127 ideas on how kitchen and bathroom features aid home sales......
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and you sell the finest in hardware

...the finest in quality
A BROAD LINE DESIGNED
FOR COUNTLESS USES

You answer every builder and consumer need with
National Lock builders' hardware. Here's a broad
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at a good profit. Order a well-rounded inventory
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1 Nail to sheathing

2 Anchor to studding

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... it comes completely trimmed outside and inside

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Check on these beautiful new Window Units today. They're the newest thing in windows and built by the oldest and largest steel window manufacturer in America. Call your nearest Fenestra salesman (listed in the yellow pages of your phone book). Or mail the coupon.

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WINDOWS • DOORS • PANELS
"OUR WALLS AND CEILINGS ARE THE MOST ADMired FEATURE OF OUR NEW HOME. NINE OF MY NEIGHBORS NOW HAVE HOMES FINISHED WITH UPSON DRY-BUILT FULL-WALL STRONG-BILT PANELS," writes Mrs. Edward Regetz of Utica, New York

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Upson full-wall Strong-Bilt Panels comply with FHA requirements. Millions of feet being used monthly! Our Territory Representative will gladly give you full information—help you figure your next job. See your lumber dealer or mail coupon.

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Have your Territory Representative call on me to explain use and application of Upson full-wall Strong-Bilt Panels.

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AMERICAN BUILDER
IN YOUR AUGUST ISSUE

The Garage—Part of the home today.
Architectural treatment of garages discussed and illustrated. Plans for storage and recreational areas in conjunction with the garage, as well as a table on modern car sizes will be shown. Framing details, hardware, door installations and driveways all profusely illustrated with drawings and photographs. Better detail plate gives complete information as to how to build cupolas for garages.

American Builder's Blueprint House—full eight-inch scale drawings of a three bedroom house designed for a narrow lot.

Rental units that the builder can build—singles, duplexes, and four unit apartments in frame and masonry—drawings, construction details, photographs.

Be sure to read these instructive features.

Office of publication, Bristol, Conn. Editorial and executive offices at 79 W. Monroe St., Chicago 2, Ill., and 30 Church St., New York 7, N.Y. American Builder's Magazine (originally ' Carpentry and Building') with which are incorporated Building Age, National Builder, Permanent Builder, and the Builder's Journal, was founded Jan. 1, 1879. Name registered in U.S. patent office and Canadian registry of trade mark.

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In This Issue

Publisher's Page

Where Locate the Dividing Line

Association News

Editorial

Public Medicine and Public Housing

FEATURES

Experts Offer Suggestions

Professional kitchen planners redesign kitchens and bathrooms of American Builder's prize-winning house designs

General Electric Reduced Room Size, Achieved Convenient Kitchen-Laundry

Hotpoint Designers Altered Placement of Equipment, Reorganized Laundry

Westinghouse Electric Recommended Structural Changes

Mullins Manufacturing Company Changed Relative Position of Fixtures

Kelvinator Corporation Worked in Conjunction with the Morton Manufacturing Company. Recommended Sliding Doors, Provided Space for Freezer

Briggs Manufacturing Company Relocated Fixtures in Bathroom of Jeanne Schlesinger House

The Eljer Company Increased Efficiency of Bathroom by Adding Accessories

American Radiator & Standard Sanitary Corporation Altered the Relative Position of Fixtures in a Kitchen and Bathroom

Fresh Ideas for Kitchen-Conscious Home Builders

People's Gas Company of Chicago offer original ideas in kitchen planning, including

Kitchen Specialties

Kitchen Fixtures

Planning Kitchens and Bathrooms

Seven Different Designs from a Single Plan

American Builder's Blueprint House of the Month

Lighting for Kitchens

Electrical Bathrooms

Standardized Kitchen Remodeling

Special New Products for Kitchens and Bathrooms

Salute to Gadgets

By R. E. Sobieran

DEPARTMENTS

Trends

Letters to the Editor

On or Off the Record

Technical Guide, How-To-Do-It and Better Detail Plates

Editors' Round Table

New Products

Catalogs

Index to Advertisers
Three features combine to give this hardwood floor a charming, distinctive appearance. First, the alternate 3/4" and 5/8" oak strips. Second, the interesting walnut pegs. Third, the mellow "Decorator Finish."

The beautiful overall effect is very similar to that of an expensive random-width plank floor. But the new Ranch Plank Floor is moderate in cost because it's pegged and completely finished at the factory, and because it's installed like regular strip flooring. It has none of the installation problems or expansion hazards of wide oak planks.

Never has a new hardwood floor gained such immediate acceptance. Try it in one of your homes, and you'll find yourself using it at every opportunity. See our catalog in Sweet's.

E. L. BRUCE CO., MEMPHIS, TENN.
Where Locate the Dividing Line?

When anybody complains of invasion by government of the field of private business, some objector is bound to come back with the observation that government does a pretty fair job in handling the mail and that therefore we should not entrust it to some other activities "affected with a public interest," such as producing electricity, or transportation, or housing.

What is the dividing line in principle between functions proper to government and those which should be reserved to the voluntary initiative of private citizens?

This question and its answer are probably the most important pair in the entire realm of economics and political policy—and the clue is to be found in the nature of government. What attribute does government have which is not possessed by voluntary associations—churches, lodges, corporations, clubs and so on? The right and ability to use force is the mark which distinguishes government from all other associations of people. You don't subject yourself to the rules of a church or a lodge unless you voluntarily become a member—but you obey the rules that government lays down, without the privilege of resignation.

Take the Post Office, for instance—how does it differ essentially from such of its competitors as the telephone, telegraph and express companies? The answer is that the Post Office permits competition only by sufferance. Try and set up competition with the first-class mail service and see what happens. No company established by private capital has the privilege of calling on the police to suppress its competitors.

Or take such a government enterprise as T.V.A.—how is it financed, compared to the way a private utility raises its money? The capital of T.V.A. is raised by taxation, which means it is taken away from private citizens by the tax-collector, with U.S. marshals and prison wardens standing behind him to lend emphasis to his demands. A private utility, by contrast, has no money to spend which is not offered freely to it by uncoerced investors.

Or take the highways and waterways—Congress is in the process of voting the largest authorizations on record for "Federal aid" to public roads and waterways—which means that highway and waterway money is money raised by coercion, with a prison yawning for the "investor" who is unduly reluctant to ante up his allotted share when called upon to do so. Security salesmen are not employed and are not needed.

No matter how beneficent a governmental agency may appear at first glance, if you look at it real hard you will see a policeman, or a jailer or a hangman lurking in the background. Force or the threat of force is the essential feature of government—the mark which distinguishes it from all other human associations.

It is no disparagement of government to note and acknowledge this attribute, because people being what they are, force or the threat of it cannot be dispensed with. If there were no police, every man would have to carry a gun—and experience certainly teaches that, where force has to be employed, it is a lot better to centralize it in the hands of a lawful government than to expect every man to be his own policeman, judge, jury, jailer and executioner. In whatever situations it can be shown that the use of force is indispensable—as it is in dealing with felons or a foreign enemy—then there government belongs. It has a job to do that cannot safely be entrusted to any voluntary association of private individuals. No such organizations as "vigilantes" or lynch-law throngs have ever done so satisfactorily a job of making society safe against criminals as an orderly system of police, courts and jails, under governmental auspices.

The principle which separates the proper functions of government from those of private enterprise, therefore, is whether or not coercion can be justified. If coercion is not needed, and cannot be justified, then the function is one which belongs to government. If coercion is not needed, and cannot be justified, then the function is one which falls into the natural bailiwick of free, private enterprise.

How civilized can a people claim to be if they need to have the incentive of a policeman's billy to get them to do an efficient job of providing food, clothing, fuel, light, transportation for themselves? And how can a policeman—whose trade is force—be expected to recognize and protect efficiency in production even when he sees it? Putting government (i.e., a policeman) in charge of production is about as logical as calling on a blacksmith to lead an army. No man can hope to excel at a trade which is not his specialty.

James G. Lyne
How to Make a Home

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

provide the tightest weatherseal ever—with extra strength built in—sections are 1 3/16 inches deep. Yes, when you build with Ceco Steel Windows, you know you've used the very best—you're sure of economy too—you're modern as tomorrow.

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makes the big difference
Many leading builders are providing even buyers of low-cost houses with the benefits of Thermopane® in windows and window walls by glazing it into a simple wood frame.

Some use dressed dimensional lumber to double as structural members and as frames for the Thermopane units. A recommended practice, however, and one which provides an economical and satisfactory method of installation, is the use of dressed lumber as a simple frame.

Thermopane presents no difficult installation problems. However, it differs from single glazing methods in several important ways. To assist you in fulfilling your customers’ requests for Thermopane, these two pages present simple, step-by-step procedures.

1. Make a simple frame of dressed lumber, preferably redwood, ponderosa pine, sugar pine or fir. Use 2 x 6’s for sides and top and 2 x 8 for sill. Rout out sill for drip groove; also plane level on outer edge for water drainage. Inside dimensions of frame should be 1¼" larger than size of Thermopane unit to be installed.

2. Nail on a spacer strip 5/16" thick x 1-1/4" wide (lattice strips may be used) around the inside of the frame to form an opening in which the Thermopane will be glazed. Heads of nails must not protrude.

3. Simple frame is placed in opening. Make sure that frame is square and plumb, that sill member is flat and level. A: Center of opening. B: Points midway from center to outer corners where setting blocks are placed.

4. Section shows how Thermopane rests on setting blocks and is cushioned by ½" bed (A) of glazing compound on each surface of the glass.

5. Section, left, shows how stool can be used as back stop for the Thermopane unit. To the right is an alternate method.

6. Same section as illustration at far left but back stop does not double as stool. Plain trim covers joint of sill at interior wall.
Glazing Instructions

Thermopane is a factory-fabricated unit. Its dimensions cannot be changed without risking damage to the metal-to-glass seal. A broken seal permits condensation to occur in the air space.

1. Check glass opening to make sure it is square. Opening within the spacer strips must be ⅜" larger than the Thermopane in width and height. That portion of the sill where the glass will rest must be flat and level. Glass must not rest on a sloping surface.

2. Nail back stop in place at sides and top of frame, against spacer strip. Nail a back stop (or stool) on sill to line up with those at the sides and top. Height of stop should be ⅜" or more to cover metalized edge of Thermopane.

3. To avoid breakage, DO NOT USE PUTTY. Provide a soft cushion for the Thermopane and make a water-tight installation by using a good, knife-grade, non-corrosive glazing compound THAT WILL NOT HARDEN. See that compound is well mixed and easily workable. Follow directions that are given on container.

4. Apply a generous bed of glazing compound to the back stops so that when the Thermopane unit is pressed into place, compound will completely fill space between glass and stops. This cushions the Thermopane and forms a watertight seal.

5. Thermopane units whose width and height combined total 80 inches or more should rest on two setting blocks of soft wood, preferably rot-proofed. Blocks should be ½" thick, 4" long and ⅜" wider than the thickness of the Thermopane unit being installed. They should be set on the spacer strip along the sill against the back stop halfway between the middle and each bottom corner of the opening.

6. Rest the lower edge of the Thermopane on the two setting blocks, CENTERING IT IN THE OPENING. Make sure that the surface of the Thermopane is exactly ⅜" away from the back stop at the sill. Press the glass into the compound on the back stops until a ⅜" cushion of compound remains between the back stops and glass.

7. Apply sufficient compound to completely fill the space between the edges of the Thermopane and the frame and to provide a cushion between the glass and face stops.

8. Press face stops into the compound against the spacer strips. Nail face stops in place with finishing nails. Fill in any voids between glass and stops. Trim off excess compound.

More than 80 Standard Sizes—Thermopane is sold by glass and building supply distributors and dealers. See them, or write us, for data on standard sizes available.

Standard Specifications for Double Thermopane

All insulating glass shall be Thermopane of sizes indicated on the drawings, and composed of an inner pane of glass...inch thick, and an outer pane of glass...inch thick, hermetically sealed with a metal-to-glass bond and separated by a (⅜" or ⅜") dehydrated air space, as manufactured by Libbey-Owens-Ford Glass Co., Toledo, Ohio, and installed according to manufacturer's instructions.
The AllianceWare vanity lavatory and the AllianceWare 5-foot tub illustrated here offer unusual possibilities in homes, apartments and hotels—wherever bathroom space is limited—yet where beauty and complete utility are essential.

AllianceWare vanity lavatories and 5-foot tubs may be installed in bathrooms as small as 5 x 7 feet. Vanity top is laminated plastic in blue, green or coral with cabinet of harmonizing color. Lavatory is white. Seat serves also as a linen hamper.

All AllianceWare fixtures are enameled by the wet-process providing a dense, lustrous surface which is stainproof and which offers maximum resistance to chipping.

Because of formed metal construction, over-all dimensions do not vary more than 1/4 inch. The rim of the lavatory illustrated is perfectly flat with true edges of unvarying thickness, assuring easier, closer, faster installation of counter surface.

AllianceWare tubs are readily installed by merely nailing two vertical supports to the studs with a horizontal member spaced between the verticals. According to F.H.A. requirements, this is the method of installation which eliminates the effect of shrinkage in lumber. Other important features of AllianceWare tubs detailed at the right explain why AllianceWare is preferred by many architects and builders. Most AllianceWare fixtures are available in white and several beautiful colors.

Specifications and dimensions sheets on AllianceWare are yours for the asking.
ABC is the fastest type of metal-clad wiring system to install.

- Easiest to handle... Easiest for getting materials on the job.
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- One piece from outlet to outlet.
- No special tools... No waste... No threading...
  - No coupling... No exact measurements.

**Plus these extra ABC features**

- **Anti-Short Bushing**—Protects the wires from armor edges.
- **Siloc Safecote** insulated wires—flame retardant, moisture resistant, easy to strip.

**ABC is easy to install with "Redege" boxes and "EZ" connectors**

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Saw Lumber, plywood, compo-board, aluminum siding.
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NAIL DOWN HIGH DELIVERY COSTS!

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QUALITY THAT WINS DEMAND... means more profit for you! CHAMPION Homes withstand all climatic conditions because of rugged construction and quality-inspected structural materials. They are available in 3 sizes and 30 designs... varied colors... enough architectural variation for many combinations in large group developments, with no two homes alike!

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Write Dept. A-3 for dealer information.
There's more than meets the eye in...

Look inside a Kwixset lock. See the advanced design, the simplicity of operation, the rugged, precision-built construction...the built-in features that make Kwixset locks first choice with architects and builders across the nation. Kwixset's unique cam action locking device provides positive knob locking. The ingenious half-round spindle reduces number of working parts. And fewer parts mean faster, more economical manufacturing operations...lower unit costs!

But mechanical design isn't the whole story. Kwixset locks are exceptionally clean and attractive in appearance...beautifully hand-finished in satin or polished chrome or brass, or satin bronze.

Builders find that Kwixset locks save money when they buy them...save money when they install them. Simple, 2-hole installation cuts time and labor on the job to an absolute minimum. Add to this Kwixset's high quality and striking beauty and there is little wonder why more and more builders are installing more and more Kwixset locks.

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JULY 1950
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BENDIX HOME APPLIANCES, INC., SOUTH BEND 24, INDIANA

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Bendix is participating in the Good American Homes Program
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You cannot find a residential wall material that offers as much quality for so little money.

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Master Selector Switch Increases Versatility Of Remote Control!
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Turn rotary selector switch to the desired circuit and then press the control switch for On or Off.

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Merely press the control switch On or Off while rotating the selector switch through all nine positions.

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Free Guide

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General Electric flexible steel conduit saves time and money — its smooth interior surface makes wire pulling easy. For information on "flex" check (D) in the coupon.

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World's Largest Makers of Steel Kitchens
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THE ½ TON WILLYS TRUCK
WITH SENSATIONAL NEW HURRICANE ENGINE

For all-around economy, performance and durability—for top truck value—the brand new ½ Ton Willys Truck leads the field.

From rugged steel chassis to long lasting body, it is functionally designed throughout for extra strength and low weight. This weight advantage plus the thrifty power of its higher-compression HURRICANE Engine, enables contractors and builders to pull their operating costs down to bedrock.

The new ½ Ton Willys Truck is particularly suited to the needs of builders. Visibility is excellent...deep windows permit you to see where you are backing...low hood and fenders let you see the ground directly ahead...functional fenders allow you to go through tight places without scraping.

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

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Send for new Modine Convector Catalog today! Special 1-Pipe Steam Convector Bulletin also available.
LAST year home builders hit the magic goal of 1,000,000 starts in one year. So far in 1950, each month has been record-breaking. From January through April 1950, new housing units totaled 396,000 which surpasses 1949 activity for the same months by 53 per cent. In April, alone, builders started 126,000 new permanent dwelling units, an increase of 37,700 (43 per cent) over April 1949.

This peak volume of residential construction has already raised prices and there are rumors of grey market activities in building materials again, as well as long waits for various building materials.

Heretofore, there have been no accurate descriptions of the four million new homes started since V-1 Day. For the past several months the Bureau of Labor Statistics has been gathering data on the characteristics of home building in 15 metropolitan areas to provide a better description of the size, structural materials and equipment included in new homes. The results of the survey of the Chicago area have just become available, and will probably prove to be fairly typical of all houses being built in the Northern and Eastern states. The part of the survey that relates to costs and selling prices shows what appliances and other special equipment are included in the selling price.

Following are the findings of a survey of over 6,600 new 1-family houses and 1,300 apartment units started during July, August and September of last year in the Chicago area.

The survey shows that 40 per cent of the 1-family houses began during the survey period had 4 rooms with about 800 square feet of floor space on the average, and another 40 per cent had five rooms and averaged about 1,000 square feet. Less than 15 per cent of the houses had 6 rooms or more and an average of over 1,000 square feet in floor space. Most of these were custom-built. Average floor space for all the single family houses started was 980 square feet. Basements, unfinished attics and open porches were not counted in determining floor space.

Apartment units for the most part were more compact. The average was 620 square feet per unit.

The popular 1-story bungalow had almost as much floor space as the 3½ story house—900 square feet on the average, compared with 1,000. The 2-story houses were considerably larger, averaging 1,350 square feet of floor space. Two-thirds of the single-family structures were 1-story houses, while not quite 20 per cent had 1½ stories and about 15 per cent were the 2-story types.

Chicago builders, like those in many other areas, are recognizing the probable future need for larger houses. To provide for the extra bedrooms that may be needed later to accommodate a growing family, almost a fourth of the houses started in the third quarter of 1949 had expansion attics.

Masonry construction with brick facing was used for 60 per cent of the 1-family houses and in over 85 per cent of the units in two or more family structures. This will be higher than the national average because masonry is required by code within the corporate limits of Chicago.

Plastered interior walls were found in over four-fifths of the single-family houses and in all of the apartments surveyed in the entire area. Gypsum board was used in most of the remaining houses.

Wood was the most widely used window material, appearing in three-fourths of the 1-family houses and in over four-tenths of the units in two or more family buildings. Steel sash was noted in a fifth of the houses and in over half of the units in multifamily structures. Aluminum sash was used in a few cases.

Over three-fourths of the housing started during the quarter had some kind of central heating system. Hot air installations were most widely used in single-family houses, and hot water systems appeared in most apartments. Radiant-panel heating installations were found in a few single-family houses and in some 2-4 family structures. About one house in eight had a fireplace.

A regional characteristic was the prevalence of full basements. Seventy per cent of the single-family houses had this feature. In one-fourth of the houses, a utility room was substituted for a basement. Some had neither basement nor utility room.

Garages and porches are not commonplace in the Chicago area. Less than a fifth of the surveyed houses had either feature.

Three-quarters of the houses were built for sale. The remainder were about equally divided between contract-built houses and owner-built houses (those on which the owner acted as his own general contractor or did most of the work himself). Both the owner-built and contract-built houses were larger on the average than those built for sale by roughly 200 square feet in floor space.

United States Dept. of Labor
Bureau of Labor Statistics
Mack says... You'll open the
FITS-ALL Adjustable

Our Newest Alacrome
FITS-ALL No. 5
Adjustable Screen Door GRILLE

The most beautiful, ornamental Fits-All Grille of them all! Its gracefully designed scrolls insure a wide sales appeal. Also fully adjustable for nearly all standard-size screen doors. Made of Alacrome metal with a permanent, silvery-satin finish that will not rust or tarnish. Note the ingenious patented holder in the lower right corner of the grille as installed on the door to the left. It permits easy adjustment of the scrolls to fit the door while being installed. Each grille packed in individual, attractive, fully illustrated display carton. We're sure this new grille will soon lead the field, so order your stock right away!

IDEAL FOR COMBINATION
SCREEN-STORM DOORS
Our new FITS-ALL No. 5 Screen Door Grille is fully adjustable for many styles of screen doors. For example, on the combination screen-storm door shown at the left, the scrolls may be installed in both the upper and lower sections to create a striking effect. Such graceful designs have sales appeal as well as eye appeal!

COLORFUL, SALES-MAKING DISPLAY CARTON

Each grille is individually packed in this eye-catching, colorful display carton with complete instructions for installing and suggestions for arranging scrolls.

Nationally Advertised

We tell the millions of readers in these leading national magazines to buy our products from you. Order today and keep well supplied!
door to new sales with
SCREEN DOOR GRILLES

THEY'RE PRACTICAL, POPULAR and PROFITABLE!

With the addition of the beautiful new FITS-ALL No. 5 our line of Fits-All Grilles is more complete, more eye-appealing than ever before! Now, your customers have an even wider choice of these attractive grilles.

Each one is fully adjustable to standard-size screen doors! Easily installed. Every Fits-All Grille is artistically designed and made of Alacrome metal with a beautiful silvery-satin finish that won't rust or tarnish.

You'll want to have a complete selection of all 5 styles on display because when your customers see 'em, they'll want to buy 'em—so stock up NOW!

FITS-ALL NO. 1 ➔
STANDARD GRILLE
ADJUSTABLE TO DOORS AND WINDOWS
This attractive grille will fit nearly any door. Its scissor-like, accordion action permits easy adjusting from 18" to 37" between stiles. Also used as a window guard to keep prowlers out... and to keep little children from falling out window. Packed 12 to carton—screws furnished.

FITS-ALL NO. 2 — Comes in pairs to fit the lower panels of doors with divided sections as illustrated. Fits doors from 30" to 36" in width. Also packed 12 to a carton.

FITS-ALL NO. 5
A new, graceful full-size grille. Two top bars are flexible to allow easy fitting to door. Packed 6 to a carton.

Nu-WAY SCREEN DOOR GRILLE
A sturdy, attractive grille that anyone can install. Furnished in black enamel finish in 3 sizes to fit doors from 30"-32", 36" and 42".

Nu-WAY PUSH GRILLE — An easy companion sale for screen door grilles. Fits above grille as shown at left. Made for 32" and 36" doors—packed 12 to carton.

Your order will be shipped same day received!

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OKLAHOMA CITY 1, OKLAHOMA
This U. S. Department of Agriculture map indicates that more than 90% of America has an average of 180 or less clear days in each year. A large percentage of these days will be during class-free summer and week-end periods. In selecting a type of daylight opening for classrooms, it is imperative to use one that transmits the maximum amount of light...while permitting controlled ventilation in either fair or inclement weather. Truscon Intermediate Classroom Windows provide these requirements, and permit selection of glass in upper fixed panel to meet exactly the varying needs of geographical location, climatic conditions, and degree of window exposure to direct solar rays. Write for free literature giving complete details.
Letters to the Editor

Labor

Sirs: I read your Editors' Round Table discussion, and it would seem obvious to me that one of the greatest opportunities in the field of research lies in Labor Research. Labor, of course, is of such vital significance to the prosperity of our country, and unless a proper balance and attitude is maintained, we might experience repercussions as you discussed in your article. I believe that the answer is purely one of intense research on a serious sincere basis between management and labor.

Charles E. Joern, William Joern & Sons, Builders La Grange Park, Ill.

Sirs: I thoroughly agree with you on the stand which you have taken. It is just as important for labor leaders to be fair and equitable in their dealings with the forces representing industry, as it is for industry to be fair to labor and the public at large. Your stand is certainly that of a very intelligent one, and I as well as the public at large will be with you 100 per cent.

A. O. Aldrich
President, Chicago Metropolitan Home Builders Association

Sirs: I concur wholeheartedly with the things you expressed in your editorial on the subject of labor. My considered opinion is that the informed and thinking members of labor unions also would agree with every word of this splendid editorial. The exception, of course, would be those relatively few labor leaders who are guided primarily by personal and selfish political ambitions for power.

W. P. "Bill" Atkinson,
First Vice President,
National Association of Home Builders

Upside Down

Sirs: While we were pleased to see the story and photo on the Lupton "Master" aluminum window in the May issue of American Builder, we were dismayed to find the cut run upside down. The correct position of the window is with the small ventilator open at the bottom.

Franz Serdaboly
William Jenkins Advertising

EDITORS' NOTE: Yes, the photograph of the Lupton "Master" aluminum window in the May issue was inverted, and we are sorry for the mistake. Mishaps of this kind, unfortunately, are not uncommon, and usually occur at the print shop where printers, deluged with hundreds of photographs and faced with a deadline, occasionally forget which end is up.

Sky Hooks?

Sirs: The May, 1950 issue of American Builder perplexes me. As a carpenter's daughter I cannot forgive a building magazine that leaves scaffolds in mid-air. The cover of this issue does just that. Two planks all around the house are in sight, yet, please tell me, what is holding them up? If it is a new invisible support, please inform me as I am afraid the men standing on them will fall any minute.

Jean Urmson
518 Cayuga St., Salinas, Calif.

Dear Miss Urmson: We are happy to report that the men working on the scaffold (cover, May issue) have not yet fallen. Which proves that not only are the scaffolds supported, but are held by exceptionally strong supports. If you will look closely, to the right of the entrance to the home, and to the right of the lumber leaning against the scaffold, you will see a triangular scaffold brace. The reason you can't see other braces, so our artists hasten to explain, is that you are looking down at the house from an angle. Therefore, the braces are hidden under the scaffold.

The Editors

A Builder for 60 Years

Sirs: I have been in the construction business in Cleveland since 1889, and I have been very interested in building news and in comparing the Carpenter and Builder and its successor, the American Builder of the present day. You can hardly believe the progress.

... I want to congratulate you for your courage, your enterprise, good work for the industry and the general good will of the builder, great and small. I feel I am expressing the feelings of all who have had the benefits of your contribution to the craft.

Charles Miles
Cleveland, Ohio
For new homes that stay new

**American Welded Wire Fabric**

Excessive settling can be prevented in the homes you build, by reinforcing all concrete construction with American Welded Wire Fabric. That means you prevent cracked plaster, warped floors, gaping baseboards and sticking doors... seepage and damp basements, cracked, sunken and bulging sidewalks and driveways... all of which tend to make a new home old before its time.

When you use Welded Wire Fabric to reinforce concrete, its strength is distributed evenly throughout all parts of the basement, first floor, ground slabs and outer walls. All are joined into a solid unit by the continuous reinforcement American Welded Wire Fabric can provide.

Make sure your new homes will have enduring strength and beauty. Select the proper size and design for each type of construction from the wide variety of sizes and designs available in U·S·S American Welded Wire Fabric. Many prominent builders have found that is the best way to build better homes, make quicker sales.

You can get U·S·S American Welded Wire Fabric from your jobbers' and dealers' stocks.

**USE THIS FREE SERVICE**

It will pay you well to get the latest information on American Welded Wire Fabric. Send today for our illustrated folders, which show typical uses of wire fabric reinforcement in factories, farms, airports and public buildings, as well as in residences, sidewalks, curbs and driveways. If you wish, our qualified experts will be glad to call and show you how you can use U·S·S American Welded Wire Fabric to the best advantage. Just drop a line, on your business letterhead, to our nearest sales office.

Every type of concrete construction needs

**AMERICAN WELDED WIRE FABRIC**

**reinforcement**
A PREVIEW OF THE SALES BUILDING OPPORTUNITIES TO BE FOUND IN THE AUGUST ISSUE OF HOUSE BEAUTIFUL REACHING YOUR BEST CUSTOMERS ON OR ABOUT JULY 20th

ADVERTIES

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

SURFACING MATERIALS

WALL PANELING

1. MISSISSIPPI DECORATIVE GLASS
   MISSISSIPPI GLASS COMPANY

Mississippi Glass Company has released an attractive booklet titled, "Modernize Your Home With Decorative Glass," featuring actual photographs that show how figured glass adds charm and brightens every room in the house — makes each radiant with interest. For free copy write: Mississippi Glass Co., 86 Angelica St., St. Louis 7, Missouri.

WINDOWS, DOORS & EQUIPMENT

2. ANDERSEN WINDOWWALLS
   ANDERSEN CORP.

Andersen WINDOWWALLS — those complete wood window units that serve both as windows and as walls are featured for use in kitchens. Andersen WINDOWWALLS are the windows home owners prefer. They are the windows that make a home sell faster.

