador electric range. All burners are easily reached and two ovens are handy
Yes, any builder can reduce costs with modular design

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 replaces 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.

For example

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 opening—without wasteful cutting and trimming.

---

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION • 332 South Michigan Avenue, Chicago 4, Illinois

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

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION • 332 South Michigan Avenue, Chicago 4, Illinois

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

Name: __________________________ Address: __________________________

City: ___________________________ State: ___________________________

November, 1950
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 rust-proof. Remember KENNATRACK for "one-source" service in top quality interior sliding door hardware... top choice of builders everywhere.

Enlarged plant facilities, increasingly efficient production methods plus constantly improving production equipment keeps Kennatrack hardware still available at NO INCREASE IN PRICE!

WRITE DEPARTMENT 520 FOR FULL DETAILS IN LATEST KENNATRACK CATALOG

JAY G. MCKENNA, INC.
Specializing Exclusively in the Manufacture of Sliding Door Hardware
ELKHART, INDIANA

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.

Promoting Comfort...

(Continued from page 278)

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 built-in vanity in master bedroom with "lift-up" top, containing a mirror and space for cosmetics; and Lameline 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...
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.

Here's what the Smith family says about CARR-dor OVERHEAD GARAGE DOORS...

"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."

"Here's what the Smith family says about CARR-dor OVERHEAD GARAGE DOORS...

"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."

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 rolling out of position.

ATTRACTION—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 CLOSE—No tugging a Carr-dor. And though it pulls down easily, it does not drop into position. Women especially appreciate its feather-touch 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, Iowa

Also manufacturers of Superior Unit Wood Windows • Exterior & Interior Doors • Enclosures • Shutters • Closet Casemates • Carr-dor Garage Doors • Basement Unit Windows • Louvers & Gable Sash • Breakfast Nooks • Combination Doors • Screens & Storm Sash • Corner (China) Cabinets • Glider Cabinets • Ironing Board Cabinets • Mantels & Telephone Cabinets • Multiple-Use & Linen Cabinets • Stair Parts.
Home Builder

"I depend on the NAHB Convention for reliable facts on every phase of my operations. The free exchange of ideas saves me thousands of dollars yearly. I find the Exposition invaluable in selecting materials and equipment. In my business, I can't afford to miss NAHB's big show."

Architect

"A good source of fresh ideas. Helps me do a better job for my builder clients by learning more about their viewpoint."

Dealer

"NAHB's Exposition is tops in ideas... the best place I know to see new products and talk with manufacturers."

Contractor

"The expert technical discussions help me meet the Exposition to compare products and keep up with new developments."

YOU'RE INVITED!

ANNUAL CONVENTION AND EXPOSITION
NATIONAL ASSOCIATION OF HOME BUILDERS
STEVENS AND CONGRESS HOTELS
CHICAGO JANUARY 21-25

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 is for more than one person, please give, on separate sheet, names, addresses, business classifications and dates of arrival.

National Association of Home Builders
Convention & Exposition Headquarters
111 W. Jackson Blvd., Chicago 4, Ill.

Enclosed find my check for $15
Please make hotel reservations for arrival January

NAME
STREET
TOWN OR CITY
BUSINESS
STATE

TECHNICAL GUIDE
for Builders and Craftsmen

How to Make a Holder 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. Owsey, Pensacola, Fla.

Square Locates Center of any Board

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.
G-E Textolite plastics surfacing is distributed by Roddiscraft warehouses from coast to coast.

General Electric is a household word. Customers know G.E. for precision products. You know from experience there are substantial profits to be made by fabricators in the application of plastics tops to all kinds of horizontal work surface.

You know also, from experience, that Roddiscraft warehouses are service centers, keyed to your needs. This team of a G-E product—Textolite plastics surfacing—made in a wide variety of colors and patterns plus Roddiscraft distribution, is your guarantee of acceptance, service and profits.

