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- A Double Function House For a Wide Lot
- Fireplace—the Central Theme
- Dealer Kitchen Planning Department Aids Contractor
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for Hand Fired Heating Plants!

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NEW LOW COST
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PLUG-IN TYPE
EASY TO INSTALL
CLOSES ON POWER FAILURE

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$22.90
LIST PRICE

THE NEW Honeywell Heat Regulator is your answer to accurate, dependable temperature control for low-cost homes with hand fired heating plants. It's Honeywell quality throughout, yet it's priced to meet all competition. It's easy to install, being a plug-in type with transformer built in. Amply powered with an efficient impulse pump to provide hydraulic action, this damper regulator is extremely quiet in operation. It is safe against fire hazard, as it returns to closed position when the circuit is broken manually or due to power failure.

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Honeywell series 40 limit controls, such as the LA419 Airstat for warm air systems; the LA409 Aqastat for hot water systems; or the P404 Pressuretrol for steam systems, are designed for use with this new Heat Regulator package. Get all the facts now about the superior new Honeywell Heat Regulator. Just address a card to Minneapolis-Honeywell, Minneapolis 8, Minnesota. In Canada: Leaside, Toronto 17, Ontario.
How to build a combination ceiling and floor in a single, simple operation

Joists, bridging and subflooring have now been streamlined into one economical, time-saving package... Fenestra "D" Building Panels. For example, it took only 45 minutes for three men to lay the entire first floor of a Maryland house.

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O. C. CALDWELL tells why he chose
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O. C. CALDWELL, owner, Lisbon Lumber Company, Lisbon, Ohio, known as an outstanding merchantiser of quality building materials, writes: "I chose Upson Strong-Bilt Panels for the interior walls of my home because their surface has a rich and delicate quality; one that lends itself well to decoration.

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Lumber dealers know building materials. For their own homes, they choose the best. O.C. Caldwell is typical of many progressive lumber dealers who have used Upson full wall size Strong-Bilt Panels in their own homes.

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TYPE OF BUSINESS

STREET

CITY STATE
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Number 11

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ORDER NOW — Your order will be shipped same day received!
Government by Labor Monopolies

The American system of political democracy and economic private enterprise is being put in serious and imminent jeopardy by socialistic policies of government and the monopoly power of labor unions. And the principal driving force promoting socialistic policies is the monopoly power of the great labor unions.

The existence and danger of the monopoly power of labor unions have been emphasized repeatedly on this page. But never have they been so strongly emphasized by action in the fields of economics and politics as they are being right now. The United Mine Workers labor monopoly has closed down the coal mines and is creating a dangerous shortage of fuel. Another labor union monopoly has closed down almost all the important steel mills and is threatening the nation with a shortage of steel, which is the most vitally important basic material of all large industries, including the building industry. Business without steel would be largely paralyzed within a few weeks. Still another labor monopoly has stopped the operation of the Missouri Pacific Railroad and kept it shut down for more than a month. And in the field of politics, the leaders of the A.F. of L. and C.I.O. are supporting almost every socialistic policy proposed by anybody, avowing their intention to defeat for re-election every senator and representative who has opposed repeal of the Taft-Hartley Act and adopting measures virtually to force their members to vote as the leaders of the labor monopolies desire them to.

There can be, and are, honest differences of opinion regarding the merits of the controversies between the labor monopolies, on the one side, and the employers with whom they are struggling and the politicians they are opposing, on the other side; but it is hard to believe there can be any difference of opinion between intelligent and responsible American citizens about the danger to which both our economic and political systems are being subjected by the possession and use of such great power by these labor monopolies.

They are strictly private organizations; and yet in this country no other private organizations of any kind are allowed now or ever have been allowed to have and use so much power. Our governments, federal, state and local, are supposed to be the repositories of all the powers that the American people do not reserve to themselves as individuals; and yet none or all of our governments have or could exercise in time of peace the power to shut down one great industry after another, as is being done by the labor monopolies. And the true situation is indicated by the fact that our governments are afraid to oppose this use of such great power by these private organizations. When governments can be thus intimidated and cowed by great private organizations, they are being replaced as the real governments by the organizations by which they are being intimidated and cowed. The United States is rapidly having government “by and for the people” superseded by government by and for the labor union monopolies.

There is only one way to remedy the present situation and stop the trend toward what is plainly becoming an American form of Fascism, That is to pass and enforce legislation which will destroy the labor monopolies. This will not be accomplished by providing for injunctions against strikes threatening the public welfare, because experience has shown that disputes arise regarding whether a strike will threaten the public welfare, and public officials influenced by politics may refuse to issue injunctions or fail to enforce them. Nor will the problem be solved by prohibiting nation-wide collective bargaining. A nation-wide labor monopoly can, without nation-wide collective bargaining, crush an entire industry by attacking one part of it after another as the railway unions with nation-wide labor monopolies are now attacking the Missouri Pacific.

The law does not merely prohibit business from using the power of monopoly to hold up prices or hold down wages. It prohibits the existence of monopolies in business, and the government constantly attacks alleged monopolies in business, for the purpose of destroying them on the theory that they can be prevented from abusing the power of monopoly only by being prevented from having it. Likewise, the threat of labor monopolies to the American political and economic systems will be removed only by an effective government policy of destroying them.
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When it comes to heating and plumbing
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For detailed information about the complete range of products, contact your Heating and Plumbing Contractor. American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

The MASTER PEMBROKE Bath
and the COMRADE Lavatory and COMPACT
Water Closets shown here are but three of the many fixtures available for your selection when you specify American-Standard. They're styled to stand out... and constructed to stand up!

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An American-Standard "Installed Here" sign on the job tells everyone who passes that only the best is good enough for the homes you build or remodel. Be sure your Contractor puts up this sign when he begins the installation.

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Baseboard Radiant Panels by American-Standard represent an advanced form of radiant heating. Replacing the regular baseboard, they become an integral part of the room. They take up little more than an inch of floor space when recessed.

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Designed exclusively for oil burning, the ARCOLINER provides the best in oil heating for smaller sized homes. Ideal for installation in utility rooms or other first floor locations, as well as in small basements.

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HIGHWAYS and homes all over America are protected—for years of rugged service and exposure to weather and hard wear—with high quality Texaco asphalt.

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In a good road, crushed stone, carefully selected and graded, is combined with high quality asphalt—to produce a resilient, weather-, water- and wear-resistant surface. In a good roof, mineral granules, carefully selected, colored, screened and graded, are imbedded in high quality asphalt—to produce a resilient, weather-, water- and wear-resistant surface.

As one of the world's largest producers of high quality asphalt—Texaco sees to it that the correct specification and grade is used for each Texaco Roofing Product. This means good protection for America's roofs—and good products for Texaco Roofing Dealers.
Why waste high-priced skill 
changing motors on power tools?

Get mill economies on your door hanging. Because planing, hinge butt routing and lock mortising are three different operations, you need three totally different tools. If you have to “set up” a power tool for each operation, you’ve got to charge off “set up time” at skilled labor prices. But with these three Stanley-Carter work speeders . . . plane, butt router and lock mortiser . . . door hanging goes along on a production line basis. No one has to wait around for someone else to catch up. You can compete on more jobs, make a profit even on “tight” jobs. Write today for catalog. Stanley Electric Tools, Stanley-Carter Sales Department, 534 Myrtle Street, New Britain, Connecticut.

- **Stanley-Carter J5 Power Plane**
  Contractors say it’s up to five times faster than hand planing. Spiral cutter at 18,000 r.p.m. leaves a smooth, waveless surface . . . even against the grain. Won’t splinter out edges. Capacity up to 2½" edges, bevel cuts up to 45°, depth of cut from a paper thin shaving up to cuts as heavy as ¼". Fully adjustable. Universal motor, A.C. or D.C., 60 cycles or less. Has its own grinding attachment for resharpening cutter in a minute or two. With a simple bench bracket, supplied, the J5 becomes a high speed jointer for inside trim and innumerable planing jobs.

- **Stanley-Carter Lock Mortiser**
  A complete mortise in 30 seconds . . . and you can adjust the machine from one size lock to another in less than a minute. Depth and length of mortise adjusted very simply. Size of cutter determines width of mortise. Length of stroke 5¼"; depth of cut 4¼". Two self-centering clamps automatically guarantee that every mortise will be perfectly centered in every door regardless of door thickness. Height rods accurately locate mortise from either top or bottom of door. Automatic feed by means of ratchet arrangement protects you against hazard of jamming or stalling of the machine in hands of inexperienced operator. The Stanley-Carter Lock Mortiser has grinding pencil for sharpening its cutters.

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  Cuts butt recesses at least six times faster than by hand . . . almost as fast as you can mark a recess for hand cutting. Leaves a smooth, flat surface for a better fit and a more solid foundation for the butt. Doors hang perfectly . . . with uniform opening on all sides. Universal ½ h.p. motor develops 18,000 r.p.m. Strong aluminum alloy motor housing and base. Attachment for sharpening bits.

- **Stanley-Carter T3 Door and Jamb Template and T1 Lock-Face Template**
  T3 is adjustable for any size door and butt in 3 or 4 minutes. Can be used on both door and jamb by reversing the templet. T1 lock-face templet for cutting lock plate recess.
The Beauty of AllianceWare is far more than just skin deep

While the striking beauty of this AllianceWare bathtub Model BA5 with its wide rim seat complements any style of bathroom design, beauty is not the only reason why AllianceWare continues to grow in preference with builders and owners alike.

Model BA5 is a one-piece tub, formed from heavy gauge steel—much heavier than ordinary commercial standards. Yet the entire tub weighs only about 1/2 as much as a cast iron tub.

AllianceWare tubs are readily installed by merely nailing two vertical supports of the correct height to the studs with a horizontal member spiked between the verticals. According to F.I.A. requirements, this is the only method of installation which eliminates the effect of cross-grain shrinkage in lumber. Anchor lugs, welded to the top, hold the tub permanently in place against the wall.

A wall guard flange extending upward from the rim of the tub and concealed behind the wall tile or plaster prevents water from seeping into the wall.

All AllianceWare tubs have flat, smooth bottoms—easy to clean and keep clean. The lustrous porcelain on steel surface is stainproof and readily cleaned by merely washing with soap and water.

You can recommend the AllianceWare BA5 tub to your owners with the full assurance you are recommending beauty plus quality construction and practical design. Your plumbing contractor will be glad to give you full details of AllianceWare.

AllianceWare, Inc., Alliance, Ohio
Bathtubs • Lavatories • Sinks
Architectural journals today are full of products manufactured of every conceivable material. This is to be expected, the building boom being what it is.

But, look at the problem objectively. The strength of steel and the resistance to corrosion of zinc are properties greatly to be desired by fabricators. It is well known that a strong, lasting, weather-resisting and economical product can be manufactured with zinc as a protective coating on steel.

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double-waterproofed

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1 WATERPROOFED INSIDE!

Every one of the millions of tough cane fibres which make up its insulating core board is impregnated with a waterproofing agent during manufacture.

HERE’S PROOF of the kind of performance that has made Celotex the Greatest Name in Insulation. In a recent letter, Mr. A. J. McMullin, President of the Olean Lumber & Supply Corp., Olean, N. Y., wrote:

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2 WATERPROOFED OUTSIDE!

This remarkably strong, durable insulating board is then coated on both sides, and on all edges, with a thick, enduring “raincoat” of specially-treated asphalt which seals out moisture.

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★ Enables contractor to resume work more quickly after the heaviest rain, thus cutting costly delays.
★ Protected against dry rot, termites, and fungus by the exclusive Ferox process.
★ Combines exceptional structural strength and rigidity with high thermal insulation.
★ Builds and insulates, all at one low cost.
★ Yet costs no more than ordinary sheathing.
★ Write today for full details!

Double-Waterproofed

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Steel Casings have been added to Ceco's casement line... speeding your installations, saving money for you. Casings bring you extra profits in finishing window openings because they eliminate the time and expense of plaster returns. Casings are carried in warehouse stocks in 4½" and 5¼" depths (measured from inside face of casement to inside face of Casing).

1. Lay casement out flat, inside up. Then attach sill member to sill of casement with nuts and bolts provided. Do not take up tension of nuts and bolts. Leave nuts and bolts loose enough to move sill member.

2. Next, move one of the jamb members up to the attached sill member. Let the tab ends of jamb member slip into slots in sill member. Then bolt jamb member to casement. Repeat with second jamb member.

3. The head member should then be attached as illustrated above, with the slots slipped over the tab ends of both jamb members. Then attach to casement with nuts and bolts but leave them loose.

4. Clinch over all tab ends by carefully pounding ends with hammer. Portion of sill member extending beyond jamb member may be clinched over jamb if desired. All nuts and bolts are then to be securely tightened.

5. Casement with the casing attached as shown in above illustration is now ready for installation. Casement hardware should be attached to casement after the unit is installed.
This aerial view was taken in Atlanta, Ga., and shows one of the largest housing developments in the country. It includes three new projects—Oglethorpe, Inc., Golf Club, Inc., and Peachtree Chambles Apartments. In each of the 1,000 modern dwelling units, tenants enjoy noise-free, trouble-free Servel Gas Refrigerators. James Wise was the architect. Construction was done by Algernon Blair.
Cost
—one of the big reasons
three multiple-housing projects in Atlanta
installed 1,000 Servels

Operators decide on the "no moving parts" refrigerator because of its low upkeep, long life, silence, and low operating cost.

Year in, year out—the upkeep cost of a Servel is normally only a fraction of the cost to maintain a motor-driven refrigerator. And Servel offers plenty more besides rock-bottom maintenance costs.

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The GAS Refrigerator
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Yes, if you want to build attractive houses at lower cost...and still add the extra features that appeal to home buyers...let this book help you. It explains the Keystone System of Stucco Application—tells you how to build homes that answer the need for durable, attractive, quality construction at lower cost.

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Write for file size catalogue.
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Installation of a drain line to handle waste from a garbage disposer takes no more time or materials than are required for a regular sink drain. It is, therefore, good practice to plan sink plumbing connections so that a garbage disposer can be installed at any time.

The above diagram taken from a booklet recently released by Westinghouse shows how simply the Waste-Away can be installed in any cast-iron, formed metal or enameled sheet steel sink having a 3 1/2" to 4" opening. Drain connection can be made at any point in a circle around the Waste-Away by rotating the lower housing. Drain outlet designed for 1 1/4" slip joint connection with "P" or "S"-type trap, in accordance with local plumbing code.

The Westinghouse booklet, previously mentioned, also shows and describes other appliances which builders can install to give their houses added buyer appeal and save the purchaser the higher cost of installation at a later date. Booklets are free, simply mail coupon below.

American Builder, November 1949.
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United States Gypsum offers a complete line to meet your requirements. Four popular types are shown and described on these two pages, covering a wide range of needs—whether you are interested in industrial, commercial, residential, or public building. See the new U.S.G. Directory of Building Materials for more detailed description and data.

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**WALLBOARD**
**INSULATING ROCKLATH**

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2. Modern lever-type faucet—on or off with flick of finger.
4. Concealed cutting board, divided cutlery drawer, 2 hidden drawers.
5. Concealed pulls—extra beauty, easier cleaning.
6. Flush-sealed linoleum counter tops—waterproof, dirtproof between cabinets.
7. Smart new Serv-Cart—combination serving cart and mobile work center.
8. Extended counter tops—ample knee room for natural stance.


American Kitchens
STYLED IN STEEL

AMERICAN CENTRAL DIVISION CONNERSVILLE, INDIANA
Why should a latch have two springs?

It's certain that a one-spring latch is either stiff and hard to turn, or slow with a weak action. You can't expect a spring to be firm at one moment, and gentle at another. That's the reason every Dexter latch uses TWO springs... a light coil spring up front for easy closing, and a big husky one in the rear for positive knob action. Both are extra large for added stamina. You simply can't beat Dexters for performance. You know the price is right when you realize that Dexters have been made for over 25 years.

Dexter Locks give you MORE

National Brass Company
Grand Rapids, Michigan

Makers of Builders, Cabinet, Screen Door and Shelf Hardware

In Canada: Dexter Lock Canada Ltd., Guelph, Ontario
NOW! Take 3 Steps to Amazing New Door Frame Economy with STEELCRAFT STEEL DOOR FRAMES

Yes, simple as 1-2-3! So efficient is the use of Steelcraft Steel Door Frames in home and building construction, that door frame erection is actually cut to 1/10th usual time! Almost a DOZEN Steelcraft one-piece door frames can be set up in the time previously required to completely install one multiple unit frame and trim. Imagine the great economy, the amazing reduction in installation costs!

CHECK THESE STEELCRAFT-EXCLUSIVE POINTS:
1. Finished in aluminum paint applied by patented electro-static process and baked on!
2. Aluminum finish provides better surface for final painting... eliminates one field coat of paint!
3. Screen door hinges applied at factory when required!
4. 61/2" wide standard frame eliminates interference of door and screen door knobs!
5. Welded spreader bar gives added protection during shipment and handling!

Steelcraft One Piece Steel Door Frames can be used in dry wall construction. A complete line of door frames... in various sizes, for interior or exterior use... is offered by Steelcraft, makers of famous Steelcraft Steel Casements and Steelcraft Metal Buildings.

SENSATIONAL STEELCRAFT DOOR FRAME ADVANTAGES
- Door Frame Erection Now Takes 1/10th the Time!
- One-Piece All-Welded Combination Door Frame and Trim!
- Won’t Crack, Warp, Change Size... Reinforced Mitred Corners Will Not Open!
- Hinges Spot-Welded to Frame!
- Completely enclosed dust box welded to frame; brass adjustable strike plate furnished!

Write today!... for Complete Information and Specifications on Steelcraft One-Piece Steel Door Frames.

STEELCRAFT MANUFACTURING COMPANY
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I am very interested in amazing Steelcraft Steel Door Frames. Please send me complete information.

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POSITION TYPE OF BUSINESS
The beauty of the home you build can also be enhanced by things that don’t show. For, when you conceal telephone wires you run no risk of detracting from the attractiveness of walls and woodwork.

It's easy to hide telephone wires if you plan ahead. First, select the proper locations for telephone outlets. Then, while construction is under way, a few lengths of pipe or tubing can be placed inside the walls. This will later carry the telephone wires to each outlet chosen.

Your Bell Telephone Company will be glad to help you plan modern, built-in telephone facilities for any home you build. Just call your telephone business office and ask for Architects and Builders Service.
The Strand all-steel one-piece door-leaf eliminates field assembly of single doors—receding or canopy type (8' x 7'). Receding-type doors for double garages (16' x 7') are quickly assembled from two 8' x 7' door-leaf units and splice channel.

Hardware comes already assembled, and serves as an installation template. Only ordinary tools are needed—no "factory trained expert" is required and installation is surprisingly quick and easy.

Strand Doors are easiest to paint because they're galvannealed for rust-protection—with a heavy galvanized zinc coat, oxidized to provide an excellent base for paint without special priming coat. They can be painted to match any color scheme.

The strength of steel—that can't warp, sag, rot or shrink—assures lifetime durability and means a satisfied customer for you every time you install a Strand Door. Volume production, concentrated in one plant, and standardization on three models, make Strand doors an unequalled value! Order from your dealer, or

MAIL COUPON FOR INFORMATION AND DEALER'S NAME

STRAND GARAGE DOOR DIVISION
Detroit Steel Products Company
Dept. AB-11, 2230 E. Grand Blvd.
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Please rush detailed description of Strand all-steel Garage Doors for 8' x 7' and 16' x 7' garage openings.

I am a ... Builder [] Dealer [] Prospective Owner

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NATURALLY a builder wants to produce as fine a home as he can at a cost as low as possible.

But even in low-cost home construction you can’t afford to cut corners on some items. There’s valley and flashing, for example. Not only is it important to put the best kind of flashing where it shows; in valleys and around the chimney and at intersections; but if you want to avoid the possibility of complaints about seepage and leaks around the less-conspicuous places, such as windows and doors, you would do well to give these joints adequate protection, also.

Why take chances when you can weatherproof all the vital spots at so little cost with Revere Home Flashing? It was designed especially for the low-cost home market and, being copper, it gives builders additional benefits which far outweigh the small cost involved. Two packages of Revere Flashing (10 sheets of copper 18" x 48", 200 bronze nails and a booklet with complete installation instructions are included in each package) are all you need to weatherproof all the vital spots in the average home.

Not only will a complete Revere Home Flashing installation add an important selling point to the house but it assures owner satisfaction and guards the builder’s reputation as a creator of fine homes.

See your building supply dealer today. He’ll either supply you with Revere Home Flashing direct from stock or get it for you promptly.

REVERE COPPER AND BRASS INCORPORATED

Founded by Paul Revere in 1801

230 Park Avenue, New York 17, New York


Sales Offices in Principal Cities, Distributors Everywhere.
This new grade of lower-priced hardwood plywood broadens your market tremendously.

Get started right now: making all the new sales that are waiting for you as a dealer in CRAFTSMAN GRADE Weldwood Plywood.

For here is quality hardwood plywood that invites comparison with any other hardwood plywood on the market. Only our superb Algoma grade—made at Algoma, Wisc.—surpasses it.

Yet Craftsman Grade Weldwood is priced as much as 30% below the cost of other brands in the same woods.

Imagine how that opens up your market! Old prospects who had reluctantly decided that a Weldwood-paneled room was too costly will now turn into immediate customers for Craftsman. This new, lower-priced grade brings Weldwood Plywood within the reach of many people who couldn't previously afford it.

And you can offer Craftsman Grade Weldwood in four popular woods ... walnut, oak, birch and Korina. Panels run 4' x 8', 4' x 7', and 4' x 6': all ¼ inch, 3 ply.

Don't fail to take advantage of this tremendously broadened market. See your local lumber dealer today ... and cash in on Craftsman!
How to borrow light... and profit with Insulux!

In breakfast nook of the K. H. Cunningham residence, Toledo, Ohio, imagination and enterprise have been used to "borrow light" from an outside room with easy-to-install Insulux Glass Block.

House hunters and buyers like houses with the extra flair that Insulux adds to them. Needless to say, Insulux installations are profitable for you, too.

In the Cunningham garage, a panel of thermally efficient Insulux protects the car from extreme cold in winter and from prying eyes all year around. (Would-be burglars are discouraged from "trying the house" when they can't see the car.)

Would you like to have more information about the remarkable uses and properties of Insulux Glass Block? Then check with your local Insulux dealer. Or write American Structural Products Company, Dept. F-6, P.O. Box 1035, Toledo 1, Ohio.
10 Power Machines in One!

That's what you have when you own an all-purpose DeWalt.

Why should you invest in many single-purpose machines when one DeWalt can give you all ten of these, and more?

Simply by changing the cutting tool on a DeWalt you have another machine! Actually, it's a complete "shop" in itself.

DeWalt starts your house for you—cutting rafters, studs, joists, bridging, fireblocks, stair horses, etc. DeWalt finishes your house for you—cutting interior trim, built-in cabinets, shelving, trellises, window-boxes, etc.

No matter what the operation, DeWalt is fast, accurate, safe! Before you buy any radial saw today, investigate DeWalt. Make sure you get all the precision and safety features only DeWalt offers! Write for catalog. DeWalt, Inc., 111 Fountain Avenue, Lancaster, Penna.
WHEN CHOOSING A TROUBLE-FREE MATERIAL
BUILDERS SAY
It's Brick first

TIPS ON GOOD
MASONRY PRACTICE

Installation of Electrical Conduits
In Cavity Walls

The cavity wall presents an easy channel for the installation of electrical conduits in exterior walls. The electricians should be on the job when the floor joists have been placed and before the walls have been carried up to basement height so as to spot their outlets and install their connections and outlet boxes. The masons can then embed the boxes in the inner wall as the work progresses.

When you want to avoid trouble with materials—warping, splitting, shrinking, cracking, etc.—you choose brick.

In a recent nationwide survey among builders you named brick “most trouble-free” more often than all other materials combined. This result was not an estimate, not guesswork. Builder after builder can back this preference with long years of successful building in brick.

You know your work will stand up when it's brick. And, equally important, your customers know it.

You know, too, that brick rates first for beauty, permanence, structural strength, resistance to fire, high resale value ... and the great majority of you said so, time and again.

The most popular answer in this survey is a good one to remember when you want to build for maximum value with a minimum of trouble: “It’s brick first.”

SEND FOR THIS LABOR-SAVING, COST-REDUCING PLANBOOK

You'll get 20 economy engineered plans for MODERN BRICK HOMES. Also many valuable tips on location of site, selection of plans, financing, exterior landscaping, interior arrangements. (Detail plans of homes shown in the planbook also available.) To get your copy of this 50-page book, just send 50¢ with your name and address to Dept. AB-11 at the address shown below.

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The Right Finishing Touch

ADDS TREMENDOUSLY to Your Buildings

- The final appearance does more for your construction than any other factor. If you're building to sell, good looks always enhance the selling value... if you're building for a client, it means customer satisfaction. When you build a stucco home or building... concrete block or brick structures... finish it off right by decorating with Medusa Portland Cement Paint. And beautify other concrete, stucco, and masonry surfaces, such as basements, utility rooms, garages, and chimneys. This special masonry paint adds charm and weather protection to your construction. Properly applied, it forms a hard, long-lasting, cement-like finish. Cheaper than ordinary oil paints, Medusa Portland Cement Paint is inexpensively applied with a wide calcimine brush or by spraying—without undersealers. Ten lovely colors.

Medusa Rubber Base Coating, the famous companion paint, is unsurpassed for basement floors, as well as concrete floors and area-ways in industrial, commercial, and residential buildings, cement asbestos siding and shingles, and porch floors. This wear-resistant paint with a thermoplastic rubber resin base bounces off heavy floor traffic. Unaffected by water, alkalies, and lime, Medusa Rubber Base Coating is ideal for use in hospitals, food factories, and wherever sanitation is required. Ten beautiful colors. Increase the selling value of your construction... order these paints from your dealer today! Send coupon below for free booklet, "How to Beautify and Protect Concrete, Stucco, and Masonry."

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Gentlemen: Please send me a free copy of your booklet "How to Beautify and Protect Concrete, Stucco, and Masonry."

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Also made by Medusa Products Company of Canada, Ltd., Porto, Ont.
Here are the reasons:

Quality

ALUMINUM

- Never need painting
- Easy to operate
- Durable "trouble-free" construction
behind today’s trend to

Approved

WINdows

* Permanently beautiful
* They’re “quality-sure”
* Look for this “quality seal”

Check over that list of advantages again.

Are you, and your customers, getting all of them?

The answer will be “yes” every time—when you build with aluminum windows bearing the “Quality-Approved” Seal. It means you can be sure you’re getting windows tested and approved for minimum air infiltration, strong sections and quality in material and construction.

You’ll get trouble-free windows—windows that are free from painting, warping, rattling and sticking, when you install them and ever afterward.

Your customers will like these windows, too—like their good looks and easy operation. like this extra assurance that you are a quality builder.

You can get Quality-Approved aluminum windows in all standard types—double-hung, casement and projected—ready to install in any type of building. Write today for the names of manufacturers who can supply you.

Address Dept. A.

Aluminum Window Manufacturers Association

209 Cedar Avenue, Takoma Park, Washington 12, D. C.
There'll be some Changes Made!

There'll be some changes made is right! Yes, more and more store interiors are being modernized. Roddiscraft Hardwood Plywood for fixtures is your entry pass to this great market. Store owners easily recognize the superiority of Roddiscraft hardwoods — perfectly matched and carefully selected for beauty and uniformity of grain. They appreciate the durability and resistance to hard knocks featured in Roddiscraft "Standard Construction."

Speed is the first consideration in a store-remodeling job. Your Roddiscraft warehouse has a wide selection of domestic and foreign hardwood plywoods in stock ready to go. In case of special orders, shipment is fast, straight from the mill. In addition to fast service, Roddiscraft gives you over-all coverage — Hardwood Plywood for fixtures; Flush Doors, both solid core and lightweight; and Fir Plywood for all utility needs.

Your Roddiscraft warehouse can give you more information about the profit possibilities for you in store remodeling.
For clients choosy about Quality . . .

Specify BRADLEY UNIT WOOD BLOCKS!

HERE'S WHY: A famous bartender was asked why a Dry Martini made by any other dispenser using the same ingredients never tasted as good as his. He answered, "They don't put any affection in 'em."

Many floor layers and contractors apparently feel the same way about Bradley Unit Wood Blocks. That's because pride in making good Blocks is the same as "affection" in mixing a good drink . . . and we put plenty in every Block produced.

Mixed with that pride, plus a dash of zest in doing the job right, is experience . . . knowing what you must turn out in a fine quality, finished Block floor to make it "taste right" to your client.

There's no guess work in our machine work . . . nothing casual about our service. There's "affection" in every step that whets your appetite for more.

SAY WHEN!

Bradley Unit Wood Blocks are produced, both finished and unfinished, in Oak, Beech and Pecan, for mastic and nail installation. Finished blocks have slightly eased edges; unfinished have square edges.

Blocks are square, comprising standard tongue and groove strips bound together by steel splines imbedded in the back. Sizes in 25/32 x 2-1/4 are 6-3/4" and 9" square; 25/32 x 1-1/2 are 7-1/2" and 9" square; sizes in 1/2 x 1-1/2 are 7-1/2" and 9" square; in 1/2 x 2 they are 8" and 10" square.
One quick glance at the printed tape... that's all you need to check accuracy on the Remington Rand automatic Printing Calculator.

For estimating materials, figuring payrolls, computing insurance data or any other problem, the tape proves you're right—right away. There's no rerunning... no squinting at dials... no copying answers. And you have a permanent record for reference at any time.

What's more, you get your answers in a jiffy. The Printing Calculator speeds through your multiplication and division—your adding-listing and subtracting—in one continuous, time-saving operation. And the finger-fitted, 10-key touch control keyboard is so easy to learn, so wonderfully fast to use.

See how automatic printed proof will increase figuring efficiency in your office. Call your Remington Rand representative now, or write to Dept. AU-11, 315 Fourth Avenue, New York 10, N.Y.

**COLOR ENGINEERED:**
The new satin-smooth, two-tone gray finish reduces eyestrain, induces greater operator output, perks up the appearance of your entire office. See it today!

Remington Rand Inc.
A new line of Monowall colors

A complete new color line for Armstrong's Monowall® has just been announced. Every color in the line has been restyled to fit the latest decorating trends. These are the colors and shades most popular for their walls and ceilings. They'll help you sell more Monowall jobs.

There are twenty-two new patterns—six plain, eight tile-designs, and eight streamline-designs. The new line includes colors like Porcelain White, Colonial Ivory, Cascade Green, Wedgwood Blue, Primrose Yellow, and Cameo Peach. They're popular colors for both residential and commercial work. Smart, modern interiors, like the one shown here, are easy to create with walls and ceilings finished in these new Monowall colors.

Monowall is practical for new construction or remodeling. The big four-foot-wide sheets are light in weight, easy to handle, and quick to install. They can be cemented to any surface that is sound and smooth. Scored patterns can also be nailed.

Here's an opportunity to show your customers something really new in an inexpensive interior finish. Ask your lumber dealer for complete information and samples of the new Monowall Line or write Armstrong Cork Company, 1611 Ross Street, Lancaster, Penna.
now take it Point by Point

Specify Columbia Window Shades — and you get everything you could ask of a shade, plus a name that’s known and trusted by millions of users.

Specify COLUMBIA PYROXYLIN — and you get more of everything you want! It’s a super shade, Columbia’s best! Check it point by point!

Columbia Window Shades and Venetian Blinds are sold only through Columbia Authorized Dealers — leading department and furniture stores and shade shops. May we send you samples of PYROXYLIN Window Shades and the name of the Columbia Authorized Dealer nearest you? Write today.

ACTUALLY PAY A PROFIT! Pyroxylin shades, because they’re top quality, wear longer than the usual shade life expectancy . . . allow low maintenance costs . . . actually make a profit for you, as one large user puts it.

CUT REPLACEMENTS — PYROXYLIN IS WASHABLE! Takes to actual scrubbing — repeated washings — fabric remains firm and sturdy, colors stay fresh. It’s waterproof, too, to rain, steam, dampness.

FORGET PINHOLES OR CRACKS! Pyroxylin shades are made on such a closely-woven base, without filler, that they’re impervious to cracks and pinholes. Better, longer wear!

COLOR SCHEMING — TAKE YOUR CHOICE! Match or harmonize Pyroxylin with any color plans . . . 14 solid colors, including high-fashion pastels and decorator darks. Duplex combinations, also. Popular PRINTED shades.

VELVET-SMOOTH TO OPERATE! Columbia’s shade rollers, made in Columbia’s own plant, take care of that! Dependable, silent service throughout Pyroxylin’s career.