3. CURTIS SILENITE WINDOWS
   CURTIS COMPANIES SERVICE BUREAU

Silenite Windows and the full Curtis Woodwork line are advertised regularly in "House Beautiful" and several other national magazines. You will find a Curtis Silenite ad in the August "House Beautiful." This strong national campaign has helped to build up wide acceptance for Curtis Woodwork which is sold exclusively through retail lumber dealers.

4. PITTSBURGH PLATE GLASS
   PITTSBURGH PLATE GLASS CO.

5. THERMOPANE WINDOWS
   LIBBEY, OWENS, FORD GLASS COMPANY

(Continued on next page)

CLIMATE CONTROL:

DOWN UNDER

"SUNKEN" LIVING AREAS PRESENTED AS GOLD MINES OF YEAR-ROUND COMFORT

In another of its regular Climate Control features, August House Beautiful offers a challenging set of facts to future home owners — about the remarkable year-round comfort of living areas below ground level. And, as explained by Dr. Paul A. Siple, expert on climatology for House Beautiful, the advantages of "sunked" living rooms and bedrooms, influenced by even underground temperatures, are practical enough to give your best prospects an entirely new perspective on their future houses. So be prepared for questions on the subject. They're inevitable, once August House Beautiful is in their hands.

Dampness, underground wall temperatures, humidity control, etc., are all analyzed in terms of their effects on "sunked" area comfort. And it will pay you to look into these important subjects... to study the illustrative sketch reproduced here from the "There's a Gold Mine Under Your House" editorial. The progressive, practical ideas House Beautiful furnishes America's leading home-minded families, you see, on the type of architecture those families select, the building materials they buy, the home equipment they use, are enormously influential. And it's only logical that they'll ultimately turn to the architects and builders who capitalize on those ideas in advance.

RENOVATION

A cellar renovation extending far beyond the mere "rumpus room" variety is pictured in the August House Beautiful. Carefully planned to utilize waste space and provide elbow room for a variety of recreational activities, each in its own sphere, it's just the model to start relaxation-minded home owners in your locality asking you for estimates and specific suggestions.

You'll find this feature (on pages 76 and 77) doubly effective as an influence that pays off because it coincides with House Beautiful's Climate Control story of the month... on the year-round comfort to be found in even below-ground temperatures. So keep the August issue handy for reference and go over both editorials with your prospective customers. That's the way to make your business grow!
CONFIDENCE

Month after month, year after year, the most aggressively home-minded families in America confidently turn to House Beautiful for building news and pace-setting ideas for home improvement. They’re upper-income families who are motivated by their desire for better surroundings... better living. Capitalize on the enormous influence House Beautiful exerts on these families by displaying its name prominently to build extra sales... immediate sales! Send for window and counter cards today, mounted with August issue advertisements of your own selection.

SALES

Every issue of House Beautiful has building ideas that make sense... of the dollars and cents variety. Every month we’ll digest them for you here in the American Builder... in plenty of time for you to make the most of them.

MORE

ADVERTIES

6. TRUSCON DOUBLE-HUNG STEEL WINDOWS SERIES 130

TRUSCON STEEL COMPANY

Truscon Steel Windows won’t rot, sag or warp. Once installed, they are free from the constant paint maintenance and adjustment expense associated with windows of less durable material. For heating economy, Truscon Double Hung Steel Windows are factory weather-stripped with stainless steel. Overall cost of these windows is lowest of any double-hung window of equal quality.

PAINTS AND CHEMICALS

7. EXALGABE FOR POOLS

INERTOL CO., INC.

SANITARY EQUIPMENT

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8. CASE BATHROOM FIXTURES

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House Beautiful display aids featuring the advertisements of many of these manufacturers can be had without charge. Circle the numbers below which appear beside the advertisements you wish mounted, fill in your name and mailing address and mail coupon to: Merchandising Division, House Beautiful Magazine, 572 Madison Avenue, New York 22, N. Y.

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15. FITZGERBONS BOILER

FITZGERBONS BOILER COMPANY, INC.

16. FRIGIDAIRE ELECTRIC DEHUMIDIFIER

FRIGIDAIRE DIV. OF GENERAL MOTORS CORP.

Here’s a sure simple way to check moisture damage — electrically and automatically! The amazing Frigidaire Electric Dehumidifier removes damp air over chilled coils—forming moisture to condense into containers where it can be drained away. A real help in thousands of homes and business installations — used by many stores to protect valuable inventories.

17. MINNEAPOLIS-HONEYWELL THERMOSTATS

MINNEAPOLIS-HONEYWELL REGULATOR CO.

18. MUELLER CLIMATROL

L. J. MUELLER FURNACE COMPANY

MUELLER CLIMATROL — trade name of L. J. Mueller Furnace Company. Milwaukee; banquet hall in the heating industry, Mueller Climatrol is the most complete line in the industry — for gas, oil and coal-warm air or warm water heating equipment. Write for literature and details. L. J. Mueller Furnace Company, 2000 S. 20th St., Milwaukee 15, Wisconsin.

19. WILLIAMS OIL-O-MATIC

WILLIAMS OIL-O-MATIC DIVISION

EUREKA WILLIAMS CORPORATION

For every type of heat in every size of home, there’s a Williams Oil-O-Matic COMPLETE heating unit, factory designed for maximum beauty, ruggedness and economy. Oil-O-Matic’s “buyers’ guide” booklet: “There is a Big Difference in Oil Burners.” Easily compares all types. Write Williams Oil-O-Matic Division, Eureka Williams Corporation, Bloomington, Ill.

MAJOR APPLIANCES

20. HAMILTON CLOTHES DRYER

HAMILTON MANUFACTURING COMPANY

KITCHEN CABINETS

21. ELGIN STEEL KITCHENS

ELGIN STEEL KITCHENS

LYON KITCHENS

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PORTA-BILT CUSTOM KITCHENS

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FENCES

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DUBOS FENCE & GARDEN CO.

24. RUSTICRAFT WOODEN FENCES

RUSTICRAFT FENCE CO.

GARDENING—LAWN CARE PRODUCTS

25. SCOTT’S “SCUTL” CRABGRASS ELIMINATOR

O. M. SCOTT & SONS CO.

The best lawn to build a beautiful house is the lawn that you and your neighbors will be proud of. That means your lawn should be a beautiful lawn. Beautiful lawns start with a foundation of Scott’s “Scutl” Crabgrass Eliminator. Scott’s “Scutl” is the only crabgrass killer that really works. It eliminates crabgrass in the root system, and when new lawns are started, it will eliminate the Finnish. Scott’s “Scutl” Crabgrass Eliminator is the answer to your crabgrass problem. Send for a free sample today. It’s the answer to your crabgrass problem... Scott’s “Scutl” Crabgrass Eliminator... Scott’s “Scutl” Crabgrass Eliminator... the answer to your crabgrass problem.
85% of all prospective home owners want oak floors

OAK opens the door to a sale

"That first look shows home buyers what they want to see—oak floors! Then they're in a good mood to see the rest of the house. If it comes anywhere near the standard of quality set by the oak floors, I've got a sale!

"You see, I know that 85% of all prospects want oak floors. That's why I always have oak in my homes. I know that if they see oak floors when I open that door, I've opened the door to a sale."

NATIONAL OAK FLOORING MANUFACTURERS' ASSOCIATION - Dept. 5-7, Sterick Bldg. - Memphis 3, Tenn.
Gives you a selling edge on competition...AT LOWER COST

REYNOLDS Lifetime ALUMINUM GUTTERS AND DOWNSPOUTS

- That softly gleaming edge around the house advertises you as a MODERN BUILDER—with aluminum!
- Specifying rustproof permanence at half the price of other rustproof materials stamps you as a SMART BUILDER!
- And while you give your client non-staining beauty with no need for protective painting you save still further on installation costs!

That's the three-point story behind the fastest growing trend in gutters—and they all add up to greater satisfaction for your client, more profit for you. These are 5" gutters, Ogee and Half-Round styles, smooth or stopple-embossed finish. You put them up with slip joints—no soldering. Downspouts and complete fittings to match. See them at your dealers. Or mail the coupon. Reynolds Metals Company, Building Products Section, Louisville 1, Ky. Offices in 32 Principal Cities.
On and Off the Record

NORTHWEST—Reports from this section state that home building is going through a revolutionary stage as far as materials are concerned.

LUMBER—Its price and availability even in areas adjacent to the big producing mills is resulting in a sharp swing to metal cabinets and metal windows, and to insulating sheathing and gypsum boards. For the first time, according to one source, asphalt shingles are coming into wide use.

PLASTER—Because of union control of the number of plasterers who can carry union cards at a given time, there are not enough of these tradesmen to go around. The result is a sharp swing to dry wall. The volume of plaster work is as great as ever, and overall, it is the permanent drop in the percentage of plaster jobs with resulting difficulty for plasterers at any wage scale.

PREDICTION—The prediction is that when business levels off the inroads being made by dry wall will continue to increase, permanent drop in the percentage of plaster jobs with resulting difficulty for plasterers at any wage scale.

UNION CONTROLS—While it is recognized that there may be a lot of sound argument in labor union limitation of members, there is a glaring inconsistency in some of the contentions of some labor leaders. The reference is to public medicine. Some labor leaders have fallen for the statement that there are dire shortages of doctors and dentists, and that therefore public medicine legislation should be passed. How that would help is not explained. But in view of the fact that there are more and more accredited medical schools being instituted, and that doctors have never had limited their own numbers, union leaders who limit their memberships to a point where construction is being held up should put their own houses in order.

CRITICISM—No one who for any reason, good or bad, limits the number of men available for a given type of work at a point where other work cannot go ahead has any right to criticize shortages in another field that is not limited by an arbitrary regulation.

PUBLIC HOUSING—It is rapidly becoming one of the most unpopular issues facing the American public. It is now evident that public housing advocates tried mightily to put projects through before the public could be awakened to the danger.

DEFEAT—In every city where a referendum vote has been conducted public housing has been defeated soundly and conclusively. In every city where council action was held up by groups of voters wanting to know more before they consented to public housing projects, the projects have been defeated.

ELECTIONS—There is already evidence to indicate that proponents of public housing seeking re-election have been defeated because of their espousal of this socialist measure. The autumn elections should prove conclusively what the public temper is regarding public housing.

PESSIMISTS—The country needs a lot of them, says W. W. Woodbridge of the Red Cedar Shingle Bureau. There are many pollyanna optimists who hope the Fair Deal will go down to defeat at some bright day in the far dim future. I am sick of them says Woodbridge. They are planning nothing, fighting neither for nor against nothing—merely hoping something will happen. Nothing, he says, EVER happens. That is why he wants brave, pessimistic realists who are willing to lead.

COMMAND PERFORMANCE—Neal A. Ochiltree, president, Ceco Products Corp., recently issued a short statement titled, "A Command Performance for American Business." It calls on business to sell itself to its own people and to other people. It should be read by every employer in the country. And then thousands of performances should be given.

L. C. HART—He is a Johns-Manville vice president. Recently wrote an article for Look magazine titled, "The Biggest Swindle in History." He proves why any sincere believer in the theory of communing ought to be passionately anti-Soviet, and brands the Soviet Union the biggest swindle in history. It also should be read by every employer.

SMALL BUSINESS LOANS—This is the latest scoop calculated to entrap small business into a state of lethargy while socialism marches on.

She knows what she wants and it takes ADEQUATE WIRING

Houses sell faster when they are planned for electrical living. Here's why:

Millions spent in appliance advertising have convinced prospective home purchasers that electrical living is for them.

Many alert builders are taking advantage of this fact. You can do it, too.

Make the wiring a selling point. You must wire anyway. Adequate Wiring is one of the least costly "plus values" you can add to clinic sales and outsmart less acute competitors.

Use this selling tool. For Adequate Wiring information and other sales help,

Just use the handy coupon.

Selling's Least Tiring
With Adequate Wiring

National Adequate Wiring Bureau
Department A7
135 East 44th Street, New York 17, N. Y.
Please put me in touch with the nearest local Adequate Wiring Bureau. I'm interested in giving my houses more sales appeal.

NAME

COMPANY

ADDRESS

CITY STATE
Moisture-Proof Walls and Slab

INSULATION in its many forms is extremely versatile in its use, and is the answer to many of today's building requirements, particularly as it applies to the one-floor basementless house. The convenience and economy of this type structure has resulted in increased use of concrete floors laid on the ground. To properly protect slab from cold and dampness, perimeter insulation and moisture barriers are required.

Asphalt hard-board, a low-cost type of building board, has been found to be particularly adaptable together with Premoulded membrane for use with slabs and foundation walls. The hard-board is resistant to water, fire and acids. It is also odorless, rigid, vermin- and termite-proof and will not rust or rot. One of its characteristics is the fact that the board has sufficient rigidity to withstand the weight of the slab and a safety load.

The membrane which has an asphalt core board is applied with mastic to walls and slab thus forming a weatherproof moisture barrier.


FIGURE 2 shows the corrected method of perimeter insulation with a thermal resistance of 2.0. It has a vapor barrier to the warm side and is impervious to conditions favorable to decay. The insulation has sufficient rigidity to withstand the weight of the slab and a safety load, and contains expansion joint characteristics. The Premoulded membrane retains its masticity and allows for "breathing" of the membrane with the dimensional changes in the slab.

PREMOULDED membrane may be applied vertically to form a waterproof membrane for sub-grade foundation walls. Pour the footings as usual. Membrane is placed as indicated. Apply heat by means of a blow torch to the general area over the key-way. Bond sheets to footing with asphalt. Drawings above indicate the sectional arrangement and the complete wall installation. Portion of membrane appearing above grade to be coated for weather-proofing.

(Continued on page 46)
What goes up in the way of low-cost housing, must come down to Richmond for the finest in efficient gravity heating. No law... just plain fact—when you consider what the new Richmond gravity gas-fired units have to offer. (See below.)
They're simple to install... economical to operate... yet never deviate from Richmond's high standards of design, workmanship and performance.

Today, with gravity the trend in low-cost heating, these Richmond quality units are a natural for your economy-minded customers. And you can be sure of meeting most gravity heating requirements with Richmond's two convenient sizes—70,000 and 90,000 BTU input per hour... plus the A.G.A. stamp of approval for all types of manufactured, natural and LP gases.

CONSIDER THESE QUALITY FEATURES of the Model SG-Gravity Warm-Air Unit

1. Sturdy round-cornered light gauge steel homemaker jacket.
2. Gas-tight all-welded radiator provides a large heating surface.
3. Cleanout covers provide easy access to flues for cleaning.
4. Heavy-gauge steel heat exchanger with large combustion chamber and long, easy-to-clean updraft flues.
5. Steel Casing Jacket Liner provides maximum air circulation to keep jacket cool.

GAS BURNER ASSEMBLIES

Group A Controls
Natural and Mixed Gases

Group B Controls
Manufactured or Natural and Mixed Gases

RICHMOND
RICHMOND RADIATOR CO.—AFFILIATE OF REYNOLDS METALS CO.
Here’s what Sells

Desirable Location is Important —

So is Appealing Architecture —

But

Sales are Made or Lost in the Kitchen!

Today more than ever before, new home sales are being made (or lost) in the kitchen. Architecture and location are important, but the kitchen has become the heart of the home, and home buyers are demanding modern, convenient, eye-appealing kitchens.
Homes . . .

All-Electric Appliances
In The Kitchen!

Men build houses, but women buy homes. When you please her, the sale is made. Hotpoint All-Electric Kitchens appeal to women. Women know Hotpoint quality and how Hotpoint adds beauty, efficiency, comfort and gracious living to any home. They know they can enjoy extra hours of leisure when Hotpoint work-saving appliances are at their command. Men also quickly appreciate the engineering skill, economy and convenience of Hotpoint Kitchens.

The weight and scope of Hotpoint advertising and the word-of-mouth praise for Hotpoint performance have taught home buyers to look to Hotpoint for the finest first. Hotpoint’s All-Electric Kitchens and All-Electric Home Laundry Equipment are your key to easier and faster home sales.

Hotpoint appliance prices are strictly competitive. In most cases, the entire cost of an All-Electric Kitchen and Home Laundry can be absorbed in the buyers’ realty mortgage with slight effect on their monthly payments.

Talk to the Hotpoint distributor in your territory or write to Hotpoint, Inc., 5600 West Taylor Street, Chicago 44, Illinois, and ask for Kitchen Planning information from our Builder’s Division.

Close the Sale with Hotpoint!

Hotpoint Inc.

Clothes Dryers • Rotary Ironers • Cabinets

5600 West Taylor Street, Chicago 44, Illinois

July 1930
Builders and real estate people state, without reservation, that the overwhelming success of this "House of Charm" project is the complete General Electric Kitchen-Laundry. Why not let General Electric help sell your houses faster, too?

General Electric offers you all this:

- Tested merchandising programs that have helped so many other builders enjoy phenomenal sales results.
- The brand of electrical appliances that people prefer to all others.
- One source of supply for matched equipment

... a full line of cabinets and appliances.
- Assistance in designing and improving kitchen layouts for your houses.
- And most important: Remember that G-E equipment is world-famous for its dependability! You can put your confidence in G.E.
One week after this advertisement was run, 131 houses with General Electric Kitchen-Laundries were sold at $10,950 each. Now our only limit to house sales is our ability to obtain additional manpower for construction!

Let Messrs. Abbott and White of Chicago, Ill. tell you, in their own words, of their experiences—

"On Saturday, 7,000 people went through the pilot house, and on Sunday an estimated 10,000 people went through.

"Prospects were frankly amazed, and the question asked repeatedly was: Do we get all this General Electric equipment with the house? The answer 'YES' surprised and pleased them.

"People who did not have sufficient cash with them dug into their pockets for as little as twenty dollars and asked whether we would hold a house for them until they could get back with the full down payment. You would have to see what was happening to believe it. We are getting phone calls, cards, and letters from a radius of one hundred miles from Chicago.

"Today our only limit to house sales is our ability to obtain additional manpower for construction! This, in spite of the fact that some other low-priced houses in this area are moving very slowly.

"We certainly appreciate all the co-operation that the General Electric people have extended to us in launching our successful program, and we are awed by the faith and enthusiasm that so many house hunters have for General Electric equipment."

Let us help pre-sell your houses!

We will work hand-in-hand with you to achieve similar results in your area. Remember, too, that this successful Chicago program has been duplicated in many other sections of the country. From Maryland, Colorado, New York, Washington, D.C., and other cities come similar enthusiastic reports.

Contact your local General Electric distributor for complete facts about the G-E "Kitchen Package," or write to the Home Bureau, General Electric Company, Bridgeport 2, Connecticut.

As little as $4.80 more a month!

You can include General Electric Kitchen-Laundry equipment in your houses for as little as $4.80 a month extra when it is included in the long-term reality mortgage.

Furthermore, the slight increase in monthly payments may be offset by the economical operation, low maintenance and long life of General Electric appliances!
EXAMPLES above indicate use of Premoulded membrane over existing concrete slabs. In Figure 1 it functions both as a vapor pressure shield and a capillary membrane. Treated sleepers are embedded in concrete. The position of the membrane localizes the slab moisture. In Figure 2, the static sleepers are bonded to the membrane with mastk with the Premoulded membrane cemented to the slab. A vapor barrier is provided as a shield above the sleepers. In Figure 3, a simple layer of Premoulded membrane is cemented to the slab to serve as a waterproofing membrane and a flooring underlay. This is a low-cost installation and although it does not prevent expanis formations at the surface, it reduces the effect. These methods can be used where moisture controls have not been included in the original construction.

BENDING the membrane to the foundation or masonry walls enclosing the area necessitates on “on the job” bending of the semi-rigid membrane. To make a bending brake with available materials take two pieces of 1 x 8 inch material 3 feet long and hinge them together, spacing hinges about 24 inches apart. Install hold-down blocks about four inches in from either end. Place an oak threshold adjoining the wood strips and the same length as the 1 x 8’s. The brake is now ready to use. Place a sheet of Premoulded membrane on the brake between the hold-down blocks so that the point of bond is directly over the hinge seam of brake. Torch the general area of the bond and place the hold-down strip over the membrane as shown in Figure 1. Place knees on the hold-down strip and lift the tree side of the brake as in Figure 2. The result will be an even and accurate bond.

PREMOULDED membrane may be applied in a single ply on grade or great slab merely by allowing six inches of headlap and six inches of sidelay and applying a binding of asphalt on the contact surfaces of such laps. Place a weight on membrane to assure adhesion until the bonding asphalt sets. Complete all bonding operations before bonding. There are no open joints with this method of application and labor costs are reduced to a minimum. A coating of asphalt should be mopped over the entire surface for weathertproofing.

TO NAH asbestos shingles quickly make a frame of a 12 foot long 2 x 4 with two struts of 1 x 4’s six feet long nailed at right angle to 2 x 4. To use, the bottom row of shingles are nailed level to the wall, after which 2 x 4 frame is suspended on a level plane with 1 x 4 struts as shown in sketch. The second row of shingles is quickly laid by placing butt end of shingles on top of 2 x 4 and then nailing. The third and subsequent rows are nailed in a like manner.—Submitted by Herbert E. Fey, New Braunfels, Texas.

How to Nail Shingles Quickly

How to Pick up Metal Sheets

LENGTH of twine used as shown in sketch will eliminate difficulty in picking up the top sheet from a stack of thin corrugated metal sheets. The end of twine is tied to a small peg driven into the ground close to the bottom sheet. The twine is placed across the top of each sheet of metal. In this manner when the top sheet is to be removed lift up on the tree end of the string and take hold of the sheet with the other hand.—Submitted by Herbert E. Fey, New Braunfels, Texas.

American Builder will pay $3.00 for each short cut or job pointor that is accepted for publication. Send all material to Architectural Editor, American Builder, 79 W. Monroe St., Chicago 3, III.

How-To-Do-It Pointers Continued on Page 119
MAKE THIS SIMPLE MITER TEST!

Try all saws before you buy! It's easy... just follow this picture. Swing arm to right for right-hand miters... then swing arm to left for left-hand miters. The saw must cut miters and angles from 0° to 80° both right and left, as shown, to be fully practical in today's construction. Don't take less — get the full range.

DELTA MULTIPLEX
DOUBLE RADIAL ACTION

DELTA MULTIPLEX portable job shop!


There's no doubt about it — make the miter test and prove to yourself Delta Multiplex is your best buy!

Learn more about Delta Multiplex these 3 ways:

FREE MOVIE!  Sound-Action-Color!  Ask your dealer to show this film.

FREE DEMONSTRATION!  Ask your dealer to demonstrate Delta Multiplex in action.

FREE IDEA BOOK!  20 pages showing unlimited uses of Delta Multiplex. Send coupon for your copy.

Try all saws before you buy! It's easy... just follow this picture. Swing arm to right for right-hand miters... then swing arm to left for left-hand miters. The saw must cut miters and angles from 0° to 80° both right and left, as shown, to be fully practical in today's construction. Don't take less — get the full range.

DELTA MULTIPLEX
“ELECTRIC RANGES HELP ME TO

Offer more...Sell more,”

says builder Arnold Hartmann
of Oak Hill Village
in Newton Centre, Mass.

“When anyone asks me why
Oak Hill Village homes sell
so readily, the answer is
simple,” says Mr. Hartmann.
“The reason is that these
homes offer utmost value to
the prospective purchaser.
All-electric equipment—
including modern Electric
Ranges—combined with
good design and construction
make them a good buy—and they sell.” Successful builders everywhere have found that it pays to install Electric Ranges.

EQUIP
YOUR HOUSES WITH
ELECTRIC RANGES

Specifications show that these homes really do
offer extra value for the money. Six rooms, all
on one floor. Three bedrooms, each large
enough for twin beds, 10 sq. ft. of closet space
in each. Completely insulated, sash balances in
windows; 65 electrical outlets, telephone race-
ways. Finest quality materials and construction.
The beautiful, practical kitchen of this dream
home is designed for modern living. It’s all-
electric, has ample work surfaces. The modern
appliances include an automatic range, and—
OF COURSE, IT’S ELECTRIC!

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

AMERICAN BUILDER
EDITORS' Round Table

BUILD YOUR OWN—Numerous books and booklets on how to build your own house are appearing on the market. While it is conceivable that with a certain plan, and certain talents possessed by the owner, an amateur can build a house, advising everybody to try it is dangerous.

PROFESSIONAL HELP—Some of this, of course, is necessary. A licensed plumber is necessary. In most cases an electrician would have to be employed. The same is true for heating and sheet metal. If plaster walls are used, an amateur certainly should not try that.

WASTED MATERIAL—There is almost bound to be more of this by an amateur than by a skilled carpenter or bricklayer.

CO-ORDINATION—Without specific details of procedure a lot of time and study would be required to avoid waste and spoiled materials.

SAVE HALF—Recently, an amateur was reported to have built a house valued at $16,000 at an actual cost of only $8,000. No plaster was used, there was no concrete work, no grading, no driveway, no garage. It is a five-room, one floor, basementless house.

COST BREAKDOWN—No cost breakdown was shown, and American Builder was asked if the saving claimed was possible.

PROBABLY YES—On the basis of a cost breakdown for another house, completely contract built, it seems possible that under certain conditions half the cost might be saved.

REASONS—The house for which the cost breakdown is available cost $9,007.96 including $50 for plans and ten per cent profit for the contractor. Of this, $3,298.18 was for materials. It is probable that the “build it yourself” owner could not have purchased the materials for the same price a contractor is charged, because the latter is a repeat customer and a volume buyer. However, for the purpose of comparison, assume no difference in the price to either purchaser.

SUBCONTRACTS—Assume that the small amount of brickwork was done by the owner, and that he also applied the asphalt roofing, and ins-

(Continued on page 53)

JULY 1950

MOST IMPORTANT FEATURE TO PUT IN THE KITCHEN...

for the least amount of money!

THE AUTOMATIC WASTE KING Pulverator

America's Finest Garbage Disposer!

A new home or apartment is considered obsolete without an automatic, Waste King Pulverator that eliminates garbage electrically! Your customers know this...they look for this modern convenience. Ask them!

A Waste King Pulverator is a strong influencing feature that'll close the sale for you. It denotes quality of construction and products in the home. It's the most important major appliance being specified by progressive builders everywhere, regardless of size or type of building project.

Weigh the facts! What other major appliance could you offer with such high value at such a low cost? Answer: There is none.

And, when you specify...be sure it's the garbage disposer that's best by the builders' test. Compare ease of installation; compare dependable, efficient operation...and compare price. You'll find all these benefits in a Waste King Pulverator and more—

★ Lifetime Gried Control, protects the plumbing.
★ Anti-jam features, eliminates binding or clogging.
★ Lower installation cost, no brackets required.
★ Longer dependable, trouble-free service.
★ Continuous-feed operation, preferred by more women.
★ Competitively priced, your best buy!

FREE! Garbage Disposer A.I.A. file folder sets.
Fill out coupon now! MAIL TODAY!

Waste King PULVERATOR
CONTINUOUS FEED

© GIVEN MFG. CO., Los Angeles 1950

GIVEN MANUFACTURING CO., Dept. AB7
1250 Wilshire Blvd., Los Angeles 14, Calif.
Please send free Garbage Disposer A.I.A. file folder set.
I contemplate using garbage disposers within the next six months.

Name____________________________Address____________________________
City_________________________State________________________

Mail Today!
Provide the protection and economy of seamless, floor-to-ceiling, blanket-type insulation. Made with vapor barrier on one side and creped Kraft on the other, Barrett* Rock Wool Battls are available in various thicknesses and lengths (up to 8 feet) to meet every building requirement.
Barrett offers you a complete line of Rock Wool Insulation Products—granulated, loose, blankets, and batts. Available promptly in mixed deliveries from your nearest Barrett distribution point. Resilient, clean, lightweight, and quickly applied, Barrett Rock Wool combines excellent thermal and acoustic properties with modest cost. And the Barrett name is kept prominently before the public by constant and extensive advertising.

8-FOOT BLANKET TYPE

ROCK WOOL BATTLS

8-FOOT LENGTHS. Go on faster. Fewer seams—an unbroken vapor barrier from floor to ceiling—mean better insulation, less condensation. Also available 15" x 24" and 15" x 48", full and semi-thick.

FIRE-SAFE. Barrett* Rock Wool is a fireproof material—functioning as a barrier to the spread of fire. A blow-torch won’t burn it.

WON’T LUMP UP. Firm, springy Barrett Rock Wool doesn’t “drift” or get lumpy. High resilience assures uniform density of insulation over all areas.

NO STORAGE CASUALTIES. Battls can be stacked for long periods and will spring back to specified thickness when removed. No “Battles” at the bottom of the pile!

SOFTENS SOUND. Cuts down outside noises and, strategically applied to partitions between rooms (as in the case of a bathroom or playroom), it virtually eliminates sound transferance.

QUICK DELIVERY. Barrett’s conveniently located distribution points assure immediate attention to your orders. No lost sales through empty shelves.