Roddiscraft
RODDIS PLYWOOD CORPORATION  MARSHFIELD, WISCONSIN

NATIONWIDE Roddiscraft WAREHOUSE SERVICE

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Minneapolis 8, Minn. . . . 4401 W. State St.
New York 55, N. Y. . . . 920 E. 14th St.
Pearl River 5, N. J. . . . . 103 Rock St.
Philadelphia 6, Pa. . . . . 12357 Tucker St.
St. Louis, Mo. . . . . 2344 Mackenna Rd.
San Antonio, Texas . . . . 727 N. Cherry St.
San Francisco 34, Calif. . . . 345 Williams Ave.
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 Armstrong 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. McCurdy, secretary manager of the association, said the change was made "to give better direction to the many MFMMA 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 reported. The new director began his connection with the company in sawmill operations in Prescott, Ark., in 1936. 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.K. Christian, organizers of the company, continue as president and vice president.

Easy to Install... Lasting Satisfaction

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 276 lbs. Other sets available for openings up to 10' wide x 10' high.
Here's some business coming your way

This ad, appearing in four colors in the Oct. 28 Saturday Evening Post, is your ad. For proof of that, read it... hearing in mind that a lot of prospective home buyers or builders in your community are going to read it too. They'll learn that the time to buy a new home is now... how you, with Gold Bond products, can give them real value and quality in a new home. Next year, when houses will be harder to sell, everyone connected with the building industry will profit from Gold Bond ads like this.

When should a fellow buy a house?

"The time to buy a house is when you need it!" That's what a wise builder friend said to me. "When you need a house when you need one, your credit will be cheaper, your mortgage will be easier, and your future will be happier than if you had waited..."

That builder knows his business. Dollar for dollar the new homes on the market have advanced less in price than almost anything else you can name. And look at some of the benefits you get:

1. You can get permanent fire protection for wood framing plus greater structural strength, from a new kind of beveled gypsum sheathing. Big beams remain strong, while conventional sheathing may fall to pieces.

2. You can get better plastered walls and ceilings thanks to modern building research. Instead of flimsy lath, you get wood lath, seamless with one rock hard surface. Large, heavy, strong panels of toughened gypsum lath. Beams are steady and hold their beauty longer.

3. You can get a house that is easier and cheaper to heat, that is warmer and more comfortable in winter and summer, and more energy efficient than one.

4. You can get permanent color and sound control products, each one better than its predecessor.

5. You can get a house that is easier and cheaper to build.

And you get a score of other wonderful things besides, when you buy or build today—stop-pitting keyed trim of wood, American beam, kitchen and bathroom fixtures that never chippy iron for you, there's the value in today's houses! And the time to get one or to remodel the one you are in, is now. For free suggestions on new building or remodeling, see your local Gold Bond Dealer and Building Materials Dealer. See him now.

NATIONAL GYPSUM COMPANY
BUFFALO 3, NEW YORK

CATH, PLASTER, LIME, SWEATING, WALL PAPER, ROCK WOOD INSULATION, METAL LATH, FIREPROOF WALLBOARDS
DECORATIVE INSULATION BOARDS AND SOUND CONTROL PRODUCTS

NOVEMBER, 1950
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 PINE ASSOCIATION
Yon Building - Portland 4, Oregon

These are the Western Pines
These are the Associated Woods

Idaho White Pine, Ponderosa Pine, Sugar Pine
Larch, Douglas Fir, White Fir, Engelmann Spruce, Incense Cedar, Red Cedar, Lodgepole Pine.

THE WESTERN PINE REGION

J.M.J. PRODUCTS CO.
MAKERS OF THE FAMOUS PT-91 PLASTIC WALL CUTTER

INCREASE TILE SALES AND MAKE PROFIT FROM RENTAL WITH THIS TILE CUTTER RENTAL PROGRAM. MERCHANDISING UNIT INCLUDES RENTAL FORMS, AD MATS, AND POINT OF SALE DISPLAYS. GET YOUR SHARE OF THE HOME INSTALLATION MARKET! SEND FOR RENTAL BULLETIN AND THE NAME OF YOUR NEAREST DISTRIBUTOR TODAY!

Write Department AB-2

AMERICAN BUILDER
Your money goes farther
... your work goes faster!

These are the famous Advance-Design features that help make

CHEVROLET TRUCKS
AMERICA'S FIRST CHOICE!