PIGMY TO GIANT SIZES! Your Columbia Authorized Dealer will make these fine shades to your exact window sizes.
BUILD THE **Double Duty WAY**

**WITH INSULITE**

**INSULITE DIVISION MINNESOTA AND ONTARIO PAPER COMPANY**

**MINNEAPOLIS 2 MINNESOTA**

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**APPROVED Insulite Wall of Protection**

**Control Moisture Condensation**

When frost forms inside the stud space, that means irate customers and trouble for you as the builder. To avoid this grief seal the warm side and **vent the cold side** of walls. (Proof available on request.)

How does Insulite fill this bill?

1. **Insulite Sealed LOK-JOINT LATH** with vapor barrier on the stud side insulates and effectively retards vapor travel.

2. **BILDRITE SHEATHING** insulates and at the same time permits satisfactory escape of vapor toward the outside.

The two in combination give you ideal insurance against moisture condensation and frost in walls.
Get the facts about this
NEW ROOF-DECK CONSTRUCTION
for your Commercial and Industrial jobs

Mail the coupon below
for a free sample of Kaylo Insulating Roof Tile and 12-page illustrated book giving full information and construction details. Clip the coupon now!

For insulated-roof jobs—all sizes, store buildings to warehouses—it will pay you to recommend KAYLO Roof Tile to owners. This tested roof-deck material offers all these advantages—

INSULATION VALUE equal to 1½-in. standard insulation board. No other insulating material needed.

LIGHT WEIGHT—5 lbs. per sq. ft.—permits savings on supporting structure. 23-lb. tile can be laid by one man.

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FIREPROOF—Kaylo Roof Tile is made entirely of non-combustible materials.

Mail the coupon now—learn more about this better roof-deck construction.

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Meet a Man with an Enamel Eye!

A FINE EYE for fine enamelware has John Berrigan — developed through his years of experience in foundry and enamel work. As Chief Inspector at Richmond’s Monaca, Penn., plant, eyeing enamelware, from casting to finished fixture, is Berrigan’s job. His critical, discerning eyes are constantly at work checking the flow of Richmond enamel cast iron fixtures and keeping them at their high standard.

OVER 100 YEARS of experience go into these four typical steps in the production of a top-quality Richmond enameled sink. Each Richmond sink, bath and lavatory is carefully checked and rechecked by men who have made the manufacture of quality plumbing fixtures their life work. For your additional assurance of quality, Richmond places its guarantee on each fixture.

Frank Jandrlich, 10 years at foundry work, is foreman of the Cupola section. To insure perfect castings, he keeps the flow of molten iron at a constant uniform temperature. He is shown checking on temperature with his Optical Pyrometer.

William Bentley, 23 years in grinding room work, inspect casting after it has been shot blasted and ground smooth. He makes sure it is in perfect condition for enameling.

Edward Roth, 37 years an enameler, critically inspects his handiwork after he has applied the Richmond Whiter-white enamel to the sink casting.

William Barton, 28 years with enamel ware, gives sink its final inspection. After both the casting and the enameling pass his thorough inspection the fixture is ready for the Richmond guarantee and shipment.

RICHMOND RADIATOR CO.—AFFILIATE OF REYNOLDS METALS CO.
WITH ALL THEIR EXTRA VALUE...

DODGE

"Job-Rated" TRUCKS are priced with the lowest!

It's what you get for what you pay that counts!

Read, on this page, why Dodge "Job-Rated" trucks offer you extra value.

Then, see your Dodge dealer. Ask him to quote you the price of the Dodge "Job-Rated" truck that fits your hauling or delivery job.

You'll get more for your money... in performance, in economy, in long-lasting truck satisfaction.

See your Dodge dealer now.

Dodge "Job-Rated" Chassis Features

1. SUPER-FRICTION CLutches. Large frictional areas. "Job-Rated" for smooth action and long life.

2. RUGGED 3-, 4- or 5-SPEED SYNCHRO-SHIFT TRANSMISSIONS — "Job-Rated" for the load. Carburized gears; heat-treated shafts; antifriction bearings throughout.

3. FULL-FLOATING REAR AXLES... Hypoid design; banjo-type housing... "Job-Rated" for the load. Long life... low upkeep cost.

4. CYCLEBONDED BRAKE LININGS (no rivets) prolong brake life.

5. CROSS-TYPE STEERING... Sharp turning angle; easier handling, and parking.

6. SAFETY-LOCATED GAS TANKS... Outside the cab, NOT inside!

NEW STEERING COLUMN GEARSHIFT... Standard equipment on 1/2-, 3/4- and 1-ton models with 3-speed transmissions... provides easier handling, more unobstructed floor space, greater safety of operation.

"RIGHT-SPOT" HAND BRAKE... under the center of the cowl... right where you want it. Standard on all 1/2-, 3/4- and 1-ton models. Provides unobstructed floor space; easier passage through either cab door.

Dodge "Job-Rated" Engine Features!

- FAMOUS DODGE L-HEAD TRUCK ENGINES... "Job-Rated" for your loads; save gas, oil.

- COMPLETELY SPLASH- AND DUST-PROOF ELECTRICAL SYSTEM... with high-output generator. Resistor-type spark plugs, and high-output coil, insure amazingly smooth engine operation; longer plug life.

- EXHAUST VALVE SEAT INSERTS... resist wear and pitting. Reduce valve grinding; preserve performance.

- REPLACEABLE PREFITTED MAIN BEARINGS... precision, long-life quality. Reduce maintenance costs.

- FULL-PRESSURE LUBRICATION... positive pressure to main, connecting rod and camshaft bearings and camshaft drive, prolongs engine life.

- FULL-LENGTH CYLINDER COOLING... 4-RING ALUMINUM ALLOY PISTONS... OIL-BATH AIR CLEANER and many other money-saving features!

For the good of your business...
IT IS estimated that $6.5 billion will be spent in 1949 for residential construction and $1.5 billion for commercial construction. Of the expenditure for commercial construction about 75 per cent will be spent for stores, restaurants and garages and the balance for warehouses, office and loft buildings. The bulk of this expenditure will be for the primary retail stores such as grocery stores, bakery and barber shops, dry cleaners, shoe repair shops and drug stores which spring up after the initial residential construction in an area has been completed.

The dollar volume of commercial construction in 1949 will exceed the previous record of an average of one billion dollars a year for the years 1926 to 1929 inclusive, but the physical volume is about half the amount of this type of construction for those years. At 1939 prices, expenditures for new private stores, restaurants and garages were estimated by the Department of Commerce at $680 million in 1927 and $370 million in 1948.

Moreover the physical volume of commercial construction has declined since 1946. It will be recalled that all restrictions in building construction were lifted in October, 1945, but were re-imposed on commercial building in March, 1946. There had been so much advance publicity on the reinstatement of restrictions that there was a rush to start retail commercial construction before the deadline. By the time the restrictions were lifted (June 30, 1947) the 1947 spring building season was past and builders preferred to postpone starting much of the planned retail construction until the next spring season. As a result, the 1947 physical volume of construction of stores, restaurants and garages was lower than the 1946 volume by about 40 per cent. Expenditures in 1948 started at a high level but began to falter after midyear. The steep rise in construction costs, in the meantime, resulted in a new record of $370 million being spent for retail construction in 1948, though physical volume remained about 26 per cent below the level attained in 1946.

A total of 41,000 store buildings were built in urban areas in 1948, according to the Bureau of Labor Statistics, as compared with 48,000 in 1947, and 52,000 in 1946. These are mostly small structures, since the average cost of each structure was about $16,700.

The factors influencing new retail commercial construction may be classified normally into three categories: (1) The volume and geographic distribution of new housing. (It is to be expected that a large volume of commercial construction will follow a large volume of residential construction in a given community.) (2) The volume of retail consumer expenditures. (In older communities which have become increasingly prosperous through the addition of new industrial plants and the continuing prosperity of established plants, a high level of commercial construction can also be anticipated.) (3) Time and business competition resulting in replacement, relocation and alteration of business premises.

According to analysts of the Department of Commerce these are secondary influences: (1) The level and stability of construction costs, and (2) the availability of financing. Although construction costs dropped considerably in the period 1929-32, commercial construction actually declined.

Congestion of commercial centers which were built in the horse and buggy age has had an important effect on the development of outlying shopping areas. The older commercial centers usually have inadequate parking facilities and thus the outlying centers have grown while the downtown areas barely hold their own.

The continuation of peak residential building activity this year augurs well for commercial building activity in 1950, since there is a lag of about a year in commercial building as it follows the residential building cycle. Homebuilding activity this summer was at the highest on record. In August homebuilders started 98,000 new permanent dwelling units, an increase of 11,400 (14 per cent) over August, 1948. This marked the fourth successive month in which new homes were started at the rate of about 100,000 a month. Preliminary Bureau estimates show a nation-wide total of 647,500 new dwelling units started during the first eight months of 1949, only two per cent or 11,700 units under last year's total for the same months.

### Estimated New Construction Activity—1949

![Chart showing estimated new construction activity in 1949](image_url)
WHY SHOULD INSULATION HAVE AN INTEGRAL CONTINUOUS Vapor Barrier?

Condensing vapor has always been a problem in building. But in today's tighter-built houses—with such modern improvements as air conditioning and humidifying equipment...extra bathrooms... automatic clothes washers and driers...it is more of a problem than ever! That is why insulated construction must be protected from condensing vapor. Condensation, if it occurs within a wall, may result in wet insulation, reducing its efficiency, and may lead to decay, paint blistering, and other damage.

Balsam-Wool is completely protected from condensing moisture by an integral, continuous vapor barrier. This vapor barrier—the asphalt coated and saturated liner of Balsam-Wool—meets government specifications requiring a barrier on the warm side of the insulation having a permeability not exceeding 1 grain per square foot per hour at a vapor pressure difference through the material of one inch of mercury.

What's more, Balsam-Wool adds an EXTRA safety factor beyond requirements—a tough, cold-side liner which reduces convection through the insulating mat, reduces air infiltration, gives additional support to the mat, and helps protect it against rough handling and the penetration of free water during the construction process.

Years of research and constant testing are behind every Balsam-Wool feature—and no other insulation contains all of them:

- Continuous integral vapor barrier
- Sturdy wind barrier
- Double air spaces
- Special spacer flanges
- Double bonding of mat to liner
- Rot and termite treatment
- Highly fire retardant
- Rigid quality control

Send for Balsam-Wool Application Data Sheets, containing hard-to-get information you'll want for your file. A complete set of these sheets is yours for the asking, mail the coupon today!

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GAS—The gas industry reports that its ban on new house heating installations has been eased to the extent that about 693,000 new residential gas househeating customers will be added in 1949-1950. Currently, about 6,600,000 families are using gas for space and central house heating.

RESTRICTIONS—By the end of 1949, restrictions on gas users will be lifted for another 1,300,000 customers. Largest group of customers still affected by partial or complete restrictions is within the manufactured and mixed gas territory. Great expansions of pipeline systems now under way are counted on to bring natural gas to these areas.

HOUSING STARTS—Bureau of Labor Statistics estimated 549,000 starts for the first seven months of 1949, a figure only four percent below the number of starts for the same period in 1948. With July the third successive month in which starts were around 100,000, indications are that the year will see 900,000 starts.

SLOW DEVELOPMENT — The 1949 home building program started late, but picked up with a rush in the second quarter. American Builder, anticipating such a pickup, stood almost alone in the early months of the year with a prediction of 850,000 starts. The prediction generally was viewed as too optimistic. Looks about right.

BUILDING CODE—The Sun-Times, Chicago newspaper, recently commented on the city’s code battle—and it is a battle—by stating that the war over whether Chicago should knock out its 1939 code simmers down to a main point, which to paraphrase Shakespeare, is “To plaster or not to plaster, that is the question.”

NEW CODE—The proposed code will allow the use of walls and ceiling materials permitted under model codes of the National Bureau of Standards and the Fire Underwriters Laboratory. It also conforms to FHA standards. Currently, the battle is a draw between the plasterers’ union in Chicago and the forces who would like to have the advantages of building economies open to home builders in other communities, including most of the suburban areas surrounding the city.

ADVERTISING—Gunnison Homes, Inc., of New Albany, Ind., recently announced a prefabricated house that will sell in any part of the country for $6,300 including lot and landscaping. That kind of advertising should not be published, since it is inaccurate. It certainly cannot be fulfilled in Chicago where some agents for the house promptly admitted that they could not sell it and the lot and landscaping for less than $7,500 to $8,000 and perhaps more. Knowing Chicago conditions, even those estimated prices appear to be too low.

SOCIALIZATION—It is “a cultured, camouflaged, and surreptitious means employed to accomplish the economic scalping of one class by another,” said Herbert B. Dora, New York University professor in the September issue of The Review, magazine of the Society of Residential Appraisers.

DORAU AGAIN—Housing is, he said, one of the more eligible candidates for further government regulation and, from a political point of view, permits a vast amount of public funds to be spent in the name of doing good—for selected beneficiaries with direct and assured political dividends in the form of votes.

FFF—It means Fighters for Freedom, and it is a division of The Committee for Constitutional Government. Announced goal is 1,000,000 members by mid-1950. Purpose is to fight highly organized left-wing movements which are pressing our government deeper into social—m.
COLORS that mean Business!

PITTSBURGH INTERLOCK
PLASTIC WALL TILE

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SELECTED BY LEADING COLORISTS
GUARANTEED SALES APPEAL

Hundreds of Combinations

JOBBERS! DEALERS! Make new customers, bigger profits with PITTSBURGH INTER-LOCK—the colorful plastic wall tile that brings you tomorrow's colors today! Actually hundreds of striking combinations can be created to meet individual tastes from the wide, luxurious range of plain, pastel and marbelized colors. Suitable for all bathrooms and kitchens—and for most business establishments. The sky's the limit on possibilities. Satisfied customers guarantee new customers and greater profit!

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Yes, I want to make new customers with PITTSBURGH INTERLOCK color-appeal. Please send full details.

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Here's Why More and More Contractors Are Building Homes with ZONOLITE* Vermiculite!

Today people are looking for houses that cost less to maintain... that are more comfortable and convenient... that provide greater safety against fire hazards. Use of Zonolite Vermiculite in homes provides builders with all these sales features. Wide-awake builders are using the many advantages of these miracle products to sell homes faster.

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Makes Better Walls and Ceilings
A Zonolite plastered wall won't chip even when nails are driven into it. Holds fire out 4 times longer than ordinary plaster. Insulates, muffles annoying sounds. It's 3 times lighter to handle. Speeds construction, cuts costs, saves time in preparation and clean-up.

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For Insulated Ground Level Floors
Warm, dry basement floors with Zonolite Insulating Concrete! In basementless homes, it means no condensation, no chilling drafts, greater comfort. Permits radiant heat systems to operate more efficiently, more economically—heat loss into ground minimized. These are real selling points for you!

**ZONOLITE Home Insulation**
So Fireproof It Snuffs Out Flames
Easiest of all to install! Vermin-Proof, Rodent-Proof! Won't pack, bunch, or settle. Flows freely around obstructions for complete insulation. The most fireproof insulation you can put into a home. Tremendous acceptance among prospects!

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Please send me without obligation data on how I can sell or rent my homes faster, about the uses of Zonolite Vermiculite and how it adds sales features to houses.

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Today there are certain definite trends in home design and equipment—and it pays to follow those trends. One thing people definitely want is the most modern type of kitchen equipment—and that includes Electric Ranges. Proof is found in the actual sales figures. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that the same thing will happen again this year.

To you, this means just one thing. To build houses that are modern today and will stay modern for years to come, you must include wiring for an Electric Range, leading to a range outlet in the kitchen. The time to do this economically and efficiently is during construction. An Electric Range, like electricity itself, is now a "must" in every modern house.

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

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Follow the trend... Wire your houses for Electric Ranges

Another 1,000,000 American families switched to Electric Cooking last year
A facetious-minded member of our staff has labeled this reasonably dignified column, "The Squak Dept." Reason advanced is that errors are recognized here, explanations of mistakes are set forth, and condemnatory letters are published in whole or in part.

Squak as a word, is not listed in any of the office dictionaries, but it is generally accepted as a synonym for complaint. So, we'll refer to the telephone call from H. H. Robinson of Pittsburgh Steel Products Co. as a complaint—a mild one. He phoned to say that we listed Steeltex Floor Lath, one of his products, in our August issue, as Steeltex wire lath. He is right, and we were wrong.

August was a pretty good month. That was the only "squak" we got. There were some interesting communications, however, that classify more as comments than "squaks."

One of these came from Mrs. Dorothy Cullers of Lansing, Mich. She said, "Your 'House Full of Ideas' in the August issue is certainly a dream house. However, the plan lacks easy access by guests into either bathroom which, in my estimation, invades the privacy of the occupants. Since this plan has everything that will make guests completely comfortable, it seems bad to overlook this detail."

The floor plan appears on page 72 of the issue, and after looking at it again, we are inclined to believe that Mrs. Cullers has a point. Neither bathroom can be entered without going through a bedroom. On the other hand, since Mr. and Mrs. Clarholm built the house for occupancy by themselves only, they probably reasoned that one of the bedrooms always would be unoccupied, and that access to the bathrooms as shown would not be a handicap. We'll leave it to the Clarholms to answer, however.

Wives of our builder and dealer readers seem to be reading American Builder at least as carefully as their husbands. Reason for believing this is that in addition to the

(Continued on page 57)
Can you profit with Youngstown Kitchens?

We’ll prove you can!

Any time you can increase the value of a house without increasing the cost, it’s profit for you.
Youngstown Kitchens do just that—they increase value, at no added cost.

THE REASONS ARE CLEAR
The added quality and value you gain with a beautiful, white-enameled steel Youngstown Kitchen are accounted for cost-wise in savings such as these:

1. Installation time is quicker — Youngstown Kitchens go in fast!
2. Delivery is timed for arrival when you need the units. This eliminates your warehousing, reduces handling costs.
3. You save the costs of painting and touch-up.
4. No fitting of doors and drawers is needed. Youngstown units are complete, ready to use.
5. Your original cost is right. (No hidden extras, no inexact guesses.)
6. Youngstown representatives can frequently make substantial savings in equipment required without sacrificing utility—and at the same time extra buyer-appeal is usually added.

Because Youngstown Kitchens are nationally known and universally accepted, they can help you sell homes. Let our representative show you how they add to value, yet cost no more.

Tulsa, Oklahoma: “Youngstown Kitchens have created more favorable comment from prospective home purchasers than any other single feature. After an analysis of comparative costs, I find that Youngstown Kitchens are more economical and much more satisfactory,” says Edward I. Cohen, builder.
MISS KELLY is concerned about chimney construction. She asks, "Is there any difference in having a chimney on the outer or inner side of a wall?" She has had experience with both, and noted that the outside chimney did not draw well. Asks if the difference is accounted for by the fact that the cold air checks the fire. She is right about the outside chimney not drawing as well as the inside chimney. The question prompts an article on good chimney construction in a forthcoming issue. The article is under way now.

FALL BUILDING may be expected to make a great spurt when the statistics are all in. A few days ago Rudolph Matern, nationally known residential architect, stopped in the office. Among other comments he dropped the remark that between August 17 and August 24 his office had received 123 house design orders. If his experience is at all typical, Long Island, New York, home building activity had a terrific pickup with the beginning of autumn.

MATERN'S EXPERIENCE no doubt reflects the great increase in the custom built home market. It has been growing since last spring at a continually accelerated pace. Every indication is that 1950 will see the largest custom-home building program since the twenties. The average cost seems to be about $20,000, mid-west levels.

CARL S. CARLSON—He is a New Jersey builder who reads his local newspaper, the real estate editor of which is another of too many gullible real estate editors—or perhaps they are just lazy—who take the word of the organized leftist minorities with regard to home building. Mr. Carlson, however, does not just boil under the collar at what he reads. He hits back with factual rebuttals.

RECENTLY, his rebuttal took the form of specific instances to prove the attack on home builders unsound. In a long letter to the editor he invited that scribe to take a trip (Continued on page 59)
HERE ARE THE 25 MOST POPULAR MODULAR-SIZE WOOD WINDOWS THAT SAVE BUILDING TIME AND COSTS!

Less cutting and trimming on the job... less waste... lower building cost! These are the reasons why it pays to insist on modular-size windows, sash and frames!

The 25 most popular sizes of 5 of the most popular designs shown on this page are manufactured on the 4-inch "module" or unit of measurement. All are available promptly. See your lumber dealer.

OPENING SIZES

GLASS SIZES—1/16" CHECK RAIL WINDOWS

POPULAR DESIGNS OF MODULAR-SIZE WOOD WINDOWS

Made of ponderosa pine, these modular-size windows have the natural insulating advantages that wood so handsomely provides. They hold paint or other finishes lastingly... discourage condensation. They are available toxic preservative treated at the factory for extra resistance where staining, decay, insect attack or humidity are factors. Ask your dealer for them.

NATIONAL WOODWORK MANUFACTURERS ASSOCIATION

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Gentlemen: I want to know more about modular design woodwork. Please send me your folder, "New Savings for Builders."

Name...
Address...
City... State...
with him, covering the territory which the editor had used as a basis for some of his charges.

THE TRIP was not taken. Whether the real estate editor was afraid to be shown the facts for the first time in his life, or belongs to the lazy group who just are not interested in doing some hard field reporting, was not made known. The invitation tendered by Mr. Carlson, however, was declined.

ANOTHER CLASS of editors are more interested in sensational headlines, and scare articles than they are in truth. It is always easier to get people to read a sensation column than one which deals with facts, and many journalists merely want readership, regardless of what they give their readers.

THIS IS NOT to be taken as an attack on real estate editors. It isn't. It is, however, an unmasking of a small minority of them whose lack of principle is proving to be dangerous. Every good newspaper man is interested in news. Where some of the scatterbrains go wrong is in their interpretation of what constitutes news. The unethical, irresponsible minority with left wing tendencies believe it to be anything emanating from a government bureau. If the government bureau release does not square with the local facts, the local facts are disregarded.

ONLY ONE WAY is open to cancel the harmful effects these quacks are having on their own readers as well as the economy of the country. That way is to refute what they write in the way Mr. Carlson is doing.

HOME BUILDING is a local business, and it never can be anything else. A corollary to this is that public relations in the home building industry is a local matter, and not something to be done on a nation-wide scale.

ATTACKS on the home building industry, whether they originate with some nationally organized trust group or with an individual of home, have to be met on the home grounds. Public relations in this industry is a local activity.
"sure...
they're made of aluminum.

"but...there's gold
in them there tile!"

Rockjaw Jim is right

... there's gold in HASTINGS alumi-tile

... the gold of definite savings...

savings in time and money and structural weight.

- Modern materials and modern engineering make HASTINGS alumi-tile the ideal modern wall tile wherever beauty and distinction of surface finishing are sought.
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Anwings and Door Hoods

Attractive... practical... economical. Designed and built of .040 gauge aircraft aluminum for easy installation, lasting beauty, year-round protection.

Constructed of interlocking segments to fit exactly any desired opening. Available in choice of seven vital colors.

For further data see Sweet's File or write direct for the story of Alumitile and our amazingly priced Anwings and Door Hoods.

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THE ALUMI-SHIELD ALL-WEATHER DOOR HOOD
Year-round protection from
snow, rain and sleet.

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information or samples, ask your supplier, or write to
one of these authorized distributors.
10 Reasons for Using ELJER'S NEW Ballcocks

The NEW ELJER BALLCOCKS, made in our own modern factory, feature design and construction principles that assure efficient, long-life service for the user. Supplied in all Eljer Tanks and available to meet the big demand as replacements in existing installations. So, use the best . . . use Eljer. 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

1950 NAHB Convention Program To Be Different

Following their recent meeting, the National Association of Home Builders' 1950 convention committee revealed their intention to develop a convention program distinctly different from those of previous years. While no names have been released for many of the national figures, including some from outside the building industry, will be brought to the convention platform.

Technical sessions designed to acquaint builders with the latest and best operating and business methods will be given prominent place on the program.

The committee, headed by E. M. Spiegel, Passaic, N. J., chairman, also plans to step up attendance promotion activities on both the national and local levels, with emphasis on the latter. Convention and exposition director Paul S. Van Aukcn of Chicago, who will direct the promotion, will work through executive officers of local affiliated chapters of NAHB. With their help in stimulating local interest, he believes attendance will continue to climb.

The national convention and exposition will be held at Stevens hotel, Chicago, Feb. 19-23. In addition to space in the main exhibit hall of the Stevens, convention headquarters, and the Normandy Lounge in that hotel, Van Aukcn will add the exhibit hall of the Congress hotel, located one block north of the Stevens on Michigan Avenue.

Industry Status Discussed By Woodwork Jobbers

The past progress, current status and future objectives of the stock woodwork industry came up for intensive discussion as the Woodwork Jobbers Service Bureau met for their annual convention last September 22-24 at the Edgewater Beach Hotel, Chicago.

The meeting was opened by Bureau President Earl G. Thurkess, who spoke on "Stock Woodwork Inaugurates a New Era in 1949." Other prominent speakers included Rep. E. M. Dirksen of Illinois; Richard Snyder, Chicago business consultant and economist; and Phil S. Hanna, business editor of the Chicago Daily News.

Another interesting feature of the meeting was a panel on "The Federal Housing Act-How Will It Affect the Wholesale and Retail Distributor?". Moderator of the panel was Sam S. Cook of Chicago, a member of the Bureau's convention committee.

Selection of the winners was based on population of the dealer's town. The Lumber Service Bureau took the dealer-group award and the J. N. Bray Co. the award for the best public relations program in the retail lumber and building materials field.

Ten-inch bronze plaques mounted on 14-inch walnut shields will be presented to the winners at the annual NRLDA meeting in San Francisco Nov. 9.

Panel of judges for the contest was composed of editors of eight trade publications in the retail lumber and building materials field: Edward G. Gavin, American Builder; Herbert A. Vance, American Lumberman; J. W. Parshall, Building Supply News; Walter Grinols, Mississippi Valley Lumberman; William Parsons, Southern Lumber Journal; Stanley Horn, Southern Lumberman; Donald Moore, Southern Building Supplies; and Dexter Johnson, Western Building.

The winning entrants and others having an appeal to women will be judged in San Francisco from the standpoint of their success in capturing the interest of women. Judging will be by movie stars and other prominent entertainers.

Three bronze statuettes, each seven inches tall and mounted on a four-inch base of polished mahogany, will be presented to the winners of this competition.

S.M.U. Short Course Dates

Two 30-day lumber dealer courses will be held at Southern Methodist University, Dallas, Texas, during the winter term. The dates are Jan. 4 to Jan. 31 and Feb. 6 to March 3.

The course hours in sales training have been increased from nine to 22.

Announce Award Winners In 1949 NRLDA Public Relations Contest

Winners of awards in the 1949 NRLDA national dealer public relations contest were announced Sept. 19, following an all-day judging session at the Drake Hotel, Chicago.


Awards to the first five were based on population of the dealer's town. The Lumber Service Bureau took the dealer-group award and the J. N. Bray Co. the award for the best public relations program in the retail lumber and building materials field.

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Three bronze statuettes, each seven inches tall and mounted on a four-inch base of polished mahogany, will be presented to the winners of this competition.
Lockwood Visits Western Associations

RODDNEY M. LOCKWOOD (right), NAHB president is pictured with T. H. Muenzen, president of the National Association of Real Estate Boards, who introduced Lockwood at a recent dinner-meeting in Omaha, Neb., sponsored by the Omaha Home Builders Association and the Omaha Builders' Exchange. Other chapters visited by the NAHB leader on a tour of the west included the Seattle, Wash., Master Builders Association and the Portland, Ore. Home Builders Association. Serving as toastmaster at a Portland banquet for Lockwood was Chester A. Moore, vice president of Commonwealth, Inc. In a tour of Seattle building sites, Lockwood paid particular attention to the Economy House Program. He also spoke at an evening meeting.

Other millions of dollars, $5.5 to be exact, are being poured into a crazy scheme to mass-produce steel houses. The aforementioned are, of course, only two of the scores of government "give-aways" that are not even seemingly harmless, and that are expensive to you and me, and every other taxpayer.

We don't have to be economists to realize that any government which consistently follows such a course will eventually end in bankruptcy. Perhaps some of the same thinking which caused the Federal Communications Commission to ban "lottery" programs could be instilled into the minds of the members of Congress who are handing out money so freely, and gambling with the nation's economy. The sad ending to the story is that unless each right thinking individual does his part to prevent it, there won't be any ban on government "give-aways," and the prodigious spending will go on and on.

Development Contests

(Continued from page 63)

(2) Economy Homes Over 50 Units—Best group of single family homes over 50 units where construction is at least 25 per cent complete.

(3) Larger Homes Under 50 Units—Best group of single family homes under 50 units where construction is at least 50 per cent complete.

(4) Larger Homes Over 50 Units—Best group of single family homes over 50 units where construction is at least 25 per cent complete.

(5) Rental Housing—Best garden apartment development where construction is at least 25 per cent complete.

(6) Complete Community Development—Best residential community where construction is at least 10 per cent complete.

Three national awards and a series of honorable mentions will be given. In the single family home development and garden apartment groups, the judges will base 30 per cent of the value of their decision on architectural design, with consideration given to such factors as simplicity, originality and efficiency of arrangement, privacy and continuing appeal. Seventy per cent of the decision will rest on site plan, design and improvements, treatment of topographic conditions, and arrangement of streets and building sites.

In the residential community group, 30 per cent of the decision will be based on architectural design, 40 per cent on the community plan and 30 per cent on the community facilities included.

Entries in the contest are restricted to NAHB members, and detailed information may be obtained from local associations. When local entries have been completed, they will be sent to NAHB headquarters in Washington for judging.

Changes in 30-Day Dealer School Program Announced

Added to the NRLD program of 30-day training courses in retail lumber and building materials is a class which will be held at Pennsylvania State College Feb. 1-28.

The school representative is C. M. Graff, Central Extension Building, State College, Pa. Robert A. Jones, Middle Atlantic Lumbermen's Association, 1528 Walnut St., Philadelphia, Pa., is the association representative.

Starting date of a class at Purdue University, Lafayette, Ind., has been moved back one week. Dates are now Jan. 12 to Feb. 11.

The Western Retail Lumbermen's Association has decided to hold but one course at the University of Washington this school year. The class will be limited to 40 students and the dates are Feb. 2 to March 3.

American Builder, November 1, 1949.
Schrader Named Director of Plywood Association

Appointment of O. Harry Schrader, Jr., as managing director of the Douglas-Fir Plywood Association has been announced by E. W. Daniels, chairman of the industry management committee. Schrader, who is director of the State of Washington Forest Products Institute, will take the new position Dec. 15.

Schrader is the author of a text used in dealer training courses at a number of universities. He has had about 15 years’ experience in the merchandising of lumber and building materials.

As head of the state-maintained Institute of Forest Products, Schrader’s work is directed toward increased utilization of forest resources and the development of new marketable wood products.

In addition to his affiliation with the forest products group, he is associate professor of forest products at the University of Washington.

STUART H. RALPH

In addition to his affiliation with the forest products group, he is associate professor of forest products at the University of Washington.

STUART H. RALPH

Insulating Siding Group

Stuart H. Ralph, vice president of the Flintkote Co., New York City, was elected president of the Insulating Siding Association at the group’s annual meeting at the Drake Hotel, Chicago, in September. He succeeds Harry F. Eli L. Chamberlain, vice president of the Maxashalt Corp., South Bend, Ind., treasurer.

The association, which was organized three years ago, is primarily concerned with the establishment of product standards and techniques for improved application. Its national headquarters are at Glenview, Ill.

Cortright’s Column

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

From Washington’s Ivory Tower

One has a kaleidoscopic view of national and international happenings—a perp show of the sublime and the ridiculous events which make for world solvency or bankruptcy, world war or peace. Comedy and tragedy alternate in the pronouncements and prognostications of the great and would-be great.

For nine long months crackpot legislators have been defending a series of proposals for a welfare state with the demagogic phrase “dynamic democracy.” One law we could enthusiastically support would require illuminating with golden letters the newly decorated Halls of Congress with Herbert Hoover’s recent pronouncement:

“No nation can remain static and survive. But dynamic progress is not made with dynamite. And that dynamite today is the geometrical increase of spending by our governments—Federal, state and local. We are on the last mile to collectivism through governmental collection and spending of the savings of the people.”

Our award for the most stimulating, challenging statistics of the month are the baby figures projected by Vergil D. Reed in the October Appraisal Journal. Here are the highlights.

1940-1947—a “war baby bonus” of 5 million births above past rates.

Toy manufacturers and first grade schools have already felt this—high prices of Christmas dolls and tops. For nine years crackpot legislators have been defending a series of proposals for a welfare state with the demagogic phrase “dynamic democracy.”

What has happened to our recession?

None of the Washington experts seem to know, although they agree that American industry has forgotten about it and is enjoying prosperity of almost boom-time proportions. Here are some startling statistics:

1913-1914 ... Some End in 9 Months, But One Lasted 42

1920-1921 ... 20 months duration

1929-1933 ... 42 months duration

1937-1938 

1948-1949 (to date) ... 10

Drew Pearson, self-appointed Omniscient Judge of National Moralties in Business and Government, made a bad slip recently in reporting the cost of housing in Alaska.