THE BARRETT DIVISION
ALLOIED CHEMICAL & DYE CORPORATION
1327 Erie Street, Birmingham 9, Alabama
36th St. & Gray’s Ferry Ave., Philadelphia 46, Pa.
204 W. Wacker Drive, Chicago 6, Ill.
40 Rector Street, New York 6, N. Y.

Now! Ford Trucks in biggest Economy Run ever made!

To demonstrate Ford Truck Economy

...THROUGHOUT THE UNITED STATES...IN EVERY IMPORTANT TRUCK-USING VOCATION

...IN YOUR KIND OF BUSINESS, WITH YOUR SIZE TRUCKS!

The Ford Truck Economy Run, most realistic economy study in truck history, is now under way throughout the United States.

It's extensive! Thousands of truck users from coast to coast are making the Ford Truck Economy Run over their regular routes. Every important kind of truck-using business is included.

It's all-inclusive! All Ford Truck models from 95-h.p. Pickups to 145-h.p. Big Jobs will participate under actual day-to-day working conditions. Detailed records will be kept on operating costs for a period of six months.

It demonstrates Ford Truck economy! The Economy Run will demonstrate for everyone to see, what Ford owners have known right along. Ford Trucks do more per dollar in every kind of truck-using business. And this means they will do more per dollar for you in your business!

Economy... one reason why Ford is America's No. 1 Truck Value! And Value is one big reason why more and more truck users all over the country are switching to Ford. Ford Trucks are making the truck industry's biggest sales gains.

Switch to Ford Trucks to feel the difference—in your pocketbook. See your nearest Ford Dealer today!

In the long run, too—Ford Trucking costs less because

FORD TRUCKS LAST LONGER

Using latest registration data on 6,593,000 trucks, life insurance experts prove Ford Trucks last longer!
FACTS at your finger-tips
...in this
Modern Masonry Bookshelf

When we help you do a better job, we are doing a better job.
Supplying you with facts, ideas (and products) that are easy to use in our main interest here at SCPI.

That's why SCPI has become the national authority on brick and tile. And that's why we offer you these valuable information sources at minimum cost—in many cases absolutely free!

DO YOU HAVE ALL THIS INFORMATION?
Check the list below for the items you do not yet have and send it with your letterhead to the nearest regional office. Our local representative will fill your order promptly and also give his personal attention to your request for any other information.

SEND FOR THESE HELPFUL BOOKLETS TODAY

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1. The ABC of Modular Masonry
2. Brick Engineering
3. Watertightness and Transverse Strength of Masonry Walls
4. Specifications for Mortar
5. "Handbook of Brick and Structural Tile" (144 pages, practical, easy to use, $1.00)
6. Brick and Tile Cavity Walls
7. Facing Tile Catalog 50-C
8. Tile Engineering
9. Modular Sizes of Brick and Tile
10. Modern Brick Homes

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Main Office
Structural Clay Products Institute
1520 18th Street, N.W., Washington 6, D.C.
EDITORS' ROUND TABLE

(Continued on page 47)

stalled all the electrical work. He then had to spend $1,215 for plumbing, sheet metal, heating and tile, plus the contract labor, and also for temporary power for tools and a Formica top for the sink. If he carried insurance that would add another $20. Call it $1,235.

HIS TOTAL—His total cost then was $4,353.18. That is almost exactly 50 per cent of the $9,007.96 total.

ASSUMPTIONS—That assumes many skills on the part of the owner, and it places no value whatever on his own time. It assumes that he is required to lose no time from his regular occupation, that he makes no costly mistakes, and that he requires no help other than the several subcontracts he let. It also assumes that he can buy materials at the same prices given to contractors. It further assumes that he needs no loan, since mortgagees would be loath to advance money for such a project.

OTHER CONDITIONS—Now, provide the same house with a concrete foundation, plaster surfaces, a garage, a driveway, and assume that there is grading to be done. Giving the contractor 15 per cent for profit and plans, the cost is now $10,016.05. These figures were obtained and analyzed by Herbert J. Mann over station KFI in Los Angeles.

CASH OUTLAY—He now has to lay out $6,209.18. This is about 62 per cent of the total. His maximum possible saving is 38 per cent.

THE BUGS—It is almost inconceivable that an inexperienced man could do all of the carpenter work. He would need a skilled journeyman to run the carpenter work with himself as an assistant. Under these circumstances he probably could save about $300 by working 330 hours himself at no charge. The carpenter would get $400. Then, if he could not do the brick, electrical and roofing work himself, unaided, he would have to spend another $350. That brings him to a little less than $7,000, and saves him a total of $3,000.

IS IT WORTH IT—Considering the very doubtful quality of the finished work of an amateur, the enormous amount of time lost through in-

(Continued on page 57)

JULY 1950
While you may live and work hundreds or thousands of miles from Associated Plywood mills in Oregon, the chances are very good that APMI exterior-type and interior-type panels are quickly available in your own area.

For, in addition to company-owned warehouses in St. Louis, Dallas and San Francisco, there are other sales warehouses in major building and distribution centers.

These regional depots stock plywood that is grademarked and trademarked; assurance that regardless of where you buy APMI plywood, you get the guaranteed products of a pioneer manufacturer in the industry.

Equally important—you get the services of experienced plywood men. They welcome your inquiries for general information, for prices, for delivery schedules.

Panels up to 60 inches in width
and up to 144 inches in length.
GOOD BRICKWORK = GOOD DESIGN + GOOD WORKMANSHP + GOOD MATERIALS

FULL HEAD JOINTS, WITH BRIXMENT, HELP PREVENT LEAKY WALLS

WE SUGGEST THAT—
All head joints in both face brick and back-up work should be completely filled with mortar. If head joints are not completely filled, water may penetrate to the inside of the wall through openings in the joints. Dabs of mortar spotted on the corners of the brick are not nearly enough to fill the joints.

Take a look at the two examples shown at the left, and you'll instantly see why full head joints are an essential part of good workmanship in bricklaying.

No mortar material alone, not even Brixment, can make watertight masonry walls, so long as open crevices and pockets are left in the mortar joints.

Brixment mortar makes it far easier for the bricklayer to do good work. It is smooth and plastic—so soft and workable that the bricklayer can use enough mortar to fill the joint, and still "place" the brick easily and accurately to the line.

Brixment mortar has greater plasticity, higher water-retaining capacity and bonding quality, greater resistance to freezing and thawing, and freedom from efflorescence. Because of this combination of advantages, Brixment is the leading masonry cement on the market.
Builders and Owners Prefer Windows of ALCOA ALUMINUM

When owners ask, "How about upkeep costs?" the answer for aluminum windows is, "Practically nothing."

More aluminum windows are going into apartments and homes every day because aluminum lasts. Aluminum windows can't shrink or swell, never need painting, stay easy to open and close.

Informed through Alcoa's colorful national advertising, homeowners and apartment dwellers recognize aluminum windows as marks of value and good construction.

Investigate any of the thousands of new buildings that include aluminum windows and see how they save money over the years. You can get prompt delivery on quality aluminum windows in all standard types and sizes from many leading manufacturers.

For information on any building application of aluminum, call your nearby Alcoa Sales Office or write ALUMINUM COMPANY OF AMERICA, 1485G Gulf Building, Pittsburgh 19, Pennsylvania.
EDITORS' Round Table

(Continued from page 53)

ability to get subcontractors in on time, and the probability that a fair percentage of the time he spent would have to be taken from his regular occupation at a loss in pay, plus the fact that in this breakdown the owner has been given credit for a maximum amount of reasonable skills, it is doubtful if any saving would be made by most owners.

CONTRACTOR PROFIT—
Whether it is 10 or 15 per cent it looks to the uninitiated like an easy and desirable item to eliminate. To the initiated, however, there are some excellent reasons for viewing the item as a good investment. In the first place it assures a careful choice of skilled subcontractors. It assures co-ordination of their work, an all important factor in good construction, and it is a guarantee that they will follow each other in orderly succession, and without waste of time. No amateur builder can expect these advantages with the quality of workmanship they assure. If he got them he would indeed be lucky.

DANGER—There is real danger in openly advocating “build it yourself” without many qualifications, and without careful study of all the pitfalls by the man who contemplates building his own.

IN THIS ISSUE—An article entitled, “Fresh Ideas for Kitchen Conscious Home Builders” appears in this issue. In the article, the author makes the following statement: “ . . . method of introducing color into the kitchen is somewhat responsible for the swing back into public favor of the all-white fixtures.” The statement precipitated an argument. Is there a swing back to all-white fixtures? The editor who authored the article was accused of indulging in wishful thinking. One of his opponents said that exactly the opposite was true. He predicted color in refrigerator units and ranges, and said he actually knew of at least one producer who was going into color for these items. Another said it might be true of low-cost homes, but not of medium and high price homes.

WHO IS RIGHT?—The editors leave it up to the readers. Is there a swing back to all-white, or is there a trend to more color in fixtures and appliances, or is there an established balance?”
The advantages of TM—Thermostat Magic—are now available on all Honeywell Comfort Thermostats—at no increase in price!

This new TM principle provides better heating, more even inside temperatures, regardless of outside weather conditions. Rapid changes outside won't affect these new TM thermostats, because they work with the weather. Home buyers all will want the magic of TM. You'll want to equip every home you build with TM comfort.

Crowning 65 years of development
TM Tested and Approved

300,000 TM thermostats now in use—many for three heating seasons—have demonstrated the comfort advantages of the Honeywell TM principle. Home owners are enjoying a new standard of heating comfort—made possible by Honeywell scientific research.

TM Meters the Heat

Controlled frequency of burner operation provides an even flow of heat under all conditions. Thermostat Magic means more than thermostat accuracy—it means maximum heating comfort and efficiency—at no increase in heating cost.

TM Thermostat Magic means:

No More Waiting for Heat
No More Chilly Floors
No More Overheating
No More Fuel Used—instead
More Comfort For Your Heating Dollar

TM keeps the heat coming in regulated portions

TM Principle provides
Better Heating—Always

Long and irregular burner operations perked up and down temperatures—often rooms to get too hot or too cold. The varying temperatures cause sensations of draft and chill. Discomfort!

Honeywell
FIRST IN CONTROLS
NEW PRODUCTS
Offered by Manufacturers

FLOOR-WALL FURNACE  A875069

Requiring only 10 inches of floor depth, the Rais furnace is approved for second floor installation by A.G.A. Combining attributes of floor furnaces, a duct furnace and a wall heater, the design provides for delivery of both radiant and convected heat through the unique shape and position of ribbed heating element. Dimensions of the unit are 25-1/2 inches wide, 36-1/2 inches high and 12 inches deep above floor. Unit may be installed in concrete slabs since all connecting and servicing is done from above the floor level. Return air grills in floor assure warm floors and heat circulation. Radiator, Inc., Dept. AB, 5341 San Fernando Road West, Los Angeles 39, Calif.

PLASTIC SURFACED PLYWOOD  A875061

Micarta, a high pressure plastic bonded to plywood, is now available to architects, builders and craftsmen in new range of sizes which virtually eliminates all waste. New sizes include: 48 by 96-inch panels for walls, wainscots, general use, 30 by 96-inch for countertops, wide countertops, sink tops with back splashes, 30 by 40-inch for tables and built-in dinette tops and 24 by 96-inch for countertops. Material is distributed through retail lumber yards. United States Plywood Corp., Dept. AB, Weylwood Bldg., 55 W. 44th Street, New York 18, N.Y.

GAS-FIRED AIR CONDITIONER  A875059

Designed for low-cost, competitive homes and housing developments, model SU gas-fired air conditioner is produced in two sizes: 85,000 and 110,000 B.T.U. input per hour, both with periodical oiling. Steel tracks are formed with 15-inch radius curve and are set at an incline for weathertight closing. Strong cables are supported by ball bearing sheaves. Door latches with spring control bar with. cylinder lock. Wagner Manufacturing Co., Dept. AB, Cedar Falls, Iowa.

PREFABRICATED WOOD SIDING  A875070

Linwood siding is prefabricated in sections that measure 20 by 195 inches with an exposure of 13 inches. It has a combed texture with invisible tongue and groove joints. Deep shadow lines lend themselves to modern and traditional exteriors. Siding sections overlap and interlock and are self-aligning. Nails are concealed. Linwood Manufacturing Co., Dept. AB, P.O. Box 215, Centralia, Wash.

DUAL PURPOSE RECEPTACLE  A875049

Dual-purpose porcelain receptacle will fit 31/4 or 4-inch outlet boxes. Base of 4 11/16 inches diameter has open holes for 4-inch mounting and knockouts for 31/4-inch mounting. Keyless, one-piece type features staked screws and handy angle contacts. Illustrated three-piece pull type is manufactured with chain and three-foot cord, seven-inch chain, or chain and inductor. Removable porcelain rings release the Bobbin pull interior for quick wiring. The Arrow-Hart & Hegeman Electric Co., Dept. AB, Hartford 8, Conn.

ONE-PIECE TYPE FEATURES STAKED SCREWS AND HANDY ANGLE CONTACTS. ILLUSTRATED THREE-PIECE PULL TYPE IS MANUFACTURED WITH CHAIN AND THREE-FOOT CORD, SEVEN-INCH CHAIN, OR CHAIN AND INDUCTOR. REMOVABLE PORCELAIN RINGS RELEASE THE BOBBIN PULL INTERIOR FOR QUICK WIRING.

AMERICAN BUILDER
Bradley STRAIGHT LINE Hardwood Flooring

IS

STRAIGHT BY ANY TEST!

Not that this surveyor's instrument is a standard device for checking accuracy in flooring manufacture; but against the exactness of its unerring plumb line, Bradley STRAIGHT-LINE flooring scores a perfect parallel.

Floor layers say STRAIGHT-LINE increases their earnings. That's because there's no crook to force out in drawing up, no mis-matching, no off-angle and joints to correct; floor layers save time, instead of losing it.

Builders like this faster laying. It protects their estimates, adds up to more finished jobs, produces more profit per job.

Housing project management and realty developers enthuse over eye appeal in the matchless beauty of STRAIGHT-LINE floors . . . declare it promotes eager occupancy and sales.

Home owners take pride in STRAIGHT-LINE floors. That's because their lasting, superb smoothness is protected by strain-free, perfect matching which our STRAIGHT-LINE feature provides . . . that's why Bradley STRAIGHT-LINE flooring is the Standard of Comparison in hardwood floors of Oak, Beech or Pecan.

At local distributors' everywhere.

BRADLEY LUMBER COMPANY of Arkansas

WARREN, ARKANSAS

JULY 1950
FLEXIBLE DOORS  
A875056

Air circulates freely in closets enclosed by these flexible doors made of strong Northern basswood slats, 5/16 by 1 1/8 inches thick. Designed for walk-in closets, room dividers and similar applications, doors are available in range of eleven standard lacquer enamel colors including a natural finish. Since it is suspended in a traverse channel, door is easily hung. Method of hanging saves space. Hough Lumber Corp., R/A-TCX Div., Dept. AB, 1544 Jackson Street, Jonesville, Mich.

RUBBER FLOOR TILE  
A875066

Stone quality rubber tile is produced in 18 marbledized and one solid color. Tile is highly resistant to indentation and has high glossed surface. Marbleization extends through entire thickness of tile. Colors are co-ordinated for harmonious effects when used in combinations. Sizes are: 4 by 4, 4 by 6, 6 by 9, 12 by 12, 6 by 12, 9 by 18 inches. Border tiles are 9 by 18 inches; feature strips are two and three inches wide and 36 inches long. Tile is available in 1/8-inch gauge, but 1/16 and 1/16-inch gauges are made on special order. Stone-Wilson Corp., Dept. AB, 255 Fifth Ave., New York 16, N.Y.

MASONRY CUTTER  
A875077

Red Devil masonry cutter, a portable machine for cutting any brick, pumice, concrete block or flagstone, is equipped with hand-operated Hein-Warner hydraulic jack. Two hardened steel blades simultaneously bite into top and bottom of masonry unit producing straight cuts and corners. Metal tray is included for presetting cuts and is lined with sponge rubber to prevent ragged breaks. Made in three models: model C-110—for material up to 10 inches thick; model C-113 will slice masonry units up to 13 inches thickness with pressure of five tons; model C-117 will trim largest concrete blocks. Lee Sales Company, Dept. AB, 10429 San Carlos, South Gate, Calif.

VINYL WALL COVERING  
A875083

Permanent vinyl wall covering is available in eight true-time colors and in two authentic wood grinds: prime vera in blonde, gray, tan, dark mahogany; walnut in blonde, dark, gray. Highly resistant to alcohol, alkali and other stains. Wander Wall is flexbile, smooth and easy to handle—goes around inside or outside corners making installation relatively simple. Photo Div., Pulpcor Co., Dept. AB, 52 Vanderbilt Ave., New York 17, N.Y.

INVISIBLE DOORMAN  
A875081

Invisible electrical-mechanical doorman unit, called the Patrician, is first double-acting automatic power hinge manufactured. A small electric-hydraulic apparatus controls 250-pound doors with feather-like touch. Controlled by hidden micro-switch so sensitive that hydraulic opening action starts after lightest touch. One-third horsepower motor mechanizes the process. Unit can be adjusted to require slight steady pressure to open or single touch. Door may be remotely controlled from control panel. Pittmatic closes door on normal cycle. In event of power failure, door can be hand controlled as ordinary door. Spring tension can be set to cope with heavy winds. Since it operates in both directions and functions slowly and smoothly, unit can be used in single door entrances. Pittsburgh Plate Glass Co., Dept. AB, 632 Duquesne Way, Pittsburgh 22, Pa.

MASONRY CUTTER  
A875077

WET-OR-DRY PUMP  
A875056

Factory sealed water pump on model HD Clipper masonry saw eliminates need of disconnecting pump when cutting dry. Pump cannot be damaged by dry-cutting. Model HD Clipper masonry saw shown is one of nine models to feature sealed pump and water application system that assures all portions of blade and cut are adequately bathed to guarantee smooth, cool cutting and longer blade life. This saw handles all masonry materials from 10-inch concrete block to one-inch quarry tile. Clipper Manufacturing Co., Dept. AB, 2800 Warwick Tract, Kansas City 8, Mo.

INSERT NUMBERS AND MAIL COUPON FOR INFORMATION

American Builder, 79 W. Monroe Street, Chicago 3, Illinois

Name _____________________________________________  Address ________________________________________

City _____________________________________________  State __________________________________________

No. ________ No. ________ No. ________ No. ________ No. ________ No. ________ No. ________

When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder
On every building job, extra safety is something you always want. And safety is one reason so many builders say, "I'll take SKIL Saw." SKIL Saw power prevents jamming or stalling that could throw you off balance; SKIL Saw has perfect balance for constant easy use; SKIL Saw provides two handles for sure control where two hands are needed.

Every SKIL Saw combines better balance, design and power. Together they give you the easy handling that pays off in added speed, added safety and better work. Ask your SKIL Tool Distributor for a demonstration today.
TO BUILD A REPUTATION FOR KITCHENS...

Build your kitchens with Crosley

The new line of Crosley Kitchens provides modern features—exclusive features—that help you build your reputation for successful planning and building. Whether you need individual appliances, combinations of appliances, or complete kitchens, Crosley offers the finest in beauty and utility. You can offer owners and tenants extra convenience, combined with compactness that conserves floor space, provides greater storage space, and saves steps. Crosley Kitchen products are versatile and adaptable. Whether you plan single- or multiple-unit dwellings, there’s a Crosley combination for the exact size and shape kitchen you have in mind. In addition, Crosley design and construction permit quick, easy installation—with a consequent saving in labor and cost. Build with Crosley today and you build a better business tomorrow.

New Crosley Builders’ Plan! Special data and service are available free to all builders and architects. For information write:

National Builder Sales, Crosley Division
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CROSLEY
Better Products for Happier Living
Note the features and you'll see why the Eljer Legation Bath Tub is in such demand. This special tub, an outstanding member of Eljer's complete bathtub line, offers your clients plus advantages found in no other tub. It gives you the opportunity to add extra convenience and satisfaction to the homes that you are planning.

Here are Legation features: thick, vitreous enamel over a rugged, rigid, cast-iron base; comfortable end-seat; low front rim; wide, flat bottom for safety's sake; easy-to-clean rectangular shape; extra-wide front rim-seat; superb beauty; 5 1/2' length; white or pastel colors.

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

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

Wider Home Builder Activity Sought in Coogan Program

A 15-point action program, designed to achieve national recognition and long-term success for home builders is being pushed by Thomas P. Coogan of Miami, president of the National Association of Home Builders.

The NAHB leader's list of objectives, announced at the last meeting of the NAHB board of directors, constitutes a platform of activities that can have many constructive effects. Since the 15 points were announced, local associations and individual builders have taken them as guideposts for the future.

Here is what President Coogan would like to see carried through as the line of home builder action:

1. INDUSTRY SOLIDARITY: Allied groups within the building industry must work together to protect industry welfare.

2. PUBLIC RELATIONS: Begins at home, with community, neighbors, employees, suppliers and customers. Showing the public the home builder is a reputable business man and citizen.

(Continued on page 179)

Norman Mason Named to National C. of C. Post

Norman P. Mason of the Wm. P. Proctor Co., North Chelmsford, Mass., former president and current director of the National Retail Lumber Dealers Association, has been appointed chairman of the Construction and Civic Development Department committee of the Chamber of Commerce of the United States, it has been announced by Otto A. Seyforth, Chamber president.

NORMAN P. MASON

Mason was named a director of the national Chamber, representing District 1 (New England) in an election early this year. The group's New England constituency is made up of approximately 160 local Chambers of Commerce and trade associations.

Directors of the national Chamber are selected for two-year terms, with two representing each region. They meet five times a year in Washington and once outside the capital to set national policy.

Mason's predecessor in the chairmanship of the Construction and Civic Development committee, one of the Chamber's most important, was George West of the First Federal Savings and Loan Association, Atlanta, Ga.

27,000 See Home Show House

More than 27,000 persons visited a six-room ranch-type model home, built under the sponsorship of the Home Builders Association of Hartford County, Conn., at the recent 1950 Hartford Home Show. The house was constructed under the supervision of Show Chairman Joseph M. Howard, assisted by Dean Carrell and Howard Menzel, with carpenters from several members' crews working 12-hour shifts for three days to put up the home in the Hartford Armory.

Association members reported that attendance at the 1950 show was heavier than ever before, the exhibits more attractive and public interest greater.

ALAN BROCKBANK, left, Salt Lake City, NAHB second vice president, and Frank W. Cortright, executive vice president hold chart showing association membership growth while President Thomas P. Coogan (at microphone) and other directors look on. Coogan outlined program for improving home builders' status at the recent meeting in Washington.

Texas Lumbermen Prominent In Civic Activities Are Honored at Convention

Members of the Lumbermen's Association of Texas who are prominent in activities outside the industry, including mayors, Chamber of Commerce presidents and civic club leaders, were singled out for special attention at the Association's recent convention in Galveston when they were named to the reception committee for Capt. Eddie Rickenbacker, honor guest at the annual event.

The group occupied seats on the speakers' platform during Capt. Rickenbacker's talk and were special guests at the board of directors luncheon which followed. Comprising the group were:

Mayors: Gene Klein, Amarillo; Herb Stokely, Brownsville; Bruce Cunningham, Texarkana; Alvan M. Clark, Robin; John T. Gillett, Alpine; Phil Magee, Jr., Robstown; and S. Amster, McGregor. Other lumber dealer city officials were W. S. Drake, Austin commissioner, and L. E. McQuinn,Boerne councilman.

Presidents of Chambers of Commerce: Warren Keys, Amarillo; J. B. Mofett, Longview; Jim Pickering, Victoria; James Wilson, Floydada, West Texas C. of C.; Ceesley M. Grogan, Atlanta; and James E. Watson, Katy.

(Continued on page 174)
Cy Sweet Says -

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

Occasionally, when I am particularly depressed by the callousness of the average American toward the trend of the times, I allow myself to project my thinking into a future which almost certainly will follow unless that callousness is penetrated. I picture myself in the role of a grandfather trying to make his young grandson understand the things he has heard his daddy and me say about the "olden days," when our country was a democracy, and our freedom was as casually enjoyed as the very air we breathed. I hear his little-boy voice saying, "Grandfather, tell me about our country when Daddy was a little boy."

My thoughts turn back to the days of my son's childhood, to the depression of the thirties, with its thousands of unemployed, its frighteningly low wages, with property almost valueless. It was at this time that a new political faith was born, a faith that was elected to the Presidency who, or at least who promised the people that a nation could spend and spend itself back to prosperity. In the ten years which followed, the masses of the citizenry were lulled by this golden voice into a state of somnambulism, where they came to accept the fact that the government owed them their living and security, and that the cost of such security was a simple matter of taxation of the Classes and Big Business. I recall the days of the W.P.A., the ranks of the unemployed dwindling, the people cheerfully handing over their responsibilities to Government, in exchange for material benefits. The Golden Voice talked on, and although taxes mounted, Prosperity had replaced Depression and the Future could take care of itself.

My mind races on to the horror of World War II in the early Forties, and to us ultimately being maneuvered into that war in order to save mankind from the evil forces of Nazism and Fascism. Democratic Government allying itself with Socialist Government and Communist Government in the struggle against Nazi Government and Fascist Government was made to seem reasonable by the same persuasive voice that had so long charmed the people. The war was won through the sheer force of production by private enterprise; however, in order to help accomplish this great task the lives of the people had been regulated by government controls. The postwar years found the United States governed by power-mad politicans demanding more power, who in turn were being harangued by money-mad Labor Union officials demanding more and more money and power, while apathetic Average Citizens, wanting only Security again, ignored the danger signals.

I watched the late Forties roll on, with Socialism tearing its ugly head, and although a new President held the reins of government, many of the wartime controls were as yet not revoked, private enterprise was still the only life, taxes were growing more and more burdensome, and Labor more and more troublesome. The labor unions were ceasing to be organizations promoting the welfare of the individual worker and were becoming vehicles on which a few greedy and unscrupulous leaders hoped to ride to political glory. Our former Communist allies were waging a "cold war" or "war of nerves" against us and the threat of a "fighting war" was ever with us.

I look into 1950 with a sigh. Atomic weapons were stored for use in case the "cold war" became a reality, the plan to make a hydrogen bomb had been sanctioned, and Socialism was rapidly gaining a firmer foothold in our nation. Accusations of espionage in high places in government were being hurled by members of the political party not then in power, and economic unrest prevailed. Those of us who believed in Democracy, Free Enterprise, and the American Way of Life of our forefathers were imperiled. Here was a picture presented. We might well have saved our energies, for the next few years brought what we had anticipated; the war, into which we had, at last, been goaded; and a deadlier and more costly war than any which had preceded it; our democratic system of government cast aside for a socialist...

(Continued on page 202)

Chicago Home Fair Attracts 143,000 During 9-Day Run

More than 150 leading national manufacturers and local distributors and dealers filed all available exhibit space in the Navy Pier at the Greater Chicago Home Fair, May 13-21. According to the sponsoring organization, the Chicago Metropolitan Home Builders Association, the big show attracted a record crowd of 143,000 visitors during its nine-day run.

One of the highlights was a stage show called "Miracles for Modern Living," in which 17 new products were demonstrated and put on public display in Chicago for the first time. These included burglar-proof, radar-operated door-locks, aluminum rubbers, electric range and a closet that turns itself inside out. The presentation was directed by Joseph H. Schulte of Los Angeles.

CROWDS watched progress of budget home, built during Chicago show. Rendering and floor plan are on back pages

The largest single exhibit was composed of the entries in the Chicago Home Design Competition, also sponsored by the association. More than 450 scale model homes and house designs were entered, created by students from 21 Chicago area high schools. $1,200 in cash prizes was awarded by the association and an additional $800 by the Chicago Herald-American.

Contest judges, all from Chicago, were Edwin H. Mittelbusher, architect; Arthur E. Fossier, builder; Arthur V. Hansen, American Builder architectural editor; William Dean, landscape architect; Michael J. Sexton, president, Chicago District Council of Carpenters; and Carl A. Carlson, Board of Education.

The new location of the show, Navy Pier, and a change in hours this year found favor with nearly all exhibitors. Hours were from 11 a.m. to 11 p.m. each day. Exhibitors said the new hours eased the problem of staffing their displays. Both on the spot orders and leads were reported unusually heavy by exhibitors.

Paul S. Van Auker was managing director of the show. He is also convention and exposition director of the National Association of Home Builders.
Small NAHB Chapter Doubles Membership

A small group of home builders in Council Bluffs, Iowa, two years ago could count only 20 members in their local National Association of Home Builders’ chapter which was just formed. Today that membership has more than doubled, and the determined group is just as enthusiastic about the job to be done by NAHB as any large chapter in the Association. Their main motto is simply to support NAHB in promoting private enterprise.

I. DONALD Greybill, president, left, and Charles H. Friese, secretary, are recently-elected leaders of the rapidly growing Council Bluffs, Iowa, NAHB chapter.