TWO GREAT VALVE-IN-HEAD ENGINES:
the 105-h.p. Loadmaster or the improved
92-h.p. Thriftmaster—to give you greater
power per gallon, lower cost per load
* POWER-JET CARBURETOR—smoother,
quicker acceleration response
* DIAPHRAGM SPRING CLUTCH for easy-
action engagement
* SYNCHRO-MESH TRANSMISSIONS for fast, smooth shifting
* HYPOID REAR AXLES—for dependability and long life
* DOUBLE-
ARTICULATED BRAKES—for complete
driver control
* WIDE-BASE WHEELS
for increased tire mileage
* BALL-TYPE STEERING for easier handling
* UNIT-DESIGN BODIES—for greater load protection
* ADVANCE-DESIGN STYLING
—for increased comfort and modern appearance.

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.

Yes, your money goes farther... your work goes faster with Chevrolet trucks. Let your dealer tell you all the details. Let him prove that you're money ahead with Chevrolet.

CHEVROLET ADVANCE-DESIGN TRUCKS

NOVEMBER, 1950
Select the Cream of BUILDING CONTRACTS!

Will your next building contract be the most profitable one you could have? Now, your greatest opportunity lies in the selective, quality building market. DODGE REPORTS will help you pick the right jobs — the ones which will bring the biggest return to you!

With DODGE REPORTS, you get current, accurate, continuous information about active projects for building contracts such as:

- new apartment buildings
- banks, hospitals, schools
- churches, theatres, homes, factories

— in fact, every type of new construction offering you profitable job opportunities in your area.

You are told WHERE to go . . . WHAT to talk about to get these jobs! You are shown what type of materials will be needed — who is involved in each project (name of owner, architect, engineer, contractor) — when the plans will be ready for figuring and when bids must be submitted.

Thus DODGE REPORTS help you cut down waste effort — help you save time and “leg work” — help you select and concentrate on the worthwhile opportunities as fast as they arise in your area.

See for yourself, without obligation, how DODGE REPORTS can help you select the cream of building jobs in today's selective market. Just fill in and mail the coupon below.

MAIL THIS COUPON

YES — I want to know about the profitable opportunities in New Construction. Without obligation, show me how I can use DODGE REPORTS in my business. (I do business East of The Rockies.)

Name
Firm
Address

F. W. DODGE CORPORATION
Construction News Division
119 West 40th Street, New York 18, N. Y.

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 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 Har-vey sliding door unit. Installation is simple; saves time and money in building.

Lumber dealers everywhere can supply builders with these perfected sliding door units—one modern way to make a home truly efficient!

Fir Door Institute
Tacoma 2, Washington

Remember—More than 6 out of every 10 doors in today's homes are Douglas fir doors!

NOVEMBER, 1950
Choose the exact instrument you need from these three LOW PRICE MODELS

1

Forest 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 dirt-free internal focusing and has coated optics for clearer, distortion-free, sharper images.

Model No. 8014
Price $145.00 complete with tripod

2

Here's the standard convertible level for the country for the past 30 years! No other instrument has the recognition and acceptance given to the David White Carnegie Improved Convertible level. Now it's available to you with complete dust and dirt-free internal focusing and coated optics for clearer, sharper, distortion-free images.

Model No. 7096
Price $170.00 complete with tripod

3

The David White "Universal" level-transit is the most practical and complete builder's instrument on the market. Now available in a new improved model — complete with internal focusing, coated optics — guarded vertical arc — in fact every possible feature to assure you lifetime durability and extreme accuracy.

Model No. 3000
Price $185.00 complete with tripod

We offer complete, prompt repair service on all makes of instruments — levels, transits, theodolites, etc.

DAVID WHITE COMPANY

AMERICAN BUILDER

Safe 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 side 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.

How to Hold Doors for Edge-Planing

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.
JAEGGER BUILDS
A BETTER MIXER

Improved mixing blade design, drum rollers on Timken bearings, advanced automotive transmission and drum gear protection—theese are some of the features of Jaeger's latest SPEEDLINE mixers. Sizes 6S, 11S, 16S with famous Skip Shaker power loader: 3½ Sifters and non-tilt types. Send for Catalog.