Having never before done anything to attack or condemn the home building industry, it was a serious error when his column recently stated: “It’s costing the Army Engineers (in Alaska) half as much again to construct houses and barracks as it would cost private builders.”

Perhaps all those who oppose President Truman’s social welfare legislation and do not have access to the White House should take a lesson from Myron H. Acherman, president of the Capitol Men’s Tie Foundation, who is always welcome at the White House. A recent newspaper item described Mr. Acherman’s recent visit to the White House, bearing a present of 40 gaily decorated neckties:

“They included several hand-painted four-in-hands, one bearing the insignia of the President’s old World War I division. Another portrays Mr. Truman playing the piano for a dancing donkey and elephant, which are leading a Russian bear on a leash.”
Attend Institute for Trade Officials

ASSOCIATION executives who attended National Institute for Commercial and Trade Organization Executives at Northwestern University, Evanston, Ill., Aug. 14-20 are (left to right, seated) G. Kenneth Millikin, assistant to manager, Northeastern Retail Lumbermen’s Association; E. Maurice Garner, secretary-manager, Carolina Lumber and Building Supply Association; (standing) J. J. Lavengood, editor, Illinois Building News, Illinois Lumber and Material Dealers Association; Donald J. Moe, assistant secretary, Michigan Retail Lumber Dealers Association; Edward C. Frick, secretary-manager, New Jersey Lumbermen’s Association; and Harris Mitchell, secretary-manager, Virginia Building Material Association. The course serves either as a refresher course or as intensive training in fundamentals.

Elect New President Of Mineral Wool Association

William R. Wilkinson, vice president and general merchandise manager of the Building Products division of Johns-Manville Sales Corp., was elected president of the National Mineral Wool Association at the annual meeting held at the association offices in New York.

Wilkinson entered the building industry with Johns-Manville in 1925 after attending St. Louis University, St. Louis, Mo.

Public Relations Campaign Launched by Chicago Group

A comprehensive public relations program has recently been launched by the Chicago Metropolitan Home Builders Association. Primary objectives of the program, according to Martin C. Huggett, executive vice president, are: (1) the improvement of the market for homes by removing from the minds of home seekers the erroneous thought that prices are on the downgrade; (2) the implanting in the public mind the value of home ownership; and (3) prevention of further government intervention in housing operations now being conducted by private industry.

A speakers’ bureau has been organized by the association and is beginning to function. It is planned to equip speakers with stereopticon slides, charts and graphs and other aids. Speaking engagements will be followed up by local news releases.

Also contemplated is a weekly or bi-weekly free syndicate of home owner and home seeker news and comments, illustrated with photographs and drawings. This would be furnished to smaller newspapers.

Wide use will be made of the NAHB seal and insignia, to emphasize the good workmanship, high ethics and public service aims of association members.

Named vice president of the organization was R. E. Daniels, a vice president of the Federal Portland Cement Co. of Buffalo, N. Y. Jul Hollmann, of the Flintkote Co. was elected treasurer.

The association also elected three new members to the board of directors. They are C. S. Northers, vice president of the Sloss-Sheffield Steel & Iron Co., of Birmingham, Ala.; H. E. Carney, president of the Carney Co., Mankato, Minn., and Joseph R. Addington, president of the American Rock Wool Corp. of Chicago.

American Builder, November 1, 1949.

1,700 Attend Mortgage Bankers Meeting

Approximately 1,700 mortgage, commercial and mutual savings bankers, builders, real estate men, title and trust company officials and life insurance executives from all sections of the country gathered for the 36th annual convention of the Mortgage Bankers Association of America Sept. 19-21 at the Palmer House, Chicago. Association spokesmen said it was the largest meeting in the group’s history.

One of the featured speakers at the convention, Philip M. Klutchnick, president of American Community Builders, Inc., Chicago, and former head of the Federal Public Housing Authority, told delegates that he believed the fears of mortgage men and builders that the extensive new government public housing program would seriously hurt their own fields are groundless.

“I do not believe,” he said, “that the present enlarged public housing programs can or will bring a collapse of private enterprise unless we, who make up that category, by inaction and downright stupidity insist on such an eventual crisis. The millennium will not be brought into being by public housing.”

Doubt that Federal government will enter the direct lending field was expressed in a report by Samuel E. Neel, MBA Washington counsel. He said it was his opinion that, whatever Senate action is taken on the pending Sparkman-Pence Bill, it would follow the House version and eliminate the direct lending proposal for the ‘middle income’ group and for veterans.

Other speakers included Meyer Kestnbaum, president of Hart, Schaffner and Marx, Chicago, who discussed “Meeting the Return of a Normal Economy”; Herman W. Steinkraus, president, Chamber of Commerce of the United States; and Franklin D. Richards, FHA commissioner.

Elected MBA president for the 1949-50 term was R. O. Deming, Jr., president of Deming Investment Co. of Oswego, Kas. Milton T. McDonald, vice president of the Trust Company of New Jersey, Jersey City, was named vice president.

Running concurrently with the convention was the association’s tenth exhibit of building, industry and services. The regular three-day sessions were supplemented by a mortgage servicing center, a separate program designed for office managers, treasurers and servicing managers on new and modern methods in handling mortgage debts.

Heads Trade Executives

Gene Ebersole, executive vice president of the Lumbermen’s Association of Texas, was recently elected president of the Texas Trade Association Executives organization.
Convection Heating with

TUTTLE & BAILEY Standardized COPPER CONVECTORS

Efficient performance... proper air circulation, more even temperatures, comfort on even the coldest days. Economical operation... quick response to thermostatic control, quick transmission of heat from boiler to rooms, fuel cost savings. Attractive appearance... designed to harmonize with any style of architecture or interior decoration.

When Mr. Homeowner asks your advice, recommend convection heating... and install Tuttle & Bailey Standardized Copper Conectors. On all counts, the combination that is your assurance of lasting customer approval.
CHEVROLET ADVANCE-DESIGN TRUCKS

Deliver the Goods . . . at Lower Cost

You get performance you can count on with Chevrolet Advance-Design trucks—plus famous Chevrolet 3-WAY THRIFT—lower operating costs, lower upkeep costs, and the lowest list prices in the entire field. These high powered trucks are true economy-masters—built to deliver all that’s asked of them in stability, stamina, handling ease, comfort, and convenience. Truck owners know that when they own a Chevrolet, they have the No. 1 truck buy in America . . . outselling the next two makes combined. Why delay your choice—see your Chevrolet dealer for full details soon.

CHEVROLET MOTOR DIVISION, General Motors Corporation, DETROIT 1, MICHIGAN

TOP-VOLUME PRODUCTION BRINGS YOU TOP-VALUE FEATURES!

Chevrolet’s new 4-SPEED SYNCHRO-MESH TRANSMISSION offers quicker, quieter and easier operation. Double clutching is eliminated. Faster shifting maintains speed and momentum on grades. In Series 3800 and heavier duty models.

Chevrolet’s power-packed VALVE-IN-HEAD ENGINES provide improved durability and efficiency as well as their world-famous economy.

Chevrolet trucks have the famous CAB THAT “BREATHES”! Outside air is drawn in and used air forced out! Heated in cold weather. Chevrolet Advance-Design brings you the FLEXI-MOUNTED CAB, cushioned on rubber against road shocks, torsion and vibration.

Chevrolet’s SPLINED REAR AXLE HUB CONNECTION adds greater strength and durability to heavy-duty models.

Uniweld, all-steel Cab Construction • Large, Durable, Fully-Adjustable Seat • All-Round Visibility with Rear-Corner Windows* • Heavier Springs • Super-Strength Frames • Full-Floating Hypoid Rear Axle in the 3600 Series and Heavier Duty Models • Double-Articulated Brake Shoe Linkage • Hydrovac Power Brakes in Series 5000 and 6000 Models • Many Color Options.

*Heating and ventilating system and rear-corner windows with deluxe equipment optional at extra cost.

CHOOSE CHEVROLET TRUCKS FOR TRANSPORTATION UNLIMITED!
Announcing
A REVOLUTIONARY NEW
LOCK-TYPE ASPHALT SHINGLE

Carey Windmaster

WITH EXCLUSIVE 4-POINT SELF-INTERLOCKING DESIGN

LOOK! Exclusive 4-way self-interlock design makes possible better roof jobs... wins customer enthusiasm that produces added sales, greater profits. Windmasters interlock at 4 points when applied, remain securely locked down against driving rains and raging winds—give years of trouble-free service. In addition, each Windmaster is rigidly fastened by nailing at 4 points. Nails are concealed—protected against corrosion by shingle overlap.

Compare ONLY WINDMASTERS OFFER ALL THESE BIG SALES ADVANTAGES!

- Protection! Only Windmasters have 4-point self-interlock design that interlocks and overlaps with powerful weather-defying angle-grip.
- Durability! Windmasters are rugged; weigh 170 pounds per square to assure maintenance-free performance well beyond the life of ordinary shingles.
- Beauty! Windmasters combine new color harmony, wood-grain texture and deep shadow basket-weave pattern to achieve a roof that blends with any architectural design.
- Economy! Windmasters are self-aligning, easy to apply—save money, material and time.
- Fire-Safety! Windmasters are listed "Class C" by Underwriters, reduce the hazard of flying brands, sparks and embers—guard against roof fires.

Let Carey Windmasters make money for YOU. See your Carey representative—or contact us and we'll give you full information.

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"NATIONAL GUARD DEFENDS AMERICA... JOIN NOW"
Parkview, now under construction at Collingswood, New Jersey, near Philadelphia, will embody builder E. J. Frankel's and owner S. J. Lowery's latest concept in apartment living. J. Raymond Knopf is the architect; Samuel Oshiver associate architect.

Mr. E. J. Frankel, well-known Philadelphia builder, says: "Parkview, latest concept in apartments, will have every one of its 1037 kitchens equipped with Kelvinator refrigerators. We have learned from experience that Kelvinators are so dependable that first cost is practically the last cost. We know that Kelvinator will satisfy the apartment dwellers."

Yes! From long experience over the years, E. J. Frankel continues to choose Kelvinators for his projects today. Mr. Frankel knows that money-saving performance and user-satisfaction are assured with Kelvinators!

In your next building, choose Kelvinators for beauty, economy and easier planning. Six different refrigerator models... all one width... fit the identical floor space. You simplify and save!

Easier planning! Flexible Combinations! Choose from new, ONE-WIDTH KELVINATORS!

3 of the 5 Kelvinator Electric Ranges all 39\(\frac{1}{4}\) wide—and the Kelvinator FR6 Freezer.

4 of 6 Great Kelvinator Refrigerators that are all 31\(\frac{1}{4}\) wide.

Here’s Kelvinator’s Space Saver Package—Refrigerator 6 cu. ft., 24" wide; range 21" wide.

GET MORE Kelvinator
Incentive and Security

RECENTLY a 17-man building team from Britain completed a six weeks study of American construction techniques and methods. The team included contractors, subcontractors, architects, quantity surveyors and building craftsmen. The team’s itinerary embraced seven American cities and the areas surrounding them. When the team returned to Britain it issued a detailed report of its findings here.

The report praised the efficiency of American craftsmen, and attributed that efficiency to design, managerial direction, pre-construction planning, organization of work at the job site, mechanization, adequate supply of materials and labor, and “in the outlook of each member of the building team, all tending toward greater efficiency, greater speed and lower costs.” It was noted that American building costs average 55 to 80 per cent higher than in Britain, and that efficient methods result in a man-hour production level 50 per cent higher than in Britain.

The report further stated that “We found nothing to undermine our conviction that, provided our building industry can be supplied with adequate materials and labor, and provided that everyone from the top to the bottom of the industrial ladder can be given the essential incentive to personal effort which the Americans possess and enjoy, the British building industry can equal the American industry in efficiency.”

The British building team placed its finger squarely on the root of all the troubles in Britain when it noted the essentiality of personal incentive, and recognized its lack at home. British workmen, whether in factories which produce building materials or on building sites, have little or no incentive, because they sought the answer to their problems in the promise of security in a socialist state. The cost of that questionable security is a leveling off of wages, which takes away the incentive to improve and earn more. British construction management has little incentive, because its only customer is the socialist state, which establishes the rules for doing business, and then steals profits by tax hiking and other methods. The result is the death of initiative and inventiveness and the consequent lowering of standards.

The American workman, no matter what his status on a building team or any other industrial team, knows that he may aspire to and hope to reach the top job, or even the ownership of the business or one like it. He knows that when he reaches his goal he will realize all of the rewards of accomplishment. That is the incentive he has, and it is his only because he is a member of a free economy. In any other economy he has neither the incentive nor the products of the incentive.

The statement of the British building team should be pondered by everyone. If the American workman is to keep the incentive which the British envy and desire, he will have to go back to concerning himself primarily with opportunity and less with government security. Freedom and opportunity are not the corollaries of the mythical security offered by a socialist state. They are the sacrifices demanded in payment.
Proving Its Value

That the home building industry is beginning to take advantage of its potentialities as a publicity "natural" was conclusively demonstrated by the outstanding success of the 1949 National Home Week observance—not only in the sweeping publicity accorded the event but also in the unprecedented number of home sales made as a direct result of the promotion.

Home building, unique in being the only industry which builds its product on a certain site and displays it for sale at the same site, has still another advantage over most industries: its operations almost invariably make good publication "copy." The tremendous number of persons who visited demonstration homes this year indicates another step toward the full exploitation of both these advantages.

The unexpectedly high volume of direct sales came as a surprise even to a large percentage of the builders who demonstrated homes. A report from builder associations in representative cities reveals the following figures on the number of houses sold in their areas during the week, and the dollar value of sales:

- Cleveland—173 homes, total value, $2,314,000;
- Memphis—194, $1,518,000;
- St. Louis—118, $1,500,000;
- Kansas City, Mo.—100, $1,200,000;
- Buffalo—105, $1,125,000;
- San Mateo, Calif.—75, $1,000,000;
- Indianapolis—100, $800,000;
- Toledo—125, $750,000;
- Salt Lake City—70, $700,000;
- New Orleans—60, $650,000;
- Seattle—50, $600,000;
- Cincinnati—40, $420,000;
- Tacoma—33, $271,000;
- Providence, R. I.—22, $200,000;
- and Dayton, Ohio—11, $146,000.

In Chicago, where the week was observed as a part of the 30-day Home and Home Furnishings Festival, the number and variety of publicity stunts hit a new high. As did display advertising ideas. A few outstanding ones are shown here.
with Sales and Publicity

Tremendous crowds inspect the work of private home builders during the second National Home Week. A surprisingly large number stay to buy

1,200,000 persons visited the homes during the month and bought 3,300 homes. This is about 40 per cent above the monthly average of sales. Of the homes sold in Chicago, 55 per cent were in the $11,000 to $25,000 price range; 35 per cent were under $11,000 and 10 per cent above $25,000. Most readily sold, the report pointed out, were homes in the $15,000 to $18,000 bracket; and there was no particularly noticeable resistance to high-priced houses.

From other sections where tabulations of results had not been made, similar enthusiasm was expressed about the success of the week. All participants felt that a great deal of credit was due to the splendid cooperation of press and radio. Many associations commented that the observance of the event had been a major factor in stimulating sales and interest at what would normally have been a period of slackened activity, and that all components of the industry had profited.

The subject matter of newspaper and magazine articles ranged from trends and statistics of national significance to hints about home maintenance. Most special newspaper supplements carried pictures, descriptions and addresses of the houses on display.

An outstanding job was done in calling attention to the large volume and high quality of the housing being produced by the industry; and a great deal was accomplished in counteracting the public's impression that it is unwise to buy now—that current costs are excessive and that there is likely to be an appreciable drop within a foreseeable time.

The Home Week campaign placed strong emphasis on the advantages of home ownership. The mayors' and governors' proclamations were especially effective in this respect.

Tieing in with this type of publicity were a number of special stunts, including essay contests on such subjects as "Why I Want to Own My Own Home," "Why I Should Buy or Build My Own Home" and others.

Another valuable feature of the public relations program was its function in creating good will for local associations. A number of articles answered such questions as "What Is a Home Builder?" and told the history of the associations, their high standards of membership and their stressing of dependability and service to the public.

Observance of the week was not without its humorous incidents, as exemplified by the Memphis firm which in an unexpected rush at their demonstration house on the last day of the week, sold the same house to three different people. The error was very quickly rectified.

Reaction of participating builders in all areas was almost without exception that of high enthusiasm. There was also the feeling that, since so much had been accomplished in only the second year of the promotion, future intensification would produce even greater results. Some local associations will launch their 1950 observance plans in the near future, to assure more comprehensive participation.

National Home Week was a credit to the industry and to the agencies which cooperated. It stimulated interest in the activities of private home builders and brought thousands of people out to inspect their work. Many of these people bought homes and many others are good future prospects. More concerted effort can accomplish even more in 1950.
Real estate values jumped more than $6,000,000 along this street in Dallas after a chain reaction of remodeling was set off. Impetus came from one idea.

Free Enterprise

WOOD siding, except that in the front, was left on this old building. Furring strips, lath and stucco were added for attractive exterior. FLOOR plan was unchanged in Claiborne. READ and PATE interior designing establishment, except for addition of partition in hallway to hide air conditioning and hot water unit. Fireplace was moved across room. Below, front of building faces Cedar Springs Road.

WITH a new idea and an old house to experiment with, one man in Dallas quietly started a chain reaction of remodeling run down homes for use as modern stores that many local citizens are now calling a miracle. To the building industry, it is not a miracle at all, but an outstanding example of how slums may be avoided through private enterprise.

The new idea was a different color paint, developed ten years ago by Joseph O. Lambert Jr. He mixed a green with enough grays and browns to get a soft, mellow green shade. He bought an old home along Cedar Springs Road for his office—a dilapi—
Saves a Run Down Street

IMPACT of the remodeling in Dallas spread farther than Cedar Springs Road, as shown by view of this intersecting street.

dated place in a run-down section near the edge of downtown Dallas. The paint was applied. With the new color exterior, the house stood out in sharp contrast to the old dwellings, second-hand furniture stores, filling stations and retail stores around it. Some began to describe it as "Spook green." Others saw some merit in the restful, cool effect of the color.

Confidently, Lambert began to buy a few other properties; to remodel and add more of the paint. Sales were immediate. Then other builders appeared on Cedar Springs Road, and other soft hues of paint were used. One house after another began to get a new face and a new coat of paint.

Today, more than twelve blocks of buildings have been remodeled in the area, where real estate values have jumped $6,000,000. Meanwhile, soft colored exterior paints are still being used, trimmed with bright yellows and reds—with Lambert green the most popular color in Dallas.

Cedar Springs Road attracts fashionable children's apparel shops, interior decorating establishments, restaurants, and antique shops. The distinctive character of the area is from the individuality of each remodeled dwelling. Each building has a quaint atmosphere all of its own, representing a design theme desired by the individual owner.

In some of the old dwellings, such as that remodeled by Claiborne, Read & Pate, interior designers, much of the original woodwork was left untouched. In this building, only one change in the floor plan was necessary—one end of the hallway was partitioned off to hide an air conditioning unit and a water heater. The builder's and architect's problem here was to provide an appropriate setting for expensive paintings, draperies and wares this firm sold. Additional interior woodwork was imported. This woodwork is eighteenth...
century English oak and pine, hand carved. The main gallery was formerly a living room, and the major change made was the moving of the fireplace from the opposite side of the room to its present position. Large plate glass mirrors now surround the fireplace, from floor to ceiling, accenting the hand carved oak columns that extend from floor to ceiling to form a frame for the mirrors. The ceiling in this room was raised three feet. Ceiling of the hallway was lowered two feet to enhance its appearance and to provide space for ducts leading from the air conditioning unit. Wilson McClure of Dallas was the architect, and A. J. Gilliland, local builder, did the remodeling. Total cost of the project, including purchase of the old building, the land and remodeling was about $40,000.

Wm. B. Goolsby, manager and lessor of the popular Dolly Madison restaurant on Cedar Springs Road, gave this reason for preferring a remodeled building for his restaurant. "With old buildings, many times you get the advantages of fine old woodwork," he said. "With new buildings you can't get the atmosphere—new stuff looks new."

Atmosphere in the Dolly Madison is from mellow, old oak, left in natural finish. To make the atmosphere enjoyable to clientele, new modern air conditioning equipment is installed, with proper insulation against Texas heat. This building was formerly a five room cottage, with a half story above which is now used for the air conditioning unit. Other modern equipment includes new bathroom fixtures and plumbing, and new kitchen appliances. Total remodeling cost was about $5,500. Income of the building before remodeling was about $100 per month. Earnings now are six times that much per month.

The ceiling was insulated with four inches of mineral wool. The original ceiling was too high for the appearance desired, and a drop ceiling, 18 inches lower, was added. Bay windows replaced small double hung sash windows. The old wood floor was covered with asbestos sheet siding. A layer of tar paper was placed over that, then asphalt tile was set in mastic.

Gingerbread — ornate cornices, porch columns—and small inadequate windows have now disappeared almost entirely from the buildings along Cedar Springs Road. Designs are more functional, more modern, and without the sacrifice of proper atmosphere. The group of buildings including and adjacent to Gittings photography studio occupy an area once taken up by a filling station and other old store buildings, and the appearance of the remodeled units equals the modern effect of many of the new.
Large modern display windows and tastefully selected signs of Gittings studio are complemented with Lambert green exterior paint. The group of old buildings in this area, before remodeling, had a rental of a little over $3,000 per year. The rental is now $36,000 per year. Air conditioning units were added in each of the buildings, and a small garden highlights the area behind the center of this group.

One of the most attractive remodeling jobs along Cedar Springs Road would naturally be one that Lambert did himself. For this job, he picked a large lot occupied by a small filling station. At a minimum cost, the filling station building was converted into a landscape architect's office, with a garden that suitably displays the exclusive type of work Lambert does. Construction included the addition of insulation, large glass windows and doors.

Today, Lambert quietly pursues his profession in this office, and openly takes little credit for starting much more than a new color of paint—Lambert green. And around him, after ten years, effects of his color magic are still inspiring new and profitable ideas in remodeling.
Economy with Concrete

Interlocking wall and roof units, formed on floor and tilted-up in position are employed in concrete industrial building.

While the William J. Moran Company of Alhambra, Calif., is an old established concern, it is now headed up by a group of young men who do not have any preconceived convictions which they are unwilling to drop, but rather who are interested in finding new and better methods for doing a job.

It is this spirit of progressiveness which recently caused the Moran Company to take hold of the new "tilt-up" method of building concrete structures, and to become one of the leading exponents of this procedure in the area. They state that the method is proven because it costs one-third less to erect reinforced concrete structures with this process and requires only one-half the construction time.

The "tilt-up" system is simple. The concrete floor is finished smooth to serve as casting platform for the walls and other members. The floor is then coated with a special wax, and on it the exterior walls are formed. Reinforcing members and sash and door frames are set in place before concrete is poured. The savings are manifold. Cost of vertical forms are eliminated. The placing of steel and concrete are made easier and quicker. There is a minimum of excavation work for the foundation, and continuous footings are not necessary, thus saving steel and concrete. The top surface of each panel only needs trowelling since the bottom side is cast against a smooth surface. Both surfaces are free from form marks and present an acceptable finish for industrial buildings.

A structure must be specially designed and engineered for "tilt-up" construction. There is a great deal of education to be done among architects and engineers before "tilt-up" construction becomes standard practice.
The Helipot building in South Pasadena, Calif., shown in the construction views on these pages is using this method of construction. It is a one story, Class A, fireproof and earthquake resistant building, containing 10,000 square feet of working area.

Pad type reinforced concrete footings are poured in place with no forming. Exterior wall pads are grooved to receive walls. The main structural members are reinforced concrete bents. Forms for these bents are used many times. Walls and bents are put into place by use of a heavy duty motor crane. The units are held in place and plumbed by special tubular turnbuckles. Roof slabs are cast on the floor and put in place by crane. All joints are made secure, steel tied, lapped or welded as required, and sealed with Gunnite. This ties all the separate panels together.

Moran engineers state that their cost for the precast walls are approximately 70 cents per square foot of wall area. They point out that the "tilt-up" method of construction requires considerably more engineering, but that the savings in time and materials offsets this added cost.
A Start in the Right Direction

A Tennis Center, first of a series of recreational buildings proposed by a Mid-western city, is designed along functional lines to obtain maximum facilities.

THE Dewey Tennis Center is the first of the city-wide improvement projects to be completed in Omaha, Nebr. This city is now looking forward to having an up-to-date park and recreation system available for their citizens within this next decade. Under construction, and in the planning stage, are swimming pools, baseball parks, pavilions and many other recreational projects.

The planning of all this work is under the direct supervision and control of Daniel M. Robbins & Associates, architects of Omaha; a young firm that adheres wholeheartedly to the new school of architectural expression as exemplified by the Tennis Center building. In introducing this new style public building to a traditionally minded community, Robbins had the full support of each member of respective Improvement and Park and Recreational Commissions of Omaha. The interpretations of plans and the construction of the

OPEN terrace over locker room extends from living room of second floor apartment.

VIEW of building from park. Large lounge and terrace overlook the playing area. Feature is extended trellis at right of building.
The building were carried on by the Foster-Smetana Company, builders of Omaha. The building is of masonry and concrete construction throughout the first floor and roof area. Walls are placed upon reinforced concrete foundations that extend below frost line, except in the case of wall columns which are placed upon concrete footings and wood piles. The 12 inch masonry walls include four inches of glazed brick which is the interior finish of the building. Pre-cast concrete joists with 2 1/2 inch concrete slabs comprise the second floor and roof slab construction. Second floor apartment is of frame construction, placed upon second floor slab.

Exterior finish is face brick and vertical redwood siding. Sash are a combination of steel and wood casements and large fixed units in wood frames. Soffits of canopies are finished in 3/8 inch plywood. Floors throughout are of concrete and asphalt tile.

PLANS indicate a practical solution to designing a building devoted to a special purpose. Locker and shower rooms are separated from main building by a covered passageway which connects the two buildings making them integral with each other. Lounge with fireplace at one end occupies most of the area of main building. Second floor houses an apartment for the tennis instructor.

ANOTHER view of building looking directly into large lounge with trellis in foreground.
Seven shopping centers, seven swimming pools and recreational buildings go up to accommodate 37,000 people living in 10,102 houses erected by Levitt & Sons.

The residents of Levitt & Sons' huge housing development on Long Island, N.Y., are to have seven strategically-located shopping centers. Two are now completed and five more are contemplated. Supplementing the program of erecting shopping facilities, is a planned project of seven swimming pools and several large recreational buildings. The tremendous and rapid growth of Levittown in the last three years provides ample need for these elaborate facilities. By the end of 1949 there will be 10,102 completed single-family dwellings occupied by about 37,000 people. About 4,000 more houses are planned for Levittown in 1950.

Structures housing the stores are standard units 47 feet wide and 125 feet long, with no variation in the modern exterior design. From one end to another at bowling alleys is high at bowlers' end and slopes to low height at pin setting end. Exposed rafters and carpeted floors affect acoustics, reducing noise.
Facilities in Levittown

One of the two large recreational buildings which have been completed to house restaurant, cocktail lounge and bowling alleys.

Floor layout of building at top of page. Exterior walls are brick veneer over cinder blocks, which constitute the interior wall finish, painted a deep soft flat green. The floors are concrete, finished with terrazzo. Concrete terrace at rear is also finished with terrazzo to provide an outside area for dancing.
to seven stores occupy each separate building, with partitions serving as bearing walls. The basements provide storage space for stock in addition to housing the heating and air-conditioning units, individually installed and controlled, for each store. The super market, which usually requires all of one building, is in a non-partitioned structure without posts or partitions.

Exterior walls are brick veneer painted white over cinder blocks, with the vertical joints between the brick finished flush and the horizontal joints raked to emphasize the low, modern lines. Roofs are flat, pitched toward a central drain near the center of each building. In wet weather this arrangement eliminates the possibility of any amount of water dripping from the roof onto customers and sidewalks. The seven-foot overhang around all roofs permits customers to walk from store to store and from building to building in inclement weather without direct exposure to rain or snow, and also makes awnings unnecessary.

In addition, the large overhang removes much of the danger of display window leaks. Plate glass windows are run to sidewalk level, made possible by the overhang. Installing the glass to sidewalk level does a great deal to remove the usual barrier a window shopper or customer feels between himself and the store interior when conventional display windows are installed.

Interior walls of the store buildings are plastered with two coats over the cinder blocks. Bearing partitions are cinder blocks, plastered. Conventional wood joists are used in ceilings, running from partition to partition, finished on the exposed side with gypsum board. In the super market building, where there are no bearing partitions, roof supports are steel I-beams extended to form overhangs, with ends trimmed to conform to the shape of the overhang.

TOP photo shows rear of recreational building with outdoor dining and dancing terrace. Center, dining room and cocktail lounge. Bottom, close-up of specially-designed exposed rafters and lighting.
Floors are conventional wood joists with subflooring laid diagonally and finished with plywood. Over this, the store lessee may apply any final finish he desires.

The individual heating and air conditioning units for each store, which are controlled by each tenant, use water from a well drilled and operated for each shopping area. After water has passed through the air conditioning units it is piped to the swimming pool adjacent to the shopping area. When this is done the water flowing into the pool is not only slightly warmer than it would otherwise be but the system achieves considerable economy.

The individual buildings in each shopping center are being placed in alignment on slightly curved streets, with two square feet of parking area for each square foot of store area. William Levitt, president of Levitt & Sons, reports that experience proves this is more than adequate for Levittown. In addition to the parking areas, each shopping center has a children's playground adjacent to it so mothers with young children may leave them there to entertain themselves.

The large, modern recreational buildings, two of which have been completed in Levittown, are beautifully designed to blend perfectly with the entire architectural theme of the area. These are basementless structures with masonry walls and trussed, built-up roofs. Floors are concrete finished with terrazzo. Large plate glass windows, run to floor level both front and rear, add much to the spaciousness of the interior.

The combination trusses and rafters, spaced two feet on center, are made up with Teco timber connectors. This type of roof was selected, not only because it is structurally sound, but because of the aesthetic effect achieved by leaving the trusses exposed. Sheathing is nailed directly to (Continued on page 154)
Accent on the Entrance Motif

Striking design helps a flower business thrive

The entrance motif of this flower shop is the focal point of interest. The canopy, which extends out at an angle over the entrance has an egg crate designed roof made up of 2x6 fillers. This provides a shade for the wide areas of glass along the front of the building, and permits a striking sign display. The canopy is supported by a channel frame and four 3½ inch steel columns set in reinforced concrete footings.

Steel perimeter framing provides supporting elements for wood framing of ceiling and built-up roof. Wood members vary in size, depending upon their span. The roof is covered with 5-ply tar and gravel, and insulated with two inches of blanket wool. Ceiling throughout is asbestos board.

Eye-appeal of this flower shop makes good business for the owner, enhances the prestige of the architectural firm that designed it, and is a compliment to the builder who faithfully executed the plans. The new structure represents outstanding design for the immediate surrounding area, and local clients, interested in having similar light commercial work done, can see for themselves the type of work both the architects and builder are capable of doing. The flower shop is owned by the Le Mar Florists of Chicago, and is situated in La Grange, Ill. Architects were Mielke & Smith, Chicago, and the general contractor was L. D. Collins, Inc., of La Grange.
Diagonal plate glass front plus unusual technique in interior design, arrangement and lighting emphasize width, minimize length in shop with 21-foot front

The generous use of broad, flat areas as the theme in this modern dress shop results in an outstandingly attractive store. The diagonal display window and entrance not only shelter window shoppers but extend the display area on the narrow 21-foot frontage. The open, carpeted center floor area inside emphasizes the displays which are placed in the V-shaped alcove at the extreme rear. This also serves as an enticement to those who might desire a more intensive study of the merchandise shown in the rear-store display.

The orderly arrangement of display cases and built-in wall cabinets on each side of the sales area are excellently proportioned. The hardwood plywood finish on these units blends with the wall finish and makes them appear as part of the wall, thus giving an optical illusion of greater width to the long, narrow store. Trough lighting along the sides together with the modern, square lighting units in the ceiling, make this store unusually attractive at night.

The store is located in Detroit, Mich., and was designed by Louis G. Redstone, AIA.
High-priced land effectively used

for COMMUNITY MEDICAL CENTER

A MEDICAL center, launched as a cooperative project by a group of three Tucson, Ariz., doctors, posed two major problems for the architect, Gordon Maas Luepke of Tucson. The first was to make maximum use of an expensive piece of property 138 x 180 feet, maintaining at the same time an effect of openness typical of Western architecture; the second problem entailed a flexibility in planning which would allow for the addition of buildings of different size, design and materials over an indefinite period of time.