Currently the Council Bluffs chapter is supporting NAHB and the building industry in the best way possible for any association—by making sure that members offer good homes for the money, and by standing ready to oppose any local influx of socialized housing. The fact that Council Bluffs is not a large city has not failed the local builders into neglect of their duty to the building industry.

Originally organized through the encouragement of William Powell, regional NAHB vice president, and the leadership of F. L. R. Hansen, first chapter president; Arnold Ranch, local vice president, and Otto B. Hill, secretary, the chapter is now headed by J. Donald Graybill, president, and Charles H. Friese, secretary, both recently elected.

Oklahoma State Builder Group Gets NAHB Charter

The Oklahoma Builders Association, comprised of local chapters at Oklahoma City, Tulsa, Muskogee, Norman, Enid and Lawton, was recently chartered by the National Association. The state group was organized about a year and one-half ago.

Home builders of two other Oklahoma cities, Ponca City and Shawnee, are in the organizational process.

Cortright’s Column

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

IT HASN’T HAPPENED HERE—YET!

The phrase “It can’t happen here” has been bandied about so much that it’s pretty trite these days. And when some of us talk about the threat of Socialism in America, we are apt to be accused of crying, “Wolf! Wolf!”

For such skeptics, I offer the following unvarnished statement of the truth about the housing situation in New Zealand—a letter written by a former prominent member of the New Zealand Parliament. Public housing was given its full reign—which proved, to use a mixed metaphor, enough rope to hang itself and with it the whole Socialist government of this important British dominion. Housing was the primary factor which caused the people to eventually overthrow the government and restore their country to a system of initiative and progress.

“The answer to the question raised by your American friend is not quite so simple as it may appear. I will, however, try to give you some of the obvious angles on this question of housing and its effect upon the general election in this country. The initial trouble rests upon the policy of inflation. Worthless paper money, commonly referred to as ‘phoney money’ or ‘funny money,’ has boosted wages to an unprecedentedly high figure for this small country and naturally enough the repercussion has enormously raised the cost of labour, not only as regards carpenters, plumbers, bricklayers and labourers who are actually engaged on the specific job, but on the timber industry as well. Practically all our housing is in timber.

“Then under the bureaucrats the importation of such items as corrugated iron, baths, tap, piping, lavatories, etc. can only be imported under license and has been strictly limited, thus forcing monopoly prices on the builders. That is one angle. Another is that under socialism no one could buy any land for building except at the land valuation price of 1942. The consequence of this was that land had to be bought illicitly—by secret payments under the table. If the purchaser chose to be a dirty dog, as many were, he could inform the government of the secret payment, in which case he got the amount of the secret payment back and the seller was heavily fined. Transactions of this nature not only added to costs but limited the area of land put on the market. Thousands of people wanted to sell, but would not sell on a valuation eight years old and would not face the dangers of selling on ‘under the table’ payments.

“Other points which had an important bearing on the subject were the following: Tenants were put into government houses on a rental of less than cost. This meant that a man on a low salary was contributing to the rent deficit on a house occupied by a man with double his income, which was manifestly absurd and unfair. One simple instance. A prominent Socialist official was allotted a state house and given precedence over those earlier applicants. His rental was partly paid by his own chauffeur. See how silly this plan of ‘housing the people’ really was. Then again, many houses were built and almost completed but not let because there was no bath, or no taps or no something else. So for months they lay idle. Then the vandals got to work, and under Socialism we have battalions of vandals in every town in the country. They would break all the windows, smash the bath and do what they liked.

“All this added to cost upon cost. Never once did it occur to the socialist planners that they should not start a house until they had all the necessities to finish it. So we had hundreds of nearly finished houses which could not be occupied. Unhappily the vandals, knowing the nature of a scandalous, extravagant and fool set of planners, backed by illimitable ‘funny money’ were fair game for a week-end’s amusement.

(Continued on page 202)
E. B. Wilson Joins NRLDA
Public Relations Staff

Everett B. Wilson of Washington, D.C., a veteran of 30 years in newspaper, sales training and promotion, and public relations work, has been appointed public relations consultant to the National Retail Lumber Dealers Association. Wilson has been closely associated with the construction industry for the past 10 years as a consultant to various industry groups. These include the Producers' Council, with which he remains associated, and the Construction Industry Information Committee for which he conducted the public relations phases of a public relations program in 1948 and 1949.

Texans Hold 'Builders Frolic'

A. J. "SANDY" McCALL (center), president of the South Texas Home Builders Association, presents gifts to Floyd Burt (left) and L. V. Burt in appreciation of their work as chairman of committee for recent "Home Builders Frolic" in Corpus Christi. More than 300 couples attended. Formed in November, 1949, the group now has about 300 members.

Spiegel Named to 2nd Term
As New Jersey President

Emmanuel M. Spiegel, of Passaic, was re-elected to a second term as president of the New Jersey Home Builders Association at its recent annual convention in the Claridge Hotel, Atlantic City. More than 800 registrants participated in the program during the four day meeting.

Spiegel is a member of the executive committee of NAHB and a director of the Council for Home Protection. His aggressive leadership is credited largely for development of the New Jersey organization into a strong and militant group fighting to eliminate conditions impeding economical home construction.

Re-elected with President Spiegel were Raymond F. Handy, Camden, vice president; Edward J. English, East Orange, treasurer; Byron Von Drehle, Hackensack, secretary; John S. Wright, Irvington, executive vice president and Clarence J. Von Drehle, Hackensack, executive secretary. Alexander Feinberg, Camden, is counsel for the association.

In accepting a second term as state president of the New Jersey group, Spiegel said, "Give us the tools and we'll lick what remains of the housing shortage in this state." By tools he meant less resistance on the part of municipal governing bodies to the construction of moderately priced housing, less conflict in building and plumbing codes, less capricious zoning regulations, and the elimination of governmental interference through public housing and rent control. "Communities like to talk about low-cost housing," said Spiegel, "but they always make it plain they mean it should be built in other communities."

George W. Seiler, Jr., of East Orange, president of the New Jersey Association of Real Estate Boards, in addressing the convention warned the homebuilders that the rental market in most communities has reached, and in some instances over-reached, the demand.

NAHB President Thomas P. Coogan, of Miami, Fla., addressed the builders at their annual banquet and appealed for action to protect war veterans from the threat of discomunishment of combination VA-FHA financing on home purchases. He also called for parity in government-insured interest rates in commenting on the reduction of FHA loan interest from 4½ to 4¼ per cent. Fritz B. Burns, past NAHB president and chairman of a special public relations committee, NAHB Executive Vice President Frank W. Cortright also addressed the group.
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WHATEVER Levitt does . . . it's always BIG! When they start building houses—a city of 40,000 springs up almost overnight. When they overhear people say that they want colored bathroom fixtures—they order them by the thousand.

Five thousand, to be exact . . . and every single one of them Briggs Beautyware!

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First, Briggs is the only plumbing ware manufacturer whose methods of making fixtures is as modern and streamlined as Levitt's way of making houses. That's why Briggs alone can sell a complete set of colored fixtures (including brass fittings) for only 10% more than white.

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Yes! Levitt & Sons know and act on a good thing when they see it. And when they saw Briggs Beautyware in color they knew homemakers would act on it—with cash! Why not start cashing in on it yourself, today!
"You should see" their faces light up when the women first walk into this bathroom. There's no doubt about it, the luxury look of Briggs Sandstone fixtures is a deciding factor in many a 'one look' sale." That's what Bill Levitt says about the Exhibit Home bathroom shown here. All the other houses in this class have the same modern layout and enamel tiling plus Briggs ultra-modern Sandstone fixtures.

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Whether you choose the Sandstone now being used in Levittown, or any other one of Briggs beautiful decorator colors, you will find that it adds immeasurably to the quick-sale value of all your homes.


Typical of Levitt & Sons latest full-size houses on a pint-size budget. 4000 of these $7990 homes are going up now. All equipped with television and Briggs Sandstone fixtures.
Take it from this SUCCESSFUL builder!

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Mayer I. Blum, widely known as America's most beloved landlord, sends his tenants champagne and flowers on their anniversaries—and, with the same thoughtfulness for tenants, builds amazingly successful apartment projects.

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Mr. Blum speaks from 34 years of practical experience when he says that Kelvinator offers lower cost of ownership and greater user satisfaction. Why not make your next purchase Kelvinator?

For full information, write to Dept. AB, Kelvinator, Division of Nash-Kelvinator Corporation, Detroit 32, Michigan.
Public Medicine and Public Housing

MEDICAL skill and the availability of medical care in the United States are at levels not reached anywhere else in the world. No one acquainted with the facts questions that statement. Another statement that will not be questioned is that there are defects in the distribution of medical facilities. A third unquestioned fact is that many families are in need of help to carry the heavy financial load caused by serious, or prolonged illness. By changing a few words each of these statements has been used in connection with public housing, and with equal disregard for the truth. The preamble goes on with the stated assumption that nothing can be done under the present system of medical care or any contemplated private enterprise measure to eradicate or improve admitted defects. This is a lie, as the long record of the medical profession in prolonging normal life expectancy by 19 years in the past half century and its tremendous current advances easily proves. A similar false assumption was used in the case of housing.

The preamble to the bill went on to state, "Because a medical dole is repugnant to the American people and would certainly result in a system of state medicine paid for from tax funds and rendered "This sounds very much like the preamble to the Housing Act of 1949. Both preambles profess belief in the system of private enterprise, and then attempt to panic people into a welfare state by making them afraid of the very things the bills stand for.

What the people, and that includes many public office holders and union leaders whose intentions are above reproach, are not told is that public medicine in a few years will cost six to nine percent of a family’s income, and that in return a man and his family will be part of 2,000 to 4,000 members of a panel assigned to a given physician. They are not told that under this system where people go to the doctor to get something for nothing, it is impossible for the doctor to sort out the minor ailments from early symptoms of diseases, which if unchecked, are fatal. They are not told that the system kills the doctor’s initiative and pride of performance, and that low-level standardization of medical care will result just as it has in England.

It is time that home builders and retail lumber dealers began to tell their customers the hoax of public medicine just as doctors have been telling their patients the hoax of public housing, and to prove to them that the cure for defects in distribution of medical care is continuing freedom and competition. If builders get public medicine and doctors get public housing, the entire nation will have got socialism, regimentation and the inevitable decline of all goods and service standards.
Experts Offer Suggestions—

Kitchens and bathrooms selected from winners of the recent "American Builder" contest for women architectural students were presented to equipment manufacturers to be redesigned by professional planners.

This was done so that the planning of these three highly specialized rooms might have the benefit of the expert knowledge of the professional designers of the manufacturers.

The practical knowledge of these experts combined with the fresh thoughts expressed by the student winners, which have been retained, has resulted in some very efficient and attractive rooms. These are shown on the following pages.

General Electric Company's Home Bureau re-planned the prize winning entry submitted by Elizabeth Graham Bell of the Carnegie Institute of Technology. They have provided a convenient and workable kitchen and laundry, and yet reduced the two rooms in size.

The prize winning kitchen as originally planned was in the shape of a broken L and called for four doors and one storage closet. Contest judges criticized it for having an excessive number of doors, inadequate storage space, and poorly planned work centers. They also commented on the lack of storage space in the laundry, the omission of a door between that room and the garage, and the fact that the room should have been accessible from outdoors.

Kitchen planning experts of General Electric's Home Bureau redesigned the two rooms for a more practical arrangement. Starting with the kitchen, they rearranged two of the doors, relocated the other two doors and the closet. As a result, they were able to make a complete L-shaped kitchen, provide a circular breakfast nook and more storage and work space. They gave the laundry a passage to the garage and made it accessible from out doors. Through this relocation of doors and advantageous use of space, the Home Bureau was able to plan a more convenient and workable kitchen and laundry and yet reduce the two rooms in size. The kitchen was reduced from 12 feet by 12 feet to 11 feet 2 inches by 12 feet; the laundry was reduced from 9 feet by 12 feet to 8 feet 7 inches by 12 feet. This reduction added 15 inches more to the dining area.

Certain imperfections were immediately apparent to the Home Bureau when they studied the original kitchen design. The excessive number of doors and their location ruined the north end of the kitchen. For instance, the door to the lounge and the door from outside were exactly opposite. This made a passageway out of the north end of the kitchen; therefore the doors were relocated in the laundry (where they would be far more practical) and the new arrangement gave the kitchen more privacy, more wall space.
and eliminated any possibility of drafts.

Next was the problem of the east wall of the kitchen which called for a storage closet and had the refrigerator set in an alcove. This was poor planning since the closet door could not be opened unless the door to the dining area was closed. Furthermore, since the refrigerator was in an alcove, it was cut off from ventilation, storage space, or work surface area. By moving the dining room door to the west, it was possible to accommodate a circular breakfast area and place the refrigerator along the west wall convenient to the work center. The closet was redesigned for greater accessibility and the door to the lounge relocated in the laundry.

The west wall was formerly pierced by three windows and an outside door. The door was eliminated and fenestration reduced to one window making space for base and overhead cabinets, the refrigerator, dishwasher sink, Disposal and a kitchen ventilating fan.

The north side of the kitchen originally allowed no wall space since it was broken up by the door to the laundry. The Home Bureau moved the door over to the extreme left of the kitchen leaving space for additional storage cabinets and the electric range.

The newly designed laundry room now supplies an entry way from outdoors to house, passage from garage and entries to the lounge and kitchen.
"Every convenience for a modern kitchen" was comment of Hotpoint designers. They selected the kitchen and bathroom of the Sonia Jean Albert entry to redesign and confined alterations to relocating equipment to conform to the most practical placement developed by their research department.

According to kitchen planning specialists of Hotpoint, Inc., this kitchen represents an ideal U-shape arrangement with generous cabinet space. Although the kitchen is relatively compact, it has every convenience needed for a modern house. Production line arrangement of completely automatic appliances cut the housewife’s work to a minimum. This kitchen can adequately serve a family of eight persons.

The clean-up center consists of an automatic electric dishwasher-sink equipped with a garbage disposal unit. This is located under the window to give the housewife a pleasant view while working at the sink, but of greater importance it is situated midway between the food storage center and the cooking center.

The refrigerator is located near the garage entrance to the house where food normally is brought into the kitchen. The refrigerator has a left-hand door opening giving convenient access to an adjacent counter surface provided by the base cabinets.

The electric range is placed near the entrance to the dining area and is flanked by base cabinets which allow counter surface for serving food either through dining area entrance or the pass-through which is equipped with a sliding door.

The designers point out that the “U” arrangement is ideal because the traffic lanes through the house do not cross the kitchen work area.

Structural changes from the original prize-winning design submitted by Sonia Jean Albert of Yale University recommended by Hotpoint include the following:

The south wall of the kitchen be extended eight inches in order to provide space for the kitchen sink. Hotpoint kitchen planners recommend that there be a minimum of four feet between lines of equipment facing each other on opposite walls. In this compact kitchen arrangement, you will note that there are approximately 4 feet, 5 inches between the two banks of appliances.

The tool bench and cabinet area in the garage were eliminated, and the garage wall moved north approximately two feet to make room for laundry equipment on the first floor. The prizewinner had designated the basement as the laundry area. Moving the laundry upstairs has a number of definite advantages, say the Hotpoint planners. The modern housewife normally washes two or three times a week with automatic equipment. The first floor location eliminates stair climbing and carrying heavy baskets of clothes. In this arrangement, the laundry is adjacent to the kitchen which allows the housewife to do the family laundry while she is cooking, sorting food, loading the dishwasher, or doing other kitchen chores.

The Hotpoint designer installed sliding doors in the laundry entrance as well as in the entrance to the dining area. This is a better arrangement than the conventional swinging or hinged door which obstructs the free action of cabinets, appliances or chairs.

Vent fans were added in the laundry and in the kitchen. These are recom
mended for the laundry when an automatic electric dryer is used because the fast drying action injects moisture into the room. The kitchen vent is located over the range to get rid of cooking odors. Ducts are located in the drop ceiling above the cabinets and are vented to the outside (east) wall.

Because the laundry did not have any direct light from the outside, a glass brick section was placed in the west wall. This provides good light and yet prevents people entering the house at the front entrance from looking into the laundry.

The broom closet and canned goods storage area in the garage also were eliminated. They were replaced by a seven foot high utility cabinet beside the refrigerator. This provides at least an equal amount of storage space and is considerably more accessible for general use. The Hotpoint designers recommend that the dead space in the southeast corner of the kitchen underneath the pass-through be utilized by installing built-in drawers for storing linen or silverware in the dining room. The opposite kitchen corner (north-east) has a base cabinet providing storage space, using the entire corner area.

The snack bar is within easy reach of all appliances yet is removed from the kitchen work area. It utilizes two inverted wall cabinets for convenient storage which project only 13 inches into the room. Base cabinets are not recommended because they are 25 inches deep and would obstruct the passage through the kitchen. Decorative shelves were placed above the snack bar between two wall cabinets. The snack bar illustrates the ingenious use of standard cabinets to form an interesting and useful detail in the kitchen.

The designers advocate using recessed fluorescent lighting in the kitchen and laundry. These are located in soffits above the dishwasher-sink and under cabinets above the snack bar and all counter surfaces. The electric range has a 24 inch fluorescent lamp located in the high backsplash which illuminates the entire cooking surface.

The laundry has a base cabinet which provides storage space for soiled clothes and also a sorting counter. Above this, a wall cabinet is placed for soap, brushes and other articles used in clothes washing. The automatic washing machine is placed beside the sorting counter while the electric dryer completes the clothes washing assembly line.

All cabinets in the laundry and kitchen have adjustable shelves so that nothing need be stored out of reach of the housewife. General recommendations are that top shelves should not be more than 70 inches above the floor, which is the maximum height the average woman can reach. Standard cabinets are located above the electric range and the refrigerator and provide continuous banks of storage space. It is important that each appliance have sufficient storage space around it so that articles and food can be stored nearest the point where they are first used.

The designers have recommended rubber tile or asphalt tile flooring for the kitchen and laundry. The equipment used in the kitchen follows:

1. "Super-Stor" combination refrigerator-freezer with 8.5 cubic foot (Continued on page 218)
To meet the exacting standards for kitchen layouts established by the Westinghouse Electric Corporation, their Better Homes Bureau recommended structural changes in the plans submitted to them for redesign.

In the design of prize-winning entries submitted by Bette Peek, University of Texas and Dora Wiebenson, Harvard Graduate School of Design are reviewed in the light of the latest concepts in planning by the Westinghouse Electric Corporation.

FROM group of winning entries, the designers of the Better Homes Bureau of the Westinghouse Electric Corporation selected two designs for model Westinghouse all-electric kitchens and laundries; the entry of Bette Peek of the University of Texas, and the entry of Dora Wiebenson of the Harvard Graduate School of Design.

In the kitchen designed by Bette Peek a number of structural changes were necessary. More usable wall space was gained for the laundry area by placing a new door in the north wall of the kitchen formerly occupied by the sink. The door from the laundry to the garage was closed up and a new door installed which leads from the west wall of the garage to the service yard. The original kitchen layout did not conform to the established routing of the major pieces of equipment that has been generally accepted by the industry; therefore by rearranging the location of the sink, range and refrigerator, that is, by placing the refrigerator to the right, sink-dishwasher in center, and range to left, a more efficient food preparation area resulted. This change necessitated placing a window in the west wall of the kitchen over the sink area. The automatic ironer and fold-away ironing board are placed in the area originally occupied by the laundromat and drier.

In the breakfast room fixed benches affordable are provided. This is optional as sufficient space is available for chairs. A large pass-thru opening with sliding doors is cut in wall for serving from counter between breakfast room and dining room.

In the Dora Wiebenson plan the kitchen was changed as follows. The refrigerator was moved to the west wall to complete the food preparation area composed of the refrigerator area and dish-washer sink. The range on the left wall remains in approximately its original position, except that a utility closet is placed against the laundry area wall. To achieve the proper placing of the refrigerator and to obtain additional wall storage space, it was necessary to reduce the size of the window area over the sink. The laundromat and drier are placed in the...
space originally occupied by a large sink and work space. Ironer and fold-away ironing board are placed on the opposite wall. To facilitate a better arrangement in the laundry the kitchen area has been reduced.

The original plan of the kitchen-laundry indicated a complete glass wall on all exposed areas of these two rooms. The revised plan has reduced the glass area considerably. The latter arrangement has worked advantageously to the betterment of the whole plan. One of the prime objections to the original layout was that guests would have to pass before the glass areas of these two workrooms before reaching the front door.

The designers of Mullins Manufacturing Corporation revised the kitchen portion of two designs. The “Sun-Back House” by Nancy Hopkins, Margaret Sinclair, and Josephine Willrodt, University of Illinois, and the design submitted by Nancy C. Reeves, University of Texas.

IN THE home designed by the University of Illinois students, however, an extension of a wall was required to separate kitchen from playroom. With the aid of this extended wall a very practical arrangement of fixtures has been accomplished. Starting at the left of the kitchen the range is placed in position. Then the sink is placed in the center of the adjoining wall with window above centered over the sink. The refrigerator is placed to the right of the sink. This type arrangement permits ample work area without encroaching on the traffic portion of kitchen and places the equipment in line for the most efficient use.

In the Nancy C. Reeves plan the sink was moved to the outside wall with a large window extending beyond the adjoining base cabinet. Stove was then placed in the former position of sink and refrigerator at end of outside wall.
Kelvinator Corporation worked in conjunction with the Morton Manufacturing Company to revise kitchen design by Sonia Jean Albert of Yale

Briggs Manufacturing Company selected the master bathroom of the prize-winning entry of Mrs. Jeanne Schlesinger, University of Ill., for an experiment in plan revision

The master bathroom shown in its revised form, which varies considerably from the location of the fixtures shown in the prize-winning entry, features Briggs' flat rim lavatories, safety bottom bathtub, and closet and task combination. All fixtures are made up in one of the many pleasing pastel colored acid resistant finishes.

The plan locates the tub on the left side of the bathroom upon entering the room. The twin counter-sunk lavatories are placed on the right-hand wall after allowing sufficient room for the door swing. Sliding cabinets below the counter provide space for supplies of all kinds. Counter top could be linoleum or Formica. Portion of the left wall not occupied by tub is built out to form a linen closet. The area of the exterior wall below the high windows is occupied with closet and task with a recessed vanity case placed in wall at end of lavatories. The same interior dimensions are used in the revised plan. The use of high windows with ventilating units is recommended because of the privacy obtained and the use of the lower portion of the wall for fixtures or accessories.
The Eljer Company in redesigning bathrooms of prize winners Elizabeth Graham Bell, Carnegie Institute of Technology, and Nancy C. Reeves, University of Texas, have maintained the same arrangement of fixtures but have provided added interest with use of accessories.

American Radiator & Standard Sanitary Corp. redesigned a kitchen and bath

Two prize-winning designs were considered by American-Standard Corporation for revision in accordance with the latest practice in the arrangement of fixed equipment in kitchens and bathrooms. The kitchen shown above is a revised version of the entry submitted by Nancy C. Reeves, University of Texas. Bathrooms shown above and right are a development of the entry submitted by Nancy Hopkins, Margaret Sinclair and Josephine Willrooth, University of Illinois.

The products used in the kitchen are the Royal Hostess sink with double compartments and drainboards, and the Undersink Cabinets of American Standard one of their newer products. Shown in the bathroom sketch is the Master Pembroke bath, the Master one-piece closet, and the Dreslyn lavatory in a custom-built cabinet design. Please refer to pages 74 to 79 in the April American Builder for the original plans of these prize-winning entries.
Fresh Ideas for Kitchen-Conscious Home Builders

The latest innovations in planning, design and color arrangement make the kitchen the preferred section of the house.

EXAMPLES of up-to-the-minute planning in a series of model kitchens are shown herewith through the courtesy of the Home Planning Bureau of the Peoples Gas Company, Chicago, Ill.

While reference is made to the term "kitchen" in this article, it does not necessarily refer to a room, but rather to an area containing the appliances, storage cabinets, counters and work area necessary to prepare and serve meals. The term "kitchen" can apply to an individual room or it can be combined with related activities, such as dining, laundering, and sewing. Thus the plans and illustrations are arranged for use, not only as rooms, but also as parts of rooms which extend beyond the space required for the kitchen assembly.

The designs shown in the photographs and plans are all constructed in the company's showroom and are periodically changed to conform to the latest ideas and innovations conceived by Harry Swenson, director of the Planning Bureau and his capable staff.
These kitchens are the result of years of experience on the part of the Planning Bureau in dealing with the building public, and translating the many ideas presented to them into practical examples of modern kitchens.

In the model kitchens the Bureau has made no attempt to hold to any fixed pattern of design or to the use of any particular type of manufacturer's product. Both steel and wood cabinets are used and the various types of equipment are shown without preference. There has been no hesitancy on the part of the designers to alter the position of the equipment from the accepted standard routing for meal preparation, to one of their own in order to enhance the over-all effect.

The director of the Bureau is a staunch advocate of the use of color, not as it applies to standard fixtures or cabinets, but rather as it applies to obtaining the desired results in the floor pattern, combinations of wallpaper and paints, and appropriately selected accessories for color accent. In this way the objections of the public to the all white fixtures and cabinets, which have a tendency to give the kitchen the so-called "hospitalized look" is overcome. This method of introducing color into the kitchen is somewhat responsible for the swing back into public favor of the all-white fixtures.

Concealed lighting, and plenty of it, plays a large part in creating the desired effect. In a number of the models the drop ceiling beam that occurs over cabinets is extended out from the face of the cabinets to form a concealed lighting trough around the entire work area. Panels of obscure glass are placed on the soffit of beam through which light is diffused. Concealed lighting is also placed under the bottom of the upper cabinets to concentrate the light on special work areas.

In a kitchen where space is not available for table and chairs or a built-in nook, the snack bar can serve equally well and can be adjusted to a limited area. Plan of kitchen below shows well arranged work and eating areas.

TWO elevations of kitchen indicated in plan above. Note the abundance of windows on outside wall and the ample supply of cupboards.
Kitchen Specialties

In designing model kitchens the Home Planning Bureau considers the installation of specialties or features as a part of the basic arrangement of the room. These features are designed with a practical point of view in that they must be useful as well as ornamental; thus the application of ornamental shelves over the range in place of cupboards, as shown in several of the kitchens, is in a sense highly practical. The value of cupboards in this area other than for bulk storage is questionable because of their height from the floor.

In a number of the model kitchens the distance between the countertop and the underside of the upper cabinets has been increased from the established standard. This is in direct contrast to the thinking of many of the kitchen experts who contend that it raises the upper portion of the cabinet out of reach of the housewife. The advantage however, of having this open area increased in height, is that it permits the installation of an intermediate shelf for the placing of condiments and other small articles that are in
constant use during meal preparation. In addition the fact that the upper cabinet protrudes at least half the distance in front of the work counter below, causes the existence of this cabinet to become a mental hazard to the housewife. This situation is remedied in a measure through increase of the open area between the counter and the cabinet.

The use of permanent scalloped valances around window openings has also been employed to soften the harsh vertical and horizontal lines of the counter and cabinets. Very often the face of the valance is decorated with a simple fret or leaf design. This same motif can be re-introduced in other areas of the kitchen, such as a frame for open shelves or the edging around a snackbar or breakfast-nook table.

The extension of window sills beyond their normal depth provides opportunities for the display of potted plants. The plants can be placed directly on the sill or upon a stand made of narrow wood members spaced several inches apart.

SPECIAL features and color spark an otherwise simple arrangement. Special shelves with glass supports over stove and folding table and the colorful paper in drop ceiling add note of interest to room. Floor plan of this arrangement is shown at left above.
In planning their kitchens, the Home Planning Bureau of the Peoples Gas Company, Chicago, Ill., give careful consideration to all types of gas equipment. Fixtures are installed, irrespective of type, in order to meet the requirement of the layout and design of room. Their relation to each other and the sink is conditioned upon the size and shape of the room in which they are placed. This placement follows a prescribed method that assures efficiency of operation for the housewife. The plans and photographs shown herewith illustrate several examples of kitchen arrangements based primarily upon the conditions of the room.
BUILT-IN storage unit as shown on plan is placed on opposite wall of breakfast nook. Drawers and cupboards are clustered around open shelf area in center. Concealed light is placed in upper portion of open shelf area. Potted plants on each side of window jamb provide an additional color note.

BREAKFAST-NOOK is separated from kitchen by a semi-open partition. Two tiles set into panels provide a decorative note in addition to the window valences. Plan of kitchen and view of one wall shown below.

TWO elevations shown above and below outline the position and size of all the units supplied in this room. Note drawers, open area below window.

JULY 1950
Planning—

Kitchens and Bathrooms

In every home, these rooms can have the greatest sales influence. Here are ideas to help improve them.

shows that families of any given size have the same variety and size of staples. The research project, sponsored by Hotpoint, Inc., also revealed that the number and kind of utensils vary little with family size. Dinnerware, however, varies greatly and has little relation to family size. The study concluded that for a family of four, there should be 5 feet 3 inches of wall cabinets, and 8 feet 6 inches of base cabinets to store a limited list of supplies in the minimum space. Dinnerware service for four would require an additional 21 inches of wall cabinets.