THE JAEGGER MACHINE COMPANY
521 Dublin Avenue Columbus 14, Ohio

to cut the cost of your concrete work

PORTER-CABLE
STERLING
1000 SANDER

$115 Weighs only 6 lbs.

Ideal for finishing those "BUILT-INS"

... ORBITAL MOTION makes it sol!

Here's your... You sand with the grain, against the grain, across the grain. Where the sand is irregular—where two pieces of wood butt at right angles or make a mitre joint—the orbital motion of the grits makes uniform. You get perfect work, regardless of the direction of the grain—and regardless of the sander's path.

This basic difference saves you plenty of time and labor. And More! The Speedmatic-Sterling 1000 features balanced lightness for easy, one-hand operation in any position. At your Porter-Cable dealer's.

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PORTER-CABLE MACHINE CO.
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Manufacturers of SPEEDMATIC and GUILD Electric Tools
In Canada Write: Strongridge Ltd., St. Catharines, Ont.
How Does Calcium Chloride Improve Winter Concrete?

"The Effects of Calcium Chloride on Portland Cement" is a semi-technical book that clearly presents the facts on the use of Calcium Chloride.

It is filled with graphs, tables, charts and contains much material not heretofore available. This information will be of great interest to contractors, architects, engineers, plant operators and men in allied fields. For your copy, write on your company letterhead to the address below... there is no obligation.

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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 ½ 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 194)
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 Dealer. 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.

Build for Greater Value with the
4-SQUARE BUILDING SERVICES
From Sand Dunes...
(Continued from page 192)

EXTERIOR DIFFERS when plan is reversed. This avoids monotony.

GROUND FLOOR PLAN
GROUND FLOOR AREA is left 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 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 bedroom, 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-
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-Off Saw, 12-Inch Jointer, Tenoner, Upright Hollow-Chisel Mortiser and Borer, Reversible Spindle Shaper, and 18-Inch Sanding Disc.

PARKS Woodworking Machine Company
Dept. 30-A1, 1546 Knowlton St.,
Cincinnati 23, Ohio

Write for free descriptive literature.

MANUFACTURERS OF QUALITY WOODWORKING MACHINES Since 1887

New Opportunities... New Profits for You with the BONDACTOR

Whether You Call It
- SHOT CONCRETE
- AIR PLACED CONCRETE
- PNEUMATICALLY PLACED CONCRETE
You Can Do It Better... More Profitably with BONDACTOR Process Equipment

Expand and Profit with BONDACTOR These 2 Ways

1. New Construction. Construction with the BONDACTOR is easier, faster, better. It costs less to build... and you profit more. You get the big savings in time, labor, money... and you keep the profits. What's more, you can take advantage of new methods and designs... and you can build without the use of many cryatal materials.

2. Repair and Maintenance. One unit does the whole job. Use the BONDACTOR for sandblasting, application of sand and cement concrete; insulating (Vermiculite and Perlite) concrete and plaster, asphaltic coats, pumice concrete; refractories, including Haydite with Lomolite cement, glassfies and fire clay, castable refractories; and other aggregates and materials.

To Save and Profit with the BONDACTOR, Act Now!

AIR PLACEMENT EQUIPMENT CO.
5235 Southwest Blvd., Kansas City 8, Mo.

Construction Equipment Distributor, or for FREE Catalog, Tear Off and Mail Coupon TODAY
The durable rust-resistant Armco Metal Unit with ADVANTAGES THAT APPEAL TO YOUR PROSPECTS

RUSCO is a complete, factory-assembled factory-painted metal unit... contains glass, screen, weather stripping, installation members (wood or metal), self-storing 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 binding or sticking... 6—Waterproof felt weather stripping... 7—Lumite plastic screen cloth—no deterioration or streaking... 8—Automatic locking in closed and ventilating positions.

ADVANTAGES FOR THE BUILDER TOO!

1—All working parts are of tubular, hot-dipped galvanized Armco Ingot Iron Zincgrip... Bonderized 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 RuscO Prime Windows from the RuscO Distributor in your territory... OR WRITE DIRECTLY.