Among the devices with which Luepke solved the problem were use of a large patio, an arcade, parking areas and walks, and large windows facing open areas which contribute full light and the effect of greater space. Provision for party walls is a feature of the planning for compactness.

Final locations have been planned for only three buildings, one of which has been completed. The number, size and location of future offices is extremely flexible under Luepke’s plan; and the three doctors who started the project maintain the right to pass judgement on the building plans of accepted tenants.

An example of the flexibility of the plan is that, while the land use study suggests an additional office on either side of the completed building, using party walls, an entirely different arrangement may be made.

Doctors who build in the project will get full titles to their own offices and joint rights in the common property, such as party walls, patio and parking areas.

The first office in the center was built by the John Joynt Construction Co., Tucson. It has a poured concrete foundation, walls of Tucson Common Brick and composition coal tar and asphalt roofing, with white asbestos cap sheet.

The exterior brick is painted.

Its interior is arranged for a maximum of space and light. Windows are placed high for the admitting and reflection of light and to provide greater wall space for placing furniture. A picture window opening out on the patio is equipped with screens which admit light and permit a view of the outside, but screen the interior from outside view.

Solid east and west walls are planned for most of the buildings.

By good over-all planning, a Tucson, Ariz., architect solves a problem involving maximum use of land and flexibility of design.

FIRST completed building in Tucson medical center features low, attractive lines
for the dual purpose of reducing summer heat and for possible future use as party walls.

The over-all design, Luepke said, was molded in such a way that exterior finishes might be anything from brick to redwood siding to asbestos shingles.
Drive-In Design
Attracts Trade

Striking appearance of this building is making profits for the owner

The fourth day after his new establishment recently opened the owner of this drive-in cafe could count more than 60 cars at a time with occupants waiting to be served—though within a two-mile radius there are 44 restaurants.

Clients are attracted by the striking design, and by open planning which permits unobstructed vision from the street through the dining room and across a serving patio in the rear. This feature, according to F. J. Woerner & Co., architects and engineers, was the main idea behind their design of the Tower Drive-In located in Dallas, Texas. Openness is achieved through the use of large plate glass windows protected from the Texas sun by a wide canopy and overhangs. L-shaped, one wing of the drive-in is formed by a canopy under which 14 automobiles may park.

Builders Sachs and Stevens, who faithfully reproduced Woerner’s plans, completed the drive-in in three and a half months. Total costs, not including kitchen ventilation, paving, signs, cathode lighting, booths and fixtures, was $30,000.

The structure is built on a 4-inch concrete slab reinforced with 6x6-inch welded wire fabric. Floor covering is conventional asphalt tile, except around serving area, where grease-proof asphalt tile was used.

Exterior walls are of Bark face brick, which have a course height of three inches and are 12 inches in length. From the tops of low exterior walls to the ceiling, plate glass was used. The entire roof literally rests on stilts, made up of 3-inch steel columns. Steel roof beams run from column to column. Over the ceiling joists, wood sheathing was applied, then the tar and gravel roof. Between the joists, three inches of cotton insulation is placed.

Interior wall partitions are made up of 2x4’s, 16 inches on center, with lath and plaster finish. Ceiling is of acoustical tile. Bar is of solid oak.

Courtesy of Dallas Fountain and Fixture Co.
Finish in the kitchen area is evenly troweled plaster painted with high cost enamel for sanitary purposes. Remainder of the ceiling is acoustical tile. Inside finish of the exterior walls is plaster directly over masonry.

Large tower above the entrance to the drive-in was originally a functional design for a forced draft cooling system. It was found not adaptable, but was left for its display value. Owner of the drive-in is F. M. Mitchell of Dallas.
A Los Angeles cafe man recognizes present-day customer tendencies and plans his new building to conform with them.

Adapted to Customer Trend

When Dick Webster, Los Angeles restaurant man, recently built a new building for his expanding business, he capitalized on his experience to incorporate a number of features which exemplify the modern trend in customer appeal.

One of his primary considerations was a central location, with emphasis on easy accessibility to automobiles and ample facilities for parking. An attractive exterior, with modern, simple lines was another essential. On the interior he stressed an effect of openness, with a few harmonious ornamental features.

Highlights of the building's exterior are Norman brick wainscoting and generous use of glass; two eye-catching Norman brick planting boxes; a wide overhang of green stucco with a metal facing and inset lights on the under part; and a predominating pylon with raised letters. Above the canopy, which extends around the two entrances, is obscure glass.

Flooring is terrazzo, with quarry tile behind the counter and in the kitchen. The ceiling is Acousti-Celotex and doors are Tuf-Flex plate glass. Counter and table tops are true-wood Formica. The wainscot is oak plywood throughout.

Bill Ding, Los Angeles, was the architect.
HEATING RESEARCH

At University of Illinois

Radiant-forced warm air heating system for basementless houses to be tested in low-cost home by School of Mechanical Engineering

RESEARCH with radiant-forced warm air heating, recently started at the University of Illinois, in Urbana, will be conducted through the use of a typical small home of contemporary design. Research Home No. 3 is sponsored by the National Warm Air Heating and Air Conditioning Association in conjunction with the University. The dwelling is 24x32 feet, has a living room, two bedrooms, kitchen-utility room combination, and bath.

The system of heating is similar to that described on page 110 in the March, 1949, issue of American Builder, where warm air pipes are imbedded in the concrete slab. Warm air is forced downward from the centrally located heating unit into pipes, which in the research home are eight inches in diameter. Pipes go from the heating unit around the inside of the outer perimeter of the slab, where greatest heat loss occurs.

Concrete foundation of the research home extends three feet two inches below grade and is six inches above. The foundation is nine inches thick at the base, and at a point eight inches below the top it slopes inward so that the thickness at the top is equal to the width of a 2x4 stud. Vapor barrier between a 4-inch gravel fill and the slab is 55-pound roofing felt. Insulation between the slab and the foundation wall is 25/32-inch thick mineral type.

During the research, continuous temperature recordings will be made at 16 points in the house.

TEST recording equipment, located in garage adjacent to small home, will be used for determining comfort conditions in the house. Robert Reese, Special Research Associate with Illinois University, is in charge of research. Professor S. Konzo is consultant.

PIPE installations in slab floor of small home, right, show positions of registers and of heating unit.
Kitchen remodeling has developed into an exceptionally profitable field of activity for both builders and dealers. This is due not only to the volume of remodeling that was postponed because of material shortages and wartime restrictions, but also to the peculiar position older homes enjoy on today's house market. Not only do these houses have an inflated cash value at the sales mart, their potentials as comfortable homes have increased in the eyes of their owners, with the result that home modernization work is rapidly assuming wholesale proportions.

Invariably, modernization begins with the kitchen. For, regardless of the age of a home, every woman wants a modern up-to-date kitchen—efficient in plan and operation, and colorful in appearance. Another reason is that the kitchen, more than any other room, becomes outmoded with time.

The Edward Hines Lumber Co. of Chicago, who look upon kitchen planning as a specialized field, have set up a unique kitchen planning department to serve this market. The department, originally created in 1938 and discontinued during the war, is headed by two professional architects, experienced in kitchen planning. These architects are assisted by a staff of interviewers, draftsmen, and clerks.

When an inquiry about remodeling a kitchen is received, an interviewer calls on the prospect to survey the job. He finds out what remodeling the prospect has in mind, how much he can afford to spend, and whether or not he is seriously interested in having the work done. If it is determined the home-owner is a definite prospect, the Hines representative takes measurements of the room, gets the home-owner's ideas on alterations wanted, and then makes a rough sketch of the proposition.

Back at the office a colored sketch and a full colored drawing are made of the proposed job. A contractor is then invited to estimate the cost. Because of plumbing and electrical work involved, only general remodeling contractors with connections in these trades are used. The Hines representative then returns to the customer with the cost figures and sketch, and negotiates a contract, either FHA or privately financed, between the contractor and the home-owner. Hines, however, does not enter into the final contract.

They profit from the millwork the remodeling job brings into their plant. Indirectly, they profit by a volume of new business which accrues from the friends and relatives of satisfied clients. The Hines kitchen planners specify only custom-made millwork. This enables them to solve any storage problem peculiar to a particular kitchen, and to introduce originality that helps enhance the surroundings. Hines hardwood is properly supported, properly finished, and properly priced. Hines millwork is sold for two to twelve feet. Formica, melamine, and aluminum walls also help in the modernization of the kitchen. The Hines department has been in the business of modernizing kitchens for 150 years.
AMPLE storage cabinets, easily accessible, increase utility and beauty of kitchen.

AWKWARD arrangement of utilities, limited storage and work counters indicate age of kitchen before it was remodeled.

PROPER relative positions of utilities save steps for housewife in new kitchen.

GARBAGE disposer—a modern convenience that is rapidly becoming essential.

PRODUCTS Used in Kitchen
Hines Lumber Co. custom-made birch cabinets
Hines Lumber Co. custom-made counter tops, Formica covered
Hotpoint refrigerator
Hotpoint garbage disposer
Pittsburgh Plate Glass in fixed sash
Pryne & Co. blow fan
American Standard sink
Universal-Cribben & Sexton gas stove
A Double Function House

House for Minneapolis architect combines all the activity of office and home under one roof

IN URGENT need of a home, yet aware that high building costs would prevent the realization of many personal and special requirements, Harley H. Johnson, one of the up and coming young architects in Minneapolis, Minn., attacked his own postwar housing problem from the standpoint of satisfying only the simple and immediate needs of his family.

Johnson felt that their basic needs were: privacy from the street and neighbors, solar heat, indoor and outdoor living, a play area, some place for overnight guests, an office where Johnson could carry on the practice of architecture, and general control of family and social activities from the kitchen. Being a student of modern architectural expression, Johnson was assured in his mind that only a house of modern functional design would meet all these requirements.

The house is of masonry and frame construction placed on a concrete foundation. Exterior walls are of concrete block and vertical cedar siding topped with built-up roof.
FIREPLACE wall of living room is of natural finish vertical V-cut boards. This same material is used on spandrel below clerestory windows, and on upper portion of opposite wall with exposed concrete blocks below. Ceiling follows the slope of roof and is finished in sand plaster.

VIEW of entrance looking toward office or study. Modernfold door covers the opening. Glass of sidelight and transom are set into a groove in plaster ceiling and exposed concrete block wall without benefit of wood frame.
WITH breezeway and garage, this home would be suitable for a wide or corner lot, and without garage, will fit on small lot.

**Suited for Wide Or Corner Lot**

WITH the attached garage and breezeway, this home is well suited for a wide or corner lot. Without the garage and breezeway, however, it would fit nicely on a comparatively small lot, and still offer a pleasing appearance.

Built in the Sunnymeade Subdivision, Columbus, Ohio, by Builder Walter J. Shapter, Jr., the home represents a typically popular design by Highland and Highland, architects, of Buffalo, N.Y.

Some of the attractiveness of this home lies in its broad, sturdy appearance. Upstairs bedrooms project slightly over the first floor walls; large stucco brackets appear to offer structural support. Stucco on the front of the building is a pale green, while shingles on both ends as well as on outside walls of the upstairs rooms are brown and green. The result is a striking, harmonious color combination.

**FLOOR plan of home designed by Highland and Highland, architects, of Buffalo, N.Y.** Ample closets including large walk-in wardrobes in the master bedroom enhance sales appeal of the home. The plan shown here calls for a full basement.
Home Planned for Comfortable Living

A COMBINATION of outdoor and indoor living is offered in this home through careful planning by Architect J. Brooks Hass, A.I.A., of Jacksonville, Fla. A large screened-in porch, accessible through convenient sliding glass doors, becomes an extension of the living room, and the generous use of steel casement windows opens the home to outdoor scenery.

Built for Mr. and Mrs. Leland Jordan of Jacksonville by local Builder Lawrence C. Pearce, the home offers plenty of storage space without stairways to climb, and its graceful exterior would be an asset to any residential area.

Exterior walls are of concrete block manufactured locally which are 4x8x12 inches.
Fireplaces—the Central Theme

This home in Atlanta, Ga., was designed by Architect John W. Cherry for G. T. Rosenthal and illustrates a new design, the practicality of which southern builders are becoming increasingly aware. It is being used in the west to a considerable extent and is particularly suitable for custom work.

The use of three fireplaces—two inside in the den and living room and the third on the terrace—is an unusual feature. The fireplaces add much to good living, especially in mild climates.

A feature of the design is the grouping of recreation space: the living and dining rooms and the den open on the terrace and are separated from it by glass walls. The large and attractive crab orchard stone barbecue pit dominates the terrace. The bedrooms and kitchen make wide use of continuous window walls.

The broad carport, also using crab orchard stone, adds to the effect of openness.

Mild southern climate dictates use of grouped fireplaces to increase both indoor and outdoor livability.
FLOOR plan shows good grouping of dining and living rooms and den to provide advantageous use of terrace. Extensive use of glass walls is an aid to openness of layout.

EXTERIOR side view of home, showing marine plywood wall, open at bottom for ventilation. Wall acts as screen for glass walls, preventing view of interior from street.
For Those Who Seek Quality

All the elements necessary to good, comfortable living are contained in this three bedroom house suitable for a sixty-foot lot.

The gatefold house for this month designed by Thomas, Grainger and Thomas, A.I.A., of Seattle, Wash., was selected from a group of quality homes of moderate size built by Albert Balch of that city.

The house is designed to conform to its wooded site where the tall pines are in direct contrast to the low, graceful exterior. The finished surfaces, wood weatherboarding, flush siding, cedar shingles and moulded wood cornices, harmoniously blend together in the design.

The house is styled to its environment. Windows on the front are well placed with respect to wall surfaces.

The plan provides for three bedrooms in the rear of house, with living portion and garage spread across the front. This type of room arrangement permits a broad view from living area of the park-like atmosphere of the development of which this house is a part. Basement is provided under rear portion of house with area large enough to accommodate heater and laundry equipment and ample drying space. Crawl space is allowed under floor joists of living area for heating ducts and screen storage.

Construction follows the normal, in that frame superstructure is placed on a six-inch concrete foundation with 12-inch spread footings. The six-inch thickness of walls is permitted because of the rocky nature of terrain. Framing of floor, ceiling and roof are all wood with sheathing, siding in its several aspects, and shingles of the same material. Batt and blanket insulation were used in ceiling.
FIRST FLOOR PLAN

WALL SECTION

DESIGN NO. AB 101
AMERICAN BUILDER BLUEPRINT SERIES
Designed By
THOMAS, GRAINGER & THOMAS, ARCHITECTS
Arcade Building, Seattle, Wash

Simmons Boardman Pub Corp. 79 W. Monroe St Chicago Ill
FRONT ELEVATION

REAR ELEVATION

DESIGN NO. AB 101
AMERICAN BUILDER BLUEPRINT SERIES
Designed By
THOMAS, GRAINGER & THOMAS, ARCHITECTS
Arcade Building, Seattle, Wash.

How Private Builders are Supplying Homes for Negroes

DURING the past three years, Mrs. Velma Grant of Los Angeles, Calif., has started over 640 houses in three subdivisions specifically for Negro families. Of these, 229 in Carver Manor and 95 in Carver Annex are complete. These tracts are in south Los Angeles. The balance of 316 are now under construction in San Bernardino. The houses are of more than 1200 square feet, exceeding by five per cent the area of the average tract house.

Although Mrs. Grant had no previous building experience, she has spent twenty years in the general real estate business. Her activities as a broker brought to her attention the pressing demands for houses by minority groups forced to pay exorbitant prices for inadequate living quarters.

After Mrs. Grant formed a partnership with an experienced builder, the Bank of America made a commitment of over $2,250,000 for the first project she sponsored. The bank is granting further financial aid for the more recent undertaking at San Bernardino.

Paul Williams, a nationally famous Negro architect, designed the first group of houses with off-sets and broken roof lines to give the houses a degree of architectural distinction not often found in tract units.

The construction is conventional with stucco exteriors, plastered interiors, hardwood floors, double tile sinks, showers over tubs, slab doors in front, and attached single garages. Front lawns were landscaped. This group of houses cost from $11,200 to $11,500.

The two and three bedroom houses of the latest development will sell for $6350 to $7250, including an attached garage, landscaping, venetian blinds, clothes lines, and incinerators.
In North Carolina, Rocky Mount realtor-builders promote Lincoln Park for local Negro residents

The need for adequate housing for Negro families in their southern area prompted Robert D. Wimberley and R. Henry Gregory, Jr., to undertake the development of Lincoln Park subdivision. The tract located in northwest Rocky Mount, N.C., is solely for Negro occupancy. The firm of Wimberley and Gregory, operating as both realtors and builders, initiated this project with the help of the FHA and the Metropolitan Life Insurance Company. City officials of Rocky Mount also cooperated in the construction of the Park.

Architects of the Greensboro office of FHA developed the basic floor plan of the houses. The plan consists of a living room, two bedrooms, a kitchen and dining space, and a bath. Special consideration was given to economy and convenience in devising the layout, as the plan indicates. Two plans—one with 676 square feet and the other with 728 square feet—were used with variations in arrangement and exterior treatment.

The selling prices of these two houses are $5450 and $5825 respectively. Monthly payments are $36. The homes were financed with FHA Title VI loans and VA Section 505 second mortgages to enable veterans to purchase houses without a cash down payment.

Ground was broken for this project, the first of its kind in this area, on March 16, 1948. Over forty homes were constructed, all of which are now occupied.

Since the area was outside of the city limits, special provisions were made initially to utilize municipal sewage disposal channels, water, and power lines. The Park, extensively landscaped by its residents, has lately been incorporated into the city.

In Tennessee

In the vanguard of the nation's private builders who are facing the plight of the Negro family and doing something about it are builders of Memphis, Tenn., who, like Mrs. Grant of Calif. and Wimberley and Gregory of North Carolina, are building solely for this minority group.

More than 1400 sales and rental units have been constructed in the Memphis area since 1948 for Negro families without discrimination. A new state law permits sales and rentals to Negroes without delegation to local boards. Mrs. Grant has contributed to the development of the city by setting up and operating an employment bureau. Owners of Lincoln Park are members of the local Negro Chamber of Commerce.
In Tennessee, rental units are constructed with FHA help for Negro citizens by Wallace E. Johnson firm

families. Two recent projects, Vandalia Homes and Lincoln Courts, are rental units built by the Wallace E. Johnson Company, Inc., to furnish low cost housing for these families.

Franklin D. Richards, national commissioner of the FHA, attended the formal opening of the Vandalia Homes apartments, and extended special commendations for this undertaking as did B. W. Horner, Tennessee state FHA director.

More than 900 applications were made for the 170 units of Vandalia Homes which are now complete and occupied. Nearing completion is the Lincoln Courts project to contain 158 family apartments of one and two bedrooms.

Financing for both projects was done under FHA insurance commitments. The success of the first undertaking, Vandalia Homes, and the demand for the apartments justified FHA’s making the second commitment without hesitancy.

The buildings, constructed in units of two, four, eight, ten and twelve apartment buildings, are built on concrete slabs, with asphalt tile floors.

Interiors are plastered and painted. Exterior walls are covered with asphalt shingle siding. Room arrangements are compact, but they provide adequate living space. Gas ranges and electric refrigerators are included with each apartment without extra charge, in addition to other items such as venetian blinds and water.

These three private builders have constructed over 1000 housing units solely for the nation’s Negro families.
E. J. Hoy, owner of the Hoy Construction Co., Minneapolis, Minn.

Low Cost Houses

Feature Quality Materials

In the construction of new homes this builder experiences no sales resistance when branded products used and cost is in line

THE trend toward low cost houses that incorporate a number of design and technical features of the more expensive homes is well demonstrated by the current addition to the project under construction by the Hoy Construction Company, Minneapolis, Minn. Of the 71 homes scheduled for 1949, 50 are being completed and 14 are occupied. These homes being built to sell for $7,950 have copper tubing radiant heat imbedded in concrete slab, Bendix automatic washers, large closets with sliding doors, and scores of other quality features usually associated with homes in the $25,000 bracket.

The houses are all 22 feet by 32 feet. Each has 740 square feet of area exclusive of an outdoor dry storage shed. Veterans buy without a down payment; others pay $1,500 down. Monthly payments are $57.33 including all taxes and improvements, such as street pavement, curbs, sidewalks and all utilities.

The Hoy homes are among the first really low cost units in the Northwest to feature full radiant panel heating.

Forms for the concrete perimeter wall are gypsum board on the outside and two thicknesses of 25/32 Insulite Bildrite sheathing on the inside. Concrete for walls are then poured and sand fill placed on the slab area preparatory to pouring. Heat from the radiant slab would be directly transmitted to the concrete outer wall if it were not for the Insulite forms which

TYPICAL two bedroom plan for all houses

THESE homes are all 22 feet by 32 feet with a total of 740 square feet of living space. Variations in the exterior obtained by changing roof pitch, windows, materials.
The heating system and hot water heater are located in a small closet off the kitchen. The system is natural gas fired and individual valves for each room permit heat control.

The Hoy Construction Company specializes in extensive use of precut building materials and the preassembly of parts. Working from complete and carefully engineered working drawings, Hoy site-assembled roof trusses, wall panels, gable ends and other units to be used in the houses. Precutting follows as a natural step and makes major savings possible.

Hoy has found it easier and more efficient to work on the ground or floor than from scaffolding or ladders. When roof trusses are used, the entire floor area is left open so the carpenter and other mechanics can work unmolested. This method makes it possible to install plumbing, wiring and interior trim economically. For example, Hoy estimates that plumbing can be completely installed in 2½ days with trained crews.

This builder also makes his own siding by fabricating ¼ inch plywood into one foot widths, and then using screen molding under the lower end of siding as it is placed on the wall to give a shadow line effect. Especially treated waterproof plywood is used.

This plywood is placed over Insulite sheathing on exterior walls. Interior walls are finished with ½ inch gypsum wallboard, taped and painted. Ceilings and inside of exterior walls are insulated with aluminum foil. Closets are exceptionally large and have sliding doors made from ¾ inch thick plywood. After waterproofing the concrete, floors of the entire house are covered with asphalt tile. Bathrooms have painted walls and standard fixtures that include a full five foot tub.

**Branded Products Used**
- Ackerman Co. hot water heater
- Aluminum sheet foil insulation
- Armstrong asphalt tile
- Andersen windows (pressure sealed)
- Briggs bathroom fixtures
- Bendix automatic washer
- Copper tubing and flashing
- Gold Seal asphalt shingles
- Gold Bond gypsum board
- Hydro Thermo hot water boiler
- Insulite Bildrite sheathing
- Square-D fuse boxes
- Kwikset & Schlage finished hardware
- Youngstown steel bathroom cabinets
- Youngstown sink and steel kitchen cabinets
- Plastic paints

![Image of houses with text overlay](image-url)

**RADIANT heating with zone control of temperature is a feature of these low cost homes. Copper coils are placed over moisture resistant membrane paper as shown in photo. The hot water is pumped circulated with valves in individual rooms.**

**FORMS for the footings are gypsum board on the outside edge and 2½/32 inch Insulite Bildrite sheathing on the inside as shown at right. Concrete is poured to ground level. Insulating wall sheathing on house below offers both structural strength and insulation in one package.**

**WHEN the project began the interiors of three houses were left unfinished. These are used as cutting shed for assembly of prefabricated parts and for storing paint.**
In all lines of merchandising, old methods and techniques of selling are coming back.

The buying public in general is pulling its purse tighter, and with a gleam in its eye, saying—

**TRY and GET IT**

*By R. E. Saberson*

If the ultimate consumer was ever King, as has been claimed down through the years, there are now unmistakable signs which indicate that he is about to climb back on the throne, after a long period of unwilling abdication.

In our own case, we are doing a bit of plain and fancy exulting—an unusual situation which was brought about by the appearance of a screaming advertisement in a local newspaper. The word "screaming" is used advisedly, since the announcement fairly shouted as though from the house tops. It whooped it up to such an extent that it could be heard above the din created by the many other advertisers who were beating their tom-toms (and their chests) in behalf of the many things they have to sell.

The advertisement which caused us to lean back in our chair, fold our hands over our tummy, twirl our thumbs contentedly, and smile broadly was prepared by none other than a well-known automobile dealer.

We might as well admit at the very beginning that there is nothing unusual in the unimportant incident we are about to describe. No doubt the same thing has happened many times to every reader. We refer to it simply because it typifies so accurately what is now happening to American business. The fact that it pertains to the trials and tribulations of an automobile dealer makes it all the more significant since we have been told repeatedly that automobiles, like houses, would be in short supply for a long time to come.

Of a truth, we felt that way about it something like eighteen months ago when we edged our way, as unobtrusively as possible, out of this same dealer's showrooms, hoping that someone would happen along to kick us around the block for having had the temerity to confess somewhat proudly that we were prepared financially, morally, spiritually and otherwise to purchase a new automobile.

Mr. Automobile Man wasn't long in blasting our hopes to high heaven. In response to our statement that we would like to buy a new car he seemed to have difficulty in suppressing a look of astonishment. Without further ado he turned on his heel and said:

"Let me show you something!"

At first we thought the "something" might be one of the newest creations of the automobile industry, but far be it from such.

"Give me the book," he demanded of the young lady who seemed to have charge of the tome. Flipping the covers open impressively and shrugging his shoulders in a gesture of despair he pointed to several pages of names, addresses and telephone numbers.

"There they are," was his only comment.

Our attempt to appear impressed was correctly interpreted as one of bewilderment.

"Those are the people who are ahead of you," was the cryptic explanation. "Put your name down if you care to and we'll call you when we have something."

We didn't add to the length of the list. It already looked like a telephone directory. No information was forthcoming as to when we might expect a call or what the car would be like. Price? Again the dealer was seized with something closely akin to a convulsion. He raised his eyes to the ceiling in a gesture of despair and said nary a word. . . . not even when we went on our way quietly.

Only a comparatively few months have elapsed since that time, during which our inane question concerning price remained unanswered until this morning when we were thumbing somewhat leisurely through the paper. Of a sudden we sat bolt upright. Our old friend the automobile dealer hit us amidships before we had time to catch...
Develop New Machine
For Laying Bricks

SPEED with this new brick laying machine is made possible chiefly through the elimination of many operations that have become standard practice. Built-in spirit levels and guides do away with the need for plumb lines, string wall guides and repeated use of hand levels. Guides on the frame direct the quick, accurate placing of each brick so the operation of laying proceeds just about as rapidly as a man can pick up bricks and lay them down. A scoop beds eight bricks with one scoopful. A second scoopful covers the course and a back-and-forth operation with a small screed grouts the joints. The machine is then unclamped and shifted to an adjoining position.

The machine was first shown on Huntingdon College campus, Montgomery, Ala., in a demonstration sponsored by the Montgomery Chamber of Commerce. Inventor of the device is Paul M. Sommers, president of John S. Hodgson contracting firm, Montgomery. Hodgson is co-developer of the bricklayer. The recent demonstration in Montgomery was attended by representatives of the Army and Federal Housing units to consider adoption of the device for government construction.

The portable bricklayer weighs less than 20 pounds. The device makes it practical to lay eight to 12 bricks in quick succession, and is said to effect a labor saving of as much as 36 cents a square foot in wall construction.
Use of FORMICA
For Panels and Counters

FORMICA, the registered trademark for decorative plastic laminates manufactured by the Formica Co., Cincinnati, Ohio, is being used very effectively as wall paneling where a hard-wearing decorative surface is required.

In homes, the paneling laminate, called Beautyboard, is particularly suitable for bathrooms and kitchens, either for remodeling or in new installations. Commercial uses include counter fronts, wall paneling in restaurants and stores, and special applications, such as interior finish panels in railroad cars and buses.

The laminates are made from layers of specially-processed paper, impregnated with synthetic resins. Cured under intense heat and pressure, it becomes infusible and insoluble in ordinary solvents.

The Formica wall paneling material is produced by applying a Formica decorative surface to a special industrial hardboard core under pressure and heat. It was designed to supply a wall board which would have the same decorative surface and the same resistive qualities as the regular 1/16-inch decorative laminate, but which would not require veneering to plywood.

The wall paneling is manufactured by the same methods as the 1/16-inch decorative sheets in two thicknesses—5/32-inch and 5/6-inch, and in combinations of 24, 30 and 36-inch widths by 60, 72, 84 and 96-inch lengths. The 5/32-inch thickness is most widely used for all applications.

The material has a relatively high degree of dimensional stability and, when properly applied, will remain flat and true. It is installed on a wall surface by using metal moldings of the insert type, snap-on type or "H" type. Since all edges of the material must be inserted into or covered by a metal molding, it is recommended that a mastic type adhesive be daubed on the back of the sheet to give adhesion to the wall.

The manufacturer states that the paneling may be installed against any type of sound and true wall, including old or new plaster, old or new cinder or concrete block, plywood and others. Where the 5/16-inch thickness is used, it may be installed against open...
The metal moldings must be securely seated to the wall, using applied wood grounds if necessary.

It is sometimes less expensive to sheath the entire wall with inexpensive plywood in order to provide mounting at any point for the metal moldings. Only normal precautions are necessary, such as care that the wall is dry and that water seepage or moisture penetration through the wall will not be excessive.

The material can be applied by any skilled carpenter. It can be cut at the job site with regular carpenter tools by taking normal precaution to protect the decorative surface from damage. The Beautyboard material is intended primarily for use as wall paneling, die fronts, interior finishing panels, and similar installations and is not recommended for work surfaces such as sink tops, table tops and counter tops.

In the planning of new or remodeled bathrooms, the regular 1/16-inch material may be adapted to a number of practical and attractive designs for lavatories, cabinets and dressing tables. It is particularly desirable as an extra working space around lavatories and in the construction of bulkheads which serve both as storage cabinets and as separations between fixtures.

Since built-in units using the material may be built to specifications, their design and arrangement may be determined by individual taste and requirements. The colors and finish of Formica blend especially well with the materials with which it is used, such as glass, porcelain and chrome.

It is not necessary to use moldings as frequently as they are used in the accompanying illustrations, although more frequent use enhances the decorative effect. The amount of molding required can be substantially reduced by use of large sheets.

The Formica veneered trim around the doors and windows in the photograph is a special assembly.

**RIGHT:** Bulkhead plan shows neat grouping of slicing doors, shelf, rack and paper holder. Old bathroom wasted this space.

**BELOW:** Old and new views of bathroom, indicating rearrangement and change to powder room. Elimination of recessed radiator is especially effective. Left: Plan of bulkhead.

**PLAN OF BULKHEAD**
How to Level Cut Rafters on Saw Table

When preparing to make the level cut of rafters for a 5-12 pitch roof, raise the saw as high as it will go and build up saw table with 4x6 inch wood blocks.

This will place the rafter to be cut in a position where it will just clear the nut holding saw blade. With the rafter in this position a 14 inch blade will cut almost like a band saw.

Figure 1 shows rafter to be cut in raised position with blocks under and guide strip nailed to blocks. Figures 2 and 3 show the over-cut obtained when blocks are placed under rafter, and saw remains in normal position.—J. G. Caldwell, San Mateo, Calif.

How to Find Center of Board

A CARPENTER’S steel square is used to find the exact center of a board that may for example measure 5 3/4 or 7-11/16 inches wide, or any other figure.

To use, first make a square mark across the plank, then place the steel square on the board as shown in the sketch. The square is then moved either to right or left so that the reading on each side is the same where the edge of the board meets the scribed mark. The corner of the square is always the exact center of board.—Herbert E. Fey, New Braunfels, Texas.

How to Make a Turntable

TURNTABLE made of one-half or three-quarter inch plywood is secured to top 2x4 member of carpenter’s horse. To install, hole is drilled through center of plywood and 2x4 to receive bolt. Used for painting and assembly—William H. Mullen, Quincy, Mass.

Show Window Details for Modern Store

By Louis J. Gluskin

MAIN streets of metropolitan centers as well as urban areas are taking on new life and interest through the continuous face lifting efforts carried on in outmoded buildings. Individual stores on ground floor levels of new commercial structures in many cases are designed to conform to the nature of the occupant’s business. These conditions have brought to light some very striking and unusual designs in modern store front architecture.

The store front of the Orpheum Lingerie Shop of New York City, detailed on the opposite page is a good example of the results obtained when conforming design to client’s business. In this case a light, airy and somewhat frivolous effect is obtained which is in keeping with the background of the merchandise.

To produce the desired results a variety of sound, permanent materials were used in the construction of the store front. Crab Orchard stone in slate form, measuring 12x24 inches is installed in the same manner as marble, being set in a bed of plaster of paris and secured to masonry wall with wire anchors. This stone is laid up in shades of orchid, rose and tan. Where economy is a factor redwood boards laid either vertically or horizontally, may be used in place of Crab Orchard stone without loss of effectiveness.