Other recommendations by the Small Homes Council follow:

When planning a house for an undesignated owner, allow space for dinnerware service for eight or more persons.

Shelves should not be higher than 72 inches from the floor, since this is usually the maximum distance a woman can reach up and grasp an article. Wall cabinets should be placed not more than 15 inches above the surface of base cabinets.

TO ELIMINATE wasted effort in preparing and serving food is the main objective in kitchen planning.

The arrangement of appliances, storage cabinets and counters; the amount of floor space allotted, and the position and number of doors and windows are the most important factors that determine kitchen efficiency. In planning, the best way to proceed is with the arrangement of kitchen equipment (appliances, cabinets and counters) first, followed by establishing the position of windows.

Adequate storage space is an important requirement for a good kitchen plan. While storage needs vary with the size of the family, a recent study made by the Small Homes Council of the University of Illinois shows that families of any given size have the same variety and size of staples. The research project, sponsored by Hotpoint, Inc., also revealed that the number and kind of utensils vary little with family size. Dinnerware, however, varies greatly and has little relation to family size. The study concluded that for a family of four, there should be 5 feet 3 inches of wall cabinets, and 8 feet 6 inches of base cabinets to store a limited list of supplies in the minimum space. Dinnerware service for four would require an additional 21 inches of wall cabinets.

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MINIMUM steps are required between appliances in this efficient kitchen layout, yet ample counter and storage areas are available. Cabinets are made by the Crane Co.
The kitchen should connect directly with the dining and service areas, with good access to the front entrance. The location of doors and the direction of their swing will affect the location of equipment, as well as the efficiency of the kitchen. Door swings should not conflict with the use of appliances, cabinets, or with other doors. Most kitchens, the study points out, require only two doors, one leading to the dining area and one outdoors.

While FHA minimum property requirements specify that window area should equal 10 per cent of the floor area in a room, the university study recommends increasing the kitchen window area to as much as 15 or 20 per cent. The kitchen plan should include as many windows as possible without reducing the required amount of wall cabinets.

The distribution of cabinets and appliances will depend largely upon the location of work centers. For right-handed persons, the sequence of work centers should be arranged from right to left. That is, "mix" centers should be at the right, followed by the sink, the range, and the serving areas, in that order. Recommended distance between cabinets or appliances opposite each other is four feet.

The distance between any two appliances is usually determined by the

(Continued on page 134)

Bathroom Planning

THOUGH convenient location of the bathroom in relation to other rooms in the home is desired, of more importance are conveniences of the room itself. Too often either not enough space is allowed for the proper arrangement of fixtures, too much is allowed with an inconvenient arrangement, or the bathroom is planned to a stereotyped design pattern with an amazing lack of fresh design thinking.

Lack of new design for bathrooms is not the fault of plumbing manufacturers. New sizes, shapes, and colors of tubs, water closets, lavatories, vanity-lavatory combinations, medicine cabinets, lighting fixtures—and improvement of almost every item for the room attest to that. Regardless of where the fault lies, builders can do much to remedy it. There are several ways, and any one may add a new lift to sales appeal of the home:

1—Try something different in built-ins for the bathroom. New storage locations for towels, wash cloths.
BELOW are items stored at each of four centers of kitchen—serve, range, sink and mix—as recommended by The Small Homes Council of University of Illinois study. Right, drawers are effectively used for storing linens, toilet articles; or a built-in dressing table fitted into a space normally wasted.

2—Compartmentalize the bathroom so that at least two people can use it with complete privacy.

3—Try adding more color to the bathroom, by either using colored plumbing fixtures or white ones with carefully selected floor and wall colors. Almost every plumbing manufacturer will be glad to offer numerous color combination ideas.

4—Try emphasizing the bathroom in a model home in your project during National Home Week by making it stand out in both design and appointments—and watch the difference it makes in the sale of the home.

Regardless of the ideas used, the following recommendations will help achieve a properly planned bathroom:

Locate the most attractive fixture opposite the entrance. This will usually

(Continued on page 138)

SENIOR architectural students at University of Southern California designed this home, lower left, which shows good kitchen plans along with other functional features.
Cabinets...

Most important requirement for a good kitchen plan is adequate storage space. For this reason, and since cabinets and counters occupy more area than any other elements in the kitchen, both their arrangement and size should be carefully planned.

For greatest efficiency, storage space in the kitchen should be planned according to the size of the family. And if possible, the arrangement should be determined before planning the placement of windows. Otherwise, windows can limit the effectiveness of cabinet arrangement.

Recommendations of the Small Homes Council of the University of Illinois are that kitchens in homes built for an undesignated owner be planned to provide storage of dinnerware for eight persons. In this case, cabinets for dinnerware storage should be a minimum of 3 feet 6 inches long, and of standard depth. For a family of four, there should be a minimum of 5 feet 3 inches of wall cabinets and 8 feet 6 inches of base cabinets (in addition to dinnerware storage). Total minimum requirements then are 12 linear feet of base cabinets. This includes 24 inches of available storage space under the sink.

When the amount of storage space to be used is determined, it is important that this space be available where it is most needed. If appliances are properly arranged according to recommended planning principles (see preceding story on kitchen planning), and if manufacturers' cabinets are used, there is little chance of error in establishing correct availability of storage space.

Manufacturers of wood and metal cabinets, largely responsible for the rapid progress in development and standardization of kitchen units, today offer integrated units styled to harmonize with appliances. Cabinets are available to fit any kitchen requirements, and are usually designed to complement work areas. Base cabinets under counters where mixing is done, for example, usually have provisions for the storage of staple items used in mixing foods, while dinnerware storage is usually arranged in wall cabinets directly above the serving area. Shelves should not be higher than 72 inches from the floor, and wall cabinets should not be higher than 15 inches above the work surface of counters.

Minimum amounts of counter space as recommended by a recent Small Homes Council study sponsored by Hotpoint, Inc., are 15 inches beside...
Cabinets...

ample counter area and abundant base and wall cabinets are provided in this kitchen. Refrigerator and additional storage and work areas not shown are on wall opposite the sink. These wood cabinets are manufactured by Cooper, Inc.

The total minimum counter space recommended is 11 feet 9 inches, though the Small Homes Council explains why this figure cannot be used as a standard. First, counters are usually used for more than one function. Second, base cabinets needed for storage usually govern the amount of counter space provided, and third, the turning of a corner in an L-shaped or U-shaped plan eliminates some storage space but gains in counter space.

Where cabinets are to be installed in an existing kitchen, windows may limit the efficiency of the arrangement, but the following rules will help do the best job possible:

1—Accurately record all dimensions of the kitchen, taking measurements along the wall at a point 36 inches above the floor.

2—Prepare a sketch of the existing kitchen, showing location of windows and doors, including trim. Show dimensions from corners to door or window casing, as well as overall width of doors and windows, height of window sill from floor, height of window including trim, width of trim around doors and windows, and over-all floor to ceiling height. Show direction of door swing, location of water source, radiators or registers (including their size).

3—Record the nature of room accessible to the inside kitchen door.

4—Record the number of children and adults in the family, as well as the amount of entertaining done, and the direction the kitchen faces.

With this data, together with an accurate drawing of the existing kitchen, a kitchen cabinet manufacturer is able to intelligently plan the amount and arrangement of cabinets and counter areas. If the builder wants minimum, medium or liberal cabinet installation, he should specify his choice. If the existing kitchen is already equipped with appliances, these should be listed and their measurements submitted.

Corner space is utilized in this kitchen by placing sink under wide corner window area. The wood cabinets, made by Carr, Adams & Collier Co., are made of Ponderosa pine. Manufacturers of both wood and steel cabinets today offer integrated units to fit any kitchen requirements. They are also willing to help the builder plan kitchens for both new and existing homes.
Glass . . .

Besides appearance value, various forms of structural glass have other practical values in kitchens and bathrooms. Used properly, glass can eliminate dark corners in a room, and can inexpensively serve as semi- or full partitions.

Dishwashers, Disposers . . .

National advertising has whetted and is continually increasing the home buyer's desire for modern sink accessories; and, automatic dishwashers and garbage disposers are no longer "desired," but are "needed" equipment to many housewives. A builder can profit from this extensive national advertising, and be sure of better satisfied home owners by including the equipment in his kitchens.

Disposer units can be linked to conventional plumbing units, if sufficiently large drain openings are allowed. Code restrictions should be checked to make sure there is no ban on disposal of wastes down kitchen drains.

For disposers, sink drain openings should be at least 3/4 inches, with 4 inches preferred. Some units take a 5 1/2-inch opening.

Dishwashers require 180 degree F. water—hotter than the usual supply. Some units have water heater boosters to raise the temperature at the unit.

Whether a builder installs these units in new homes or not, he should make provision for their installation.
New models of appliances are in greater demand today than ever before, and builders who are offering them in new homes are discovering a valuable sales aid.

Manufacturers have made it easy for the builder to plan the kitchen through standardization of most equipment that goes into it. Though ranges, refrigerators and home freezers vary in many respects, they, like cabinets, have generally the same over-all dimensions.

Once the kitchen arrangement is decided, allowances for the average range should be 42 inches of space; for the refrigerator, usually 36 inches. Though home freezers vary in length, most are obtainable in average counter heights.

Adequate space should be provided in front of all appliances for passageways and work area for two persons. A clearance of four feet is sufficient, according to recommendations of the Small Homes Council of the University of Illinois, where sponsored by Hotpoint, Inc., considerable kitchen planning research has recently been conducted. In many cases, it is required that appliances be set out a few inches from the wall. With a 4-foot clearance between appliances, sufficient space is provided for the usual required set-out without cutting into minimum space needed for working between fixed equipment.

The range and refrigerator form two of the three points in a kitchen layout work triangle. This triangle, which represents the routes of most traffic in preparation of a meal, will be formed according to the locations of the sink, range and refrigerator. Distances between each will vary, though the sum of the distances between all three—that is, the sum of all sides of the triangle formed—should not exceed 21 feet 6 inches.

Mortgages with kitchen appliances and equipment included in them are becoming increasingly popular with home builders. A recent national survey conducted by American Builder revealed that 35 per cent of the 712 builders interviewed included ranges in their 1949 homes, and 32.2 per cent included refrigerators. Appliance manufacturers indicate that these percentages are increasing in 1950.

Popularity of this "packaged" kitchen is increasing because more and more builders are finding good acceptance of the idea among home buyers. They have found that many wishful thinking home buyers do not buy because the extra expense of new equipment, in addition to the down payment for the house, is considered too much. Savings banks are liberalizing credit terms to permit people to buy appliances and equipment through the open-end mortgage and the package mortgage at a cost of only a few dollars extra a month. Builders who adapt these financing plans can add extra sales appeal to their homes.

Consistent, large-scale advertising...
FOLLOWING trend to built-ins, some manufacturers offer built-in ranges, as illustrated by Thermador Electrical Manufacturing Co. range, left. Perfection Stove Co. range, right. box drawer-type broiler, banquet-size oven, large storage compartment.

OVER one-third of the nation's builders offer ranges in new homes to aid sales. Left to right, are: Gray & Dudley and Grand Home Appliance Company gas ranges, and the Frigidaire "Thrifty-30" and A. J. Lindemann & Hoverman Co. electric models.

of such appliances as ranges, refrigerators and freezers, and of other equipment for the kitchen, has increased the home owner's demands—whether he is considering a new home or remodeling his old kitchen. His demand is justified, since equipment has been consistently improved.

Many ranges are now almost completely automatic, and operate by push-button or dial control. The trend to built-in equipment, at an all-time high, is responsible for new range units that permit individually planned locations of burners or ovens in cabinets. New gas ranges also feature ease of cleaning, burners that automatically light, thermostatically and automatically controlled ovens, and numerous other improvements.

Refrigerators and home freezers feature more storage space in less cubic-foot area than ever before; quieter and more efficient cooling units, and more attractive design. The potential home buyer is aware of these facts, and his appetite is whetted to the point of purchasing. It is up to the builder to help him afford new appliances—when he buys the home.

WITH a greater demand for home freezers, their installation in a new home will help sell it. Left to right, are new storage freezers offered by Leonard, Hotpoint, Inc., The Cecilator Company and Awea Manufacturing Company.
Floor and Wall Coverings

Color interest in kitchens and bathrooms can make profits for the builder

Here are some suggestions

Profit returns are high for money carefully spent on floor and wall coverings. The main rooms to emphasize, according to some of the nation's leading builders, are kitchens and bathrooms. There are two reasons: First, these rooms are usually looked at more closely by home seekers than other rooms in the house, and second, well-chosen color combinations can make interior decoration as important to many home buyers as the over-all construction of the home.

First strike against the builder is that color is a personal matter, and decoration tastes vary widely with home buyers. Second strike against him is that as a rule he is not, and does not pretend to be, a color expert. These do not have to be serious handicaps, however. Following these general rules will help make floor and wall coverings work to his advantage:

1—Select floor and wall coverings for durability, ease of maintenance, and color.
2—Seek advice of experts before selecting color combinations. Most floor and wall covering manufacturers now offer selection charts and other devices that enable the builder to choose proper color combinations.
3—Follow the manufacturer's directions in installing the materials.
4—Do not purchase materials merely because they are low in price.
How to Install Factory Finished Wall Panels

FIRST. make sure walls are clean and dry. Establish level line at desired wallcoat height around room. Find lowest point of floor, measure to height wanted then mark a line around walls with a carpenter’s level. All measurements for cutting and fitting sheets are based on these lines. Widely used commercially and in homes, factory-finished wall panels are available in wide variety of colors and patterns.

SECOND. Installation of wallcoat is started from a corner or door opening by nailing a vertical moulding at the starting point. Bottom end should be high enough from the floor to fit snugly to top of base moulding. For more specific treatment of moldings, which come in a large variety, the installer is advised to see the manufacturer’s specifications. The operator now is ready to cut panel to length.

THIRD. using a fine-tooth saw, work from finished surface. Hold saw at an angle of 45 to 60 degrees, but never in a straight up-and-down angle. Sand newly-cut edges.

FOURTH. slide panel end in channel of moulding and fit top even with level line. Scribe end of sheet to fit distances into channel of moulding. Cut to scribed line. In fitting, start in one corner, proceed around to door opening. Lay panel over padded trestles to apply generous coat of adhesive over back. Use a spreader, which can be made from piece of scrap panel notched for 1/4-inch high ridges.

FIFTH. application of panel may be made in two ways. For shorter panels, insert end into first fixed moulding, and fit the second moulding into place on other end; then push panel into place with moulding attached. Check alignment of panel with level line, and nail exposed flange to moulding. Use large-headed lath nails, which will be covered by base moulding. Do not force board into place.

SIXTH. for proper, permanent bond, all-over contact is required. When panel is first set against backing, give it a slight rotating motion to work in adhesive. Go over entire panel, kneading and pressing it two or three times. If panel is not holding, then brace it. After panel installation, remove excess adhesive with cloth and gasoline. Lay successive panels around room by following the same procedure.

Drawings and data courtesy of Masonite Corporation

WALL coverings shown here have plastic enamel surface, are made by Tylen Co.
Planning—Hardware and Mouldings

Effectiveness of the kitchen and bathroom depends generally on small finishing touches—large, in the eyes of a homeowner.

Hardware and mouldings distinguish the kitchen and can be a strong merchandising feature of today's homes. They protect finishes from moisture and abuse, and make housecleaning easier for the housewife. In short, hardware and mouldings are the finishing touches that add to the utility and beauty of both the kitchen and bathroom.

The type of exposed hardware used in kitchens is based on the overall appearance of the room. Cabinet manufacturers use hardware styled to blend with their cabinets, and since cabinets carry most of the hardware in the kitchen, the hardware blends. But a builder, if he makes his own cabinets, will have to select hardware carefully for best appearance results. Ornamental iron hardware can be effectively used in some cases on wood cabinets left in natural finish, when the kitchen in general is designed to reflect provincialism. In a contemporary kitchen, where cabinets have simple, modern lines, a great variety of hardware in matched ensembles is available to enhance the style. Some cabinet manufacturers offer cabinets with little or no exposed hardware; concealed hinges are used on doors, and drawers are opened by a recessed portion on the bottom edge of the drawer face. The advantage, they claim, is that there is no hardware to paint around. Other manufacturers offer types of recessed cabinet door latches that fit flush with the door surface. One new cabinet door catch operates on a magnet principle, drawing the door closed and holding it. Widely varied homeowner tastes have created demand for the vast assortment of hardware offered, and the builder must select to suit his clients.

Basic use of metal mouldings is to bind and seal edges of surface materials exposed to wear and excessive moisture. The problem of sealing the space between the sink and counter top, one of the most important uses, has been solved by mouldings developed by several manufacturers. Not only has the complete seal been developed, but installation is simplified, as illustrated.
MOST home buyers are no longer favorably impressed with a commonplace bathroom. Constantly exposed to a flood of highly effective advertising, they are familiar with nationally known brand names, and have pre-formed ideas about what this room should contain far in advance of the time a builder will have a chance to sell them a home.

Home buyers are educated to want the best fixtures possible, maximum convenience for the room, and equally important, they want attractive color—either in the fixtures or in floor and wall coverings. Besides the kitchen, no other room in the new home may come nearer making or breaking a sale than the bathroom, and fixtures may do either.

Built-in fixtures are currently highly popular with home buyers. A builder can do much himself to provide storage space in the bathroom, by building closets and shelves. Manufacturers now offer numerous built-in products that can take this room out of the average category and make it the feature of the home. Built-ins in various prices and styles include medicine cabinets, lavatory-vanity combinations, a unit to hold magazines or toilet articles recessed near the water closet, tubs, shower cabinets that occupy less than 9 square feet of floor space, and heaters. All these items, and others, add more usable space to the room, and are attractive and desirable.

Mirrors are growing in bathroom...
importance, and a builder adds plus value to the home by using them to
good advantage. One excellent idea
for mirrors in the deluxe bathroom is
their use in conjunction with a vanity
set which may be placed at one end of
the room, the mirror extending from
the top of the vanity across the end of
the room and up to the ceiling.

Mirrors should not be thought of
only in terms of deluxe bathrooms,
however. If the above idea were used
in a small room, it would add an
appearance of twice the size to the
room, and give it about that much
more appeal. Any room can be over-
furnished, but it is difficult to get too
many mirrors or too much built-in
storage space in the bathroom.

Shower facilities are rapidly becom-
ing a must with home buyers, and are
desirable either in a compartment or
over the tub. An excellent sales feature
of a home with basement game room
or work shop is the installation of a
shower cabinet in the basement, or
better still, additional bathroom facil-
ities.
NEW shower head offered by Sloan Valve Co. features automatic self-cleaning. Spray disc moves each time shower is used.

DRAWING shows how built-in shower cabinet below, made by Fiat Metal Manufacturing Co., is installed flush with wall.

VANITY lavatory combinations, new ideas in bathroom furnishings, have plastic covered tops for ease of cleaning. Toledo Desk & Fixture Co. unit, left, has medicine drawer with hidden locking device. Unit, right, is offered by Alliance Ware, Inc.

TUBS, like this one by Eljer Co., are built low and wide for safety.

BUILT-IN shower cabinet saves space

PLUMBING fixtures in basement add convenience for laundry, games room or workshop
HIGH on the list of most-wanted items by today's housewife, washers, driers and ironers to her are synonymous with the ideal home.

Modern laundry equipment is designed to blend well with kitchen cabinets and appliances and, where space permits, it can become an attractive extension of the kitchen. Ideally, the washer, dryer and ironer should be arranged according to the sequence of their use, with ample counter space near each for sorting and folding of clothes. For plumbing economy, one-wall installation is recommended. A convenient work sequence is clothes bin or hamper, counter area, washer, sink, dryer, counter, and ironer.

For plumbing economy, the laundry in basementless homes is usually either a part of the utility room, is located between kitchen and bathroom or is adjacent to at least one of these rooms. Laundry equipment properly arranged in sequence with necessary counters can be effectively used in a combination laundry-game room, either on the first floor or in the basement. Wherever the laundry is located, adequate lighting and ventilation are highly essential. For best appearance, exposed pipes and utilities should be out of sight in the laundry room.

STORAGE and table-top working space in the laundry can be obtained in combination units. such as this one of porcelain enamel.

COMBINATION laundry offered by Blockstone Corp., with automatic washer, dryer and ironer, requires six feet of wall space for installation. Most modern laundry equipment is designed to complement and harmonize with modern kitchen cabinets and appliances.
VENTILATION without creating drafts or fire hazards is accomplished today with power units that more than pay for themselves in the sales appeal they add to new homes. To the homeowner these units mean protection of wood and metal in the home from dampness, and comfortable living free of undesirable odors.

Though there are differences of opinion regarding the best location for a ventilator duct in the kitchen, it is generally agreed that the opening should be as directly above the range as possible, as long as the proximity does not create a fire hazard. In this manner, fumes and grease-laden air go directly into the ventilation passage without striking the wall or ceiling. Some ventilators, with vent ducts located under a hood directly above the range, draw in vapors and liquefy them in the exhaust unit where they are deposited on a fireproof tray. This eliminates any chance of danger from fire. Other units with vents similarly located have different safety features.

A small exhaust fan in the bathroom will quickly pay for itself in its preservation of interior decorations and fittings. The use of a bathtub or shower by the average size family causes several gallons of water a day to be given off in steam, which must be taken out through a ventilator without creating a draft. Because of the damaging effects of moisture to the ventilator itself, motors in some models are located entirely outside the air stream.

Hinged grille, motor and fan assembly lift off for cleaning new kitchen ventilators made by the H.G. Electric Co.

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Seven Different Designs
From a Single Plan

TO CONFORM to average lot requirements, the designer of this month's blueprint house has provided for six alternate plan layouts. The basic unit in all cases remains the same but the position of porch, or breezeway and garage is changed. These units are arranged singly or together, on a line parallel with the length of house as shown in photograph, or placed alone at each end of house.

Group placement of the same house, in the same general area, on the part of operative builders, is made possible through the use of flexible units that alter the appearance of the exterior of the house without increasing costs.

The basic house which includes entrance vestibule, storage and utility room contains 1180 square feet. This area is divided into three bedrooms, bath, kitchen, living and dining rooms and ample closet space. The exterior design conforms to a simplified version of a Cape Cod cottage, with outside walls faced with horizontal and vertical siding. Plain shutters are placed alongside the windows of front walls for added effect.

The house is placed on a concrete slab with 8-inch-thick perimeter walls; 2x4 inch stud walls are securely anchored to concrete slab. All interior walls are non-load bearing. Roof is supported by built-up trusses that extend across the 30 foot span. Bulk insulation is confined to the ceiling area. Asphalt shingles cover the roof.

Heating is the forced warm-air perimeter type with eight inch diameter metal supply ducts imbedded in concrete slab. Heating unit is placed in the attic area with large enclosed duct extending down to metal perimeter ducts under slab. Estimated erection cost in midwest: $14,400.

SIX different plan layouts are indicated.
The basic plan in all cases remains the same; position of porch and garage varies
FOUNDATION PLAN
LEFT SIDE ELEVATION

RIGHT SIDE ELEVATION
**Lighting for Kitchens**

Bright but soft light illuminates this U-shaped "ideal" kitchen which is part of an activity room where informal entertaining may be done. Flush ceiling fixtures flood the room with general lighting, but fluorescent tubes concealed behind the valance brighten the countertops and sink work-spaces. Convenient power sources for kitchen electrical equipment are furnished by four duplex outlets.
FOR economy it is essential that the basic wiring harness of a kitchen—and of a home, of course—be thoroughly outlined while the building is still in the planning stage of construction to avoid unnecessary alterations or deprivations.

A kitchen should be planned for efficiency, convenience, and beauty. Lighting is a dominant factor in the perfection of these attributes. Preparation of meals is done with greater ease, foods and utensils are more accessible, and appliances are more efficiently utilized to their maximum capacity when the housewife can see what she is doing—without strain and discomfort.

In planning the kitchen shown on these pages, thought was given to providing proper illumination for the work areas and to including power outlets for electrical kitchen appliances such as mixers, toasters, and roasters.

MODERN lighting techniques are reflected in this kitchen. A silvered bowl ceiling fixture for general illumination is supplemented by local lights at the sink and work counters. The valance at the window conceals fluorescent tubes which illuminate the sink, while fluorescent units mounted under wall cabinets give light at the work areas.

Reliance is placed upon fluorescent fixtures to furnish illumination on the counters. Light from these fixtures is not sharp nor strain-producing and is not likely to reflect glaringly upon the metal and other polished surfaces of the work area although the light intensity is not impinged upon.

Single 15 watt 18-inch tubes installed in special decorative fixtures have been installed under the cabinets above the range and work counters. Two parallel 40 watt 48-inch fluorescent tubes concealed behind a seven-inch valance light the sink.

The electric light bulb of the ceiling fixture in the kitchen is an integral part of this fixture since its silvered bowl prevents a ceiling glare spot. This 150 watt bulb in the deflecting concentric rings of the fixture provides ample general lighting.

If the major appliances in the kitchen are to be electrically operated, it is strongly recommended that thought be given to incorporating separate circuits for this equipment in the wiring harness. In any event, fuseless load centers located in the kitchen or in some convenient household center will add to the living efficiency of a modern home.

Individual switches for each light in this kitchen shown make it possible to economize with the use of electricity since only the area in which one is working need be illuminated. With these under-cabinet tubes, the housewife is not forced to work in her own shadow on any of the counter space.

Source material courtesy of Westinghouse Electric Company.
OVER-ALL drawing of lighting installation used in kitchen on opposite page, together with detailed drawings of fluorescent lighting under counters, in valance over sink, and of the ceiling fixture with diffusing shield.

MOLDINGS enclose electrical circuit and with frequently spaced outlets provide maximum convenience for use of countertop.

SPACIOUS windows flood this kitchen with light. But note flush ceiling fixtures for illumination at night or on dark days.
THE UTILITY of a bathroom arrangement is increased by the use of vapor-proof incandescent ceiling lights in compartments.

Planning—

Electrical Bathrooms

EVERY home should, of course, be planned as an architectural unit, but it’s just as important to plan each room for maximum utility. The forethought given by a builder to each room in the planning stage will furnish effective sales materials when the house is completed, without prohibitive cost. For example, planned conveniences in the bathroom will distinguish a house for sale from innumerable competitive buildings of comparable value and construction.

The first considerations are the arrangement of the fixtures and provisions for adequate plumbing. It is essential that the wiring harness and electrical conveniences be considered to insure that the maximum in electrical utility is provided within the building budget.

Ample lighting is the first electrical prerequisite and is furnished by ceiling lights and single or twin mirror lights of either the fluorescent or incandescent type. An interesting addition to the lighting facilities of the bath that will fascinate most customers is a small night light. A 40-watt fluorescent sun-lamp that has been perfected to operate with standard ballast and lamp holders makes an ordinary bathroom unique, a feature to add to any promotional kit.

Valance lighting, already widely accepted to improve the decor of other major living areas in the house, is being used over tubs to give pleasing illumination. An electrical wall heater, to warm bathrooms on chilly days, is an asset in most any climate, for it will furnish heat quickly by both radiation and convection.

And of real importance is the installation of duplex outlets for the convenient use of electrical equipment in the bath.

Bathroom Planning Sells Homes

Here are points in home planning that will catch a customer’s eye—

- Wall heaters will warm bathrooms on chilly days with quick, safe heat
- Real eye comfort is assured with soft fluorescent twin lights at the mirror
- Ultraviolet rays from new lamp will bathe bathroom in vitamin D
- Duplex outlets make use of electrical razors and hair dryers convenient
- Bathroom night lights and valance lighting are inexpensive additions
- A simple flip of a switch will convincingly demonstrate these conveniences to the customer
Standardized Kitchen Remodeling...

THE kitchen in the California McClintock home was recently remodeled by Ray Wille. The new sink shown in photograph at top was installed along what was once a blank wall to right of old sink as shown in the lower photograph. In the old arrangement, the sink was placed under a window opening into the pantry (see plans on succeeding page) in which refrigerator was located; table in center of kitchen was make-shift compensation for totally inadequate counter and storage space. In the new kitchen, a steel casement window above the sink replaces three double-bung windows. New steel cabinets cover the walls. The counter adjacent to the range has a stainless steel top so that hot pans may be set on it without damage. A garbage disposal unit is installed in the double sink. Color scheme in the new room is in blue, white, and yellow: the soffit is yellow; the Formica countertops are blue; the cabinets are white-enamel; a blue-tiled linoleum covers the floor. Total cost of this remodeling job was $2,114.

.... is a specialty of Ray Wille, managing partner of Bass-Miller Company, California. Dependence on selected products and subcontractors insures uniform costs and craftsmanship for remodeling jobs that are best sales aid.