THE F. C. RUSSELL CO.
DEPARTMENT 7-AB 110, CLEVELAND 1, OHIO

From Sand Dunes...

(Continued from page 104)

WALL SECTION showing construction used in beach houses

race 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 130 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 COMMIE!

You can tell a snake by its shape and a skunk by its odor, 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 ooze 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 unmistakable odor of his words. The stench is un-American.

REPORT ANY FACTS ON UN-AMERICAN ACTIVITIES TO YOUR FBI

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 proven 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.

HOLT PROFESSIONAL SANDER, SNMPL 12. Fast, smooth; super-accurate cut. Counterbalanced, demountable drum cushion, improved vacuum system, fingertip motor speed selector, two H.P. motor and many other features. SNMPL 8 (not shown) has 8-inch drum width.

HOLT ARISTOCRAT, A16. All-purpose floor maintenance machine. Hand-grip control; heavy-duty enclosed capacitor motor; self-leveling brush bracket; lifetime grease sealed gear reduction unit; many other features.

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 WHIRLWIND SPINNER. Heavy duty, super-powered. Five tools in one—sands, wire brushes, grinds, planes and bevels.

HOLT HOPPER-TYPE MAILING MACHINE, HDE ZE-77. Designed for accuracy, ease of control and dust-free operation. Ideal for close work in confined areas, also for glass bevelling, marble and tile—many other uses. Sturdy, universal motor.

Write today for complete information on these and other of the famous profit-making, precision-built Holt line of Floor Machines.

HOLT MANUFACTURING COMPANY

HOLT MANUFACTURING COMPANY

NOVEMBER, 1950

451 20TH STREET, OAKLAND 12, CALIFORNIA

770 BADGER AVENUE, NEWARK 6, NEW JERSEY

It sure is GREAT to be an AMERICAN

FREE... a reprint of above message, "How to Recognize a Commie," (without advertising) and a car sticker, "It Sure Is Great To Be An American," gladly mailed upon request.

This is second in a series in the interest of democracy.

WARE ALUMINUM WINDOWS

3700 N. W. 25th STREET • MIAMI, FLORIDA

Due to restrictions and material shortages, all orders are subject to prior sale.
**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-run mark, 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 certificates were handed to 52 persons who had signed up new members in the competition. Top winner of prizes and bonus points was Maxwell Smeden, who scored 83 runs in the contest, which by the time it closed, had assumed many of the characteristics of a baseball pennant race. Smeden not only won a trip to the NAHB 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. Smeden 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 members achieved, they were crowned as royalty clothed in gaily-colored, 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-plated 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 Smeden, Walter Stackler, Clifton Rand, James Boshart, Anthony Villet, Howard W. B. Stafford, Charles Rorech, Bernard Krinsky, Jerome Miller, Charles Jarger, Frank Clanson, Alwin Cassens, Frank 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 continued.

Dallas Sets Record for New Homes per Capita

Home builders in Dallas, Texas, have, in proportion to population, put up more homes since the war than those of any (Continued on page 200)
Only this Carey Rock Wool Batt features

Exclusively New

FIRE-RESISTANT VAPOR BARRIER

to provide comfort and savings with greater fire safety!

NEW! NEW! NEW! Carey Folded Strip Blanket with Continuous Vapor Barrier

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—or Semi-Thick: 15" by 40'

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 safety-minded architects, builders and owners. It is non-combustible, the vapor barrier retards 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 Manufacturing Company
Lockland, Cincinnati 15, Ohio

Gentlemen: Please send me full particulars on:
- New Carey Rock Wool Batt with Fire-Resistant Vapor Barrier
- New Carey Folded Strip Blanket
- Other Carey Rock Wool Insulation Products

Name: ____________________________________________

Address: __________________________________________

City: ____________________________________________ Zone: _______ State: _______

AB 11
THOUSANDS 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 Terne Metal.

Architects throughout the country will soon receive copies of the file folder of reference material on Follansbee Terne Metal for roofing and weathersealing.

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.