Vertical redwood boards in eight inch widths, installed with “V” joints between siding sections, are used as facing for a continuous projecting light trough which runs along one side of front and extends into store. Trough on opposite side is finished in stucco with flower box above in which preserved green ruskus is placed. This unit also extends into the store proper. Glass show cases on each side of entrance are of the abbreviated height type with glass on sides and -top finishing into an extended light trough. Wood trellis above, formed in the popular egg-crate pattern, is built up of 3x12 inch wood beams painted a dark green. The bulkheads and entrance floor are terrazzo finished in two shades of green. The door jamb is free standing and is actually a steel frame covered with mahogany. Store front metal is of bronze. A combination of fluorescent and incandescent lighting is used in the windows. Neon sign above the trellis is an integral part of the store front design.
AMERICAN BUILDER'S STORE FRONT DETAILS

ORPHEUM SHOP - N.Y.C.

Bronze Awning Flap

Bronze Frame

Redwood & P.P. Glass
Mahogany Frame

ELEVATION

Show Win.

Herculite Doors

Terrazzo Floor

Vestibule Crab Orchard Stone

PLAN

SECTION "A-A"

DETAIL NO. G-1
How to Cut a Dado or Groove by Using Two Saws

AN easy way to cut accurate dadoes or grooves is by the use of two saws (preferably back saws), a block of wood and a "C" clamp.

First determine the width of dado or groove to be cut; then select a block of wood a trifle smaller than the length and width of the saw. The block should be of sufficient size that when it is placed in position with the two saw blades the combined thickness will be equal to the desired width of dado or groove. Clamp the block between the saw blades, (one placed forward, the other backward.) Place the block in position so it will stop the cut at the correct depth. When the correct depth is reached the material between the two saw kerfs may then be chiseled out. Submitted by Roy S. Sterrett, Brookings, South Dakota.

How to Re-grind a Drill Bit

VERY fine wood bits may be made by re-grinding drill bits in the manner described below.

Hold the drill bit on the edge of grinder wheel at about a 25 degree angle so that the side but not the point touches the wheel. Grip the flutes of bit with the left hand, move the bit forward until it comes in contact with the wheel, then keeping a constant pressure, rotate the bit by sliding the flutes between the fingers of the left hand, at the same time moving the bit slightly up and down the wheel. Grind one side partially and then the other until an edge is obtained on both sides similar to the one in the diagram. When the bit is finished the spur will be chisel-shaped and the lips will form slight points.

Bits sharpened in this manner will drill faster than conventional drill bits, will not creep on an angled surface and will bore at the very edge of a board. Submitted by Roy S. Sterrett, Brookings, South Dakota.

Interior Features in the Modern Mode

By R. J. Alexander

Designers and builders today are showing an increased interest in the use of materials for interior use that formerly were considered applicable only for the exterior of a house. This use of standard materials together with current products, has caused a new type of interior design to become popular.

The lower photograph of living room shown on opposite page indicates a successful combination of natural finish plywood in one of the close grained woods, and painted brick for wall surfaces. The plywood is made up of small square units with chamfered edges. A feeling of sturdiness is obtained in the detail of hanging shelves through additional depth provided in shelf construction. Drawings indicate several methods that may be used in obtaining this depth. Small angle trims secure shelves to brick wall. The design of shelves is strongly reminiscent of the old mission style, but the material, detail and finish are well adapted to the functional house of today.

The other photograph shown at top of opposite page illustrates a partition separating the entrance hall from living room. Here glass, in an obscure pattern, is used with striking effect, both as a background for furniture and to permit the infiltration of light from window on opposite wall of hall.

In the detailing of wood frame and millings of partition, the designer has reduced the width of wood members to a minimum. This is done without sacrifice of structural strength. Emphasis is thus placed upon the floor to ceiling glass panels minimizing the effect of wood members as supporting elements. Placing the glass at the extreme end of frame provides opportunity for horizontal shelves at upper area of alternate panels. Adjoining walls, doors and ceiling are face brick, asphalt tile and fir plywood in antique finish with chamfered edges. Permanency of finish is obtained with these materials with a minimum of redecorating necessary. Because of the variety of textures and colors involved, a perfect background is created for the placement of furniture. This type of glass partition does not in any sense act as a bearing wall. Ceiling just above extends to next solid partition or outside wall.

Careful detailing and expert craftsmanship are required to achieve the fine results shown in the photographs.
AMERICAN BUILDER'S BETTER DETAIL PLATE

NO. 760. GLASS PARTITION. HANGING SHELVES.

[Diagram showing details of a glass partition and hanging shelves, including dimensions and materials used.]
NEW PRODUCTS
Offered by Manufacturers

OIL FIRED SUSPENSION FURNACE

Model OL-180-S oil-fired suspension unit weighs less than 575 pounds ready to install, and has capacity of between 140,000 and 180,000 B.T.U. input. Compact, efficient unit is 23x27x74 inches. Casting, heater, blower, motor, Eilers, wiring and harness are assembled at factory. All connections to oil burner, relay switch and combination fan and limit controls can be made in a few minutes. Constant speed motor. Variable speed drive. Filters, incorporated in blower compartment, are easily removed and installed. Jackson & Church Co., Saginaw, Mich.

SIDING MATERIAL

Wahlfeld Wahlap siding, made of Masonite tempered presboard, is manufactured in 10 and 12-inch widths, 12 feet long. Easy to apply, a wood starter strip of 5/16x1/4-inch is first applied level and nailed around the entire building, covering the joint between bottom of plate and foundation. First piece of siding is placed on starter strip even with the building, and bottom edge of siding is nailed through on approximately 12-inch center. Sufficient precut wedges used in installation are supplied with siding. Either siding corners or corner boards may be used. Construction of lap joint makes this siding weather-tight. Wahlfeld Manufacturing Co., Peoria 2, Ill.

SLIDING STEEL DOORS

Amweld sliding steel doors for modern storage walls, bedroom or basement storage closets, are made of flat-rolled steel sheets with welded reinforcing for rigidity. Ball bearing rollers at bottom of each panel assures quiet, smooth and trouble-free operation. Rubber bumpers and finger rolls fitted in each panel. May be installed with or without wood frame. Wood trim where used for facing is additional and not supplied with units. Standard sizes available are widths of 3, 4, 5 and 6 feet, with one height of 6 feet 7 inches. The American Welding & Manufacturing Co., 500 Diets Rd., Warren, Ohio.

AMERICAN BUILDER

November 19/9

PATENTED

NEW PRODUCTS | Offered by Manufacturers

WINDOW FAN

Chelsea Type WC window fan incorporates variable speed. Cabinet type, it has a reversible feature. May be mounted on window sill or supported from window frame by attachments provided. Has sufficient capacity to provide one change of air per minute for small homes, apartments, stores, shops, or office suites. Semi-portable, it can be easily installed and removed for the winter months. Available in 24 or 30-inch sizes. Chelsea Fan & Blower Co., Inc., 1206 Grove St., Irvington, N.H.

MAGNETIC CABINET CATCH

Magnecatch, a magnetic catch for cabinets, cupboards, all small hinged doors, is ideal for new homes, new cabinet equipment, or for replacing broken, sticking, inoperative mechanical catches. Good for more than 70 years of normal service, heart of the catch is a lifetime Alnico magnet, working on a phosphor bronze spring mounted on a 2-inch rustproof housing. Magnet contacts a small disc on the door. Simple installation. Engineering Achievements, Inc., 1227 Tchoupitoulas St., New Orleans 13, La.

WATER CIRCULATOR

Taco "HC" low cost horizontal circulator has high quality and capacity required for modern radiant heating systems. Construction includes porous bronze Oilite bearing, patented rotary seals, spring drive coupling, stainless steel shaft, balanced cast bronze impeller, two bolt flanges, and body rotatable for different pumping positions. Quiet operation. Easily accessible for servicing. Wide range of sizes and capacities. Taco Makers, Inc., 137 S. St., Providence 3, R.I.
FREE STANDING DOOR FRAMES
Four new factory assembled free-standing door frames for use with Herculite all-glass doors are now available, in addition to regular line of Herculite door frames. New frames include a Pittco Checking Floor hinge; are ready to set in place. They are engineered to provide the necessary resistance to deflection when the doors are opened. Construction features include heavy steel reinforcements, heavy tubular aluminum extrusions, with anodized finish for covering, and accurately mitered joints. Pittsburgh Plate Glass Co., Grant Building, Pittsburgh 19, Pa.

METAL FIREPLACE UNIT
Model-R, popular-priced, all-metal circulator fireplace with radiant blades, circulates heat throughout the room. Blades are welded to back and sides of fireplace, and act as ducts or flues to direct cool air over hottest areas of firebox. Cool air is drawn in at floor level, guided through heating chamber that surrounds firebox, and warm air is expelled at mantel height. May be installed in old or new fireplace. Electric fan placed behind intake grilles can be used to change unit from gravity to forced air heating system if desired. Available in wide range of standard sizes. The Majestic Co., Huntington, Ind.

ELECTRIC RANGE
New Frigidaire electric range has two ovens for broiling and baking at the same time. Porcelain and chrome back panel protects wells from splashing and holds full width fluorescent lamp, electric clock, oven controls, small appliance outlets, signal lights, and a "60-60" time signal that has two speeds—one for measuring up to 6 minutes, another up to 60 minutes. Surface cooking is done by new Radiantube units that cook faster with less current. Utility drawer moves quietly on triple Nylon rollers at touch of a finger. Frigidaire Div., General Motors Corp., Dayton 1, Ohio.

WATER SOFTENER
Rheem single tank, single valve water softener operates efficiently and inexpensively. As water flows through the appliance, it passes through a bed or Rheemolite, a special zeolite, which withdraws calcium, magnesium and other hard mineral ions from the water and replaces them with soft sodium ions. Application requires a little more than a square foot of space. Rheem Manufacturing Co., New York, N.Y.

ROOF AND SURFACING MATERIAL
Abesto Fiberated Lumiclad, a roof and surfacing material, provides reflective insulation value on top of roof, and insulation to hold heat in building during winter months. Aluminum flakes are bound tightly in suspension by special suspension booster called "Viscroid." This results in a thick, creamy material which remains silver-colored all the way through, providing reflective insulation value. Will not crack or chip. It will expand and contract with the natural "breathing" of the roof. Abesto Manufacturing Corp., Michigan City, Ind.

(Continued on page 122)
NEW COLOR FLOOR TILE AB11926
A new color, a striking yellow, has been added to Wright rubber tile flooring. It is the 21st color of the Wrightex line. Marbleization is of yellow, white and tan, making an intriguing effect. Firm also produces Wrightflor, a harder tile, for use in office buildings or wherever traffic is heavy. Wright Manufacturing Co., Houston, Tex.

COMBINATION WINDOW AB11905
Fleetlite combination aluminum window is factory-cut by precision equipment. When builder receives the window, he removes it from carton, sets it in place and builds around it. Or, if he is working with a frame structure, he will nail the anchor lugs to the studs. Windows are double-hung with double hung sash, storm sash and screen, made from extruded aluminum sections. Glass, put in place at the factory, is held tightly with Koroseal mounts. Velon screen fits between sash and storm sash, or over lower storm sash. All sash snap out for cleaning. Fleet of America, Inc., 413 Dun Building, Buffalo 2, N. Y.

HARDWOOD PLYWOOD PANEL AB11907
Plankweld, a factory finished plywood panel, is 5/16 inch thick 4½ inches wide by 8 feet long, and grooved at each long edge to permit easy installation. Designed particularly for erection over existing walls, panels can also be used for new installations. Simple metal clips along with nailing are all that are needed to install. Now available in birch and oak, the firm plans in the future to produce panels in other woods such as Korina and walnut. United States Plywood Corp., Weldwood Building, 55 W. 44th St., New York 18, N. Y.

UNIT HEATERS AB11908
UBS series may be employed for natural, manufactured, mixed and LP gases, with complete safety. Other safety features are an improved Automatic Pilot employing a new actuating lever and switch design, together with a combination fan and limit control to prevent overheating. Approved by both the American Gas Association and Underwriters' Laboratories. Sizes range from 50,000 B.T.U. to 225,000 B.T.U. per hour input. Surface Combustion Corp., Toledo 1, Ohio.

VENTILATING FAN AB11921
Radia Model No. 1 automatic 8-inch ventilating fan is built to fit all standard construction and permits quick, easy installation in walls, ceilings or wall cabinets. Once installed, only die-cast aluminum grille is visible. Unit may be mounted horizontally or vertically and vented into ducts, air shafts, or outside. Operation of unit is controlled by regular wall switch or by Shepler Model "S" three-speed switch, either of which can be placed at any distance from fan in most accessible location. Shepler Manufacturing Co., 1312 Sheffield St., Pittsburgh 12, Pa.

REFRIGERATOR AB11918
RB75 Coronet model refrigerator, in space-saving cabinet two feet wide and 57 3/5 inches high, has a capacity of 1/2 cubic feet. Long door model maintains safe storage temperatures throughout entire cabinet. "ZerO-Lator" compressor eliminates need for a false bottom in cabinet and increases usable interior storage space. U-type evaporator offers storage capacity for more than 20 pounds of frozen foods and two ice cube trays. Moderately priced unit has five roomy shelves. The Cooler, for Co., Duluth, Minn.

SUSPENDED LIGHT FIXTURE AB11911
"Coloured" lens are installed in new Dino- lier fixture series. Fixtures are operated on three-way switch attached to collar of unit.

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

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When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.
1. Ro-Way quality lumber is personally selected by Rowe’s own expert buyers at West Coast Lumber Mills (no job lots here).

2. Only fine quality three-ply Douglas Fir Plywood used for Ro-Way panels. Notice that for this plywood “exterior grade” glue is used...the kind that is highly resistant to moisture.

3. Multiple Mortisers are used to assure greater uniformity and accuracy in the construction of the wood sections.

4. Ro-Way uses double-end tenoners for efficient construction.

5. Muntins, Rails and Stiles in each wood section are carefully squared up.

6. Ro-Way Drum Sanders give the wood of Ro-Way Doors that silky, lustre finish.

7. Ro-Way workmen put on the finishing touches by sanding all joints and surface by hand.

8. All Sections are carefully rabbed to provide weather-tight ship-lap joints.

9. Notice how mortise and tenon joints are securely glued—then steel doweled.

10. Ro-Way Springs are made in our own plant, and power-metered to the weight of each door.

11. Special machines produce Ro-Way Track Rollers with that “double-thick tread”.

12. After all Ro-Way hardware has been fabricated, it is Parkerized and painted for extra protection against rust and rusty streaks that spoil the looks of a door.

Then Ro-Way Doors are erected with equal care by Ro-Way’s National Network of selected Distributors. You can depend on that sort of factory-distributor teamwork to protect your reputation and give lasting satisfaction to your customers.

---

**ROWE MANUFACTURING COMPANY**  
757 HOLTON STREET, GALESBURG, ILLINOIS, U. S. A.

*Standard sizes available for prompt delivery. Good delivery on special sizes for commercial and industrial use.*
Ripping
Dadoing
Mitering
Cross Cutting
Bevel Ripping
Mitre Dadoing
Compound Mitering
Bevel Cross Cutting
Shaping
Routing
Tenoning
Grooving
Ploughing

Increased rim force permits you to make a deeper cut with less expenditure of power because a 9" blade and 1½ h.p. motor on a Walker-Turner Radial Saw does the same amount of work that ordinary saws can do only with a 14" blade and a 3 h.p. motor.

Here’s how it works. Unusual Walker-Turner motor construction brings the spindle (shaft) close to work through new type of positive cog belt and gear drive. A smaller blade is therefore used to do the required work, thus giving you a double saving. Smaller blades are less expensive than larger ones, less power is needed to turn them.

WALKER-TURNER RADIAL SAWS CUT DEEPER, CUT COSTS THROUGH INCREASED RIM FORCE
Full work visibility—motor yoke attached to gliding ram leaves work area free of obstructing, overhanging rack. No bending, bumping, dodging.

Ball bearing ram—travels 24" on eight correctly spaced ball-bearings. Precision adjustment can be made without disturbing setting.

Center-Pivot—all cuts start from the center of table. Full length left hand miters can be made as easily as right hand miters. Difficult cuts made easy with exclusive Center-Pivot construction.

Controls—on-off push button switch at head of gliding ram; switch for quick voltage change for 110 or 220; elevating crank located where it’s easy to watch exact blade height; three self-indexing, taper-seat latches at 45° and 90°, with positive locks.

Adjustments—only three main points of adjustment: the work table, column guides; motor plate.

Motor—Specially designed, cool operating and powerful motor has 2 1/2 times overload capacity.

Protection—New type guard with anti-kickback pawls and splitter for ripping. Extra protection in the drop leaf side guards.

Table Top—laminated maple, of selected hard kiln-dried stock 46" x 24", and 1" thick. Two fences; center one removable.
Here's How to Dress Up Homes QUICKLY-EASILY At Low Cost!

Use Coffman Stock Grilles, Posts, Brackets, and Entrance Rails

Small homes are easily beautified at very little expense with Coffman Ornamental Iron! All the charm of Old New Orleans and Charleston is built into these hand-wrought ornamental iron posts, brackets, grilles, and railings. Designed by master craftsmen, their architectural proportion is exact, their quality—unsurpassed!

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Coffman low cost ornamental iron has a wide market in the small home field. Wide range of stock items meets all types building requirements. It's a packaged line, easy to stock, easy to sell.

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The R. A. Coffman Co., Inc.
Coral Gables, Florida

TECHNICAL GUIDE for Builders and Craftsmen

How to Make a Sheet Metal Bender

Made of two eight foot lengths of 2x8s, this simple wooden clamp will permit a length of sheet metal to be bent quickly and neatly. Secure a length of angle iron to the end of each 2x8 as shown in the sketch, using flat headed wood screws which are driven in flush with the metal. The screws are driven in both along the edge and the wide side of board. Drill a hole near the end of both 2x8s and insert a heavy bolt. Provide washer and wing nut on top side.

In use, the sheet metal is placed on the bottom 2x8 and top member is clamped over the metal piece. The protruding end can then be bent easily and neatly by hammering the metal down against the face of angle iron.—Submitted by Herbert E. Fey, New Braunfels, Texas.

How to Apply Crooked Sheathing

When attempting to draw a piece of crooked sheathing or siding up tight to the adjoining board before nailing, try the following method.

First nail the crooked board to the studs at each end, with the curve upward. Then take a wide piece of scrap lumber that reaches across two studs and clamp this piece to the studs by means of two large C-clamps. Make a long wedge of the material that is being used and place it between the scrap lumber piece and the top of the crooked siding or sheathing. Sheathing can then be easily driven down into position by driving the wedge in with a hammer. If the C-clamps fail to hold properly under the pressure, nails can be tacked in to hold scrap lumber piece securely.—Submitted by Herbert E. Fey, New Braunfels, Texas.
KEEP IN TUNE WITH THIS COLOR AGE

with

Johnson
RUBBER TILE

AMERICA'S
MOST
BEAUTIFUL
ECONOMICAL
FLOOR

Announcing the Addition of

3 CHARMING NEW DECORATOR COLORS

No. 190 CREAM-TAN (Deluxe) • No. 260 BLACK WITH FLECKS OF GREEN (Standard) • No. 270 DEEP BLUE WITH WHITE (Standard)

Now available in 9 standard and 6 deluxe colors, the most brilliant afforded in any type floor covering. Plain and marbleized. Fade-resistant. Squares, diagonals, duo-cuts and polka dot and star custom inserts. Also 3 other colors in

DEALERS THROUGHOUT AMERICA

DISTRIBUTORS!

Choice territory still open.
Write for details.

OTHER JOHNSON PRODUCTS
RUG CUSHION
STAIR TREADS
VINYL PLASTIC
SET-ON-BASE COVING

JOHNSON GREASE-PROOF TILE

Unaffected by ordinary grease, fats, oil, citrus juice, acids and alkalies. Ideal for commercial kitchens, restaurants, industry, auto showrooms, bakeries, filling stations, etc.

THE NAME OF THEIR DREAM IS—

The General Electric
Complete Kitchen Package

AND IT MEANS FASTER SALES FOR YOU...

CONVENIENCE ... COMFORT ... SANITATION ... ECONOMY!

Under the easy-to-sell "packaged mortgage" plan, the home-buyer adds just a few dollars extra a month—usually an average of about $13.80—to his regular home mortgage.\(^1\)

That pays for the kitchen completely—because it's a basic part of the house—and part of the price too!

The day the new owners move into a G-E equipped home, their kitchen-planning problems are over—because there is nothing else to buy.

They need not worry about future installation costs. They need not worry about heavy short-term installment payments—because they're paying over the years instead of over the months! And General Electric Appliances run so economically, so dependably, the savings can offset the slight extra monthly payments.

These are powerful selling points when you show a house with a General Electric Complete Kitchen Package.

So plan to include the features your prospects will be looking for, insisting on—the features that will help you sell faster, build prestige—the features that come only with a General Electric Complete Kitchen Package!

Put them in your next home-building project.

"Packaged Mortgage" helps you sell!

Those are the things today's home-hunters are looking for... a modern, leisurely way of living that takes the toil, time and trouble out of homemaking.

And General Electric's Complete Kitchen Package ranks first among the desirable features of today's new homes... because it brings them all-electric living!

And that's better living! That's why the G-E Complete Kitchen Package makes your homes easier-to-sell—and faster-selling too!

America's home-seeking millions realize that the General Electric kitchen provides freedom from drudgery—and is easy to pay for! They're sold on it... completely!

General Electric Home Bureau success story of the month

E. A. Ballin of Hewlett Harbor Construction, Inc., East Rockaway, L.I., N.Y., says:

"Architectural Forum and Family Circle featured our model house, and thousands of people visited it. The item which caused the greatest comment was the kitchen with its G-E equipment. In future developments, we plan to include ever increasing amounts of G-E equipment to insure super-salability of our homes."


\(^1\)When equipment is included in a long-term mortgage.

You can put your confidence in—

GENERAL ELECTRIC
NEW LOW PRICES
on this
ALL NEW COMET

only COMETS have these features

1. Maximum portability.
   Easy to move Comets to
   lumber.
2. The Clipper features new,
   easy raising and lowering
   mechanism at front of
   machine.
3. Features exclusive safety
   return spring assembly.
4. All controls located at
   right and front of machine.
5. Comet motors are rated
   to provide 100% overload
   capacity.
6. All exposed parts weather-
   proofed. The pull
   handle and motor control
   switches are only a finger length
   apart, also exclusive with
   Comets. Larger, newly designed
   felt wipers keep retractable arm
   positively dust free during op-
   eration. Own a Comet for better
   cutting and bigger profits. See
   your nearest Comet dealer or
   write direct for new prices.

Study the facts about this great,
new Comet Clipper now avail-
able at new, low prices. Offers
larger cutting capacity: longer
retractable arm, bigger table
top. All exposed parts are
weather-proofed. The pull
handle and motor control
switches are only a finger length
apart, also exclusive with
Comets. Larger, newly designed
felt wipers keep retractable arm
positively dust free during op-
eration. Own a Comet for better
cutting and bigger profits. See
your nearest Comet dealer or
write direct for new prices.

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.
2029-33 Santa Fe Avenue, Los Angeles 21, California

Catalogs and
HOW-TO-DO-IT INFORMATION

649—NAILING CHART—New Gold Bond nailing
chart for use in determining type and quantity of nails
required for use with gypsum wallboard and sheathing
is offered by the National Gypsum Co., Buffalo 2, N.Y.
Chart also gives data on nails to use in applying exter-
ior finish over Gold Bond gypsum sheathing.

650—THE ZINC INDUSTRY—A 64-page profusely
illustrated booklet published by the American Zinc
Institute, Inc., 60 E. 42nd St., New York 17, N.Y.,
describes the principal uses of zinc and its products.
A diagram included shows the flow of zinc from mine
to market. The production and marketing of the
primary derivatives and by-products of zinc are also
covered.

651—GREASEPROOF INDUSTRIAL FLOORING
—New fire-resistant material for industrial applications
is described and illustrated in 4-color, 4-page brochure
issued by The Tile-Tex Division of The Flintkote Co.,
Chicago Heights, Ill. Specifications and colors are offered.

652—CONVECTOR RADIATORS—by Young are
described and illustrated in attractive Catalog No. 40-
issued by the Young Radiator Co., Racine, Wis. Capacity data, specifications and dimensions are shown
as well as typical piping connections for steam, vapor
and vacuum systems and mechanically circulated hot
water systems.

653—“PRIZED POSSESSIONS”—is title of new
catalog issued by the Roach & Musser Co., of Musca-
tine, Iowa, which interestingly presents the Thrift-T
line of quality woodwork for the home. Window units
of several types, colonial entrances and other exterior
and interior doors, garage doors, and other products of
fine woodwork are illustrated and described.

654—BOILER-BURNER UNIT—The new Smith
Mills “100” boiler burner unit is shown in a 4-page
brochure issued by the H. B. Smith Co., Inc., Westfield,
Mass. How the unit includes provisions for heating
domestic hot water is shown, as well as specifications
and dimensions, and illustrations of combustion cham-
er and heating unit.

655—“MARBLE FORECAST—For 1949-1950” is tit-
led catalog No. 22-A offered by the Marble Institute
of America, Inc., 108 Forster Ave., Mount Vernon, N.Y.
Availability of foreign and domestic marbles is given,
as well as classification as to characteristics encoun-
tered in finishing, color ranges, and other information.

656—NEW LINE OF BUILDERS’ HARDWARE—
Several advances in the lock-making art and in build-
ers’ hardware design are featured in an interesting
22-page catalog offered by the Arrow Lock Corpora-
tion, 702 Wythe Ave., Brooklyn 11, N.Y. Entrance
door trim suggestions are presented, as well as illus-
trations of ornamental front door hardware.

657—GLASS BLOCKS FOR COMMERCIAL, IN-
DUSTRIAL USE—New booklet on PC Glass Blocks,
containing general and technical data, illustrations,
construction details and specifications is offered to
architects, engineers, building contractors and owners
(Continued on page 132)
HOLLOW-CORE TYPE
embodying the famous, patented
"INSULOK" grid core

SOLID-CORE TYPE
permanently stabilized
by unique slotted core-stock

Know the Facts
And You Will Prefer

MENGEL Flush DOORS

Mengel Hollow-Core and Stabilized Solid-Core Flush Doors are designed, engineered and exhaustively tested to give life-time service. In both types, exclusive Mengel construction and curing processes provide utmost protection against warpage... hardwood stiles give maximum screw-holding strength and "take" stain, to match faces perfectly... keylock dovetails keep stiles and rails permanently tight... hot-press bonding assures virtually everlasting satisfaction... superfine belt sanding of faces and machine planing of edges reduce installation and finishing costs.

Mengel Flush Doors are the most dependable doors you can buy, yet volume manufacture in high-efficiency plants permits really competitive prices.

The coupon below will bring you complete details. Mail it today, and know the facts.
American Builder, November 1949

Connors Lumber and Land Company

FOREST PRODUCTS SINCE 1872

“LAYTITE” Maple and Birch FLOORING
The World’s Finest
– Bar None

Manufactured and Graded Under M.F.M.A. Specifications

NOW IT’S AVAILABLE IN CARTONS

EASED EDGES

NAILING GROOVE

Write for illustrated 75th Anniversary Booklet

CONNOR LUMBER AND LAND COMPANY

MIXED CARS—Northern Hardwoods, Pine and Hemlock

PHONE No. 3  MARSHFIELD, WIS.  P. O. Box 112-D
Teletype No. 26  Mills: Laona, Wisconsin and Connorville, Michigan

Behind The Mills—The Connor Timber Stands

Catalogs

(Continued from page 130)

by Pittsburgh Corning Corp., 307 Fourth Ave., Pittsburgh 22, Pa. Forty-page booklet is titled “The Mark of a Modern Building—PC Glass Blocks.”

658—A STORY ABOUT FORMICA—titled “News and Views in This Formica World,” has been issued by Formica, 4514 Spring Grove Ave., Cincinnati 32, Ohio. Some of the many different applications of this decorative plastic laminate are described and illustrated in color in the attractive 14-page catalog.

659—“SPECIAL PURPOSE SHEET STEELS—For Architectural Beauty and Permanence”—is title of an illustrated 12-page booklet issued by the Armco Steel Corp., Middletown, Ohio. The booklet describes the properties and uses of Armco’s stainless steels, enameling iron, Zinegrip and Zincgrip-Paintgrip for commercial and home building.

660—FOR BUILDERS OF BASEMENTLESS HOMES—New 4-page brochure issued by the International Oil Burner Co., Spring and Park Aves., St. Louis 10, Mo., graphically presents the firm’s M7 Oil Furnace. Cutaway drawings, illustrations and specifications are shown of unit, which distributes warm air through ducts under wood floors or in concrete slabs.

661—SPECIFICATION SHEETS—For architects, engineers and builders, new series of specification sheets cover application of Trip-L-Grip framing anchors at specific points in light wood frame construction. Released by the Timber Engineering Co., 119 Nineteenth St., N. W., Washington 6, D. C., initial sheet illustrates application of anchors in attaching joists to headers and headers to trimmers. Subsequent sheets covering other framing points will be released each month by the company.


SERVICE COUPON—CLIP and MAIL to CHICAGO

Readers Service Department
American Builder, 79 W. Monroe St., Chicago 3, Ill.

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

Numbers

Name

Street

City

Occupation*

*Please note that occupation must be stated if full service is to be given.
ANDERSEN WINDOWALLS perform two functions simultaneously. They function as WINDOWALLS in that they admit sunlight and fresh air and frame an outdoor view. They function also as walls, protecting the inside from outside discomforts.

Almost the entire facade of this well-designed Minnesota home is made with WINDOWALLS, in this instance a series of Andersen Gliding Windows. The result: a masterpiece of "open planning"—a comfortable, livable home in a region that sees an annual temperature range of more than 125°F.

Specification data on ANDERSEN WINDOWALLS is in Sweet's Architectural and Builders' Catalogs, or will be sent by us upon request. See your local lumber or millwork dealer for further information.

*TRADEMARK OF ANDERSEN CORPORATION

ANDERSEN CORPORATION
BAYPORT • MINNESOTA
The NEW Engineered-to-be-BETTER
ARCH-KOR
FLUSH DOOR

HOME-OWNERS like its enduring beauty
CARPENTERS like its workability and easy installation
EVERYONE likes its modest price

The Hasko Arch-Kor door is a better door... that costs no more than ordinary doors.

It is built of selected materials throughout. No seconds or rejects are hidden behind the face panels. It is built on a new principle of engineered door construction which permits manufacturing savings... so Haskelite can give you better materials and superior quality at conventional prices.

The Arch is a fundamental engineering form. It is the strength member in bridges, buildings, and other structural achievements of ancient and modern times. The principle of the Arch is used to produce the exceptional strength and warp-resistance of the Hasko Arch-Kor door.

This new hollow-core door is of balanced, cross-grained construction to give exceptional resistance to warping.

Because we use selected straight grained materials in the rails and stiles, the door edges plane smoothly and easily, hinges are mounted quickly and cleanly — screws hold permanently. This workability makes faster, easier installation a sure thing with the Hasko door. Up to 1" in width and 2" in height may be trimmed if necessary. Double lock blocks permit 8-way hanging.

You owe it to yourself to find out all the details and specifications of this door that lets you give your customers a better buy. If your lumber merchant does not yet have full information, drop us a letter or postcard for the new Hasko Door bulletin.

DWER WALL by the Upson Company is effectively installed in guest room, and in a boy's bedroom, as shown in these illustrations. It is washable, paintable, and paper may be applied over it if desired floating fasteners. The full-wall panels are washable, paintable, or may be covered with wall paper.

Experienced builders recommend, in the use of most dry wall materials where 3/4-inch thicknesses are used, that two layers be installed. One layer should be placed horizontally and the second vertically. But with some which come in room-long lengths, one layer is sufficient. Also, it is recommended that studs be absolutely straight before dry wall is installed. The reason for this is that dry wall should not bend, and if studs are not even, obviously it is impossible to obtain a correct installation. Installation, with most dry wall materials, is simple and fast.
NOW...a doorway that has everything!

EVERYTHING IN ONE PACKAGE
Pittsburgh Doorways reach the job, ready for bolting into the opening. Twelve standard designs are available which, singly or in combination, will fit any job.

STURDY, HANDSOME FRAME
Fabricated of extra-heavy extruded aluminum, highly polished and anodized. It's reinforced with steel channel and tie rods, as partially shown here.

PITTCO CHECKING FLOOR HINGE
Only 6¼ x 6¼, it is an engineering marvel. Has positive door-speed control, separate checking control, built-in hold-open feature. It's sealed in oil for life.

WITH the new Pittsburgh Doorway you don't even need a screwdriver; there's no drilling of holes in the frame. And there's nothing to assemble. You just unpack the frame, bolt it into the building opening, and hang the massive Herculite Tempered Plate Glass Doors—for which the frame is especially engineered. Everything is in one "package"—the famous Pittco Checking Floor Hinge, moldings for transom glass, supports for sidelights, strikes for locks, sockets for bolts, everything! No time-consuming calculations. No worries about setting and fitting. But this is only a small part of the story. For complete information, why not fill in and return the coupon? There's no obligation.
Modern farm homes

ARE ADDED TO THE WEYERHAEUSER 4-SQUARE BUILDING SERVICES

From the kitchens of all the 4-Square Farm Homes, the farm wife has a full view of the farm yard and approaching visitors... a feature women like.