REMODELING kitchens is a specialty of Ray Wille, managing partner of Bass-Miller Company, Culver City, Calif. This is a unique specialty in this era of much building, but it is one that Mr. Wille has found satisfying and profitable.

Wille's success is based on two fundamentals — an intelligent selling program and quality workmanship. Actually, these two facts are closely related since Wille depends upon his completed remodeling jobs to be his best sales aid.

After a brief discussion with a new prospective customer for a kitchen remodeling job — usually a housewife — Wille escorts her through remodeled kitchens in homes of about the same age and price as that of the prospect. He dramatizes these trips by showing her photographs of the kitchen to be inspected before it was remodeled. Further, the evidence of craftsmanship and the commendations of pleased customers are most effective in selling a prospect.

Another valuable tool that Wille uses in selling is a booklet of “before and after” photographs of kitchens that he has remodeled. This technique impresses the housewife with the changes her own kitchen could undergo.

Before leaving a prospect's home after the sales interview, Wille prepares a complete estimate of costs — "striking while the iron is hot." His extensive remodeling experience and his reliance upon the same group of subcontractors enables him to make accurate on-the-spot estimates. The
Here are step-by-step points Ray Wille uses in his successful kitchen remodeling business:

1. Know kitchen equipment and subcontractors thoroughly to be able to visualize a new kitchen while inspecting the old one.

2. Demonstrate to the prospective customer, usually a housewife, what can be done to old-fashioned kitchens by showing before-and-after photographs. Take her on a tour of completely remodeled kitchens to convince her.

3. Prepare sketches and estimates on the remodeling job while in the home on the initial sales visit—"striking while the iron is hot."

4. When a contract has been won, please the customer by doing the job as quickly as possible.

5. Do a good craftsmanly job or do not do it at all. Quality work and satisfied customers are the best salesmen.

usual job costs approximately $2000. His plans for new kitchens are standardized; he usually uses the same manufacturer's equipment in each so that his estimating is simplified. Wille prepares his own plans for the jobs.

After a contract has been won, cabinets and new equipment are delivered to the job immediately, irrespective of whether or not work is to begin at once, to give assurance to the homeowner. Once a job is started, work is carried on until it is finished so that the owner is not unduly inconvenienced.

All plaster, board, or lath are removed from the walls and ceilings of the kitchen as the first step in its reconstruction, for Wille does not do patch jobs. Also, it is frequently necessary to replace studding and other members to insure strong support for the new cabinets and equipment. All wiring and plumbing are completely replaced.

After roughing-in the new plumbing and electrical circuits and installing 16- or 18-inch cabinet soffits, walls and ceilings are replastered. Cabinets are then installed and a wallboard is cemented to the walls and soffits and trimmed with stainless steel moldings. This plastic-surfaced wallboard (available in many colors) has a hard glossy waterproof finish which can be cleaned with a damp rag. This board is also used behind the range and the refrigerator and on the wall inside the sink cabinet since it is easily cleaned.

White enameled Kitchen Kraft steel cabinets with adjustable shelves and roller drawers are used by Wille regularly, as is Formica for sink and countertops, back splash, and window ledges. One-sixteenth sheets of Formica are purchased from the factory and laminated with 3/4-inch exterior grade waterproofed plywood by the contractor in his own factory, on his own large press. Cove moldings cover joints at the wall and Formica countertops.

In addition to his press, Wille has a table saw, a router, and a punch press for cutting stainless steel moldings. Sink decks are cut slightly oversized so that they can be scribed into place on the job for a better fit.

Before installing the Briggs double sink, glue is spread on the wood support and the sink is then set in a Hadee

(Continued on page 218)
Special New Products Section

Kitchen and Bathroom Ideas

RANGE CANOPY AB75001
This kitchen canopy with two-speed over-the-range quiet ventilator and fluorescent lighting fastens directly to wall easily and quickly. All necessary parts and materials are furnished in single carton. Specially designed motor and blower operate without vibration. Two push buttons permit lowering of kitchen canopy top for removal of filters and grease trap for easy servicing. Does not affect heating and ventilating systems. Comfort Products Corp., Dallas, Texas

CUTTING BOARD AB75002
A maple cutting board base cabinet top is new part of Youngstown Kitchen Line. Designed as a surface on which to cut meat, bread, vegetables and other foods, the top has the same contours as standard Youngstown tops. Top is made of hard maple, 1½ inches thick, with sub-base laminated construction to give an edge grain work surface. Top is made in 24-inch widths and can be easily cut to fit smaller cabinets. Mullins Manufacturing Corp., Warren, Ohio

BUDGET SINK AB75003
New 39-inch sink is designed for use as a component part of 60-inch apartment and multiple home kitchen units. Elkhart Lustranite stainless steel sink is economical investment for a low-cost kitchen. Compact arrangements with units solve summer cottage and hunting lodge kitchen problems. Homeowners who wish to supplement their income with an "extra apartment" will find this sink a good investment. Elkhart Manufacturing Co., 1874 S. 54th Ave., Chicago 30, Ill.

REFRIGERATOR AB75005
Counter height refrigerator, designed to match Select-A-Range, is 36 inches high. By removing 1½-inch feet, it may be installed under the standard counter or drain-board. It is 26½ inches wide—taking the same space as standard 27-inch kitchen cabinets. Food storage space has six cubic feet capacity or approximately 20 pounds of food space. Additional 10 pounds of space in chill tray. Refrigeration Sales Company, 91 Lexington Street, New Britain, Conn.

LINOUM AB75006
Floors and walls of this attractive kitchen are covered with linoleum. As a floor covering, linoleum has resilience offering ease underfoot and minimizing hazard of slipping. Walls are kept bright with an occasional washing with mild soap and water. Linoleum can be applied over any smooth, firm, dry wall surface, such as plaster, plywood, hardboard or gypsum wallboard. Many color-coordinated patterns are available. Congoleum Nain, Inc., Kearny, N. J.

ELECTRICAL HEATERS AB75007
Heater series 250 electrical space heaters are made in wall and wall-mounted and portable models. A built-in thermostat has a range of 50 to 85 degrees F. The heat can be controlled by dial setting. The fan can be operated independently for cooling purposes. Air is drawn into the chamber through modified venturi tubes to keep temperature of box, grille, and fan at minimum. Wattages range from 1500 to 3000 watts. Markel Electric Products, Inc., Buffalo 2, N. Y.

SINK-DISHWASHER AB75009
The Apex Dish-A-Matic dishwasher in this combination has its own water heater, that boosts the temperature of the top water to 180 degrees. The sink is white porcelain enamelled with chrome-plated fixtures and storage. The dishwashing capacity is service for six. The porcelain tub is undercoated for maximum heat retention and minimum water noise. Three gallons of water are used for the complete washing cycle. Apex Electric Manufacturing Co., Cleveland 10, Ohio

CABINET SHOWERS AB75004
Wall-away cabinet showers are made in many models for recessed, corner, interior, built-in or battery locations. Cabinets, including receptacles and walls, are made in six colors. Vitreous porcelain floor has no-slip surface. One-piece receptacle has no crevices to gather dirt; no mastic is required for installation. Photo shows Wall-away in-dooor with frame of extruded bronze, heavily chromium plated. Henry Wax Mfg. Co., Inc., Wall-away Building, Elkhart, Indiana

DRESSING TABLE AB75008
The Olympia Vanity, a streamlined, lavatory and dressing table combination, is made in four models and in four popular panel colors, in addition to white, of quality baked enamel. Cabinets are of a sturdy rust-proof aluminum construction. All models are equipped with touch-latch. Tops are of Formica with handsome metal trim. Sizes available are 24, 36 (either right or left-hand vanity), and 48 inches wide. Western Metalcraft, Inc., Olympia, Wash.

WATER HEATER AB75010
Thermostatic electric water heaters are made in 25 models one of which, the 50-gallon Classic model, is shown here. These heaters have a "life belt" heating element which may be removed for service without draining tank. A pure magnesium ionode rod in the tank neutralizes corrosive action and adds to life of heater. Control dial provides 50 degree temperature selection range. McGraw Electric Co., Clark Division, 525 West 45th Street, Chicago 38, Ill.

(Additional products featured in back of book)
How to Make a File Holder

The drawing above is self-explanatory. The file holder shown is easy to make and will hold 20 files. It can be hung on the wall close to the work bench and yet be out of the way. Placing the files in this manner they do not touch one another and therefore stay sharp longer.—Submitted by J. G. Caldwell, San Mateo, Calif.

No. D-68 ... Distinctive Details for the Kitchen

Features indicated in photographs and drawings on the opposite page present interesting and varied details that can be made available to any modern kitchen, or the remodeling of an old kitchen.

Design of the lower cabinets and drawers presents a different approach than usual. The full thickness of the door and drawer fronts projects beyond the face of the cabinet, thus permitting a recess to be cut out of the side of door and the bottom face of drawer for a hand hold. The sliding doors of the upper cabinets can be made of 1/8-inch tempered Masonite as detailed, or of obscure glass. This offers a change from the usual flush and lipped hinged doors.

An unusual feature is the screen partition that separates the kitchen and dining area. It is composed of a group of tapered shelves placed between verticle supporting members. Masonite is placed and secured to frame on dining room side. The automatic washer is part of the counter equipment. Access to same is obtained through portion of hinged counter top as shown. The cabinet face in front of washer is removable.
AMERICAN BUILDER'S BETTER DETAIL PLATE

No. 268. DISTINCTIVE DETAILS FOR THE KITCHEN

ELEVATION OF CABINETS

PLAN OF KITCHEN

SECTION AT "A"

SECTION AT "C"

SECTION AT "B" SECTIO AT "D"
TONGUE AND GROOVE joint is easy to make on the circular saw. The thing to remember is that the ends first be squared accurately and that the mitre gauge be set exactly 90 degrees from the blade and that the blade be set at 90 degrees with the table.

RABBIT JOINT: The side piece is set with its full width into the front of box or drawer. This means that the side need only be squared and that the full rabbet cut is made in front.

FINGER LAP JOINT features equal thicknesses of tongue and groove sections, all cut with the use of dado head on circular saw. Both sides of joint may be cut simultaneously by clamping them together in their correct relationship.

MITRE JOINT WITH CLAMP NAIL is produced by cutting a 45 degree angle on both ends of the joint. The pieces are then clamped in position and nailed as shown.

SPECIAL TONGUE AND GROOVE is a special corner joint made easily by using the cutter in the moulding head on circular saw or with the shaper cutter on shaper.

SIDE AND BASE CONSTRUCTION are the same as the tongue and groove except that the base is set higher in the sides to provide clearance such as is sometimes necessary in drawer construction.

MITRE JOINT WITH SPLINE is a 45 degree mitre in which a matching groove is cut in both sides so that a spline may be set in and glued to give strength to an otherwise weak joint.

DADO TONGUE AND RABBIT joint is a combination of the rabbet and the tongue and groove joint. It provides a more rigid joint than either of the others.

MODERN features in the 1980 retail store are not confined to the main streets of our cities and large towns. The movies and consumer magazines have given the small town dweller the desire for a store that has the latest decor, fittings and atmosphere. The buyer today will seek the store which is most pleasant. That is the reason merchants of today are turning to modernization for the solution to their problems when their stores appear to be outmoded.

The interior stair of the Crawford Clothes Store in Newark, N. J., shown in detail on the opposite page, is representative of the type of remodeling that can be seen in most any modern establishment, anywhere in the country. The curved stair to the mezzanine floor provides the feminine atmosphere necessary in an entrance to a woman’s coat and suit floor or department.

The treads, risers and exposed stringers are built up of precast terrazzo which is made up of red Verona marble chips, with white portland cement and color added. Two rows of non-slip carbon fiber inserts are placed close to the nosing of each tread.

The railing is made up of a bronze handrail and intermediate bronze channels. The vertical struts are built up of steel cores placed in bronze tubes. Steel core extends into stringer and is secured to steel channel stringer with clip angles. Clear plastic panels are used between the bronze frames because of their ease of installation as well as economy in cost.

The wallpaper which forms the background is metallic in effect with a body color of grayish green and a pattern of light blue-green and silver.
Salute to Gadgets

By R. E. Saberson

IT IS A BEAUTIFUL morning. Spring is busting out all over. Summer is just around the corner. The back yard beckons. Neighbors up and down the street are looking over their early flowers. The tantalizing smell of freshly-cut blue grass is wafted by the gentle breeze that brings with it frequently the over-powering fragrance of apple blossoms. It is one of those “what-is-so-rare” days that have inspired poets... the time when one's homes are better than any other month in the year.

And so we turn to the accumulation of publications that have been put aside during the week for more leisurely reading. We thumb through the pages of Life Magazine replete with generous-sized pictures of happenings throughout the world. None however is more interesting than the eight-page article entitled "Levitt Adds 1950 Model To His Line." Here we see Bernard Levey, his wife and children standing before the three Levitt homes they have lived in since they rented one of the Cape Cod homes Levitt built in 1948 to see if they liked it. They did, according to the story, and bought a 1949 model. Now they have ordered a '50, selling the '49 for only $236 less than they had paid in 1948. When the Levitt home along Life thinks they may buy again.

Of course there is nothing particularly new or startling in the fact that houses change from year to year. You can drive through the residential sections of nearly any city or town and note the change in which many of the homes were built. Only difference between then and now is that the factors of obsolescence have been speeded up immeasurably, not only as they apply to functional planning but through the use of the many new building materials now available and the countless automatic equipment items and labor-saving gadgets that put in their appearance with unfailing regularity.

"Obsolescence," of course, isn't the proper word for the difference which exists between the various home models that are now appearing with greater frequency. The automobile, for example, actually is obsolete long before it ceases to perform properly for its owner... a fact largely responsible for the millions of cars that now clog the highways. If the buyers of new cars drove them until they wore out there would be no automobile industry as we know it today. Passing industries at the present time.

The fact that the Leveys could switch houses as easily as if they had been automobiles assuredly adds up to a notable achievement. Levitt will build 4,000 homes this year, 500 of which one-third will go to people already occupying his homes, says Life.

Naturally the same thing is taking place in some degree in other metropolitan areas throughout the United States, now in the throes of the greatest home building boom in its history. Countless families already have sold the homes they bought when they couldn’t find any other place to live and are now “working up” the wealth with the same manner as families do with automobiles. Whether you view this tendency with alarm or accept it with reassuring equanimity, matters little. It is something that has been brought about by our way of life and our relentless struggle to do things better, or faster or cheaper than they have ever been done before.

In the meantime our whole concept of living is being changing by the invention of electrical, labor-saving equipment which now makes it possible to operate a compact home, conveniently and comfortably, without the help of the maids.

A day or so ago when we made inquiry concerning two families who had built large homes in a beautiful location across the road from the tenth tee of the Country Club which we once patronized, we were told that both of the pretentious residences had been sold and that their former owners were living happily in surprisingly small apartments in the city. Their children had grown up, married and moved away and had taken with them much of the glamour that once had been worth the cost of hundreds of dollars but in the headaches which grew more and more acute as it became well nigh impossible to obtain the help necessary to operate homes that were not mechanized as they are now.

Then today, on a warm spring morning... (Continued on page 167)
just 4 words...

DOORS: RO-WAY OVERHEAD TYPE

and the job is RIGHT!

RIGHT IN MATERIALS
Rowe's own buyer selects only high quality lumber at the mills. Panels are three-ply exterior grade Douglas Fir plywood. Hardware, Track Rollers and Springs are made in our own plant, and Parkerized after fabrication.

RIGHT IN CONSTRUCTION
Multiple mortises assure accuracy, uniformity and good fit. All mortise and tenon joints are glued - then dowelled. Track rollers have "double-thick tread." Springs are power-metered to the weight of each door.

RIGHT IN INSTALLATION
Ro-Way Doors are erected with utmost care by Ro-Way's nation-wide network of selected distributors.

RIGHT IN APPEARANCE
Ro-Way Doors are drum-sanded to give a silky, lustre finish. All joints are finished by hand. Parkerized and painted hardware prevents rust streaks. Ro-Way Doors keep their good looks.

RIGHT IN SERVICE
Ro-Way Doors roll up-in and overhead - out of the way. They won't freeze shut. They won't blow off or bang shut. They are not affected by moisture-swelling or frost-raised floors. Even drifting snow won't keep them from lifting easily.

RIGHT IN PRICE
Ro-Way Doors are built completely in Rowe's own plant. This "single-profit" plan enables us to pass along to Ro-Way users many extra values at no extra cost.

ROWE MANUFACTURING COMPANY
766 Halton Street © Galesburg, Illinois, U. S. A.
How to Fit Step Railings

Build your forms to fit stock sizes, set railing in form, pour concrete, Installation is that simple! But what are stock sizes?

"SEVEN by TWELVE"

Coffman's Standardized Wrought Iron

STOCK STEP RAILINGS

and Straight Rail Sections

FIT PRACTICALLY ALL NEEDS

There are 2 step, 3, 4, 5, and 6 step Coffman standard railings, and straight railings in six sizes from 2' 8" to 3' 2". Intermediate Coffman newel posts are available for corner or straight section use, with 4" extended leg for setting in form, or with floor plate expansion shields and bolts.

COMPLETE & EASY TO INSTALL

For sturdy, high quality ornamental iron railings specify Coffman. They are complete, one piece sections, with solid, rigid welded construction. All installation accessories are included.

LOW IN COST

Through standardization and engineered production, Coffman offers low cost rails to fit all needs. Sections can also be combined with "made to order" railing.

Get the Answers on Railing

Send for Your FREE "Rail-O-Graph"

It quickly tells you what to order, what stock railing will fit, how best to fit odd size steps. It's the quick way to visualize application of Coffman No. 265 Stock Step Rails to any size treads and risers.

Write for your "Rail-O-Graph" today! P. O. Box 1113. Gives interesting details of the "Fit" of rails.

THE TECHNICAL GUIDE

for Builders and Craftsmen

How to Enclose a Portion of Automatic Washer

In the installation of automatic washers, particularly in kitchens or adjoining utility rooms, objection is often raised to the exposed hose connections and the hot and cold water supply pipes and bibbs. The sketches above indicate two solutions to this problem.

Where cupboards occur above the automatic washer, as indicated in sketch Number 1, a hinged plywood panel door is secured to the underside of cupboard, with plywood enclosure at both ends extending to floor.

Where the washer occurs under window as shown in sketch Number 2, the top and front plywood enclosure lifts up to provide access to hose connection. Sides are enclosed with plywood to floor.—Submitted by J. G. Caldwell, San Mateo, Calif.

How to Provide Nail Bins under Work Bench

CONTAINERS for nails with a drop flap are provided on lower shelf of carpenter's bench. This arrangement eliminates the annoyance attributed to shavings getting into nail containers.

The bins are placed in a row on the lower shelf of work bench. The top and upper front of each bin is left open. The lower front of each is equipped with a drawer pull. A length of 1/4-inch plywood extends across the entire group of nail bins and is suspended from the underside of shelf above by means of screw eyes.

A portion of the front and top of the bins is cut off at a 45 degree angle and a plywood cover drops in position and fits tightly over bins. When bins are pulled out cover remains open, when pushed back, cover falls in place.—Arthur F. Taggart, Monrovia, Calif.
These outstanding advantages make MA-TI-CO first choice for every type of installation

In addition to these important advantages, MA-TI-CO Asphalt Tile is resilient underfoot, easy to clean and has odor-free characteristics — qualities that make MA-TI-CO the ideal flooring for every type of installation.

MA-TI-CO is especially desirable because of its square, clean cut edges, that save you valuable installation time. And it's available in 27 richer, clearer colors in solid tones and marbled patterns — including five new pastel "Petal Tones" — to meet today's demand for more colorful, cheerful styling.

Selected for such impressive projects as Napa State Hospital shown above, MA-TI-CO is also the outstanding choice for industrial plants, apartment houses, commercial stores and individual homes. Levitt and Sons, America's largest builder of private homes, specifies MA-TI-CO for flooring every room of 4,400 new homes in 1950 — convincing proof of MA-TI-CO's quality and versatility.

Be sure to use MA-TI-CO for your next installation. MA-TI-CO is a nationally advertised product your customers will recognize and it assures lasting satisfaction wherever it's used.

DEPT. 67

MASTIC TILE CORPORATION OF AMERICA

Factories: Newburgh, N.Y. — Long Beach, Calif.

Member Asphalt Tile Institute
GPX provides the ideal material for reducing the cost of producing highly finished concrete surfaces. Its inherently smooth, armor-hard plastic surface gives it unbelievable wearing qualities. Work done with GPX Concrete Forms requires a minimum of "grinding and pointing." The resultant surface is so smooth that, in the case of ceilings, plastering can be eliminated entirely.

The number of re-uses of GPX Concrete Forms is determined solely by the care with which it is handled and the cutting necessary for pipes and outlets. GPX Concrete Forms, if handled with reasonable care under special circumstances, can be used literally hundreds of times.

GPX is an extremely high-grade exterior Douglas Fir Plywood with a superior plastic overlay applied under heat and pressure at the time the plywood is being bonded. RESULT: the plastic flows, condenses and sets forming a hard plastic surface that becomes a part of the plywood itself—not merely an added surface layer.

Investigate GPX today. It is a quality product of Georgia-Pacific Plywood & Lumber Co. with practically unlimited application for building, in industry and on the farm. For further information, write on your firm letterhead or fill in and mail the coupon appearing at the bottom of the page.
One of the most recent developments in the construction industry has been the acceptance and extensive use of Georgia-Pacific's plastic-faced plywood, GPX, for concrete forms. Their economy in use, handling, and maintenance is today, serving to keep costs down on construction projects everywhere.

Willcox - Bein - Fish - McHugh, alert New York contractors, use GPX Concrete Forms exclusively for ceilings. Ceilings poured into GPX Forms are ready for painting after only a minor grinding and smoothing operation instead of the customary 3 coats of plaster finish. In addition, one GPX Form will maintain its smooth surface at least three times as long as forms made of ordinary plywood. WILLCOX-BEIN-FISH-MCHUGH REPORT THAT ON LESTER PATTISON HOUSES, TO GET A COMPARABLE CEILING WITH OLD TYPES OF FORMS, WOULD HAVE COST $500.00 TO $600.00 MORE THAN IT DID WITH GPX CONCRETE FORMS.

Willcox - Bein - Fish - McHugh first used GPX Concrete Forms when working on the construction of Manhattan's well-known Jacob Riis Houses. Since that time, these progressive builders have used GPX on the Governor Alfred E. Smith Houses, Section One of the Governor Alfred E. Smith Houses, Lester Patterson Houses, and Queensview Houses. About to be started by this firm is Section Two of Astoria Houses. Of course, GPX Concrete Forms will be used!

Lester Patterson Houses, another example of how progressive contractors can keep costs down by the use of GPX Concrete Forms.
SOLD
BEFORE THEY
WERE BUILT!

One of the 713 houses in Alta Mira Addition, El Paso, Texas.

STEEL KITCHENS

helped us sell these houses before they were built—reports Emilio Peinado, Home Construction Company, El Paso, Texas.

“...believed Kitchen-Kraft Cabinets would be a smart investment in sales appeal and future customer satisfaction. The enthusiastic comments of women now enjoying the use of these convenient, beautiful kitchens prove we were right” ... say Denny Wagner and Sam Hunt, developers of Alta Mira addition.

The Alta Mira addition is just another example of how Kitchen-Kraft kitchens add “salability” to homes and “rentability” to apartments. Only Kitchen-Kraft can answer the demand for “custom-built” appearance at low cost! With Kitchen-Kraft, you can sell “planned” kitchens right from stock. Always remember — Kitchen-Kraft kitchens make homes easier to sell . . . apartments easier to rent.

MIDWEST MFG. COMPANY • GALESBURG, ILLINOIS
Division of Admiral Corporation

'Budget House of 1950'
Built at Chicago Show

On-site construction used for demonstration of new techniques and materials

\[ \text{DRAWING of Chicago home show house, designed by Chicago architects Edwin H. Mittelbusher, A. J. Del Bianco and Carl Kastrup} \]

ONE OF the features of the Greater Chicago Home Fair was the “Budget House of 1950,” built and opened for inspection during the show, May 13–21, at the Navy Pier. Its construction was sponsored by the Chicago Metropolitan Home Builders Association with the cooperation of the Chicago District Council of Carpenters, A.F.L., and material suppliers.

Chicago Architects Edwin H. Mittelbusher, A. J. Del Bianco and Carl Kastrup designed the home, with Landscape Architect William Dean collaborating in the landscape plan.

The on-site demonstration was designed to give interested Fair visitors an opportunity for a first-hand view of modern home building methods and materials. Questions were invited from the crowd and answered by builders, who also explained the economies achieved through such features as roof truss construction, pre-built chimneys, drywall construction and radiant perimeter heating systems for small homes.

A notable feature of the show was its complete coverage of home ownership. Free advisory services on design, site selection, financing, building, remodeling, or selection of materials and equipment were made available to show visitors by staffs of experts.

\[ \text{FLOOR plan of “Budget Home” sponsored by Chicago Metropolitan Home Builders Association, built with cooperation of AFL carpenters and material dealers} \]
NORGE Electric Ranges chosen for Bunche Park Housing Project

Serving Miami, Florida—Bunche Park, being developed by the Gaines Construction Company, will house over 1,000 families in two-bedroom homes at $47 monthly and three-bedrooms at $40. Read why Norge Electric Ranges were selected by the builders.

“As both builder and landlord,” says Sal Ramagli, Sales Director of Gaines Construction Company, “we’ve had to build and equip Bunche Park houses with an eye to both the present and the future.

“This has been particularly important in the selection of so essential an appliance as the family cook-stove.

“After exhaustively exploring this subject, we selected NORGE Electric Ranges on both counts. They fulfill all family requirements, and their construction is such as to protect our investment over the long haul.”

SEE THE FEATURES OF AMERICA’S FINEST HOME APPLIANCES

Refrigerators • Gas and Electric Ranges
Electric Water Heaters • Home Heaters
Automatic Washers
Wherever you find a Comet saw on the job, you’ll find smooth, speedy progress on all cutting requirements. On all jobs big or small, Comets set a fast pace, unmarred by breakdowns or inaccuracies. Many saws in one, a Comet makes all the cuts for both outside, and inside finish-up. Comets, table or trailer mounted, are easy to move about, fully protected against weather and offer maximum operator safety. They earn more profit for you. Write or wire for literature and prices.

CONSOLIDATED MACHINERY & SUPPLY CO., LTD.
2029-33 Santa Fe Avenue, Los Angeles 11, California

Catalogs and HOW-TO-DO-IT INFORMATION

157—GLASS BLOCKS—“Beauty Spots for your home” is title of new brochure offered by Pittsburgh Corning Corp., 307 Fourth Ave., Pittsburgh 22, Pa. Illustrations and typical installation details are shown.

158—“YOUR MODERN KITCHEN”—Attractive 32-page catalog in color shows several different ideas for use of wood kitchen cabinets. Offered by Morgan Co., Oshkosh, Wis.

159—SHOWER DOORS AND TUB ENCLOSURES—Complete line of Gulfspay shower doors and tub enclosures, poster and showcase doors, and metal framed mirrors are shown in catalog issued by Binswanger & Co., 207 N. Main St., Houston, Tex.

160—“MODERN VENTILATION FOR MODERN KITCHENS”—is title of new 8-page catalog offered by The Emerson Electric Manufacturing Co., St. Louis 21, Mo. Details of construction, design, performance, dimensions and installation of ventilators for wall, ceiling and windows are shown.

161—SHOWER RECEPTORS—The Weisway Vitreceptor, receptor for stall showers, is featured in a bulletin published by Henry Weis Manufacturing Co., Inc., Elkhart, Ind. Unit provides floor and first six inches of the walls of a shower stall.

162—KITCHEN CABINET HARDWARE—standard and “Streamlux” as well as Colonial cabinet hardware designs are colorfully presented in literature now available from American Cabinet Hardware Corp., Rockford, Ill. Amerock lines include matched cabinet hardware and matched window hardware.

163—BATHROOM-PLUMBING FIXTURES—Complete line of vitreous china plumbing fixtures is described and illustrated in a new 12-page catalog available from Mansfield Sanitary Pottery Inc., Perrysville, Ohio. Specifications are given.

164—APPROVED FLOOR FINISHING PRODUCTS—The Maple Flooring Manufacturers Association, Oshkosh 3, Wis., has published its new list of approved floor finishing products, tested under strengthened revised specifications.

165—PLASTIC TILE—Lists of available colors and prices of Prestile tile board are presented in new literature available from Prestile Manufacturing Co., 2860 Lincoln Ave., Chicago 13, Ill. Material is suitable for bathrooms, kitchens, recreation rooms, laundries.

166—VENTILATION—“How To Have Comfort From Moving Air” is title of a 136-page book which describes and illustrates principles of ventilation, and presents line of ventilators offered by The Torrington Manufacturing Co., Box 809, Torrington, Conn., from whom the book may be obtained.