COLD ROLLED STRIP • ELECTRICAL SHEETS • POLISHED BLUE SHEETS

SEAMLESS TERN E ROLL ROOFING

SALES OFFICES: New York, Philadelphia, Rochester, Cleveland, Detroit, Milwau-

kee, Dallas, Chicago, Indianapolis, Kansas City, Nashville, Los Angeles,

San Francisco, Seattle, Toronto & Montreal, Canada, Please - Follansbee, W. Va.

FOLLANSBEE METAL WAREHOUSES

Pittsburgh, Pa. • Rochester, N.Y. • Fairfield, Conn.

Association News

(Continued from page 198)

other city in the nation, according to the Home Builders Association of Dallas, which announced 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 under construction. With four months still to go, Grover A. Godfrey, executive vice president, predicted that the 1950 total would run close to 10,000 new units.

Most of the 1950 building was single-family residences, with 5,872 finished through August and another 1,571 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. Breedy, 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; A. Groves, chief appraiser, Veterans Administration; Laurence C. Thomas, chief appraiser, VA Baltimore branch; James Roney, Moss-Roney (mortgage finance) Co.

Joseph Meyerhoff, Baltimore builder; Robert F. Porter, vice president, Harry T. Campbell and Sons; H.B. Marshall, president, Southern Supply Co.; Coleman Cordish, Western Mill and Lumber Co., and John P. 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.W. Service, in Miami, Fla. Watson, who has been active in the lumber 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 1 Government "freeze," which bases loan valuations on construction costs of that date, has
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 lumber 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: 8 great truck engines—each “Job-Rated” for PLUS power.
ECONOMY: priced with the lowest. “Job-Rated” for dependability and long life.
BIGGER PAYLOADS: carry more without overloading axles or springs because of “Job-Rated” WEIGHT DISTRIBUTION.
EASIER HANDLING: sharper turning!

With all their extra value DODGE “Job-Rated” TRUCKS are priced with the lowest

November, 1950
Consult your plumber for the latest up-to-date models of...

Fiat Shower Cabinets

- Save labor, speed installation time
- Lower installed cost
- Beautiful, modern, distinctive
- Eye appeal to home buyers

Unsurpassed for beauty and ultra-smart 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 and labor 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.

Fiat Metal Manufacturing Co.
Three Complete Manufacturing Plants
(Chicago area plant) Franklin Park, Ill.
Long Island City 1, N. Y.; Los Angeles 32, Calif.

Please send catalog of Fiat Showers, Receptors, and Doors. Also builders bathroom floor plan.

Name
Company
Street
City
Zone

Mail to FIAT METAL MFG. COMPANY • 9301 Belmont Ave. • Franklin Park, Ill.

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 1, 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.
4. 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 aggregates and also recommendations for the newly-developed techniques of placing perlite aggregate concrete with or without air entraining agents.

J. John Break of the Precast Slab and Tile Co., St. Louis, was elected president of the group. Other new officers are Kirk E. Kazlowitz, Cleveland Gypsum Co., Cleveland, Ohio, vice president; and Wharton Clay, New York, secretary-treasurer; Donald Gott, Great Lakes Carbon Co., New York City; S. Q. Johnson, Texas Panamale Co., Dallas; and Lewis Lloyd, Alatix Construction Service, New Orleans, were named directors.
for QUALITY with PROFIT...

...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.
PARANITE HYDRO- THERM BUILDING WIRE

PARANITE Hydro-Therm combines in a single wire the heat-resistant qualities of Type RH and the moisture-resistant qualities of Type RW.

USED IN DRY LOCATIONS 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 moisture-resistant 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 fall 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 co-chairman; Bob Layton, chairman; and Frank Robertson, San Antonio, NAHB regional vice president, who made presentations. Headquarters of the association is in Corpus Christi.

The Slide-A-Fold DISAPPEARING ATTIC STAIRWAY

A handy, practical and LOW Cost way to reach the valuable storage space of the attic.

Write for folder

COMpletely ASSEMBLED EASY TO INSTALL LOOKS GOOD SUPERIOR CONSTRUCTION REQUIRES SMALL SPACE LOW IN COST!