Modern bathrooms, pleasant, airy bedrooms, and generous clothes closets are outstanding features of these farm homes.

A farm home is truly modern when its plans call for a service room that provides the space and equipment for laundering and other activities.
HELPING BUILDERS SERVE

another profitable field

More and more builders see in the farm market a rich field for the sale of farm homes... because farmers today have the buying power to satisfy the needs of their families for better farm living.

For years, Weyerhaeuser, through the 4-Square Home Building Service, has made available to builders the best in urban small homes... scores of practical, smart homes designed for the popularly priced market.

Now... at a time when interest in farm homes is accelerating at a lively pace, Weyerhaeuser offers six designs of modern farm homes, including floor plans and condensed material lists. Each home has been specially designed to meet farm needs.

Every design includes a service room for such chores as canning, laundering, rough processing... a room that serves as a buffer between the farm yard and spotless kitchen... a room providing space for the men to clean up and store work clothes.

Rear entries open into the service room... halls lead from this room to bedrooms and bath so that traffic is kept away from the rest of the house.

Sparkling kitchens, as compact and efficient as those of city homes, are included, as well as modern bathrooms and light, airy bedrooms.

These homes are designed for comfortable country living... for full size farms or suburban plots... and many a town family would prefer them, for a properly equipped service room is a real adjunct to efficient, convenient housekeeping.

Weyerhaeuser helps builders serve the rich and profitable farm market with specially designed farm homes. See your 4-Square Lumber Dealer for complete details.

NOW BEING ADVERTISED TO 3½ MILLION FARM FAMILIES

Modern Farm Homes are the livet topic with farm families today... and these Six New Designs are being featured in leading state farm papers from coast to coast to focus interest on the new designs available through your 4-Square Lumber Dealer.

Weyerhaeuser
SALES COMPANY
ST. PAUL 1, MINNESOTA
WEYERHAEUSER 4-SQUARE LUMBER & SERVICES
For cooler, cleaner kitchens that sell...

Specify EMERSON-ELECTRIC KITCHEN VENTILATORS to meet your specifications...

Wall Model:
1. Double-rabbet-sealed outer door prevents inside moisture condensation, gives weather protection.
2. Telescoping adjustable sleeve fits walls 5 1/2" to 13".
3. Square outside frame, easy to brick or frame around.
4. Convenient chain actuates fan switch and outer door.

Ceiling Model:
1. Adjustable sleeve joint in ceiling housing fits standard 10" rectangular duct, for necessary extensions.
2. Outside grille has angle baffles for weather protection.
3. Automatic shutter closes duct when fan is not operating.
4. Can be operated by drop chain from fan or wall switch.

Bath Models:
1. Dependable Emerson-Electric induction motors, with thrust bearings.
2. Quiet-type 10" blade moves 470 CFM, a complete air change every 2 minutes for average kitchen.
3. Competitively priced.

...and her specifications!

Bath Models:
1. Equipped with attractive grille finished in baked white enamel.
2. Easily cleaned and serviced—fan and grille are hinged to swing down at a unit without disconnecting.
3. Exceptionally quiet operation—built for long, trouble-free service.
4. Designed to quickly whisk out cooking odors, smoke, steam and heat—protects furnishings from greasy vapors.
5. Backed by Emerson-Electric Standard Factory-10-Year Wor...
Take a complete low-cost shop right to the job in this portable Delta MILWAUKEE

Multiplex

Exclusive with Double Radial Action
2 radial movements do more work than the usual 3!

Tilt motor for bevel Swing track for miter or rip

Delta Multiplex—Machine of Many Uses! Does all this—and more:

- It Cross Cuts
- It Miters
- It Shapers
- It Rabbets
- It Bevel Rips
- It Compound Miter
- It Router
- It Ploughs
- It Tenons
- It Cuts Dados
- It Drills

You make only 2 simple adjustments — to do as many as 125 different operations!

Exclusive double radial action uses only two instead of the usual three radial movements. This reduces set-up time, provides greater safety, and speeds up production. You get more flexibility to do more jobs, easier operation, fewer adjustments, front control of all moving parts, and full use of the saw travel.

Delta Multiplex has unequalled capacity . . . for low-pitch rafters cuts, for difficult left-hand miter cuts, for all-around pre-cut work on the job!

Delta Multiplex is the outstanding value for your work today. Send for descriptive literature. Many models available. Easy time payments. Prices start at $195 f. o. b. Norwalk, Ohio.

POWER TOOL DIVISION
Rockwell Manufacturing Company
Milwaukee 1, Wisconsin

Look for the name of your Delta distributor under "Tools" in the classified section of your telephone directory.

Power Tool Division
Rockwell Mfg. Co.
314 N. Pierce St., Milwaukee 1, Wis.
Send me descriptive literature on the complete line of Delta Multi-lux Multiplexes.

Name:
Address:
City:
State:

Tear Out Coupon and Mail Today
Sell VALUE

of lower grades of MFMA Northern Hard Maple Flooring, for School Class Rooms, Gymnasiums, Residences, Public Housing, Bakeries, Factories, etc.

Sell VALUE

of Third Grade MFMA Northern Hard Maple for Granaries and other Farm Buildings, Shops, Storage Facilities, Recreation Rooms, Dens, Bedrooms.

These days, when building costs have brought "buyer's market" conditions into the lumber business, it's time to bear down on VALUE—simple downright VALUE! The lower prices of the Second and Third Grades of MFMA Maple Flooring offer standout value with no sacrifice of utility to the owner seeking to cut costs. Write for copies of the two MFMA leaflets pictured above.

MAPLE FLOORING MANUFACTURERS ASSOCIATION
Room 386 46 Washington Boulevard
OSHKOSH, WISCONSIN

FLOOR WITH NORTHERN HARD MAPLE
BEECH AND BIRCH

with the HERMAN NELSON
Standard Model Portable Heater

Completely Self-Contained and Self-Powered
- Gasoline Engine Powered — uses gasoline for heating fuel.
- Provides Quick, Clean, Safe Heat — without smoke, soot or open flame!
- Abundant Fresh, Heated Air — forced to areas where most needed!
- Full 250,000 BTU per hour capacity — enough to heat three ordinary five-room houses — yet no bigger than a kitchen stove!
- Lowers winter job costs by eliminating cold weather shut-downs!
- Can be used for countless applications requiring a portable, self-contained heating unit.

Write for information about temporary or semi-permanent heating

ALSO AVAILABLE! HERMAN NELSON KEROSENE BURNING MODELS

HERMAN NELSON ECONOMY MODEL PORTABLE HEATER — Low priced, small, compact — ideal for smaller jobs. Electric Motor Powered — 125,000 BTU per hour.

THE HERMAN NELSON CORPORATION
MOLINE, ILLINOIS

Since 1906 Manufacturers of Quality Heating and Ventilating Products
"We like Atlas Mortar because it is possible to get a more uniform, workable mortar with less effort"

says expert mason Mr. Willard Randolph of August Randolph & Son, Detroit Lakes, Minnesota.

Mr. Randolph's statement gives further proof that experienced masonry craftsmen prefer Atlas Mortar Cement. Many similar reports tell how masons like the buttery plasticity of Atlas Mortar, the easy way it responds to the trowel... and how contractors appreciate its satisfactory yield, its strength and color. Its outstanding durability 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), Chrysler Building, New York 17, N. Y.
BARCOL OVERdoors

ARE IDEAL FOR INDUSTRIAL GARAGES

The principal requirements for industrial garage doors are Easy Operation, Weathertight Closing without sticking, Durability, and Minimum Maintenance. The Barcol OVERdoor has all of these in high degree. Tailored twin-torsion springs insure proper balance for easy operation. An exclusive roller crank closing action provides tight closing with no binding. Well-engineered hardware, especially designed and built for heavy-duty service, gives extra-long life and the strength to stand hard use. Long-time users can testify that Barcol OVERdoors require very little attention to keep in running order, often pay for themselves through savings on this factor alone. Thousands of successful industrial applications — both exterior and interior — can testify to the validity of all these claims. For your next heavy-duty installation, select dependable Barcol OVERdoors — see your Barcol representative for full details and assistance.

American Builder, November 1939

New Kitchen Picture Window

Demand for brighter, more pleasant kitchens is receiving due recognition from this firm which is producing picture window units for this room.

Two new sizes of the multi-panel insulating unit are especially designed for use in the bedroom or as a long narrow unit over the kitchen work area. The sizes are 55 3/4 x 36 inches and 75 x 36 inches.

The factory fabricated units consist of two or more panes of plate glass sealed in a space of dehydrated air by means of a metal-to-glass bond. The windows reduce heat loss through larger areas and lessen condensation on glass during temperature extremes.

British Building Team

(Continued from page 138)

According to the Chicago Metropolitan Home Builders Association, it is easier for workers in the Chicago area to buy homes now than it was in 1939. Ten years ago, it took 20% of the manufacturing worker’s wages for him to buy the kind of home he now can purchase for his earnings over a 185-week period.
"ES-nails really work now we can use gypsum siding for sheathing purposes instead of boarding."

"This will cut more than $250,000 from our construction costs."

Levitt & Sons, internationally famous for their organization, volume and quality construction—spend millions of dollars looking for new products, new methods for getting small homes to buyers—BETTER AND FASTER—Their complete acceptance of ES-nails, the first positive "LOCKING" nail to take full advantage of all savings and construction traits of non-wood siding, shows that ES-nails are self-clinching, and ES-nails can be driven at any convenient point—no need to locate studs.

Use this modern construction method on your next job—a method that thousands of other builders, as well as Levitt & Sons, find affords unquestionable strength; and enduring safety—at a saving.

For more information about the value of ES-nails and the savings it will mean to you, call your supplier, or write:

Elastic Stop Nut Corporation of America, 9330 Vauxhall Road, Union, New Jersey.

A finished house, built with ES-nails, which require NO special technique to apply—Standard building practice was used.

"This will cut more than $250,000 from our construction costs."

Levitt & Sons, internationally famous for their organization, volume and quality construction—spend millions of dollars looking for new products, new methods for getting small homes to buyers—BETTER AND FASTER—Their complete acceptance of ES-nails, the first positive "LOCKING" nail to take full advantage of all savings and construction traits of non-wood siding, shows that ES-nails are self-clinching, and ES-nails can be driven at any convenient point—no need to locate studs.

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For more information about the value of ES-nails and the savings it will mean to you, call your supplier, or write:

Elastic Stop Nut Corporation of America, 9330 Vauxhall Road, Union, New Jersey.
Automatic Self Lighting
H. C. Little Oil Furnaces
Help Sell Small Homes

For these 7 Good Reasons:
(See if you don't agree that these features will help YOU sell)

Low First Cost—Amazingly low in comparison to numerous exclusive comfort and convenience features.

Specifically Designed to small home needs as regards heat output, overall dimensions, construction details and simplified, low cost installation techniques.

Automatic Self Lighting with exclusive H. C. Little electric ignition and 24 hour electric control. NO Pilot Light. Start and stop without attention.

Non-Mechanical Oil Burner has exclusive H. C. Little progressive vaporization principle for fine performance plus maximum comfort and economy.

No Moving Parts in burner to wear out.

Burn Catalytic Oil—More heat per gallon of oil at lower cost.

Factory Guarantee—A real sales tool you can show your customer. Proof of quality.

Underwriters' Laboratories listing builds increased confidence. Proof of safety in operation.

Write for U-R "get acquainted" literature today. The sound dollar values and the sound quality values in Universal fixtures will mean more profits for you.

H. C. Little
Burner Company
SAN RAFAEL, CALIF.

Or contact the nearest H. C. Little Factory Representative:

Bismarck, N. D. Boise, Idaho
Chicago, Ill. Cleveland, Ohio
Detroit Lakes, Minn. Dayton, Ohio
Fayetteville, N. C. Reno, Nevada
Kansas City, Mo. Laredo, Texas
Laredo, Texas New York, N. Y.
Portland, Oregon Salt Lake City, Utah
St. Louis, Mo. St. Petersburg, Fla.

For these 7 Good Reasons:
(See if you don't agree that these features will help YOU sell)

Low First Cost—Amazingly low in comparison to numerous exclusive comfort and convenience features.

Specifically Designed to small home needs as regards heat output, overall dimensions, construction details and simplified, low cost installation techniques.

Automatic Self Lighting with exclusive H. C. Little electric ignition and 24 hour electric control. NO Pilot Light. Start and stop without attention.

Non-Mechanical Oil Burner has exclusive H. C. Little progressive vaporization principle for fine performance plus maximum comfort and economy.

No Moving Parts in burner to wear out.

Burn Catalytic Oil—More heat per gallon of oil at lower cost.

Factory Guarantee—A real sales tool you can show your customer. Proof of quality.

Underwriters' Laboratories listing builds increased confidence. Proof of safety in operation.

Write for U-R "get acquainted" literature today. The sound dollar values and the sound quality values in Universal fixtures will mean more profits for you.

H. C. Little
Burner Company
SAN RAFAEL, CALIF.

Or contact the nearest H. C. Little Factory Representative:

Baltimore, Md.
Buda, Texas
Bismarck, N. D.
Boise, Idaho
Chicago, Ill.
Cleveland, Ohio
Detroit Lakes, Minn.
Fayetteville, N. C.
Kansas City, Mo.
Laredo, Texas
New York, N. Y.
Portland, Oregon
Prescott, Ariz.
Salt Lake City, Utah
Seattle, Wash.
St. Louis, Mo.
St. Petersburg, Fla.

For these 7 Good Reasons:
(See if you don't agree that these features will help YOU sell)

Low First Cost—Amazingly low in comparison to numerous exclusive comfort and convenience features.

Specifically Designed to small home needs as regards heat output, overall dimensions, construction details and simplified, low cost installation techniques.

Automatic Self Lighting with exclusive H. C. Little electric ignition and 24 hour electric control. NO Pilot Light. Start and stop without attention.

Non-Mechanical Oil Burner has exclusive H. C. Little progressive vaporization principle for fine performance plus maximum comfort and economy.

No Moving Parts in burner to wear out.

Burn Catalytic Oil—More heat per gallon of oil at lower cost.

Factory Guarantee—A real sales tool you can show your customer. Proof of quality.

Underwriters' Laboratories listing builds increased confidence. Proof of safety in operation.

Write for U-R "get acquainted" literature today. The sound dollar values and the sound quality values in Universal fixtures will mean more profits for you.

H. C. Little
Burner Company
SAN RAFAEL, CALIF.

Or contact the nearest H. C. Little Factory Representative:

Baltimore, Md.
Buda, Texas
Bismarck, N. D.
Boise, Idaho
Chicago, Ill.
Cleveland, Ohio
Detroit Lakes, Minn.
Fayetteville, N. C.
Kansas City, Mo.
Laredo, Texas
New York, N. Y.
Portland, Oregon
Prescott, Ariz.
Salt Lake City, Utah
Seattle, Wash.
St. Louis, Mo.
St. Petersburg, Fla.
NEW ARRIVAL

Satin-lite has the same quality appearance as Wal-lite... deep cut, wide sloping score lines, satin-smooth baked enamel finish, $25 tempered presdwood base, same distinctive designs.

Satin-lite meets the demand of customers who want a beautiful decorative wall board at lower cost. You'll make more sales by stocking and selling Satin-lite along with Wal-lite. In its price field Satin-lite is made to be the best.

DISTINCTIVE DESIGNS

In Tile Pattern, Parallel-line and Smooth Surface, Satin-lite's designs are identical to Wal-lite. These three meet the widest range of demand. Panel sizes are 4' x 8', 4' x 6' and 4' x 4'; packaging is 192 square feet per crate; all identical to Wal-lite.

BEAUTIFUL COLORS & WHITE

Satin-lite colors follow the same popular selections as Wal-lite but in deeper tones. Peach, Yellow, Green, Blue and Ivory are available with white stripe. White available with Gray, Black and Red-stripe. All colors are complimentary to the lighter tones in Wal-lite.

BUILDERS: SEE YOUR LUMBER DEALER
DEALERS: SEE YOUR JOBBER OR WRITE FACTORY

Manufactured by...
WALLACE MANUFACTURING CO.
10th and FAYETTE • NORTH KANSAS CITY, MO.

DISTRIBUTED Through LUMBER and BUILDING MATERIAL DEALERS
Repairing An Asphalt Strip Shingle Roof

The exposed position and large size of any roof subject it to damage by lightning, hail, wind and falling objects such as tree limbs. The ease with which an asphalt strip shingle roof can be repaired is one of the advantages of this type of roofing. The procedure is the same whether shingle tabs are square, hexagonal or of a special pattern.

Each strip shingle laid with five inches or less of the tabs exposed (Continued on page 150)
A GREAT NEW SANDER

has been added to the

Thor Silver Line

DIRECT GEAR DRIVE delivers 20% extra power to the belt!

NEW HEAT CONTROL SYSTEM makes belts cut faster, last longer.

"ONE PIECE" HOUSING assures permanent peak performance.

Two superb models! Features never before offered in portable electric Belt Sanders! Write for Circular No. JE1131 for complete story of Thor's great new Silver Line Belt Sanders. Independent Pneumatic Tool Co., Aurora, Ill.

DIRECT GEAR DRIVE delivers 20% extra power to the belt!

NEW HEAT CONTROL SYSTEM makes belts cut faster, last longer.

"ONE PIECE" HOUSING assures permanent peak performance.

Two superb models! Features never before offered in portable electric Belt Sanders! Write for Circular No. JE1131 for complete story of Thor’s great new Silver Line Belt Sanders. Independent Pneumatic Tool Co., Aurora, Ill.
You can be sure of complete satisfaction when you specify Getty Casement Operators.

**Why?** Because Getty has specialized for over a quarter of a century in the design and manufacture of the BEST casement operators money can buy! This is your guarantee of quality.

**Getty No. 4703W**

*Internal Gear Angle Drive Casement Operator...* combining the finest, strongest design of casement operator in low modern style, and a modest price. Getty also manufactures the External Gear Angle Drive Operator and Horizontal Gear (reversible) operator.

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**Details Again Sell Houses!**

Buyers are becoming increasingly particular about the kind of home they get and the conveniences in it. Women especially are demanding kitchen ventilation. They want more than just “a fan”. They want the right kind of ventilation and plenty of it. It will pay you to install Getty—leaders in popularity, real stimulators of home sales.

*Only Getty has the nine-speed control switch...* only Getty has the patented blade combining the volume of a fan with the power of a blower.

**Spot Ventilation at the Point of Air Pollution**

*In the Kitchen, Bath, Game Room or Laundry*

Manufacturers of Pry-Lites, recessed lighting fixtures

Factories: Pomona, California; Newark, New Jersey

Warehouses: Los Angeles, San Francisco, Chicago

Stocked by more than 500 wholesalers in over 350 cities.
62 Million Messages to Build Plywood Acceptance

YOUR CUSTOMERS—those for whom you build homes, commercial buildings, farm structures—are being told the advantages of plywood construction through a concentrated national consumer advertising campaign.

This fall, a total of 62 million impressions will be carried by Life, Saturday Evening Post, Better Homes & Gardens, American Home, Sunset, Farm Journal, Successful Farming and Progressive Farmer. Every advertisement tells why plywood builds stronger, more rigid, more durable structures—why plywood is so versatile and useful, as siding, sheathing, subflooring . . . for cabinets, built-ins, paneling.

It means greater acceptance for Douglas fir plywood—in every step of the building job.

Douglas Fir PLYWOOD

LARGE, LIGHT, STRONG
REAL WOOD PANELS

DOUGLAS FIR PLYWOOD ASSOCIATION • TACOMA • CHICAGO • WASHINGTON, D. C. • NEW YORK
when the mercury shrivels down

WOOD windows prove their low "k"

Low thermal conductivity—known to engineers as a low "k" factor—is the reason why wood does not readily transmit heat or cold. And to thousands of home-owners, wood windows prove the value of this low "k" every month of cold weather by increasing comfort and reducing fuel bills—and in minimizing glazing problems.

Windows of Ponderosa Pine have other important advantages to strengthen this preference for wood. These windows discourage condensation—often a cause of costly redecorating problems. Their smooth, even-grained surface readily takes all finishes, permitting these windows to blend in with any decorative plan. The workability of Ponderosa Pine makes installation of window-covering fixtures simple and quick. A scientific preservative treatment at the factory not only enhances still further the long life of these windows, but imparts a prime coat for painting.

FOR FRIENDLY LIVING... Ponderosa Pine

Woodwork

Our new booklet "Ponderosa Pine Woodwork for Today's Home" contains a wealth of photographs, showing interesting applications of Ponderosa Pine windows, doors, cabinets and other woodwork. This new book is a valuable addition to your file—and is yours for the asking. Just mail the coupon!

Ponderosa Pine Woodwork
Dept. SAB-11, 38 S. Dearborn St.
Chicago 3, Illinois

Please send me a copy of "Ponderosa Pine Woodwork for Today's Home."

Name: ____________________________
Address: __________________________
City: ____________________________ Zone: ________ State: ____________

American Builder, November 1949

Repairing Roof

(Continued from page 146)

to the weather will be pierced by two rows of nails. The first step in repair is to pull out the nails in the row of shingles above the damaged strip. Next, withdraw the nails in the strip to be removed. The strip shingle then can be taken out easily.

The replacement shingle should match the original shingles as closely as possible. After the new shingle is inserted, it should be fastened with six nails. All six nails should be on a line 5½ inches up from the butt of the new shingle. There should be one nail ½ inch to each side of the center of each cutout and a nail 1 inch from each end of the strip.

The same system of nailing should be used for the overlapping shingle. Whether the new nails are to be driven through the old nail holes or not, seal the old holes with asphalt cement.

If wind caused the damage, tabs of the new strip shingle, as well as tabs of other shingles in that immediate area of the roof, should be cemented down with asphalt cement. Where wind is a constant hazard, it might be desirable to cement down all shingle tabs on the roof. Special attention should be given to fastening shingles along ridges, rakes and eaves. Shingle tabs are cemented by lifting each tab slightly and with a putty knife or caulking gun, placing a spot of cement about 1 inch from each end of the strip. The same system of nailing should be used for the overlapping shingle. Whether the new nails are to be driven through the old nail holes or not, seal the old holes with asphalt cement.

If wind caused the damage, tabs of the new strip shingle, as well as tabs of other shingles in that immediate area of the roof, should be cemented down with asphalt cement. Where wind is a constant hazard, it might be desirable to cement down all shingle tabs on the roof. Special attention should be given to fastening shingles along ridges, rakes and eaves. Shingle tabs are cemented by lifting each tab slightly and with a putty knife or caulking gun, placing a spot of cement about where the center of the raised shingle tab will rest.

Missouri, Rhode Island Join Tree Farm System

The American Tree Farm System added two more states recently when Missouri, the 25th to join, launched its program Sept. 9 and Rhode Island, the 26th, adopted the plan Sept. 16.

The system is sponsored nationally by the Forest Products Industries, Inc., in cooperation with state agencies, and is designed to give public recognition to forest land owners who do good jobs of management.

Three Missouri properties, representing the types of private forest ownership, were certified as tree farms. They are: Industrial ownership—Pioneer Forest, Shamrock Com., operated by National Distiller Products Corp., 86,000 acres; farm ownership—C. W. Fleetwood, Pilot City, 40 acres; and small, non-farm ownership—A. E. James, Zalma, 1,575 acres.
"Well— what about TEL-O-POST?"

**TEL-O-POST was First**
And constant improvements have kept it first.

**TEL-O-POST is Best Known**
Only post advertised regularly in Saturday Evening Post and Better Homes and Gardens, making customers for you.

**TEL-O-POST is Tested Best**
Prominent midwestern university engineering department found TEL-O-POST stronger, safer.

**TEL-O-POST is Safer—Easier to Install**
Patented features assure safety, easy installation and operation.

**TEL-O-POST is Packaged**
Attractive marked cartons—easy to stock—easier to sell.

**TEL-O-POST Sells**
That's why you should stock and sell 'em.

Write today!

Building Products Division
BRAINARD STEEL COMPANY
4 Larchmont Avenue Warren, Ohio

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Trinity White is a true portland cement made from selected raw materials. It has all the excellent portland cement qualities of strength, endurance and workability. Use Trinity by itself for whiteness — with pigments for purer, truer color values. Use it in architectural concrete units, terrazzo, stucco. Trinity White Portland Cement — plain or waterproofed. Trinity Division, General Portland Cement Co., 111 W. Monroe St., Chicago; Republic Bank Bldg., Dallas; 816 W. 5th St., Los Angeles.

TRINITY WHITE PORTLAND CEMENT

WHY FLUORESCENT LIGHTED MEDICINE CABINETS

Complete Bennett Bilt Lighted Medicine Cabinets cost less to buy and install than separate electrical wall fixtures and cabinets of equal quality. These cabinets increase the attractiveness of modern rooms by providing a more finished, self-contained, compact installation.

Nothing has been overlooked for convenience and quality. No other medicine cabinet has all 18 built-in premium features. That's why you should specify and buy Bennett Bilt Lighted Medicine Cabinets. It costs you nothing for the fully-illustrated complete line catalog. It may mean many dollars to you. Write today.

THE BENNETT MANUFACTURING CO., ALDEN, N. Y.
CUSTOM METAL CRAFTSMEN SINCE 1906

LIKE A TEETER-TOTTER...

Tilt-A-Door operates with

• NO SPRINGS
• NO TRACKS
• NO NOISE

Just a simple tilting action. Aluminum construction is unaffected by weather. No sticking, warping or freezing. Nothing to get "out-of-order". Nothing to wear out. Noiseless, sturdy and smart. Simple installation.

Exclusive areas available to Dealers and Distributors

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Please send me detailed information on your Aluminum Garage Door.

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STATE
I hand does the work of 10!

Black & Decker 8" “QUICK SAW”*

ideal for one-hand operation, 10 times faster than hand sawing in many construction jobs!

You haven't seen anything until you've watched a Black & Decker 8" Quick-Saw in action . . . and put it to work saving time and cutting costs on your building and construction jobs! This 8" model is especially suited for one-hand operation because it is close-coupled and perfectly balanced. Like all work-saving Quick-Saws, it is:

SPEEDY . . . beats hand sawing 10 to 1 and eliminates fatigue.

VERSATILE . . . makes many cuts in many materials: rip, cross-cut, angle, groove, dado; in wood, metal, stone and compositions.

PORTABLE . . . use it anywhere; operates on any standard power line or portable generator.

EASILY ADJUSTED . . . quick adjustments for angle or depth of cut or for changing blades and discs.


Ask your nearby Black & Decker Distributor for a demonstration. Write for our catalog to: The Black & Decker Mfg. Co., 666 Pennsylvania Ave., Towson 4, Maryland.

LEADING DISTRIBUTORS EVERYWHERE SELL

Black & Decker
PORTABLE ELECTRIC TOOLS

8" Quick-Saw
Cuts to 23/8" Depth
Also 7" and 9" Models
Any Fireplace is Easier to Build

around the HEATILATOR* Fireplace Unit

The Heatilator unit is a scientifically designed form around which any style of fireplace is easily built. Complete from floor to flue, it actually circulating heat...gives protection against the common causes of smoking.

**Saves Time ... Saves Materials**

⭐ **SAVES** cost of building downdraft shelf and smoke dome.

⭐ **SAVES** cost of separate damper and its installation.

⭐ **SAVES** time and labor in forming firebox and throat.

⭐ **SAVES** cost of firebrick and labor to line firebox.

The Heatilator name on the dome and the damper handle is your protection—refuse substitutes.

Write today for installation data.

HEATILATOR, INC.
355 E. Brighton Ave., Syracuse, N.Y.

*Heatilator is the registered trade mark of Heatilator, Inc.

Levittown...

(Continued from page 85)

the trusses. A two-inch layer of rigid insulation was applied over the sheathing under the 5-ply built-up roof. The roof is finished with Vermont white marble chip embedded in the last coat of asphalt. This not only adds to the appearance of the roof, but also has considerable reflective insulation value.

These large recreational structures are heated with a combination radiant and forced warm air system. Heavy corrugated galvanized steel 30-inch ducts are installed around the perimeter in the concrete slab, with floor registers at regular intervals. Warm air is forced through the ducts, some of it escaping through the registers to circulate and keep air clean.

The shopping centers, recreational buildings, swimming pools, parks and other supplemental housing facilities being supplied by Levitt & Sons in Levittown, comprise but a part of their well-planned “world’s largest housing operation.” The huge, intricately geared organization run by Levitt landscapes all streets and the yards of the individual homes. The thoroughness of every job amazes individuals who have been builders all their lives. Levitt & Sons are winding up 1949 with more than $50,000,000 worth of work completed. In addition to the houses being erected in Levittown, the firm this year is completing about 400 houses in Roslyn, N.Y., on Long Island, which have been sold at prices ranging from $17,500 to $22,000.

**PRODUCTS USED IN LEVITT COMMERCIAL STRUCTURES**

Barrett built-up roofs
Bell & Gossett water pumps
Bethlehem Steel beams
Briggs plumbing fixtures
Detroit Steel Products windows
G.E. furnaces
J-M insulation board
Kompolite Co. terrazzo
Lewin-Mathes copper piping
Minneapolis-Honeywell furnace controls
Pittsburgh plate glass
Sani-Metal partitions
[Tyreproof Products Co.]
Sargent hardware and door checks
Teco timber connectors
Timken furnaces
U.S. Air Conditioning Corp. units
USG plaster and gypsum board
U.S. plywood
Wheeling Corrugating Co. heat ducts
Williamsburg steel door bucks and doors
York-Shipley furnaces
How to DOUBLE the sales appeal of big windows

Picture Windows! Their beauty attracts more prospects to the homes you open for inspection. When they are Thermopane®, you point out that insulation is built in...no storm sash are needed. Thus you give home buyers two things they want: "open look" and greater comfort and convenience.

Thermopane is a sealed, double-glass unit...the easy way to insulate glass areas. It stays in all year. In summer, it helps keep rooms cooler. In winter, it cuts heat loss, reduces downdrafts, minimizes condensation, saves fuel. Its insulating efficiency makes Thermopane a wise choice for every type of window throughout the house. For details, write for our Thermopane book and list of over 70 standard sizes.

*®

FOR BETTER VISION, SPECIFY THERMOPANE
MADE WITH POLISHED PLATE GLASS

MADE ONLY BY LIBBEY-OWENS-FORD GLASS COMPANY
4119 Nicholas Building, Toledo 3, Ohio
WALLS UP! in 3 DAYS with SPEED-WALL

AMAZING EVIDENCE

Study these pictures. They make eye-popping evidence in support of Speed-Wall advantages. They reveal the swiftness with which floor, walls and roof, all Speed-Wall, were erected on the new Marinos Restaurant, Topanga Canyon Beach, California...Speed-Wall's greatest virtue is its sound engineering principle which results in great strength and ability to absorb vertical and horizontal stresses. Not a pre-fabricating method, exterior and partition Speed-Wall may be pre-cut, or cut on the job. Speed-Wall construction saves from one to two dollars per sq. ft. of floor space. Eliminates fire-blocking, studding, diagonal bracing, insulation, plaster and stucco. It is amazingly fire-resistant, has very high insulation and acoustical values. May be stained, varnished, calcined or paneled...Speed-Wall is versatile in application. May be effectively integrated with other elements. Opens wide new field in architectural adaptation. Offers larger profits to builders! Write for free information!

Available Kiln Dried if Desired

It's New! It's Practical! It's Economical! It's Amazingly Fast Construction! For tract development or single homes. Arrange now to handle this type of construction exclusively in your area.

FOR FASTER AND BETTER BUILDING

American Builder, November 1948.

Hotpoint Announces New Pushbutton Ranges

Hotpoint, Inc., has announced its 1950 model electric ranges with the line highlighted by a new pushbutton model which brings this type of range into the medium price class.

The new model will be a companion model to the firm's two top deluxe pushbutton ranges. A change in the two deluxe pushbutton ranges will be a new 1600 watt "instant heat" calrod unit designed for high speed cooking. Under tests it boils a pint of 60 degree water in four minutes.

This unit is standard on the RD-7 double oven range and the single oven model RD-6. Both have pushbutton controls that light up in different colors to show settings of four surface units and ovens. The RD-6 model has a raisable deep well cooker Calrod unit to increase flexibility by conversion to a fourth surface unit.

Underwriters Laboratory Conducts Test on Perlite Plaster

In an effort to determine the fire-resistant qualities of perlite plaster, the Perlite Institute is conducting a series of tests, particularly as they apply to the fireproofing of interior steel columns. These tests, held at the Underwriters' Laboratories, Chicago, Ill., are but the beginning of further experiments in the use of lightweight aggregates in plaster and concrete.