167—“MODERNISTIC, DISTINCTIVE TRIMMINGS”—is title of a new catalog offered by National Aluminum Co., 1133 Alum Creek Drive, Columbus 9, Ohio. Installation drawings are given, as well as dimensions and illustrations of large variety of trim available.

(Continued on page 132)
Don't worry...it's tile

Even husbands can't mar the rich good looks of Genuine Clay Tile! One quick swish of a damp cloth and the fired-in colors of floors, walls and countertops are sparkling-bright... it defies stains, scratches, burns and scars...no waxing, polishing or scrubbing! Best of all, you don't have to talk "substitutes"...

Genuine Clay Tile is available now!

The Tile Council of America, Room 3401: 10 East 40th Street, New York, New York. Room 433: 727 West Seventh Street, Los Angeles, California.

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BILTY-FORSTER LUMBER CB.

Conner "Laytite" Maple and Birch Flooring in Cartons is something new in Flooring. It has new retail sales appeal for You and Your Customers. You can price it per carton. And your customers like the idea of a price per carton plus the clean, dry appearance of Flooring kept in cartons. Quickly and easily, they are able to figure the exact cost of Flooring a particular area. No other Flooring offers you the selling features listed below.

Write today for the complete information and prices on Conner "Laytite" Flooring. Discover for yourself why lumbermen like Mr. C. J. Schiek of Hilty-Forster Lumber Co. are so enthusiastic in their praise. It's the world's finest Flooring — bar none.

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The Conner Lumber and Land Co.

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P.O. Box 112-D

Telephone No. 3 or 418
Teletype—Marshfield No. 26

Catalogs

(Continued from page 130)

768—SINK COUNTER COVERING—"Shell-Fit," decorative, flexible sink counter covering, is featured in new literature available from Youngstown Manufacturing, Inc., 66-76 S. Prospect St., Youngstown, Ohio.

769—STEEL KITCHEN CABINETS—28-page catalog showing several arrangement ideas with steel cabinets is available from Lyon Metal Products, Inc., Aurora, Ill. Installations, available cabinet sections, and specifications are shown.

770—TUB HANGER—The Lucke Leakproof tub hanger, made by William B. Lucke, Inc., Wilmette, Ill., is featured in their new brochure which shows how the hangers are installed and presents illustrations of various applications.

771—KITCHEN VENTILATING FANS—Wall, ceiling, chimney and duct type ventilating fans for kitchens are illustrated and described in new literature available from Shepler Manufacturing Co., 1312-14 Sheffield St., Pittsburgh 12, Pa.

772—HARDWARE FOR KITCHEN CABINETS—New types of cabinet catches and hinges for kitchen cabinets are described in literature available from The Stanley Works, New Britain, Conn. Illustrations and specifications are presented.

773—CUSTOM-STYLED STEEL CABINETS—Features of the Marvel steel kitchen cabinet line are graphically presented in a new brochure offered by Metal Products Co., 1100 S. Central Park Ave., Chicago 24, Ill.

774—STEEL CABINETS AND CABINET HARDWARE—Architectural cabinet products, kitchen cabinet attachments and cabinet hardware manufactured by Washington Steel Products, Inc., 1940 E. 11th St., Tacoma 2, Wash., are featured in their new 32-page colorfully illustrated catalog.

775—SPECIALTIES FOR KITCHENS AND BATHROOMS—Shower stalls, medicine cabinets, ironing boards and ventilators are described in a 16-page catalog available from Dura Steel Products Co., 1774 E. 21st St., Los Angeles 11, Calif. The catalog. No. 49, offers specifications and illustrations.

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B & D "Quick-Saws", Hammers, give you MORE OUTPUT...

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Black & Decker Quick-Saws give you perfect balance, close-coupled design, reduced weight and length, comfortable "saw grip" switch handle, complete safety. B&D Electric Hammers are hard-hitting and amazingly husky, yet compact and light in weight. Result: your men can handle either tool more easily, with less fatigue; turn out more work every day.

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These B&D Tools are built to last, give you extra years of heavy-duty service! Both tools are fully protected against dust and over-heating; have powerful motors, extra-tough gears, husky housings, all the extra strength and stamina built into every Black & Decker Tool!


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BLACK & DECKER ELECTRIC QUICK-SAWS rip, crosscut, dado, angle groove— in wood, metal, stone, compositions. Quickly adjusted for angle or depth of cut. Easy to change blades and discs. Universal motors operate on any standard 110 or 220 volt power line or portable generator. Three models for cutting to depths of 2½", 2½", 3½".
OPEN and Close the GARAGE DOOR by RADIO CONTROL

Here is practical, time-proved equipment that offers convenience and protection comparable in importance to other home utilities. The driver opens or closes the garage door by simply pushing a button in the car. Our new Model E Electronic unit operates on frequencies assigned by FCC for this service. Cost is very moderate.

"SPECIAL SECTIONS" for the Barcol OVERdoor

The Barcol OVERdoor — an improved overhead garage door — lends itself admirably to an almost limitless variety of decorative treatment. Consider this interesting example, which even includes curtains in the windows! For details and advice, consult your Barcol representative.

FACTORY-TRAINED SALES and SERVICE REPRESENTATIVES in PRINCIPAL CITIES

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

Kitchens and Bathrooms

(Continued from page 92)

counter and storage requirements, or by necessary clearance between opposite rows of cabinets. The study recommends that the sum of the distances between refrigerator and sink, sink and range, and range and refrigerator should not exceed 22 feet. An important "yardstick" in measuring the efficiency of the kitchen is the "work triangle" formed by the paths between the three basic appliances. If normal house traffic passes through this triangle, meal preparation and other kitchen tasks are seriously interfered with.

One-Wall Assembly

The research project by the Small Homes Council entailed a detailed study of each of the four general kitchen arrangements, the One-Wall, Corridor, U-shape and L-shape.

Though the straight line or "One-Wall assembly" is the simplest way to combine all work centers into a unit, the study revealed that these kitchens are almost always deficient in storage and counter areas because they are compressed into an extremely small space. Therefore, this type was not recommended for small homes because (1) "if it fulfills storage and counter requirements, it is too large to work in efficiently, and (2) if it is small enough to meet standards of distance, it becomes deficient in storage and counter area."

Corridor Assembly

In the Corridor arrangement, where the one-wall assembly is literally cut into two parts, there is little excess floor area. However, work centers tend to lose normal sequence and traffic crosses the work triangle.

If there is an exterior door where the corridor assembly is used, additional light can be gained by installing a glass panel in the door.

L Assembly

The L-shaped assembly, derived by turning the straight-line arrangement around one corner, provides a relatively large amount of floor space for activities and equipment other than for food preparation. Proportions of unused space in this arrangement vary according to the room width, and if this space is to be advantageously used, obviously the kitchen should not be too narrow.

Advantages of this arrangement are: A larger window area may be used in an L arrangement than in a corridor, and work centers may be easily combined and kept in normal sequence.

(Continued on page 138)
Designing can help you to cut building costs

Walker-Turner designing is at the bottom of the high operating efficiency of Walker-Turner woodworking machines. And the more efficiently you can build, the lower your building costs.

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

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

SOLD ONLY THROUGH AUTHORIZED DEALERS
More and More and MORE Builders

are proving that they hold a winning hand when the houses they build are heated with H.C. Little

the ONLY vaporizing oil furnaces that automatically light themselves and burn low cost furnace oil!

H. C. Little automatic self lighting is only one of this equipment’s MANY FEATURES that are helping to SELL HOUSES from Boston to San Diego, from Seattle to St. Petersburg. In this game, H.C. Little is Builder’s Choice, so go ahead and deal yourself a winning hand TODAY!

Write Dept. A7 or call your local factory representative.

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

Kitchens and Bathrooms

(Continued from page 134)

U Assembly

In the U-shaped assembly, the sink is usually placed at the bottom part of the U, with the refrigerator and range and their adjoining cabinets forming the two wings. The two wings need not be equal in length, and, in fact, it is better if they are not if the kitchen is to have two or more doors. Where the wings are equal, more area is required in order to provide space for them.

Advantages of the U-shaped kitchen listed by the Small Homes Council are: (1) Work area is kept free of through traffic, (2) a large and continuous window area is possible in all cases, (3) combined work centers in normal sequence are possible, (4) distances between appliances are relatively short, (5) counters provided by base cabinets are continuous around three sides of the room and furnish ample working space, and (6) a generous amount of wall space is available for storage cabinets.

Need For Planning

A second phase of the Small Homes Council study analyzed 100 kitchen plans of typical small homes built since the war to arrive at definite recommendations for increasing efficiency of kitchen layout. Of the (basementless) homes analyzed, the research indicated that approximately 90 per cent of kitchen plans in the small houses did not allow for adequate storage space. Nearly 70 per cent did not provide sufficient counter work surface area, and a majority of the homes revealed faulty architectural planning in the size and shape of the kitchen in relation to the rest of the home.

With home builders definitely getting into the lower rental price sales field, and with a high volume of building assured in 1950 and 1951, practical kitchen planning can gain new stature for the building industry. The average monthly rental of units in multi-family rental projects financed under FHA mortgages has declined from about $87 in 1948 to an average of $82 in 1949. The average mortgage on new one-to-four family structures in 1949 was $7,220, compared with $7,340 in 1948.

At the same time the nation’s savings banks are liberalizing credit terms to permit people to buy more time-saving home equipment painlessly.

The open-end mortgage and the package mortgage mean that the addition of a complete kitchen in a new home costs the buyer only a few extra dollars each year.
MENGEL means QUALITY in Hollow-Core FLUSH DOORS

1. Balanced seven-ply construction to provide controlled reaction in changing weather conditions.
2. Hardwood construction throughout—stronger, more durable, free from grain-raising, more easily and economically finished.
3. Exclusive Insulok grid core material has inherent resiliency, cannot cause warping, nor transfer grid pattern to faces.
4. Greater strength. Adequate core stock surface area provides maximum gluing surface and resistance to warpage.
5. Precision key-locked dove-tail joinings of stiles and rails add strength and stability.
6. Ready to finish. Door faces are smoothly belt-sanded. Stiles are machine-planed at factory—profit to standard book sizes.
7. Fully guaranteed. Each door must meet rigid quality control standards and constant inspection throughout manufacture.
8. Mengel Flush Doors are economical—no mouldings to paint—no corners to collect dirt. Smooth hardwood surfaces are less absorbent and less costly to finish—easier to clean and longer-lived.

Write for complete specifications. Use the coupon.

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

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2530 South Fourth Street, Louisville, Ky.

Gentlemen: Please send me, without obligation, full specifications on [ ] Mengel Hollow-Core Flush Doors; [ ] Mengel Stabilized Solid-Core Doors.

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NEW Safway “4 by 4” Steel SCAFFOLDING

ECONOMICAL FOR EVERY CONTRACTOR . . . FOR EVERY LIGHT DUTY JOB!

Now every contractor can afford to use safe, efficient steel scaffolding . . . even on the smallest jobs! The new Safway “4 by 4” Scaffold is priced so low that there is no need to consider antiquated, dangerous wood horses and pole-and-crossbar scaffolding. Here’s why you can handle all light duty jobs more profitably with the new Safway “4 by 4” Steel Scaffold:

ADVANTAGES OF SAFWAY “4 by 4” STEEL SCAFFOLDING

- Lowest cost scaffold for loads to 50 lbs. per sq. ft., heights to 40 ft.
- Made by the originators and leading manufacturers of metal frame scaffolds.
- Safe welded tubing steel construction. No splintering—no nails—no fire hazard!
- Can be re-used indefinitely in other combinations.
- Speeds work . . . saves time in assembly and dismantling.
- Permits work platforms at 16-in. intervals, with materials readily at waist level.

Free LITERATURE

Write for Bulletin AB-750.

Bathroom Planning

(Continued from page 92)

ly be the lavatory or tub. The water-closet should be in the most secluded part of the room.

Recommended size for the family bathroom, according to the Plumbing and Heating Industries Bureau, is 6 feet by 8 feet. No bathroom should be less than 3 1/2 feet wide.

Space between fixtures should not be less than 6 inches.

The bathroom door should be 28 inches wide and swing into the room.

Provide adequate space for storage. One method is to have a floor-to-ceiling panel of drawers and shelves at the open end of a recess tub. Various types of cabinets can be used, including counter top cabinets which can serve the added function of providing counter space adjacent to the lavatory. A cabinet lavatory, which makes use of otherwise wasted space under the lavatory, will help solve storage problems in small bathrooms.

Clay Products Foundation Selects Research Center

The Armour Research Foundation of the Illinois Institute of Technology, Chicago, Ill., has been selected as the technical research center of the Structural Clay Products Research Foundation, according to a recent announcement by Director of Research Robert B. Taylor. Here the initial phases of the industry’s long-range $1,250,000 research program will get underway.

The program will be devoted primarily to end-use research in brick, tile and other structural clay products. Taylor declared: “Lower in-the-wall masonry costs will be the main objective. Studies will be made of the effect of unit size, weight, assembly techniques, etc., to determine combinations that will allow walls to be built most economically,” he said.

Taylor will establish an office in Chicago to devote the major portion of his time to personal direction of the research. He plans to continue his personal survey and study of the brick and tile industry and its users, in order to keep research needs evaluated and up-to-date.

Taylor, who was formerly assistant director of research for the Owens-Corning Fiberglas Corp., Newark, Ohio, took over his new post with the Structural Clay Products Research Foundation in January of this year, after the nation’s brick and tile manufacturers had subscribed to a five-year research effort.
MAKES A HIT WITH EVERYONE!

Westinghouse COLDER COLD MODEL SA-8

BUILDERS: The Westinghouse name has the kind of acceptance that sparks a house prospect's interest. It tells him that your house must be quality built. Then, too, prospects want large capacity. Here's an 8.05 cu. ft. Refrigerator that requires no more space than former 5 cu. ft. models.

APARTMENT OWNERS: You're looking for rock-bottom maintenance, replacement and operating expense. You get that and the initial cost is right. This SA-8 has all the construction and mechanical features that have earned all Westinghouse Refrigerators a reputation for "penny-pinching" year after year.

TENANTS AND BUYERS want large capacity for frozen foods, bottles, general food storage. The SA-8 provides it and COLDER COLD for safe, sure food-keeping.

For full particulars write, or phone your Westinghouse Distributor.

WESTINGHOUSE ELECTRIC CORPORATION
Appliance Division • Mansfield, Ohio

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

FREEZING COMPARTMENT freezes and stores 21 lbs. of foods and ice.

MEAT STORAGE

STORAGE TRAY is deep. Stores 15 lbs. of meat in proper cold.

HUMIDRAWER holds nearly ½ bushel of fruits and vegetables.
As a builder you seek products that help sell homes more quickly. Products that are free of installation problems. That result in thoroughly satisfied purchasers and enhance your prestige as a quality builder. These are the very reasons why AUTO-LOK will appeal to you.

Equally suitable for small or large homes, for schools, hospitals and institutions — AUTO-LOK affords maximum draft-free ventilation during the warm months, and positive protection against all climatic extremes.

Close more sales with the aid of the tightest closing window ever made!

For complete information, see SWEETS, or write for name of nearby AUTO-LOK distributor. Address Ludman Corporation, Dept AB-7 P.O. Box 4541, Miami, Florida.

THE TIGHTEST CLOSING WINDOW EVER MADE!

Auto-Lok

weathershielded ALUMINUM AWNING WINDOWS

Special New Products

(Continued from page 117)

CABINET HARDWARE A875045

Four new items are featured in this line of cabinet hardware: forged brass hardware, a new type concealed hinge, concealed knobs, and a die-cast handle. Bright brass, dull brass, dull bronze, bright chrome and dull chrome are popular finishes used on this group. The assortment is displayed on the company's 150" board. National Lock Company, Rockford, Ill.

HOME VENTILATOR A875037

Model 2H Aeropel has a certified capacity rating of 600 cubic feet per minute at base delivery with wall box and grille in place. Smart grille is made of molded white plastic and offers minimum resistance to air flow. Fabricated steel wall box is rust-proof. Motor starts automatically when weather door is opened, stops when door is closed. Can be used in kitchens, bathrooms, laundry rooms, offices, and rest rooms. American Blower Corporation, Detroit 32, Mich.

FLOOR FURNACE A875047

Over-all depth of the model 365 factory assembled, gas-fired floor furnace is only 25 inches. Lower six inches of the casing are completely waterproof for protection of controls and burners. Available in three sizes of 35, 50 and 65,000 B.T.U. per hour input, this unit employs a complete gas shutoff feature. The owner has a choice of manual or fully automatic controls, and either a floor type or duel wall register. Service adjustments are readily made from above the floor. Bryant Heater Div. Affiliated Gas Equipment, Inc., Dept AB-17825 St. Clair Ave., Cleveland 10, Ohio.

(Continued on page 142)
Out of the "Frying Pan," Onto the Job

 Builders particularly want to know what makes quality on the materials they buy and use hundreds of times every season. For nails, it's the furnace pictured above. Here, in hot, molten zinc, is the "last stop" for weatherproof nails. The operator submerges his ladle full of nails into the liquid metal to coat every nail thoroughly, uniformly. Then the nails are cooled, ready to withstand any type weathering condition.

 This photo, taken at the W. H. Maze plant in Peru, Ill., shows how "Zinclad" nails attain a heavier coating than usual galvanized nails. No "thin" spots for weather and rain to penetrate.

 Builders know it, too. "For a few cents more," they say, "you can be sure of no nail rusting, no discoloration throughout the life of the building. One case where it pays to spend a little more for a lot more."

"You can tell 'em by the box or carton. Just look for the DIPPED IN PURE ZINC."

It's easy to spot a "Zinclad" nail by its heavier, shinier zinc coating.

**WEATHER-PROOF NAILS FOR BIGGER SALES!**

If they're MAZE "ZINCLAD," they're hot-dipped for a heavier coating, longer life

The difference is in WEATHER-PROOF WEAR! Maze "Zinclad" nails are hot-dipped in pure molten zinc for a much heavier coating than usual galvanized nails. You pay just a few cents more for a LOT MORE in nail life, weather-resistance, no discoloration in the years ahead. Every type: Roofing, shingle, spiral, butt, asphalt, siding, common, cribber. See your dealer, or write for samples, literature.

Other MAZE MADE NAILS: Lead hood, pellet, bronze and stainless steel asbestos face, galvanized roofing, pointed asphalt siding, copper, screw, ring shank, and lead head roofing fasteners.

**W. H. MAZE COMPANY**
NOT "PIPE DREAMS"  
...BUT FACTS!

Facts that Prove Bermico Can Slash Your Building Costs

Use Bermico and save money, time, trouble all along the line. For several reasons... all good. Bermico's convenient 8-foot length is so much lighter... weighs only a third as much as other types... it handles easier on truck or job. Simple as ABC to lay, too. No joining compound necessary. A few hammer blows - joints are tight! And stay tight even when the ground settles!

What's more, Bermico is rootproof and watertight... unaffected by atmospheric extremes. And the smooth uniform bore delivers a high capacity water flow.

Each length of Bermico must measure up to a strict and unvarying engineering standard. That explains why millions of feet of Bermico are now serving in house-to-sewer connections, septic tank disposal and drainage systems.

For the full story of how Bermico Sewer Pipe can cut costs, boost profits, streamline your effort, write to: Dept. A-17, Brown Company, 500 Fifth Ave., N. Y.
This seal tells you WHY

QUALITY
APPROVED

it pays to buy Quality Approved
ALUMINUM WINDOWS

Read the quality requirements on that bright red seal.

These are important reasons why it pays to buy "Quality-Approved" aluminum windows.

Only manufacturers whose windows meet these rigid standards may use this seal.

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When you buy windows bearing the quality seal, you'll know you're getting all the advantages you are looking for—strong, sturdy windows, well designed and carefully manufactured. Windows that add a smart "quality look" to your houses, and offer a lifetime of paint-free, trouble-free service to your customers.

Build quality-sure on your next job. You can get all the facts from any Association member, from Sweet's Builders' File (Section 3c/1a) or by writing us, Dept. A.

Aluminum Window Manufacturers Association
74 Trinity Place, New York 6, N. Y.
All you've ever wanted in a fine bathroom cabinet is in this new Hall-Mack Mirro-Glide.

Heat is the very most in bathroom cabinet beauty and convenience....

There's beauty in the large handsome expanse of plate glass mirror (3½” x 22”) completely bound by a wide chrome frame.... in the gleaming white baked enamel steel cabinet.... in the fine Hall-Mack workmanship and finish.

And there's real convenience in the big divided cabinet with more than twice the room of an ordinary cabinet.... in the six fully adjustable glass shelves.... in the smoothly sliding mirror doors which always provide a 20” x 22” mirror for use even when one cabinet is opened.

Wherever you want the ultimate in cabinet quality, and the most in beauty and practical convenience—install the new Hall-Mack Mirro-Glide.

And remember...
Hall-Mack accessories....

Special New Products
(Continued from page 142)

WALL VENTILATOR AB75025

These outside wall kitchen ventilators are adaptable to all types of wall construction. Fit wall thicknesses 4½” to 15½” inches. Special shelves fit thicker walls. Models 844-46 have an eight-inch blade; models 1044-46 have ten-inch blade. An automatic control opens and closes the outside door. Positive weather-tight seal is assured. Door is held tight under tension against rubber gasket. All outside parts are rust-proofed. Uses no more current than a 40-watt bulb. Rosco Industries, Rochester 2, N. Y.

LAVATORY AB75043

New lavatories feature flat rims for built-in dressing tables or other cabinet work. Aluminum frames, insure neat, water tight installation, are available for these fixtures. The Arrowhead vitreous china and the Tahoe enamelled cast iron models are available with two types of chrome plated mixer fittings and have over-all dimensions of 20 by 18 inches. Kohler Company, Kohler, Wis.

DECK-TYPE SINK FIXTURE AB75033

This center-set sink fixture with its lever handles and eight-inch elevated swinging nozzle is made of fine brass heavily plated with chromium finish. Nozzle is fitted with anti-splash ‘Spring-Flx” aerator which adds oxygen to the water. Furnished with ¾-inch tail pieces or eight-inch center. Fits all sinks with thicknesses up to 1½” inches. Self-closing thumb-controlled spray permits quick diversion of water from nozzle to spray head for rinsing dishes and other cleaning. Spray head is heat resistant and is molded to fit the hand. Speakman Company, Wilmington 99, Dela.

(Continued on page 146)
Larry DeMayo, an up-and-coming construction man, is getting his full share of important contracts in and around Philadelphia. He's also a steady customer for Blue Brutes. You’ll know why when you read the captions with these action-photos, taken on his drainage sewer job near Large and Rawn Streets. And remember; these are not our claims... these are Mr. DeMayo’s own words.

As far as we’re concerned, that’s the Blue Brute story. After all, job-testing is the only sure way to find out just how construction equipment will perform. And when a man who’s using that equipment speaks up... it’s time to listen!

We’d just like to add that Larry DeMayo has plenty of company. All over the country Blue Brute users will tell you that for time-and-money-saving performance, quality materials and workmanship there’s more worth in Worthington... Immediate deliveries from your nearby Worthington-Ransome Distributor.

See him for further facts, or write us direct.

WORTHINGTON PUMP AND MACHINERY CORP.
Construction Equipment Department
Morristown, N. J.
Distributors in All Principal Cities

BUY BLUE BRUTES

IF IT'S A CONSTRUCTION JOB, IT'S A BLUE BRUTE JOB

JULY 1950
"That house is really weather-tight—it's weathersealed with FOLLANSBEE TERNE METAL"

Weathersealing with Follansbee Seamless Terne Metal is positive and long-lasting—somewhat like an insurance policy against rain and high winds. In fact, many homes and other types of buildings have Follansbee Terne Roofs that have given trouble-free service for more than a half-century.

But roofing is only one of the uses for Follansbee Seamless Terne Metal. This durable, time-tested material is particularly well suited for flashings, copings, ridges—for gutters, valleys, spouting.

Every building needs metal for weathersealing regardless of the type of construction. And terne metal is so readily accepted by architects and engineers that you can include Follansbee Seamless Terne Metal in your bids on new construction or repairs.

Be sure to call in your sheet metal contractor whenever you have a roofing or weathersealing problem. He'll tell you all about the advantages of Follansbee Seamless Terne Metal. And, from time to time, we'll have other information you'll want in your files—just write Seamless Terne Dept., Follansbee Steel Corporation and we'll see that it's sent you.

FOLLANSBEE STEEL CORPORATION
GENERAL OFFICES, PITTSBURGH 30, PA.
COLD ROLLED STRIP • ELECTRICAL SHEETS • POLISHED BLUES SHEETS • SEAMLESS TERNE ROLL ROOFING

KITCHEN VENTILATOR A875034
Natona 10-inch pressure type fan is specially built for this ceiling ventilator to provide maximum air delivery. The housing fits standard

SINK AND TRAY COMBINATION A875042
Square corner sink and tray unit has piling drainboard that covers one eight-inch sink and
For Garages, Barns, Industrial Plants

STANLEY

Rolling or Sliding

DOOR HARDWARE

- Garage, barn and industrial plant doors roll smoothly on Stanley Hangers and Stanley Track. The frictionless hangers—with ball bearing swivels and roller bearing wheels—coat quietly and easily under fingertip operation.

Stanley Door Hardware assures permanently carefree doors because of the weather-protected, dirt-shielded track feature. Stanley Track is straight as a die. “Hold-Fast” Track Brackets hold the track rigidly in perfect alignment at each suspension point. Any length of track needed can be assembled. Every possible combination of track brackets for double and triple door sets can be furnished.

Three sizes of track, hangers and brackets fill requirements for any door up to 1000 pounds.

For Overhead Carrier Systems

Many industries use the Stanley Track, Brackets and X-3655-7 Hangers. Used with 16 to 14 gauge enclosed track an extremely useful and economical carrier system can be constructed.

THE STANLEY WORKS,
NEW BRITAIN, CONNECTICUT
Make Sales Easier!

INSTALL Pyrofax Gas

In Homes beyond the Gas Mains

Gas Is Preferred!

Two out of three women prefer to cook with gas—and beyond the gas mains the choice is "Pyrofax" gas. It is clean, quick and economical, not only for cooking but for water heating, refrigeration, and room heating as well. No matter where you build, you can offer home buyers all the advantages of the preferred fuel... gas.

Turn "Shoppers" Into Buyers

Give them the fuel they want—install Pyrofax bottled gas service. Installation is quick and easy—low in cost—no expensive tanks to buy—no special wiring—no changes in construction needed. Supply is guaranteed in writing.

Nationally Advertised Appliances

Magic Chef and Caloric ranges, Servel refrigerators, Ruud and Bryant water heaters, and other gas appliances are available for use with PyroFax Gas—from our distributors in 30 states east of the Rockies.

Special New Products
(Continued from page 146)

CORNER TOWEL BAR AB78016

Twin corner towel bar in photo is one of fourteen matched bathroom and kitchen accessories in the Autryte Fairfield line. Heavy duty bars of racks have an exclusive fluted shape. High luster chrome finish is specially treated for brilliance and wear resistance qualities. Other items in line include soap dish, toothbrush holder, tissue holder, towel bar, towel shelf, robe hook, towel ring, shelf brackets, and racks. Autryte Company, Oebville, Conn.

SLIDING HOOKS AB78023

A stainless steel track supports six nylon hooks in this device designed to supplement cupboard and other storage space. Hooks that slide smoothly on track may be dyed any color by boiling in Tintex or similar dye. Easy to install. Trackbox is mounted with screws and washers (included in each set) to shelf bottom, cabinets, walls, doors, windows, frames, over sinks, work benches, etc. Hooks are self-spacing. Each set includes six hooks, 12-inch stainless steel track, and screws for mounting. Culver Products Company, 332 S. Michigan Ave., Chicago 4, Ill.

FILTER-FAN BLOWER AB78034

Filter-Fan consists of two main units: a washable filter and a centrifugal blower. The all-metal removable filter unit is cleaned by immersing...
tests prove principle by which the **INSULITE** "Wall of Protection" controls moisture condensation in walls!

To find out by scientific experiment how to prevent moisture condensation (and frost) in walls, a prominent Mid-West University built a giant "ice-box" 40 feet square and 25 feet high, cooled by a 25 ton refrigerating machine.

Inside, they built a full-size four room bungalow of standard construction but with removable wall sections of various materials to document the test. The house was heated to 70°F with humidities up to 40%. The outside was cooled to −10°F to duplicate winter conditions.

**Here's what they found out**

To properly control condensation, a wall should be "sealed on the warm side and vented on the cold side." This is exactly the principle of construction used for 10 years in the **INSULITE Wall of Protection**.

**INSULITE** Sealed Lok-Joint Lath provides the vapor barrier required on the warm side of the wall. Billrite Sheathing on the cold side of the wall provides permeability that lets vapor "breathe" through towards the outside. The **INSULITE Wall of Protection** controls moisture condensation and frost in walls. Now is the time to build winter comfort into your homes. Correct construction is important at any season—summer or winter.