Craig Wood Products Co.
BRADLEY ROAD
COLUMBUS, GEORGIA

COLUMBUS, GEORGIA

AMERICAN BUILDER
Presenting the new Barrett EVER-FAST† Shingles

Here's a true double-coverage, lock-down 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 slide 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 being driven into roof-boards.

Fewer shingles for your job — only 111 to the square means faster application.

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 3½", 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.

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<th>PLAIN</th>
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<td>Bundles per Square</td>
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SPECIFICATIONS:
- Coves and weathering.
- 4-point-locking shingle that gives 100% DOUBLE coverage... and puts 3 thicknesses on 50% of the roof!

THE BARRETT DIVISION
Allied Chemical & Dye Corporation
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Elkin N. & Gray's Ferry Ave.
Philadelphia 4d, Pa.
1107 Erie St.
Birmingham 5, Alabama
300 W. Water Soiva
Chicago 6, Ill.
INDUSTRY BRIEFS

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. Prior 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.

**SIGNS**

**MADE TO YOUR ORDER**

**FOR REAL ESTATE**

**PLUMBING**

**HEATING**

**REFRIGERATION**

Any amount large or small

- PROMPT SERVICE

Metal, masonite or cardboard, low cost signs, write today for details

- WE SIGN THE NATION

- ACTIVE DISPLAY ADV

1222 West 35th Street Chicago 8, Ill.

**BUILDERS • CONTRACTORS**

**CUT COSTS**

With MULKEY'S All-Steel PORTABLE ELEVATOR

It's Balanced

- For bricks, blocks, mortar in buckets, sand, roofing, lumber, boxes, dirt, sacks, etc.
- One man can handle and operate easily trailed up to 35 miles per hour.
- Clutch and Brake Assembly (own design).

Write for FREE Literature and Prices! SAM MULKEY COMPANY

1621-DD Locust Kansas City 8, Mo.

**PRECISION folding stairway**

- No springs—Actuated by counterweights
- Easy to operate
- Safety treads on steps
- Insulated door panel
- Requires no attic space
- Shipped in one package

Write for full information

SAM MULKEY COMPANY

1621-DD Locust Kansas City 8, Mo.
DESIGNED FOR MODERN BUILDING

Rich and custom-styled in appearance, this handsome new glazing assembly is an outstanding addition to the famous Kawneer Line of Architectural Metals.

The Kawneer 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 Kawneer Company, Department AB-56, 1105 North Front St., Niles, Mich., or Department AB-56, 920 Dwight Way, Berkeley, California.

THE KAWNEER COMPANY
ARCHITECTURAL METAL PRODUCTS
SUCCESS!

Here's the sort of thing builders are saying about the new Youngstown Kitchens.

Our biggest selling features are the new Youngstown Kitchens Jet-Tower Dishwasher and the Youngstown Kitchens Food Waste Disposer. Together, they give home buyers insurance against early obsolescence 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 one.

Time and again we've seen proof that it's easier to sell a house with the Jet-Tower Electric Sink and Youngstown Disposer installed. These make it a 'push-button house' in the eyes of most people. And they see how this will keep their homes from becoming obsolete.

For complete information, write or wire Builder Department. Be sure to visit us at the builders' show in Chicago.
...and here's PROOF!

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 gathered 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 one thing to many Chicago builders: Public favor is higher toward homes with the new Youngstown Kitchens Automatic Dishwasher.

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 Dishwasher in new homes for sale is more than paid back in increased buyer interest. Also, this Dishwasher 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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for Residential, Commercial and Industrial Use
*Miracle Wedge* *Salt Spray Steel*
Manual or Electric Operation

OVERHEAD DOOR CORPORATION
Hartford City, Indiana, U.S.A.

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HERE is an "extra" comfort and convenience to help sell homes without "extra" cost to the builder or the buyer.

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One pair of 2 x 2-inch tight pin hinges.
One only 2½-inch hook and eye.
One only No. 600 "All-Steel" sash lock.

All parts are heavily Sherardized to prevent rust. Also furnished in Japan or Cadmium finish, when so ordered. Packed one set with screws in a carton.

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