In the current test two steel columns are used, each enclosed with metal lath and plaster composed of perlite aggregates, and metal corner beads. In the case of "A" column the plaster was forced through the metal lath to make contact with steel flanges of column. In "B" column the plaster was applied in the normal manner. Test on "A" column showed a three hour and 45 minute resistance before thermostats attached to the columns indicated that the degree of heat applied to the steel had reached the critical point.

This is the first of a series of tests (Continued on page 158)
America’s “Look-Ahead Builders” Point the Way...

HOW TO SELL
WHAT YOU BUILD

Add Comfort, Appeal, Value to Your Projects.
Make Bendix Equipment Part of Your Blueprint

The days when home-buyers gritted their teeth and took anything that would keep the rain off are gone! Today, they're looking for extra value. Extra comfort. Extra convenience.

That's why some of America's biggest builders provide for a Bendix installation right in the blueprint stage. It's an inexpensive "extra" that sells your units fast—and first!

To get first-hand information on how little a Bendix installation costs, and how much it does for you sales-wise—see your Bendix distributor.

The Great Bendix "Economat"—Ideal for small homes, duplex projects or rental units.

Here's the amazing new low-price Bendix automatic that America's gone crazy about. Fits anywhere in house or apartment. Never needs bolting down. Widely advertised—nationally known. Worth twice its price to you if you're building small or rental units!

Look over this list of blue-chip builders—all Bendix boosters!

Levitt & Sons, Manhasset, N. Y. • Gross Homes, Clayton, Mo. • Taylor Development Co., Richmond, Va. • Place & Co., South Bend, Ind. • Tauxemont, Alexandria, Va. • Byrne Organization, Baltimore, Md. • Merrick-Kleist Homes, Cleveland, Ohio • Ridge Crest Project, Seattle, Wash. • Burns Realty Co., Denver, Colorado.
Top photo shows the new $10,000,000 Kent Village housing project in Maryland now under construction. The giant project includes over 1,000 units.

Lower photo illustrates the DRIVE-IT '38 tool being used to anchor wooden sleepers, for partitions, to the concrete flooring.

DRIVE-IT does it again...solves a tough fastening problem and saves time and money for the contractor.

On the Kent Village project over 75,000 feet of 2" x 4" wooden partition sleepers have been anchored to concrete. A two-man crew "set" more than 25,000 drive-pins at the rate of over 800 "shots" per day. That's some record; and, to quote the contractor, it was done "at a saving in cost of 75% over conventional methods!"

You, too, can enjoy these amazing savings on common fastening jobs where steel or wood must be anchored to steel or concrete. Take a tip from Mr. Hubert Hendricks, General Superintendent on the Kent Village job who says: "We are very pleased with the results of DRIVE-IT powder-powered tools and would gladly recommend them to anyone having similar anchoring problems."

Write today for the facts on DRIVE-IT—the new money-saving, safety engineered fastening system. We'll be happy to arrange a demonstration through your local DRIVE-IT distributor.

Harold Hauf Named Editor Of Architectural Record

Harold D. Hauf, chairman of the department of architecture and professor of architectural engineering of Yale University, has been appointed editor of Architectural Record magazine, published by the F. W. Dodge Corp. He succeeds Kenneth K.

HAROLD D. HAUF

Stowell, who recently resigned, it has been announced by Judd Payne, publishing director of the magazine.

Hauf, who obtained his B.S. in architectural engineering at the University of Michigan and a master's degree at Yale, is a member of the American Institute of Architects and the American Society of Civil Engineers. He is vice president of the Association of Collegiate Schools of Architecture, co-chairman of the joint committee of the A.I.A. and the Producer's Council and a commander in the civil engineer corps of the U.S. Naval Reserve.

On active duty in the Navy from 1941 to 1945, Hauf was with the Bureau of Yards and Docks. He resumed his duties at Yale in 1945 and also practiced as research consultant for investigation of new building materials and methods with the view of reducing construction costs.

Perlite Test

(Continued from page 156) to be carried on by the recently organized Perlite Institute. The purpose of these tests is to bring to the attention of building commissioners and code making authorities the important properties of this new lightweight aggregate.

Members of the Institute, together with Wharton Clay, secretary and Harry Lewis, chairman of Technical Committee of the Perlite Institute were at the laboratory during the test. Representatives of the U.S. and Cleveland Gypsum Companies, Chicago Plastering Institute, and the Building Commissioner of Kansas City were among others in attendance.
Aggressive engineering keeps American Machines out-front in ability to save job-time and labor for you... and increase your profits!

In this ALL-AMERICAN "family portrait" you'll find outstanding new members—the sensational new Super 8 Floor Sander... new American Rental Floor Sander... new American DeLuxe Maintenance Machines... new American Wet or Dry Vacuum Cleaning System... and the new big-power American 8½" Saw!

Also, other American Machines unbeatable for a wide range of everyday jobs in flooring, construction and maintenance. Send coupon for more details.

American Floor Machines—Portable Tools

Send Coupon Today

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

[ ] Floor Sanders [ ] Floor Edgers [ ] Saws
[ ] Small Sanders [ ] Maintenance Machines

Name: ____________________________
Street: ____________________________
City: __________________ State: ______
Crane Cuts Erection Time On Pre-Fabricated Homes

Use of a truck-mounted hydraulic crane has reduced the time required to unload and erect pre-fabricated houses from six or seven hours to approximately two and a half hours. Officials of the Petroleum Equipment Co., Milwaukee, Wis., reported recently. They said they have used the machine, a Hydroncane manufactured by the Bucyrus-Erie Co., South Milwaukee, in the erection of Page and Hill pre-fabricated homes and also in steel erection, hoisting of roofing material, digging house connections and other operations.

Before the crane was employed, the contractor unloaded the homes with a chain hoist mounted on a motor transport tractor. The tractor was detached from the semi-trailer which had hauled the house sections to the site and used to hoist and pull the sections off the trailer and to move them to the house foundation. They were set in place with the aid of the hoist and hand labor.

In cases where the ground was rough or sloping the tractor could not reach the foundation and it was necessary to do additional work by hand.

The entire job of lifting the sections from the semi-trailer and placing them on the foundation is now handled by the crane, the construction men said.

Building Inspectors Conference To Emphasize Public Relations

One of the principal objectives of the building inspectors conference, to be held February 26, 27, 28, and March 1 at Purdue University, will be the development of techniques to enable the inspectors to do a better job of presenting building codes to the people with whom they deal.

While public relations will receive special treatment, certain technical aspects of the whole inspection problem will be included in the conference. The specific subjects to be in-

(Continued on page 164)
Announcing

Great New Facilities...Great New Service

...Same High Quality Standards in

KNAPP METAL TRIM

- Tremendous Plant Expansion plus Vastly-Improved Delivery Schedule
- Increased Scope of Service and Quality Products to Architects and Contractors

NOW... famous KNAPP, a great name in metal trim, announces the biggest news in its almost half-century history! Long known to architects and contractors, Knapp today provides greater facilities and service than ever before.

Backed by 45 years of outstanding metal trim fabrication, Knapp Bros. Mfg. Co. now offers you almost every conceivable metal trim item necessary to modern building construction. Standard items of guaranteed precision and quality, plus custom-built parts that meet the strictest, most exact architectural specifications.

Expanded manufacturing facilities now provide all required metal trim faster, more accurately, better... with prompt delivery assured.

To insure the correct answers to your construction problems, specify KNAPP METAL TRIM in all future building planning. Write today for full details on Knapp Metal Trim and allied products.
The makers of Har-Vey Hardware's component parts are nationally recognized as leading manufacturers of quality products. Sources such as Chrysler Corporation, Anaconda Copper, Formica, Reynolds Metals, etc. were selected because they represent QUALITY in their respective fields - and contribute superior materials & workmanship to the production of Har-Vey Hardware.

There's superior design, too, to match superior parts, for Har-Vey Hardware has been engineered to assure easy installation and smooth, silent operation. A new design feature guarantees positive locking of the hanger to the door, and use of oilite bearings has made Har-Vey Hardware completely rustproof.

Prominent in the Frantz line of Guaranteed Builder's Hardware is a complete range of sizes and types of high quality Butt Hinges, in both plated and bright finishes... sturdy strap and tee Hinges... ingenious Hasps and similar items. You'll find it both convenient and profitable to select all your Builder's Hardware requirements from the complete Frantz line.
and you'll choose CURTIS Silentite!

In a 40-mile wind you'd soon know the difference between Curtis Silentite and ordinary windows. For under such conditions, Silentite allows 20% less air infiltration than the famous original Silentite—America’s first “insulated” window.

There are scientific reasons for Silentite’s superior weathertightness. "Floating" weather-strips press snugly against the side of the sash, yet allow easy movement. Gone is the conventional check rail—in its place a new type rail with specially designed weather-strip members. Bronze spring leaf weather-stripping at the head and sill complete this superior window design. And Silentite is a wood window for maximum insulation value and reduced heating costs.

Silentite Windows are easy to operate—have no weights, cords or pulleys. They have the streamlined beauty that comes from slender mullions and wide glass areas. Toxic and water-repellent treated, Silentite windows assure lasting value in any size or type of home.

Curtis Companies Service Bureau
AB-11S Curtis Building, Clinton, Iowa

Please send me book on Silentite Windows, including casements.

Name: ____________________________
Address: __________________________
City: _____________________________ State: __________

I am:  □ Architect
□ Contractor
□ Prospective Home Builder
□ Student
(Please check above)
Build EXTRa COMFORT into your houses at low cost! ... with a PRICE Fyro-Place

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

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

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

Make Price FYRO-PLACE a Community Habit!

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

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

PRICE FIREPLACE, HEATER & TANK CORPORATION
139 AUSTIN STREET BURFALO, NEW YORK

Paul B. Shoemaker Joins Georgia-Pacific Plywood

Paul B. Shoemaker, for the past five years sales manager of the United States Gypsum Company and affiliated with that firm for 22 years, has been named vice president and director of sales by the Georgia-Pacific Plywood & Lumber Co. Shoemaker, a native Iowan who attended the University of Minnesota, has been connected with the building materials industry for the past 27 years.

At the same time the Company announced the election of William J. Renn, Jr., as vice president in charge of the Plywood Sales Dept. Renn has served Georgia-Pacific as manager of the Plywood Sales Dept. for the past several years.

Clark Equipment Co. Opens New Factory

The Clark Equipment Co. recently completed a new factory at Jackson, Mich., the firm's president, George Spatta, has announced. The company also has plants at Buchanan, Battle Creek and Berrien Springs, Mich.

Building Inspectors (Continued from page 160)

Included in the program will be selected from a wide range of problems which are being submitted to the committee for consideration. The general classification of problems will be building, sanitation, and electrical inspection.

The conference will be sponsored by the School of Civil Engineering School of Electrical Engineering and the Technical Extension Division. Cooperating with the University will be the Midwest Conference of Building Officials and Inspectors, Illinois State Building Inspectors Association, Building Officials Conference of Michigan, Missouri Association of Building Inspectors, the American Society of Sanitary Engineers and the Illinois chapter of the latter.
GOOD PAYING JOBS FOR YOU

because we're giving home owners remodeling ideas like this!

THIS October Post ad is timed to help you line up profitable jobs all through the winter. It's another in the Gold Bond full-color Saturday Evening Post series that sells remodeling ideas to home owners right in your community. This one features a charming recreation room that can be built at low cost with Gold Bond Gypsum Wallboard, the fireproof board that is unaffected by cellar dampness. It comes at the right time, too, just when folks are leaving their gardens and thinking about improvements inside the house.

So when prospects ask for ideas for basement gamerooms, attic apartments, and other remodeling jobs—give them Gold Bond ideas! In addition to full-color reprints of this ad we'll be glad to send you our "Modernizing Magic™" booklet which illustrates many remodeling and modernizing ideas. Write Dept. AB-11, National Gypsum Co., Buffalo 2, N. Y.

GOLD BOND GYPSUM GRAIN BOARD (Shown Below) is the low cost answer for those smart, expensive-looking remodeling jobs, either home or commercial. It gives the warmth and beauty of fine wood paneling at low wallboard prices. Saves, too, because no further decoration is necessary.

Bleached Walnut Knotty Pine

You'll build or remodel better with Gold Bond

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.

Over 150 Gold Bond Products, including gypsum lath, plaster, lime, wallboards, gypsum sheathing, rock wool insulation, metal lath products and partition systems, wall paint and acoustical materials.
Selected for Six
OF THE NATION'S LARGEST,
NEWEST MULTIPLE DWELLINGS

1. STUYVESANT TOWN
   New York City
2. PETER COOPER VILLAGE
   New York City
3. RIVERTON
   New York City
4. FORDHAM HILL
   New York City
5. PARKLABREA
   Los Angeles, Calif.
6. PARKMERCED
   San Francisco, Calif.

HOLLOW STEEL
DOORS and FRAMES

The choice of wise investors

Cost less
TO INSTALL!

Cost less
TO MAINTAIN!

Outlasts
THE BUILDING ITSELF!

Prompt Delivery Anywhere in U. S. A.

Write for DESCRIPTIVE BULLETIN

UNITED STEEL FABRICATORS, INC.
WOOSTER, OHIO

Raymond K. Watkins Is
New Stamford Division
Sales Manager For Yale

Raymond K. Watkins has been appointed trade sales manager of the Stamford Division of The Yale & Towne Manufacturing Co. as a step toward the complete reorganization of the Division's sales department, it was announced by Meade Johnson, general sales manager. Johnson also announced the appointment of Walter J. Cyr as assistant trade sales manager.

In his new post, which consolidates the duties of several sales manage-

RAYMOND K. WATKINS

HHFA Announces Director
Of Slum Clearance

Appointment of Nathaniel S. Keith as director of the new slum clearance and urban re-development program provided by Title I of the Housing Act of 1949 is announced by Raymond M. Foley, administrator of the Housing and Home Finance Agency.

The directorship was established in the office of the HHFA administrator by the new housing act. In his new position, Keith will be responsible, under the administrator, for carrying out a program providing for $1,000,000,000 in loans and $500,000,000 in grants to communities throughout the country for acquiring, clearing, and preparing slum and blighted areas for re-development.
As to the name, there is no question... your own customers have established Crane as the favorite name in plumbing.

So choosing a sink for any one of them becomes a matter of size and price. And here, too, Crane has everything your customers may wish—a sink for every space, a price for every purse. One or two basins... single or double drainboards... Crane has them in all combinations, including the most complete counter-top installations you'll find.

This breadth of line is typical of Crane wherever you see it. In bathrooms, too, where Crane offers complete groups in every price bracket. Again in home heating, where Crane supplies every requirement for any system... hot water, warm air, or steam... coal, coke, oil, or gas.

When making selections from the complete Crane line, you'll find it helps to check your plans with your Crane Branch or Crane Wholesaler.

CRANE KITCHEN SINKS range all the way from 38" to 72" in width, include such popular features as retractable hose spray... swinging mixing spout... finger-tip Dial-a-see controls.

KITCHEN PRIDE 38 in. wide
KITCHEN QUEEN 72 in. wide
SUNNYDAY 54 and 60 in. wide

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5
PLUMBING AND HEATING • VALVES • FITTINGS • PIPE

NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS
FROM TRADITIONAL
TO MODERN


CABOT'S
Creosote Stains
SUIT THEM ALL!

Cabot's Stains are a natural for wood siding, clapboards and shingles. They penetrate deeply... bring out the grain and texture... lend distinctive beauty to homes of every design. Cabot's Stains are favorites with builders everywhere because:

Economical price — only ½ as much as good paint.

High proportion of creosote oil—gives years of protection against termites and decay.

Durability—in the most severe climates.

Wide range of colors—unlimited combinations to vary appearance of identical homes.

Ease of application.

WRITE TODAY! Free Color Card showing complete range of colors—weathering grays and browns to brilliant lasting hues! This color card and complete information about Cabot's Stains are yours for the asking.

Samuel Cabot, Inc.
1124 Oliver Building
Boston 9, Mass.

Oak Flooring Association Adopts Grading Rules For Pre-Finished Hardwood

Official grading rules for pre-finished hardwood flooring have been adopted for the first time by the National Oak Flooring Manufacturers' Association.

Authority to formulate the rules was voted by the organization's grading, milling and inspection committee. Representatives of member companies which produce pre-finished hardwood flooring assisted in drawing up the regulations.

For many years the association has had official grading rules governing unfinished strip flooring of oak, maple, beech, birch and pecan. Pre-finished flooring, manufactured by some of the organization's 73 members, is a comparatively recent industry development.

The new rules provide for four grades of pre-finished oak flooring and one of beech and pecan. They specify that all grades be established after the flooring has been sanded and finished, and that red oak and white oak species be separated.

Top grade in the oak species is prime. Next are standard and better, standard and tavern. The grade in beech and pecan is designated as tavern and better.

House Committee Approves Added Mortgage Funds

Legislation to encourage home building by giving the government an additional $2,275,000,000 to insure or purchase mortgages, was approved Oct. 10 by the House banking committee. Similar legislation has been passed by the Senate, and leaders expected Congress to complete action on it before adjournment. The bill would:

(1) Increase by $25,000,000 the $200,000,000 previously authorized for insurance of loans for home repairs and modernization of low cost homes.

(2) Add $750,000,000 to the $6,000,000,000 previously authorized for insurance of mortgages on medium price homes.

(3) Add another $500,000,000 to the $6,150,000,000 previously appropriated for the insurance of loans on large scale rental housing projects.

(4) Authorize $1,000,000,000 in federal purchases of home mortgages. Under present law the government can purchase 50 per cent of the home mortgages held by a private lender under certain limitations. The approved bill would let the government purchase all of the mortgages held by a private lender on veterans' housing.

American Builder, November 1949.

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American Builder, November 1949.
Nothing heats better than Modine Convector

Radiation . . . NOTHING LOOKS MORE BEAUTIFUL
IN A BEAUTIFUL ROOM

For the full story, call your Modine Representative.
He's listed in the "Where-to-Buy-it" section of your phone book.
Ask to see a sample, or write direct.
Modine Mfg. Co., 1501 Dekoven Avenue, Racine, Wisconsin.

Send for New Modine Convector Catalog Today!
Special 1-Pipe Steam Convector Bulletin Also Available.
It's Easy... It's Economical!

Eliminate Your
CHIMNEY
PROBLEMS
WITH A PHONE CALL

Here's How:
Be free of delays when the building is ready for the chimney... get fast action, just phone your Van-Packer dealer and ask him for the

VAN-PACKER PACKAGED CHIMNEY
Easily installed in 3 man hours by a sheet metal man or carpenter. Light weight. Needs no foundation. Suspend from floor or ceiling joists.

ENTIRE CHIMNEY SHIPPED COMPLETE
(Convenient 2-foot sections: base, housing, roof flashing, chimney cap.) Nothing else needed.

SAFER...
Underwriters' Laboratory accepted for any fuel: gas, oil, coal or wood for any type space heater or floor or basement furnace. Meets FHA Requirements.

ECONOMICAL...
Save up to 50% over brick. A lifetime chimney, more efficient... better draft.

IMMEDIATE SHIPMENTS
made direct to project.

LIBERAL DISCOUNTS
to project builders.

WIRE us name of your lumber or heating dealer for immediate quotation.

VAN-PACKER CORPORATION
136 South Clark St., Chicago 3
Phone: Randolph 6-1840
American Builder, November 1949.

Johns-Manville WEATHERTITE SHEATHING

...a new, improved sheathing and insulating board for application direct to the building frame

• J-M WeatherTite* Sheathing is a rigid insulating board material made of clean pine fibres impregnated throughout with pitch saturants. Thus, the weather-resistant pitch is an integral part of the entire sheet.

The large sheets strengthen and brace the structure and speed up construction. Insulation value is an added advantage. There are three types for varied job requirements.

**SELLING POINTS**

- Weatherproof—Strong—Economical
- Insulates as it builds—Large size speeds application, reduces waste
- Pitch saturated throughout—Job cut edges are as water-repellent as the factory-finished edges and surfaces
- 25/32" vertical sheets have bracing strength comparable to diagonal wood sheathing
- 25/32" horizontal and ½" vertical sheets have bracing strength better than horizontal wood sheathing
- Vertical sheets provide a solid unbroken surface from sill to plate
- Horizontal sheets are easy to handle and "V" joint eliminates necessity for headers
- The name Johns-Manville assures quality

• DATA

25/32" WeatherTite for Horizontal Application
Size—25/32" thick x 2' wide x 8' long; ends square; V-tite joint on long edges (see illustration).
Packaging—6 sheets per package.
Weight—123 lbs. approx. per package.

25/32" WeatherTite for Vertical Application
Size—25/32" thick x 4' wide x 8', 8'6", 9', 10', or 12' long; all edges square.
Packaging—4 sheets per package.
Weight—Approx. lbs. per package:

<table>
<thead>
<tr>
<th>Size</th>
<th>Weight</th>
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<tbody>
<tr>
<td>4'x8'</td>
<td>165</td>
</tr>
<tr>
<td>4'x8'6&quot;</td>
<td>175</td>
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<tr>
<td>4'x9'</td>
<td>185</td>
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<tr>
<td>4'x10'</td>
<td>205</td>
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<tr>
<td>4'x12'</td>
<td>246</td>
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</tbody>
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½" WeatherTite for Vertical Application
Size—½" thick x 4' wide x 8' long; all edges square.
Packaging—6 sheets per package.
Weight—Approx. 168 lbs. per package.

WHERE TO USE

For sheathing exterior frame walls of all types. The 25/32" thickness is recommended for best results. However, where low cost is a basic consideration, the ½" WeatherTite does an excellent job.


Address: Johns-Manville, Box 290, New York 16, N. Y.
How Builders Sell Homes

Successful home builders from all parts of the country offer their sales ideas in these exclusive American Builder reports. Others will follow in later issues.

EDITOR’S NOTE: This is the second article in a series to be published exclusively in American Builder detailing the ideas of outstanding home builders on successful public relations, promotion and sale of houses in all price classes. The ideas and opinions presented here were obtained by letter from builders of all types in all sections of the United States by W. P. "Bill" Atkinson, Oklahoma City, who was moderator of a panel "Selling Your Houses in '49" at the 1949 NAHB convention and exposition in Chicago. Because of time limitations at the panel sessions, Mr. Atkinson was unable to use this material in the discussions. It is being published for the first time in American Builder. The quotations are directly from the letters obtained. Names of the builders quoted are being omitted to protect confidences and also to protect those concerning from extra correspondence.

CATERING TO CHILDREN can be enjoyable for members of a building firm. Prospective home buyers, often the parents, are favorably impressed, and results can be satisfactory to all concerned, according to this Seattle, Washington, builder.

“Everyone in our office delights in the companionship of young children,” he says. “It has been a great deal of fun presenting the young folks with candy and toys as we go through the neighborhood and at the community Christmas tree.

“When parents come to our office to purchase homes, it is a problem for them to look after the children and to keep them from tearing up deeds and contracts. We have always carried a large assortment of toys, small dolls and candy which we give to the children upon approval of the mothers.

“We have a minimum of malicious mischief and broken windows on our job because all of our children are our partners in helping to build our neighborhoods. We take

the whole gang down to the community ice cream parlor, instruct them in building houses, sewers and roads, and let them ride on the bulldozer and shovel at periodic supervised times.

“This activity with children in the neighborhood has had some surprising results. When parents with children come through our neighborhoods, the folks go through the houses and the children amble around talking to the youngsters already established. Our children are enthusiastic about our neighborhoods and it is no time before they transmit this enthusiasm to the prospect’s children. This has occurred with children from kindergarten to college.

“Here is an illustration:

“At a recent meeting in Sunday school, a 5-year-old boy was the center of lively controversies. When the teacher stated that God built the earth and everything in it, the boy protested vehemently. That is wrong. He did not. The builder of our development did.”

“With several large subdivision developments, all under way at the same time, we use furnished model homes as the best method of attracting a parade of buyers. In the home building business, we are advertising to a parade and we must appeal to a new group of buyers every day.

“Flood lights illuminating our homes, trees, park-like sections and entrances create the desire of passing autos to turn in.

“Signs are most important. Consequently, we spend a considerable amount building attractive ones. I believe the most important advice on signs is to have them freshened up frequently.”

Scrapbooks are good, this builder continues. “Showing the prospective home owners scrapbooks of stories on your developments and displays of newspaper and magazine clippings impresses them, too.”

EMPHASIS ON NEWSPAPER ADVERTISING is placed first with a Salt Lake City, Utah, builder.

“We spend approximately $80 per
Building Owner Brady M. Steele writes, "It became necessary to re-roof the building housing the Cherryhurst Pharmacy and other establishments." He adds, "I was so impressed with the qualities of the 'Century' No. 4 Red Asbestos-Cement Shingles that I contracted with the Pyramid Roofing Company to put this material on the roof. Now that the job is completed I am more than pleased with the results. The entire building is enhanced by the roof."

Another K&M roofing job... another well-pleased customer. K&M shingles will do it for you every time. Your sale is launched by the easily seen "dress up" appearance of these trim, hexagonal K&M No. 4 shingles in charming colors—Spanish red, surf green, black, gray and mottled gray. And you can quote right on shingles so easy to apply, because of large size, plus punching and notching for automatic true laying, working from either left or right.

You are able to assure customers about resistance to weather, rot, rust, fire and upkeep—knowing that K&M "Century" Shingles will make good for you. That's why they make for good business. See your K&M Dealer for full details, or write us direct.

Original manufacturers of Asbestos-Cement Shingles in this country

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA
Builders everywhere are enthusiastic about the New Infra-Red Dried Shingles.

They find Duo-laps are always thoroughly dry, and easier, more economical to apply over solid or spaced sheathing, because of the wide 12" or 14" exposure. Double coursing gives double insulation value. Write for free literature and name of your nearest dealer.

The foundation is the most important part of the structure, have it THOROSEALED on the outside surface to keep water out of the walls.

If foundation is already built and leaks, have it THOROSEALED on inside surface to keep water out of the room.

STANDARD DRY WALL PRODUCTS
BOX X. NEW EAGLE, PENNSYLVANIA

BRAND NEW! Made by one of World’s leading Precision Equipment manufacturers. In original crates with all equipment.

PORTABLE! Self-contained 3.6 H.P. Briggs & Stratton or Wisconsin gasoline engine. Weighs only 340 pounds. Easily handled by two men. Ready to operate in less than 2 minutes.

SWINGING ARBOR! Balanced to swing away from operator for added safety. Hand and foot guided. Operator’s foot does the work.

SPECIAL EQUIPMENT! Available at extra cost are (A) 12 inch diameter saw (B) Roller extension tables (C) Electric motor to convert Buday for production line and shop installation. Write for detailed information.

SPECIAL DISCOUNTS TO WHOLESALERS

MAIL THIS COUPON TODAY!

Ennis Supply Company
334 First Street North
Minneapolis 1, Minnesota, U.S.A.

Please ship us ( ) Buday Portable Power Saws FOB ( ) MINNEAPOLIS ( ) MILWAUKEE via ( ) Fast Freight & Motor Truck.

NAME_  
ADDRESS_  
CITY_ ( ) STATE_  

WRITE NOW for NEW 20 page brochure with 4 pages of specifications pictorially described. No. 144
Easy to Erect **COMES COMPLETE (EXCEPT FOUNDATION)**

The Reliance Home is built on a half-mile-long production line; shipped by trailer-truck, complete in 7 sections. Walls, doors, windows, wiring, plumbing, bathroom tub, basin and electrical fixtures are factory-installed. When delivered, the Reliance Home can be erected on a job-prepared concrete slab foundation by 5 men in one 8-hour day.

Easy to Sell **MORE HOUSE FOR THE MONEY!**

The Reliance 3-Bedroom Home has big rooms, big closets, a step-saving plan...everything budget-bound couples are looking for at a price they can pay. It includes more and better equipment (G.E. range, Bendix washer, Tracy stainless steel sink, screens for all windows, radiant heating, triple insulation, etc.). Reliance Homes have been built in the Philadelphia area in quantities; complete, including foundation; exclusive of lot, at a builder's cost of $6,000 per house.

WRITE TODAY FOR DETAILS ON A FRANCHISE and illustrated literature giving complete information about the house.

RELIANCE HOMES, INC.
LESTER, PA.

APPROVED FOR FHA AND GI FINANCING. CURRENT DELIVERIES WITHIN 300 MILES OF LESTER, PA.; NATIONAL DISTRIBUTION COMING SOON.
ParaUSE "Type RR" Cables are made with a high grade heat and moisture resisting insulation protected by a tough neoprene sheath over the conductor insulation. This sheath provides an armor for the conductors which is resistant to heat, (even to flame), oils, acids, alkalies, and moisture. Sunlight, air or exposure to weather has little or no effect on its life. ParaUSE Cables are designed for direct burial in the earth, or for installation in street ducts or on overhead pole lines.

ParaUSE "ParaUSE" CABLE "Type RR"

NON-METALLIC—NEOPRENE SHEATH

ParaUSE "Type RR" Parkway Wire and Cable provides economical permanent underground installation from power line to meter and for connecting several buildings from the same service. Examples of its application are on farms, estates and institutions, and for lighting streets, airports, ball parks, drive-in-theatres and many other outdoor lighting and power circuits.

It eliminates the trouble from sleet, windstorms and weathering. UNSIGHTLY outside wire is also done away with. You save labor. You save time. Simply dig a trench and cover; no other protection necessary.

Picking up a Stanley Hammer is like grasping the hand of an old friend. It feels just right because it's skillfully made to the measure of your own skill. Forged from special analysis steel and given two super heat treatments. Handle is locked in head by "Evertite" process, exclusive with Stanley. Stanley Tools, New Britain, Connecticut.

THE TOOL BOX OF THE WORLD

STANLEY


HARDWARE HAND TOOLS ELECTRIC TOOLS

How Builders Sell . . .

(Continued from page 172)

cent of our normal advertising budget on classified advertising, as we believe this medium produces the bulk of our qualified prospects," he says.

"In preparing the copy, different styles of makeup are used to furnish eye appeal. Abbreviations are never used and sufficient white space is included to make the copy stand out. The copy occasionally begins with varied methods of attracting attention, such as analysis of the home market, the reasons why it is profitable and practical to purchase now, or perhaps a discussion between two mythical persons interested in home ownership. Another method, running the copy between two columns of listings is also used. We try to tie-in our radio advertising with the newspaper ads, but this is not possible due to the publishers' regulations.

"Photographs add to the appeal of the advertisement and are used at various intervals. Copy should run daily, including Sunday, to keep constantly before the public. "Display is used infrequently due to the higher cost. However, when we want to run large income property or advertise some special service, we use the financial page of the newspapers, generally using a 3-column 4-inch space, with photographs. It has been successful for specialized purposes."

For sale signs are important, the builder says—and "Sold" signs are equally as important. "When the property is sold, a 'SOLD' strip is placed across the sign, showing that we have made the sale," he explains. "Thus the combination sign appeals both to the buyer and the owner-seller of homes."

"Match booklets are one of the most effective methods of institutional advertising. These were secured at a reasonable price, very attractively printed in three colors on the two outside covers. They are given away at various civic club luncheons and meetings, left on the main desk at hotels, on the street, etc. We find it pays to have these 'twenty salesmen' carried around in the public's pockets."

"Air mail sticker booklets. These are along the line of match booklets, containing some twenty gummed labels printed in air-mail colors, that can be detached and attached to air mail. Our distribution has been fairly wide on these;

(Continued on page 180)
Show your Clients these modern Automatic Anthracite Heating Units

They save up to 52% annually on fuel bills

1. **Automatic Anthracite Stokers**
   Installed in an existing boiler or furnace, or in new houses, automatic hard coal stokers deliver *plenty* of heat quickly . . . save up to 52% on fuel bills . . . eliminate fuel worries.

2. **The Revolutionary Anthratube**—saves on fuel bills . . . its proved efficiency is over 80%. This scientifically engineered boiler-burner unit, with "Whirling Heat" and other revolutionary features, produces quicker response, superior performance than units using other types of fuel. Fully automatic.

3. **Anthra-Flo furnace-burner unit**
   - An entirely new type furnace-burner unit, which features a simple burner mechanism, attached by two bolts with all working parts easily accessible. Fully automatic, coal feeds direct from bin across single *stationary* perforated plate . . . ashes discharge by gravity into container within unit. Available for steam, hot-water and warm-air heating systems.

Today you can offer your clients modern automatic heat with Anthracite equipment.

You can show your clients how to save money . . . as much as $100 to $200 every year and yet have *plenty of heat—clean heat—even heat*—and no worry about future supplies or deliveries.

For complete information about (1) new anthracite stokers (2) revolutionary Anthratube or (3) Anthra-Flo, just fill in and return the coupon below.

ANTHRACITE INSTITUTE
101 Park Ave., Dept. 11-D, New York 17, N. Y.

Please send me more information on
1. New Anthracite Stokers
2. Revolutionary Anthratube
3. Anthra-Flo furnace-burner unit

Name: 
Address: 
City: 
State: 
Zone: 
Library: 

PLEASE PRINT
TRUSS DOORS

Absolutely warp-proof and with a guarantee to back it up — that's Truss Door*, the greatest door development in many years.

Truss Doors are hollow core, birch faced flush doors with an integral truss that holds them in permanent alignment. Save on installation with straight doors, save on replacements with doors that stay straight.

*Pat. Applied For.

WILL NOT WARP

After receiving their final adjustment at the factory, Truss Doors can be hung from either side with either end up. They go in faster because there is no need to relocate hinges to compensate for warpage. Big lock blocks on both sides make it easy to install hardware, too.

Finish? It's really beautiful. Fine birch veneer face sheets, either one piece or harmonizing matched veneers.

We can't begin to tell you of all the many features that make Flush Doors ideal for every building application. For the complete story, write for our comprehensive folder.

Truss Door Division
KENNEBEC, INC.
BINGHAM, MAINE

WATERPROOF IN FREEZING WEATHER!
with CRYSTAL
Silicone Water Repellent
Non-Freezing!
Lastingly Effective!

Construction jobs are speeded up in cold weather with CRYSTAL exterior waterproofing . . . applied quickly by brush or spray on dry brick, stucco, concrete block at temperatures below freezing!

Only CRYSTAL has all these advantages:
ONE COAT. Crystall penetrates, waterproofs, retards, depth. One gallon covers 100 to 200 sq. ft. of surface. TRANSPARENT. Invisible after application. Will not change surface color or texture. STAINPROOFS. Makes surfaces soft to the touch. Send for detailed information and literature.

The "ONE PACKAGE" WINDOW

Metalart ALUMINUM WINDOWS

You receive a complete window when you buy Metalart Aluminum Windows. Metalart Windows arrive on your job completely glazed with DSB glass and with full length screens and sashlocks—easy to install. With extra heavy aluminum frame complete weatherstripping, and lifetime Pullman type balances. Metalart Aluminum Windows reduce labor and installation costs, eliminate painting and maintenance. In full range of standard and modular sizes with 2, 4, 8, 12 or 16 lights. Send coupon for complete details on this and other aluminum building products.

METAL ARTS MFG CO., Inc., P. O. Box 4144, Atlanta, Ga.

Please send me detailed information on your:
Aluminum Windows [ ] Ornamental Aluminum Shutters [ ] Storm Windows [ ] Attic Ventilators [ ] Custom Framed Screens [ ] Tension Screen [ ]

I am a Distributor [ ] Dealer [ ] Architect [ ]

NAME

ST. & NO. ____________________________
CITY ____________________________ STATE ____________________________
American Builder, November 1949.

TRUSCON Series 138
STEEL Double-Hung WINDOWS

can take it!

in residences — where internal —
external moisture factors and condensation are
present constantly; where airborne acids and
corrosive substances must be combated; where
structural stresses and strains must be met —
Truscon Series 138 Steel Windows can take it!

in river boats — where dampness
and gaseous vapors are eternal; where vibration,
jolts and jars continue 'round-the-clock; where
twisting and straining create extreme tensions
— Truscon Series 138 Steel Windows can take it!

in railroad cabs — where vibration
harmonics can be extremely destructive; where
switching operations can deliver severe blows;
where fuel and industrial fumes are ever present
— Truscon Series 138 Steel Windows can take it!

Truscon Steel Windows
assure the Style, the Strength,
the Service You Need

- There is a type of Truscon Steel Window to meet exactly every residential,
institutional, office building and industrial need. These Truscon Windows, made by
the largest manufacturer of steel building products in the world, offer structural
advantages and money-saving features of interest to everyone in the building trades.
Write for free illustrated literature.
Do Sidewall Jobs in Greater Safety with "TROUBLE SAVER" Scaffold Brackets

On jobs like this—and many others—"Trouble Savers" pay big dividends by saving time, labor and materials. They provide safe working platforms that give your men safe footing.

Made of rail steel, "Trouble Saver" Scaffold Brackets are light, easy to handle and extra strong. They're available in nail-attached, studding and bolt-attached types.

Write for catalog of "Trouble Saver" Equipment.

THE STEEL SCAFFOLDING COMPANY, INC.
Dept. AB, 856 HUMBOLDT STREET
BROOKLYN 22, NEW YORK
Telephone EVergreen 3-5510

Art in Iron

Artcraft produces the finest, most exacting custom-made ornamental iron work from specifications at amazingly low cost. This is in addition to our regular, low-priced, stock ornamental work. Write today for more information, or send specifications direct.

Delivery: Two works for custom work; immediate delivery for stock items.

Terms: Payment with order or C.O.D.

Artcraft Ornamental Iron Co.
710 E. Hudson Street, Columbus 11, Ohio

Artcraft manufactures:

FREE:
New 40-page catalogue, "ART IN IRON," showing Artcraft's latest in custom work. Write for your copy. Address your request to Dept. AB, 856 Humboldt St., Brooklyn 22, N.Y. No cost or obligation.

How Builders Sell . . .

(Continued from page 176)

however, they rate second to the use of match booklets for effective results."

Mechanical pencils are used. "A deal was worked out for a supply of mechanical pencils of a very good grade, imprinted with our signatures."

Phone directory covers. "We are now making an initial distribution of covers for phone directories. These are of heavy stock, imprinted with the firm name, address, phone number and a list of our services, together with a cut of the national association. These are being placed in choice locations, such as hotels, department stores, garages, service stations and in some cases, public phone booths, wherever a heavy flow of traffic is experienced. We expect many of these covers to work 24 hours daily for us.

"Outdoor display signs are a very important method of institutional, and even direct advertising. We use the large outdoor type of painted billboard, sometimes running to 20x30 feet. These are of two types. One strictly for institutional copy and the other to advertise a subdivision or particular property that is involved. Our only test is that it be in a spot that commands the attention of heavy traffic."

Direct mail—"We find the pennypost card, sent to the neighbors of a home owner who has listed his home for sale, directing their attention to the listing, is a very good method of contact. Some phone in to say they have a friend looking for a similar home, or they want to know if they could list their home for a like amount, and so on. No matter the reason why the other individuals call, they have done their bit. It's up to us then to get their name and address. We also mail out announcements to the neighbors advising them of the names of newcomers to their neighborhood and inviting them to call on them as a friendly gesture. These two methods are old standbys of the real estate sales profession, but we have proven that they really work."

"We also use direct mail for featuring particular properties, using a purchased list or one that we have developed. Currently we are using mimeographed letters, individually signed by the salesmen, giving details of the property for sale, and a photograph of the property if enclosed. These are sent out in groups of fifty."

(Continued on page 184)
This new manual contains essential data to help you plan the electrical systems and equipment of your houses to make them efficient... to give them strong sales appeal... and for economy of construction.

It explains the principles of the Four Degrees of Electrical Living; makes it easy to select and apply the right degree to your house.

The book features layouts of two kitchens: An "Economy Kitchen" that is minimum in space and equipment requirements; and an "Ideal Kitchen" that offers an arrangement of equipment, counter and storage space for the builder who wants the best.

Shows how to design space-saving laundries with powerful appeal. Explains simplified wiring and how to plan it. Dozens of lighting ideas. Complete technical data on electric appliances and equipment.

Here is both an idea and reference book that every builder should have. There is no charge; no obligation.
What do your Flooring Specifications call for on jobs like these?

**RANCH HOUSE DEVELOPMENT...**

Basementless, concrete slab construction. More and more cost-conscious operative builders are turning to Tile-Tex Asphalt Tile as the all purpose flooring for a one story ranch house. It’s low in cost, has an amazing record of long life and is the only type of resilient flooring which can be installed with perfect safety over a non-waterproofed concrete slab. No other sub-flooring required. Can be installed in gay, colorful patterns or solid tones. Appeals to home owners because it can be used with or without rugs or carpeting.

**BLOCK OF STORES...**

On the main street of town, where store traffic is heavy, and tenants require different decorative effects. With Tile-Tex Asphalt Tile you can offer the commercial user an almost endless variety of designs, patterns and custom accessories around which to plan colorful and functional floors. Yet your client pays no maintenance penalty for high style. Tile-Tex is exceptionally easy to clean and keep clean.

**RESIDENCE...**

Two stories and a basement, for upper income purchaser. For kitchen, bathroom, basement recreation room, foyer, children’s bedrooms. Specify Tile-Tex Asphalt Tile, by all means. It's the right floor for heavily used areas. It brings bright, spirit-lifting color to many areas of the home. It lightens the cleaning burden. And it helps sell your homes.

Tile-Tex Asphalt Tile is installed by expert floorcovering contractors located in principal cities and towns. Write The Tile-Tex Division, The Flintkote Company, Chicago Heights, Illinois for the name of the flooring contractor nearest you. Sales offices in Chicago, New York, Los Angeles, New Orleans, Montreal, Toronto.

---

**STORM SASH**

for metal casements at low cost

**DEALERS WANTED**

Wilson storm panels are installed from the inside—they’re interchangeable with screens. A hollow rubber gasket prevents transfer of cold from metal casement. 1” dead air space gives maximum insulation. You’ll find the Wilson window will make friends wherever sold. Wilson storm windows available K D or completely assembled.

**MANUFACTURED BY**

**METAL WINDOW SERVICE CO.**

4601 West 47th Street, Chicago 32, Illinois

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**STATEMENT OF THE OWNERSHIP, MANAGEMENT, AND CIRCULATION REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, AS AMENDED BY THE ACTS OF MARCH 3, 1933, AND JULY 2, 1946 (Title 39, United States Code, Section 233)**


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**EDWARD G. GAVIN,** Editor.

Sworn to and subscribed before me this 26th day of September, 1949.

[SEAL]

RUTH WEGGERER, Notary Public.

(Per commission expires February 5, 1953.)

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**CONTRACTORS**

**WICK COMPANY, INC.**

EXECUTIVE OFFICES: 1706 CHICAGO AVENUE, CHICAGO 14, ILLINOIS

SALES OFFICES:

THE TINE-TEX DIVISION

CHICAGO HEIGHTS, ILLINOIS
Increase fire protection by installing metal clad or Kalamine doors with Coburn Fire Door Hardware. Dependable, smooth-operating Coburn Fire Door Hardware will save valuable goods and protect personnel... and your fire insurance costs will be reduced.

Coburn Fire Door Hardware is made to specifications of The National Board of Fire Underwriters and, where necessary, bears the U.L.I. label. Special sets are available for single and double incline or level slide doors; vertically operated doors. All are equipped with automatic self-closing devices. Write for Catalog #210 showing the full line of Coburn Fire Door Hardware; charts showing required headroom; wall space and other vital information.

Engineering help is available without obligation.

Other Coburn Products include #500 Swing-Over Garage Door Hardware Sets, overhead trolleys and conveying systems for carrying loads up to 3,000 lbs.

COBURN PRODUCTS DEPARTMENT
THE COLORADO FUEL AND IRON CORP.
WICKWIRE SPENCER STEEL DIVISION

Any way you look at it...

INSL-COTTON
is the most profitable insulation

FOR YOU... FOR YOUR CUSTOMERS
Every home insulated with INSL-COTTON is a better home... with extra sales appeal... gives greater customer satisfaction.

LOW LABOR COST
Costs only about ½ cent per sq. ft. in open attics. New labor can easily do the job.

UNIFORM PROTECTION
No high or low spots ever. Mechanically laminated to avoid human error.

LASTS A LIFETIME
Won't sag or settle. Moisture and insect repellent.

PERMANENTLY FLAMEPROOFED
Lasts indefinitely under normal conditions.

CERTIFIED
Every lot manufactured is tested for weight, density, thickness and flame-proofing qualities. You are certain to get what you buy.

EFFICIENCY
From 4% to 36% more efficient than any other type of commercially available insulation. K factor 0.24.

EASY INSTALLATION
Unrolls like a rug. No expensive tools necessary. Harmless to handle, can't irritate skin, lungs or eyes.

DEALERS

INSL-COTTON DIVISION
TAYLOR BEDDING MFG. CO., TAYLOR, TEXAS & BELTON, TEXAS
Originators of Flame-Proof, Fire-Resisting Cotton Insulation

MAIL THIS COUPON TODAY!

TAYLOR BEDDING MFG. CO., Taylor, Texas
Gentlemen: Please send specifications and full information on Insl-Cotton.

Name: ____________________________
Address: _________________________
City and State: ____________________
Check Here: ____________
[ ] Distributor [ ] Dealer [ ] Architect [ ] Building Contractor
SELL YOUR HOMES EASIER...
EVERY WOMAN WANTS ONE!

FASCO AUTOMATIC KITCHEN VENTILATOR

- PROFIT from the big sales appeal of clean, cool, comfortable kitchens.
- AMAZING LOW PRICE... quick, easy installation... helps keep your building costs down...

LIST PRICE $24.95 Plus Attractive Discount to Builders!

- Changes air in average kitchen every three minutes!
- Quiet operation, without drafts... no radio interference
- Four models for all size kitchens... all wall thicknesses... all types of construction.
- America's largest builders use FASCO Ventilators as standard equipment.

WRITE, WIRE or PHONE for complete information to FASCO Industries, Inc., 100 Davis Street, Rochester 2, N.Y. (Phone IRamilton 1800)

How Builders Sell...
(Continued from page 180)

Radio—"We have arrived at no definite decision as to the type of radio advertising that is most effective, if it is. We have tried the half hour program, fifteen minute program and the minute announcement. It is our belief that this must be considered institutional advertising, even though specific properties are plugged. There is one exception to this: we have on several occasions used the on-the-spot mobile unit broadcast. It is very frequently picked up on car radios while the family is out for a Sunday drive and the entire family will drop in to see the house. This gives a good source of prospects, and of course, for those who decline to give a name, we used one of the oldest methods of getting it—namely, obtaining their car license number and checking with the public records at the State Capitol on the following day.

Television has produced no direct sales that we are aware of (we are currently on a television program of some two minutes once a week), yet numerous individuals tell us they have watched the show. During the holiday season when the department stores remain open evenings, the bookings are increased and spot tests show that our audience is tapped by many hundreds of shoppers who are curious as to the video program, or by one or more members of a family who while away the time waiting for another individual who is shopping. Practically every store having a radio and television display room thus give us free advertising."

Home show brings results. "We participated in a home show conducted by a national organization during last year, running seven days and nights. This was a more expensive method of advertising; however, we did receive a very excellent play. The booth was attractively decorated and the walls were done in mural fashion to show the subdivisions and other projects we were selling. We got an excellent list of some two thousand names, as well as contributing to the direct sale of a number of properties.

"Our office is located on a street that carries heavy pedestrian traffic and we find it to our advantage to show eight enlargements of current listings. These photographs are centered around a central display unit that is changed monthly. As long as the display is interesting and changed often it is noted many people stop to inspect it."
**The Sensationally NEW Low-Priced**

**PARKS No. 20**

**20" PLANER**

Here is a modernly designed, rugged, high-speed, low-priced planer that is ideally suited for every shop and industrial plant requiring a quality surface. The Parks No. 20 Planer has a four-knife cutterhead with a speed of 3600 R.P.M. and offers two feed speeds — 20 and 40 F.P.M., and 40 and 80 F.P.M. Write for complete descriptive literature.

**The PARKS Heavy-Duty 12" x 4" Planer**

A compact, sturdy, thickness planer that offers mill planer precision and ruggedness at a sensationally low price. Write for descriptive catalog sheet.

---

**The PARKS WOODWORKING MACHINE CO., Dept.30-HH, 1546 Knowlton St., Cincinnati 23, 0.**

---

**HANSEN ONE-HAND TACKERS and STAPLERS**

Building contractors find that they can simplify the application of wall board, building paper, insulation batting, foil, etc., by using the Hansen Tacker. This speedy, convenient tool drives home stout two-legged tackpoints —fast as you can grip it. It holds scores of tackpoints at a loading—and reloads in a jiffy. It gives a great saving in time over old-fashioned methods.

**THE MODERN WAY TO DO ALL KINDS OF TACKING AND FASTENING JOBS**

---

**FREE**

10 day examination offer

SEND FOR THE TAMBLYN SYSTEM OF ESTIMATING ON FREE 10 DAY OFFER

Let me show you how you can cut guesswork out of building estimating.

Hazards of competitive bidding have been reduced to a minimum for thousands of contractors now successfully using my simple factors in preparing their cost estimates on materials and labor. I want to become your "silent consultant" by placing at your elbow, for immediate reference, the boiled-down essence of my 40 years' experience — expressed in simple factors that require only the application of your local wage and material rates to arrive at a competitive, yet safe cost, as a base for contracts. Mail the coupon to me today.

---

**GORDON TAMBLYN, THE TAMBLYN SYSTEM**

As a reader of this publication we are warranted in sending you a copy of the complete Tamblyn System for 10 days free inspection. At the end of inspection period, you may mail it back or pay $38.75 in easy monthly payments.

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**SEND FOR THE TAMBLYN SYSTEM ON FREE 10 DAY OFFER**

Mail the coupon to me today.

GORDON TAMBLYN, THE TAMBLYN SYSTEM

1115 So. Pearl St. A-35 Denver, Colorado

Send me the complete Tamblyn System on free 10 days trial if I like it, I will pay $8.75 when 10 days are up and $7.50 per month until $38.75 is paid. Otherwise I will return it.

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**GORDON TAMBLYN, THE TAMBLYN SYSTEM**

As a reader of this publication we are warranted in sending you a copy of the complete Tamblyn System for 10 days free inspection. At the end of inspection period, you may mail it back or pay $38.75 in easy monthly payments.

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**GORDON TAMBLYN, THE TAMBLYN SYSTEM**

As a reader of this publication we are warranted in sending you a copy of the complete Tamblyn System for 10 days free inspection. At the end of inspection period, you may mail it back or pay $38.75 in easy monthly payments.
BENNETT DAMPERS are BETTER DAMPERS

STEEL OR CAST IRON—THERE’S A BENNETT FOR YOU

The original steel damper. Exclusive “Slip-Joint” avoids damage to masonry from heat-expansion. No breakage in shipping, handling, installation or use. It’s the only damper with 60° Steep-Slope. High dome insures best results. Lays up with minimum cutting or fitting. Competitively priced. Sizes 24”, 30”, 36”, 42”, 48”, 60” and 72”. Cat. No. C-101.

BENNETT

*Expanslip

STEEL DAMPER

BENNETT

Steep Slope

CAST DAMPER

The Cast Damper with high dome, steep slope (50°). Steel valve avoids breakage. Broad, strong front flange may be used as lintel bar. These features, and sharp, clean lines make this the most up-to-date cast damper on today’s market. The contractor’s favorite cast-iron damper. Sizes 30”, 36” and 42”. Unconditionally guaranteed steel valve (Cat. No. C-103) or with cast-iron valve (Cat. No. C-104).

BENNETT

SCRU-TITE

CLEAN-OUT

DOORS

Airtight. Offered in Cast Iron (C-211) with steel door or Solid Aluminum (C-212) for superior corrosion resistance. Both types have tight closure with convenient single thumb screw. Sizes 8”x8” and 12”x12”.

BENNETT

DEEP SEAT ASH DUMP

100% heavier for permanent seating and trouble-free service. Saves cutting firebrick. Size 9”x4½”. Cat. No. C-203.

By the Makers of “Fresh-Aire” and Warm-Aire Fireplaces


BENNETT - IRELAND INC.

Clarence in 1906

NORWICH, NEW YORK

Only

Ubalco

OFFERS MODULAR SIZED
ALUMINUM CASEMENT WINDOWS!

Write for complete facts on the fastest selling
ALUMINUM CASEMENT WINDOWS IN THE WORLD

UNION ALUMINUM COMPANY
INC.
SHEFFIELD, ALABAMA

World’s Largest Manufacturer of Aluminum Casement Windows

Ken Corner Level

CUTS CORNER
COSTS 50%

MODEL A—NEWEST time and money saving level yet—12 ways better than ordinary levels. Cuts costly corners in masonry and carpentry building by reducing tedious hours required to plum and square 2 SIDES OF CORNER AT ONE TIME—on windows and doors; also, face of each brick. Plumbs 4 ways at once—the corner, 2 faces, and top surfaces. Two aluminum bars, form “L” for each brick and support both horizontal and vertical glass liquid vials containing usual bubbles. AVAILABLE in 18", 24", 36" and 48" sizes.

MODEL B—Has ONLY ONE ADJUSTABLE BUBBLE used for plumbing a Batten, incline, or tapering surface. AVAILABLE in two sizes, 18", 24". KEN CORNER LEVEL saves 50% of the cost in building all corners which increases production 100%. Carpenters can build brick fireplaces and chimneys for home and farmhouse. WRITE for details.

Dept. L — SINGER-KENNEDY CORP. 21 E. Van Buren St., Chicago 5, Ill.

Custom Built!
IRON RAILINGS

COMPARE

* HALF OVAL HAND RAIL
* ALL WELDED
* ALL SOLID STEEL
* EASY TO ORDER
* YOUR SATISFACTION GUARANTEED

FREE

CATALOG, DIMENSION SHEET, PRICE LIST, ETC.

BELSON Mfg. Co.

AURORA 3, ILL.

GUARANTEED

By the Makers of "Fresh-Aire" and Warm-Aire Fireplaces

NATIONWIDE SERVICE

STRAIGHT CARS
OR MIXED CARS

KNOW-HOW—We’ve served the trade since 1912 and understand customers’ needs.

QUALITY—Careful and conscientious guarding of standards insure dependable quality.

SERVICE—Complete stocks in five cities enable us to deliver your order as you want it.

PRICED RIGHT—Timely appreciation of market conditions—with extensive freight tariff knowledge—effects savings for you.

PACIFIC MUTUAL DOOR CO.
TACOMA BUILDING • TACOMA 2, WASHINGTON
MILLS—OREGON, WASHINGTON, CALIFORNIA
WAREHOUSES FIVE PRINCIPAL CITIES
Garwood, N. J. • Baltimore 31, Md. • Chicago 8, Ill. • Kansas City 3, Kansas • St. Paul 4, Minn.

Mix 12 to 15 more yards a day with
JAEGER 3½S “AUTO-LOADER”

Gated hopper loads while previous batch mixes—big time saving!
“Duo-Mix” drum—no mixing, fast discharging!

You cut costs and boost profits when you mix 12 to 15 yards more concrete daily with no more manpower. And, you can do that with the Jaeger 3½S “Auto-Loader.” It’s the fastest half-bag mixer made. Catalog M-8 tells why—shows the complete Jaeger line. Write for it.

THE JAEGER MACHINE COMPANY
Columbus 16, Ohio
Leading Distributors in 130 cities sell and service Jaeger equipment.

WORLDWIDE DISTRIBUTION

PUMPS • COMPRESSORS • HOISTS • PAVING EQUIPMENT

NORDAHL
Feather Glide WARDROBE HARDWARE

• can’t jump track
• silent & smooth

...overhead suspension does it

At last here is wardrobe door hardware that does the job! When you specify NORDAHL wardrobe door hardware, its overhead suspension principle guarantees efficient, quiet, and trouble-free operation. Aluminum extruded track and guide comes in lengths up to 18 feet—it can be used with any thickness of panel or plywood door. Cadmium plated steel hangers have phenolic rollers. Specify NORDAHL for new construction or replacing old.

NORDAHL
180 W. ALAMEDA AVE., BURBANK, CALIFORNIA

ALSO SPECIFY NORDAHL SLIDING DOOR FRAMES
Chicago Firm Makes Magnesium Wall Forms

Magnesium wall forms are being fabricated and tested for the construction field.

Magnesium's light weight makes the forms easily portable. The panels weigh less than three pounds per square foot. Through the use of

NEW wall forms are made of magnesium

3.16-inch plate, high rigidity is obtained to insure a smooth surfaced wall with no waves or dents to require rubbing or plastering. The forms will not rust, swell when wet, or contract when dry. Magnesium possesses a high degree of resistance to corrosion by the alkalis in concrete.

Magnesium wall forms are manufactured by the Symons Clamp and Manufacturing Co., Chicago, Ill.

New Insulation Method For Metal Buildings

Thermal insulation and acoustical problems encountered in all-metal structures were solved in a factory-fabricated, job-erected, all metal building recently completed at the Sun Oil Company's Toledo, Ohio, refinery.

The one-story structure has sheet aluminum walls and roof, and is 640 feet long by 40 feet wide. The building is being used as a craft shop and tool crib. When the construction program is completed it will be used as a warehouse.

Since aluminum conducts heat with great rapidity, proper insulation was of prime importance both to prevent overheating of the interior during warm weather, and to permit economical heating during the winter. In this instance, Fiberglas PF insulation, light density, two inches thick, unfaced and unpainted, was applied to the walls and roof. The entire installation was completed by a crew of nine men in less than three weeks.

(Continued on page 192)
READYBUILT
(Fireplace, Reg. U.S. Pat. Off.)

FIREPLACES
Lends unsurpassed beauty and charm to homes—old and new. The modern fireplace that fulfills all modern day requirements—used with gas or electricity. Large variety of attractive models in brick, stone, wood, etc., available.

Furnished complete—ready to be installed in hour's time of handy man—shipped anywhere.

DEALERS, BUILDERS and HOMEOWNERS write for catalog and full information.

THE READYBUILT PRODUCTS CO.
1705-23 McHenry St. Baltimore 23, Md.

YOU SAVE MONEY
with American-bowstrings!
You Save Money, Speed Construction Time with these unusually fine roof trusses. Durable, safe, approved by engineers everywhere. Used on the nation's buildings for over 27 years. Deliveries Quickly Made. Shipped sent fully assembled immediately ready for fast, easy erection.

AMERICAN Roof Truss Co.
6856 Stony Island Ave., Chicago 49, Illinois ... PLaza 2-1772
Established 1922

E-Z MARK GAUGE
THE PROFESSIONAL WAY!

Makes a clean-cut deeply etched profile. Remove chips. Repeat on jamb. Hang door!

Comes in 3", 3 1/2" and 4" (Std.) sizes. If dealer can't supply, send only $1.00 with order, pay postman balance plus postage C.O.D. In Canada, 2c higher per order. No C.O.D. State sizes wanted.

Comes with Leatherette Case
E-Z MARK TOOLS
P. O. Box 8377 Los Angeles 16, Calif.
Dept. A

best tool you can buy
PAYS FOR ITSELF MANY TIMES OVER!
Builders everywhere want this master workman—for its better work, bigger savings, greater accuracy and built-in POWER!

WALLACE No. 1 RADIAL SAW
with the exclusive Wallace Angulator
SAWS RAFTERS complete in one handling without marking! Saves $200 to $400 on the average home. Does all sawing jobs—PLUS shaping, dadoing, routing, rebubbing, grooving, etc.

Start Saving Now—Write for Free Bulletins
On Our Complete Line of Woodworking Machines
J. D. WALLACE & COMPANY
136 So. California Ave., Chicago 12, Ill.

ASSOCIATED PLYWOOD MILLS, INC.
MILLS: Eugene, Oregon, and Willamina, Oregon
BRANCH SALES WAREHOUSES:
Eugene and Willamina, Oregon; 925 Toland St., San Francisco 24, Calif.; 4814 Bengal St., Dallas 9, Tex.; 4268 Utah St., St. Louis 16, Mo.

SALES WAREHOUSES:
Beesonette & Eckstrom, 2719 S. Compton, Los Angeles 11, Calif.; Pacific Mutal Door Co., 626 Tacoma Bldgs. (Home Office), Tacoma, Wash.; 1047 Fleet St., Baltimore 31, Md.; 2341 Throop St., Chicago 8, Ill.; 516 South Ave., Smokey Hill, N. J.; Adams and Shawnee Sta., Kansas City; 2235 Territorial Road., St. Paul 4, Minn.

The experience of Associated Plywood Mills dates from 1921. That is a long time in the relatively young plywood industry—long enough to characterize Associated Plywood Mills as one of the pioneers in the development and growth of this important building product.

Manufacturing plants of Associated Plywood Mills, Inc., are located at Eugene and Willamina, Oregon, in the heart of the Douglas fir region.

Warehouse stocks of APMI plywood are located in major population and building areas from coast to coast. These regional depots also are headquarters for experienced plywood men whose services are always available, and who are as close as your telephone.
LOOK!
Balance Sash and Weatherstrip with One Enclosed Unit

THE ALLMETAL SASH BALANCE & WEATHERSTRIP UNIT

MAKE IT EASY FOR YOURSELF. Give your client a better installation and better sash control by using this combination Sash Balance and Weatherstrip Unit. The ALLMETAL Sash Balance is rolled from one piece of metal and new engineering principles have been applied to give true two-way balance action—making use of both spring tension and metal tension—thus gaining stability. In raising and lowering sash, spring housing (in itself the most effective weatherstrip) compresses against groove yet does not hinder vertical movement. Hammered side ribbing against the stops gives additional weatherstrip protection. Spring never shows. It is completely concealed.

1. Spring for vertical tension.
2. Enclosed housing for lateral stability and neater appearance.
3. Complete metal runway coverage.
4. One-piece tubular housing conceals spring.
5. Specially designed sash clip for secure spring holding.
6. Full ¾" x ¼" sash groove (after fitting).

Write today for complete details about this new, better, economical window equipment which saves so much in labor and time.

ALLMETAL WEATHERSTRIP COMPANY
2243 North Knox Avenue • Chicago 39, Illinois

ALLMETAL WEATHERSTRIP CO.
2243 North Knox Avenue, Chicago 39, Illinois

Gentlemen: Please send me complete information and prices.

Name
Address
City State

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Watch for announcement on new Bruce Ranch Plank Floor

For complete information, write E. L. BRUCE CO., Memphis, Tenn.

10 YEARS' PROVEN DURABILITY...

and

STRATE-LINE ACTION

back this

NEW DETROIT
EASY FINISHER

Easy's fast, strare-line action duplicates the back-and-forth motion of hand block work. Sands up to moldings and right angles. Does not sand cross grain, cut swirls or other hard-to-cover abrasive patterns.

Your Copy of the New Easy Bulletin is yours for the asking. Just fill out coupon and mail.

DETROIT SURFACING MACHINE CO.
7458 W. Davison Ave. • Detroit 4, Michigan

Company
Name
Street No.

City State
**USE THE finest!**

**UNIVERSAL LEVEL-TRANSIT**

Truly the finest in accuracy and dependability, the Universal Level-Transit is smoothly converted from a precision level to a highly accurate transit in 2 easy motions. A practical all-around builders' instrument. Patented ball-bearing rose assures perfect adjustment under the severest conditions. Telescope 12" long, 25 power, horizontal circle 41/2" with Vernier to 5 minutes. Price $165.00

**EXTRAS - MODEL 3000**
- Detachable compass.... $13.75
- Studio wires.................. 5.50
- Extension leg tripod.... 15.00

Write today for full information on Model No. 3000 . . . Also FREE booklet "How to Lay Out Building Lots."

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**KNOT SEALER WP-578**

Knot sealer WP-578, developed by Western Pine Association, is recommended for priming knots to prevent paint failure. In laboratory and field tests, it has out-performed all other sealers. Prepared solutions of WP-578 are made and distributed by 82 approved manufacturers from coast to coast. If your dealer does not have it, write Dept. 121-B, Western Pine Association, Yeon Building, Portland 4, Oregon.

*Idaho White Pine  *Sugar Pine  *Ponderosa Pine

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**INSULATION is impaled on prongs of clips and prongs bent back flush with insulation**

**ROOF** insulation was fitted between wood strips fastened to the roof beams clips were bent back so that they were flush with the insulation surface. The clips were attached to walls on 12-inch centers, horizontally. Vertically, three clips were spaced at an equal distance between the girts which are 65 inches apart. Insulation was applied to the roof by using wooden strips attached to the steel beams, which, in combination with fasteners applied on top of the insulation, hold the insulation firmly in place.

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American Builder, November 1949.

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<td>48</td>
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<td></td>
<td>Wurth Chemical Company</td>
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<td>Zonolite Company</td>
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National "Big 4" Flexible Door Hangers are the low-cost solution to all-weather barn door operation. They are built entirely of steel on extremely heavy line with an embossed hood for greater strength. Designed with extraordinary simplicity and craftsmanship for specific advantages such as:

1. Antifriction steel roller bearing with axle shoulder to prevent binding on hub of wheel. This gives free motion to the door at all times.

2. Outward swinging flexibility which allows door to rise higher than with any other flexible hanger.

3. When hanging in normal position, hanger is perfectly rigid—there is no vibration as with other flexible hangers.

4. Fastens to one side of the door only by means of three bolt holes for ease of installation.

5. Two studs and a hook absolutely prevent hanger from jumping the track.

6. Axles and rivets are cadmium plated to prevent rust.

7. Door comes closer to track than with any other hanger.

"Braced" Rail is used with "Big 4" Hangers. Brackets for this rail are placed every 12 inches apart and double riveted to the rail. A metal brace extends below bracket giving extra carrying strength.