AND in addition, you get extra bracing strength, extra insulating value and extra protection because **INSULITE** is asphalt-treated inside and outside—every fiber protected.

Use Double-Duty **INSULITE** for better wall construction.
JAEGGER Self-Raising Tower

Here's '50 to '60 profit per day!

A Hoist Tower that pays for itself fast—then pays you big dividends. One contractor says his Jaeger Self-Raising Tower saved $50 a day!—the tower, an operator and two wheelers, against 10 to 12 hoddlers. You take this tower to your jobs on truck or transporter. Two men assemble it on the ground in two hours. Then its 17-hp hoist raises it. Standard height is 37', with extra sections: 47', 57' or 67'. (31 1/2', 41 1/2', 51 1/2' and 61 1/2' lifting heights). Saves scaffold erecting time, saves constant labor and cost of replacing wooden tower materials. Places materials faster, safer. Handles 1-ton loads with complete safety. And, you can use it two ways—

5'6" x 5'9" material cage
and 1/2 cu yd concrete bucket

Either, or both, available. Interchange quickly and easily on the job. Material cage takes two wheelbarrows or largest concrete cart. Concrete bucket discharges automatically at correct level—handles full batch of 11-8 mixer.

Write for bulletin HS-9

THE JAEGGER MACHINE COMPANY, Columbus 16, Ohio

3 CONTRACT "BUGS" ELIMINATED

With Amazing Zonolite Vermiculite Plaster!

Save time... save costs... do a better job with this miracle plaster aggregate that's revolutionizing the plaster industry. One job sells another! Trowels easier and evenly. Weighs a fraction of sand plaster... yet is 4 times more fire-resistant. Helps you get extra jobs because it's used to fireproof beams, columns, ceilings, and trusses, as well as for regular application. Cuts risk of not making contract fulfillment dates—permits you to handle more jobs per month. Get all the facts today!

ZONOLITE VERMICULITE AGGREGATES

ZONOLITE COMPANY

Write 135 S Lasalle St Chicago 3

Special New Products

(Continued from page 148)

GAS RANGE

Model 0-71 Toppan gas range is equipped with a top broiler in addition to the second lower broiler located under the oven. The chrome drip pan on burners—once a giant, two standard, one "Mighty-Mite"—are controlled by four Simmering valves. A wide flame burner heats the Flex-Speed oven insulated with Fiberglas. Top broiler compartment automatically rolls out and has chrome pan and slotted grid. Lower broiler has porcelain pan and grid. Equipped with light in top roll, Toppan Visminder and Vismidecrete. Visminder indicates when cooking is done; Vismidecrete lists time and temperature information for cooking. The Toppan Stove Company, Mansfield, Ohio

BATHROOM MAGAZINE RACK AB75016

Bathroom hospitality unit, a recessed service rack, has special sales appeal and holds several magazines, cigarettes and trays, other miscellaneous bathroom items. Cabinet measures 12 x 17 1/2 x 5 1/2 inches. House of Hospitality, Dept. AB, 11544 Ventura Blvd., North Hollywood, Calif.

AUTOMATIC SOFTENER AB75017

Everlast electric automatic water softener is regenerated once or oftener a week, depending on requirements by clock operation that initiated regeneration during night—or when water is not being used. Cycles will repeat a...
Look at the New Line in our new line!

Striking New Shado-Tex Design adds compelling beauty to Flintkote Insulated Sidings

HOMEOWNERS will be quick to appreciate the bonus of beauty your recommendation of Flintkote's new Shado-Tex Insulated Sidings brings to their homes.

Available in either Shake or Shingle Patterns, Shado-Tex offers the textured beauty of expensive hand-split sidings, heightened by the simulated shadow line that sets off the finished job with a soft, subtle accent.

And every homeowner welcomes the opportunity to do two jobs with one material. Point out the fact that Shado-Tex Sidings insulate as well as decorate, and watch customers nod their understanding approval.

Especially useful for remodeling, Flintkote Insulated Sidings have also met with enthusiastic acceptance for certain types of new construction.

The wide line of patterns and designs offers a type to suit any architectural style, any locality. And the modest price . . . combined with quick, easy installation and exceptional durability . . . gives homeowners a great deal for their building or remodeling dollar.

As soon as you see it, you'll want to use this new Flintkote Product.

Visit your local Flintkote Dealer soon, and get complete details. If he doesn't yet have Shado-Tex, write us. We'll rush full details to both of you.

THE FLINTKOTE COMPANY, Building Materials Division, 30 Rockefeller Plaza, New York 20, N. Y.

FLINTKOTE
the after years of service cost no more!
**Build-in More Light... for Quicker Sales**

**IN KITCHENS**
The lighter the kitchen, the more it appeals to your prospects. Panels of Blue Ridge Patterned Glass dividing dinette from kitchen transmit light from one to the other, add sparkle to both. At right... Fluted glass panel above range. Architect: C. W. W., Mayhew, San Francisco.

**IN BATHROOMS**
View-obscuring windows transmit light and add distinction... when they're Blue Ridge Patterned Glass. Its square, linear and all-over patterns create smart effects in all rooms where privacy is desired. May be Satined* finished for greater obcurity. Below: Doublex glass in aluminum windows by Timm of Los Angeles.

You can make all rooms lighter, more appealing... with panels, partitions or entire walls of Blue Ridge Patterned Glass. Write for your free copy of "New Adventures in Decorating" to see what a variety of effects you can achieve—even on modest budgets—with this versatile glass. It comes in over 20 patterns. May be Sensitized for greater strength. Blue Ridge Sales Division, Libbey Owens Ford Glass Company.

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**Special New Products**
(Continued from page 130)

**SHELF SUPPORTS**

No-Way adjustable shelf supports are made of rust-proof Alacrome metal and are easily installed by fastening four strips with screws in an upright position for each set of shelves desired. Shelves are laid on the supports which hold them steadily and securely. These supports come in 24", 48", 60", and 72"-inch lengths with 20 screws and 16 clips for complete installation. Supports are simply snapped into position cleated. Marklinburg-Duncan Company, Oklahoma City, Okla.

**LO-BOY REFRIGERATOR**

This compact unit of five cubic feet interior space was designed especially to match stand-
and kitchen cabinet work. A new type of motor installation — "cabled power" — reduces vibration and noise to minimum. Mechanism is suspended with spring springs and cushioned in rubber. Sanitary Refrigerator Co., Fond du Lac, Wis.

**HARDWARE-PULLS**

These pulls are made of solid brass and are available in any finish desired. Model numbers are, left, 106 door pull, 107 drawer pull of top right, and 108 drawer pull, or bolt, made to accommodate material ranging in thickness from 1/2" to 1 1/16 inches. National Manufacturing Company, Sterling, Ill.

(Continued on page 134)
Houses "A" and "B" look alike. But "A" has an American Kitchen and sells many times faster than "B"! Read the proof! In 25 homes, 24 buyers chose American Kitchens over another well-known brand! The only reason this one kitchen sold was because it was already installed!

Quality pays off! Many customers can't judge construction: they judge your homes in terms of things they know... and they know a good kitchen from a cheap one! American Kitchens spell high quality... in the kitchen as well as the entire home!

American Kitchens pay off! They are more economical because they give you more return per dollar, sell homes faster than any other brand! If you don't believe that top quality gives you bigger profits right now—if you don't believe the experience of the builder at the right affects you—don't buy American Kitchens! There are other brands you can get cheaper!

American Central Division, Dept. AB-7
AVCO Manufacturing Corporation
Cincinnati, Indiana
Please have my distributor send me your new 1960 Builders' File.
I design homes priced from $  to $ .
I expect to handle  units in 1960.
Name
Address
City     County     State
The Mighty Midget

ASBESTOS SIDING and SHINGLES

The Scout is a small utility cutter for asbestos siding and shingles, with speed and ease of use.

The cutting blade is made from a high-grade steel, heat-treated, has sharp serrated teeth machined by a milling cutter. Overall length 16"., height 6", width 2½".

Approx. wt. 3 lbs.

The base of the Scout Cutter is high-grade aluminum casting, having the proper amount of weight necessary to perform the best operation by the operator.

MONARCH CUTTER

NOW, AT LAST
MALLEABLE IRON CASTING

The Monarch Asbestos Siding and Shingle Cutter in malleable iron gives you the 100% guarantee against broken castings. Because of its metallurgical structure, malleable iron is the ideal material for this cutter. The Monarch gives greater toughness, higher resistance to corrosion and will stand up to heavy and repeated impact.

WRITE FOR FREE DESCRIPTIVE FOLDER

TRI-STATE BUILDING MATERIALS CO.
P. O. BOX 1476, FORT WORTH, TEXAS

For Trouble-Free Bath Tub Edges Specify LUCKE

Leak-Proof Bath-Tub Hangers

No Leaks • No Cracks • No Repair Expenses

The Modern Way To Prevent Leaks

There is no excuse for cracks or leaks or repair expense in good building. LUCKE Bath Tub Hangers are specified and used by leading architects and builders to overcome this problem. Lucke Hangers build tubs into walls. Tub rests securely in hanger along each wall.

Sold by Leading Plumbing Supply Houses

Manufactured by

W. B. LUCKE, Inc.
Wilmette Illinois

Special New Products (Continued from page 152)

ELECTRIC RANGE AND WATER HEATER A873017

Wagener table top automatic water heater and Wagener electric ranges are designed to fit side-by-side. The 550 degree F. range oven is large—has 5750 cubic inches of space. Range has

three high-speed, swivel action, surface units. All six sides are insulated with fiberglass. The water heater, available in three sizes, is made with either porcelain or linoleum top working surface. Front of heater has 110 volt electrical outlet which can be replaced with a visible hot water indicator if desired. Wagener in heater controls rust in heater and house water pipes.

America & Southern Corporation, Nashville, Tenn.

WATER SOFTENER A873020

Permutit Electro-Matic water softener is simply re-energized. The turn of a single switch after pouring a small amount of salt into the conveniently located salt chamber is all the attention needed for regeneration. Valve and timer mechanism automatically controls process, times out brine and returns units to normal service. Unit is compact, easily movable. Made in various models for varying capacities. The Permutit Company, 330 West 42nd St., New York 18, N. Y.

AUTOMATIC WATER HEATER A873019

Designed for use with natural, manufactured, mixed, liquefied petroleum or liquefied petroleum air gases, this heater has a glass surfaced steel tank. Intense heat fuses glass and steel

in bond that permits bending without cracking. Draft trays slow down velocity of rising hot gases which heat heat-absorbing surfaces at bottom and rear of tank. Clutter burner and heat wall are glass surfaced hills to eliminate rust damage. Made in 20, 30, 45, 60, and 75-gallon capacities. A. O. Smith Corporation, Water Heater Division, Milwaukee 1, Wis.

(Continued on page 214)
KEEP POSTED—read the American Builder every month. The highly competitive building business demands that you keep abreast of the times. Be informed on the latest techniques of building—keep posted on the new and improved products, materials and equipment—get the benefit of tried and proven methods of selling homes, new ideas on financing and land development.

Special information on small commercial and industrial structures—stores—hotels—shopping centers and farm buildings.

In addition you get the latest in home designs—pictures and plans of the best sellers coast to coast.

AND EVERY MONTH a complete blueprint of a selected home drawn to 1/8-inch scale, plans, elevations and details.

Read the monthly review of the National Association of Home Builders—items directly from local Association headquarters. Study the better detail plates and "How-To-Do-It" features contained in every issue.

DON'T MISS A SINGLE COPY. Start your personal file of this valuable building magazine NOW!

If you are already a subscriber, renew your subscription to make sure of receiving your issue each month. The coupon below is for your convenience.

PLEASE NOTE—
Kindly check your principal activity:
Builders and Contractors:
- Builders and Contractors specializing in Residential or Light Commercial or Light Industrial Building.
- Contractos specializing in Heavy Building Construction.
- Builders and Contractors engaged in both Residential or Light Commercial or Light Industrial Building and Heavy Building Construction, not specializing in either.
- Contractors specializing in all types of Heavy Construction other than Buildings.
- General Contractors engaged in Heavy Construction of both Buildings and other than Buildings, not specializing in either.
- Special Trade Contractors, contracting for only such parts of Building Construction as carpentry, masonry, plumbing, roofing, heating, ventilating, electrical, painting, concrete and excavating.

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- Distributors of construction equipment.
- If none of the foregoing applies, please advise the type of business with which you are affiliated.

NAME OF YOUR FIRM
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If not, give Title or Position

Subscriptions accepted only from those directly connected with the building industry.

(Good only in United States, Possessions and Canada)
How to Plan for Full Life
On a Small Lot

This home exemplifies maximum exploitation of minimum land space, for it contains 1,125 square feet of living area although the lot it occupies measures only 30 x 90 feet, and slopes three feet across its width. Furthermore, the lot area includes a garage, a service yard, and a spacious patio.

The house, located on a narrow street in Manhattan Beach, California, was designed by J. Merrill Gray for James W. Beeth. It is unique both in design and in framing. The living room and kitchen, separated from the trafficked street, face the patio at the rear of the house where they receive the benefit of the southern sun. A shed roof with exposed beams was used over the master bedroom and living room section with clerestory windows running the entire length of the building and illuminating these rooms with the eastern sun.

The position of the entry provides access to all rooms without the need to pass through other areas. This entry is formed by a planting box, with bookshelves on the living room side, just inside the entrance. The guest closet is built of combed plywood; it also encloses a linen closet and card table shelves. The dominating Roman brick chimney struc-
(Continued on page 158)

GLASS of clerestory is glazed between supporting posts without additional window jamb. This section rests on concrete slab...
KENTILE GIVES NON-BASEMENT HOMES HANDSOME, LONG-LASTING FLOORS

Installs on concrete in direct contact with the earth—All fillers, binders and pigments in Kentile have high resistance to the alkali found in concrete. And Kentile’s asbestos filler assures insulation against the cold and moisture in concrete floors. Equally ideal for installation on radiant-heated concrete slabs.

Also: Kentile can be laid over double T&G wood floors—or directly over firm plywood. Saves installation and labor costs because it can be laid tile by tile—eliminating the handling problems in laying flooring from heavy, hard-to-move rolls. Ready for use as soon as it is laid.

A CHILD’S BEDROOM like this gets hard usage—but that won’t faze Kentile. Colors go clear through the tough, scuff-resistant material—can’t wear off. Kentile stoutly resists dirt and stains—a few flicks of the mop and it’s shining like new. The many desirable features of these attractive resilient floors are being brought to your clients’ attention in leading magazines.

ONE OF THE 100 new low-cost homes built by Gordon Bronson in New Brunswick, New Jersey. All floors are Kentile. It’s used throughout these homes because it permits installation right over concrete on grade, cutting construction costs.

KENTILE floors give you freedom for design at low cost.

IN ADDITION TO 25 COLORS and a wide variety of feature strips, you can select “Kenserts” and “ThemeTile”—individual decorative touches for adding custom-made distinctiveness at low cost.

David E. Kennedy, Inc., 58 Second Ave., Brooklyn 15, N.Y. • 350 Fifth Ave., New York 1, N.Y. • 705 Architects Bldg., 17th and Sansom St., Philadelphia 3, Pa. • 1211 NBC Bldg., Cleveland 14, Ohio • 225 Moore St., S.E., Atlanta 2, Ga. • Kansas City Merchandise Mart, Inc., 2201-5 Grand Ave., Kansas City 8, Mo. • 1440 11th St., Denver 4, Colo. • 4532 South Kolin Ave., Chicago 32, Ill. • 1113 Vine St., Houston 1, Texas • 4501 Santa Fe Ave., Los Angeles 58, Calif. • 95 Market St., Oakland, Calif. • 452 Statler Bldg., Boston 16, Mass.
Sized right! Priced right!

for small homes
for multi-family apartments
for low-cost housing

Yes, this Mueller Climatrol high-boy is a sensation because it's a perfect fit for the jobs you're designing and building today!

- Only 16½" wide, 24" deep, 58½" high in 60,000 Btu size, 80,000 and 100,000 Btu sizes similarly compact. Shipped assembled.
- Priced to fit builders' and buyers' budgets and still deliver top-quality comfort.
- Available in beautiful crinkle-green for modern basements, or gleaming appliance-white for utility rooms.
- Backed by Mueller's 95-year reputation for home-heating leadership.


How to Plan for Full Life

(Continued from page 156)

picture contains the fireplace and a grill inside of the house and an incinerator that faces the patio on the exterior. The flagstone used in the patio extends into the dining area of the house to serve as a hearth for the grill and fireplace

WITH glass door open, patio becomes extension of living area and integrates the inner areas of the house and the patio.

In the bath, glass blocks are used for daylight illumination. Mirrors on opposite walls of this room create a feeling of space. The ceiling is furred down over the tub to enclose additional household storage space. Auxiliary heat is supplied in the bath by a wall heater built into a drawer space of the vanity.

Two types of floor construction were used; the west half of the structure, on the high side of the lot, rests on a concrete slab so that steps are eliminated at the entrances. The east half is built over a wood floor so that filling was not necessary. Projecting eaves of the house, boxed and faced with an angled fascia board with compound mitres at the corners, conceal a copper gutter.

Instead of conventional studding, 4x4-inch posts, three feet six inches on centers, support the building. Beams, 4x6 inches, also three feet six inches on centers were used for the shed roof joists. Headers and the top plate were mortised into their adjoining members to add rigidity to the building. Glass is fitted between the uprights without jambs or frames wherever possible, especially in the clerestory section. Moldings over the exterior plywood sheathing give a board and batten effect.
Never Before SUCH POWER . . .
Never Before SUCH VALUE . . .
in Chevrolet P-L Advance-Design Trucks

America has learned to expect the most from Chevrolet. And now the line that outsells all others brings truck users still more: More power—to make light of maximum loads. More value—to make sure of minimum costs.

Everywhere—on every kind of job, every kind of road—these new P-L models are proving themselves the greatest of a great line. Yet Chevrolet trucks are notably low in price and in operating and maintenance costs. No wonder that year after year Chevrolet trucks are the Nation’s Favorite!

CHEVROLET MOTOR DIVISION, General Motors Corporation
DETROIT 2, MICHIGAN

LEADING WITH ALL THESE PLUS FEATURES:
* TWO GREAT VALVE-IN-HEAD ENGINES: the New 105-h.p. Load-Master and the improved 92-h.p. Thrift-Master—to give you greater power per gallon, lower cost per load
* THE NEW POWER-JET CARBURETOR: smoother, quicker acceleration response
* DIAPHRAGM SPRING CLUTCH for easy action engagement
* SYNCHROMESH TRANSMISSIONS for fast, smooth shifting
* HYPOID REAR AXLES—5 times more durable than spiral bevel type
* DOUBLE-ARTICULATED BRAKES—for complete driver control
* WIDE-BASE WHEELS for increased tire mileage
* ADVANCE-DESIGN STYLING with the “Cabs that Breathe”
* BALL-TYPE STEERING for easier handling
* UNIT-DESIGN BODIES—precision built.

CHEVROLET
P-L
ADVANCE-DESIGN TRUCKS

Popularity Leaders
Chevrolet trucks outsell all others. In every postwar year truck users have bought more Chevrolets than any other make—proof of the owner satisfaction they have earned throughout the years.

Performance Leaders
The new Chevrolet P-L trucks give you high pulling power over a wide range of usable road speeds—and on the straightaway, high acceleration to cut down total trip time.

Payload Leaders
The rugged construction and all-around economy of Chevrolet P-L trucks cut operating and repair costs—let you deliver the goods with real reductions in cost per ton per mile.

Price Leaders
The Chevrolet truck line is the very lowest priced line in the field—saves on initial cost. What’s more P-L trucks give owners dollar and cents savings in maintenance and operation.

JULY 1958
Consult your plumber for the latest up-to-date models of...

Fiat Shower Cabinets

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

Unsurpassed for beauty and ultra-smart appearance, the new Fiat Built-in Cadet shower will add sales appeal to any home.

It saves considerably on shower installation cost by eliminating expensive tile work on the job. Builders report savings of $40.00 to $60.00 and more per unit.

Check with your plumbing contractor for details on Fiat Shower models. The Built-in Cadet shower is designed especially for medium and high grade bathrooms.

Use coupon for catalog of complete line of Fiat showers.

New Built-in Model 19B Cadet bathroom shower

FIAT METAL MANUFACTURING CO.
THREE COMPLETE MANUFACTURING PLANTS
(Chicago one plant) Franklin Park, III.
Long Island City, N. Y.
Los Angeles 32, Calif.

In Canada: Fiat showers are made by Porcelain and Metal Products Ltd., Onttica, Ontario.

Please send catalog of Fiat Showers, Receivers and Doors. Also builders bathroom floor sheet.

Name__________________________
Company_______________________
Street__________________________
City____________________________
Zone...State____________________

Mail to: FIAT METAL MFG. COMPANY 91301 W. Belmont Ave., Franklin Park, III.

Salute to Gadgets

(Continued from page 122)

ing, when our thoughts turned somewhat longingly to the country, we came across further evidence to indicate that the shift from the big to the little, or vice versa, still is taking place. In the 65 columns of "Homes For Sale" advertising in the classified section we read the following:

"Overlooking miles of beautiful River Valley. A charming, modern and recently completely refurbished home. Living room, library, dining room, kitchen, 2 maids rooms, bath, open terrace and screened porches downstairs. 4 bedrooms, 3 baths, sleeping porch on 2nd floor. New oil, forced air heating. Guest cottage, 5 rooms, just completely remodeled. 2 car garage. Grounds, 9 acres, highly improved in house area with tennis court, bowling green, gardens, hundreds of lilacs, grand old shade trees, paved drives. City and school bus at the door, 30 minutes to loop. Early possession."

Some one will buy it, of course, but not for what it cost the owner regardless of whether his desire to get away from it all was brought about by the shortage of competent help, increasing taxes, reduction in the size of the family, changes in his economic status or any of the many other reasons which usually influence the decision to sell such an establishment. The point is that some other family will have a chance to take over until the glamour fades for them and they too decide to pass it along to some one else.

Actually there isn't very much difference between such buying impulses and those which prompt a family to purchase a second-hand Buick rather than a new Chevy and it is well that this is the case. It maintains a value for the second-hand car, or the house, that would not otherwise exist.

In the years to come there will be more and more switching about in home-ownership rather than less for the simple reason that there will be so many new gadgets to appeal to those who want the latest in whatever they own. When they move along, the ranks will close behind them and others will strive to satisfy their yen for better living by taking over a home they couldn't afford if they had to buy it at its first price.

Another trend plainly is apparent in the houses that are being erected today... a trend which will further tend to accelerate the shift in homeownership. Built-in features eliminate the need for many items in furniture and furnishings which were not only expensive to buy but difficult to move as was the case at first with kitchen

(Continued on page 162)
NOW!...Johns-Manville Super-Felt Insulations come in 3 types
—all made of the famous, firmly felted Johns-Manville Rock Wool

Ful-Thik Batts

More thickness, more rock wool for the money! Here is our number one recommendation. Made of the firmly felted Longshore rock wool produced by Johns-Manville's revolutionary new process. Full stud thickness. (Also available Semi-Thik.) Batts are stronger, lighter in weight, have greater uniformity and rigidity throughout. Vapor-barrier with reinforced tacking flanges.

Thick Batt Blankets

In addition to the Johns-Manville Ful-Thik Batt, J-M Super-Felt now comes in Thick Batt Blankets. The firmly felted rock wool is fully enclosed for convenience in handling.

Medium Roll Blankets

For economy jobs, here's the new Medium Roll-Blanket. With this third type you now have a complete line of Johns-Manville Rock Wool Insulations to meet every sales need.

For further information, write Johns-Manville, Box 290, New York 16, N.Y.

And remember, J-M Home Insulation is easier to sell because People think of Johns-Manville FIRST*

*For home insulation, the public preference for Johns-Manville is 40 to 1, according to nationwide public opinion surveys
THE NEW, FREE BOOKLET EVERY HOME BUILDER WILL WANT
—helps you build homes for LESS by saving on figuring costs the Printing Calculator way!

Hundreds of builders have sent for their free copies—GET YOURS NOW!

When you estimate a job, do you laboriously cover sheets of paper with figures—figures that have to be checked—re-checked before you can be sure you’re right?

Well, sir, all that’s a thing of the past, as you’ll see from Remington Rand’s new publication “Blueprint for Figure-Fact Efficiency.” It’s a concise, graphic presentation of how to streamline your Estimating, Payroll work, Cost checking and many other phases of your business where minutes spent on obsolete figuring methods are dollars down the drain.

You’ll discover how the famous Printing Calculator, with its faster 10 key keyboard and its automatic division, direct multiplication...lightning-quick addition and subtraction...its constant visual check by Printed Proof on the Tape—eliminates figure drudgery...boosts your paper-work efficiency and cuts costs way down. Send the coupon today for your FREE copy.

Remington Rand
PRINTING CALCULATOR

Remington Rand, Business Machines & Supplies Div.,
Room 1480A, 315 Fourth Avenue, New York 10.

Please send me a FREE copy of “Blueprint for Figure-Fact Efficiency”—the booklet that shows how to CUT COSTS the Printing Calculator way.

Name
Company
Address
City Zone State

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Salute to Gadgets
(Continued from page 160)

and laundry equipment. Houses will become more complete as living units. Decorations and even floor coverings will be more permanent. It will take less time, work and money to move from house to house as these labor-saving elements and permanent furnishings become a part of the structure.

All of which provides a flexibility of ownership which did not exist when the building of a house was undertaken but once in the lifetime of less than half of the families of America. Many a prospect has hesitated to buy a home in the past because it could not be expanded or contracted to suit the needs of a growing family and its eventual scattering. With this deterrent factor removed, more families will be willing to buy a home and increase their equities, however small, through their monthly installments. They will be able to do a far better job of raising a family in their “own” home and have a better outlook on life than usually is the case in apartments. Then when the children finally are gone, Pa and Ma can dispose of their equity and move into an apartment planned especially to meet their needs.

Home ownership seems to resolve itself into the question of whether a home can pay for itself and earn its keep down through the lifetime of those who will be serving the needs of the several families who will “own” it. The fact that an element of ownership is involved, even though the equity at times may be thin, greatly improves its chances for successful liquidation. The rented house of the past usually did not receive the care it deserved from owner or tenant. The home that is “owned” by those who live in it will no doubt get better attention since its eventual resale value will mean much more to the occupants.

The ease with which homes can be bought and sold in the future seems to raise havoc with the oft-repeated conclusion that “it takes a heap of living to make a house a home.” If we are to have annual models and new gadgets that cause families to sell a comparatively new house almost before they have had time to settle, some of the sentimental attributes of home-ownership will no doubt disappear. But in view of the fact that we now live in a mechanical age, what else can be expected? The rocking chair and the geranium pots in the huge old-fashioned kitchen will have to give way to push-button gadgets. We may decry the passing of sentiment but only until the electrical current fails. As soon as it comes on again we will rise and salute the gadgets!
All this crowd to see a house?

Yes, because it's one of these modern, new homes that attract people faster than sugar draws flies. And one of the big reasons is its Bryant automatic gas heating that's going to make it sell or rent faster, and for more money!

It's no secret to Mr. and Mrs. America that the Bryant nameplate means quality. In fact, you'll hear many a story of how the Bryant that Uncle Jim bought back in the early 1900's still is doing a fine job.

Today, Bryant offers the most reliable, most diversified gas heating equipment ever presented to help make your houses the kind of homes America wants.

There's a Bryant representative near you. Call him or mail the coupon. Let him aid with your heating problems . . . and tell Officer Clancy to stand by to handle the crowds when you open your Bryant-heated homes!
Design Heating Systems on the Architect’s Drawing Board

By Randall A. Nelson

When Edgar Guest wrote that "... it takes a heap o’ living in a house to make it home," he unknowingly proposed a slogan for members of the architectural and building profession. The modern home might easily be described as a package of mechanical devices for comfortable living. Stone, mortar, wood, nails, glass, and the immemorial other building materials of today may be used to build a house but it is generally the case that this latter provision has been disregarded and it has been left to the individual subcontracting mechanic to get his equipment into the house as best he can after it has been framed, semi-finished or finished. The results have often been makeshift and, at best, certainly not exemplary of good, clean design.

The architect will certainly find it to his advantage to call on the "know how" of specialists in installation techniques during the period in which he is designing the house. Particularly is this true with regard to the heating system. The ideal heating system is one which is made an integral part of the house. Its major contribution to the house is the creation of an indoor atmosphere of comfort for the occupants. It should perform this function continuously, efficiently and unobtrusively so that the occupants of the home may enjoy its benefits yet never be overly conscious of its existence.

Cognizant of this paradoxical specification, the heating industry has striven successfully to develop heating equipment automatic in operation, dependable in service and space-saving in design. Yet, in all too many cases, the architect has evidently not been sufficiently informed by the industry of its efforts to help him achieve his desired objective because the heating plant is not integrated in his design.

If the heating engineer or contractor is called in by the architect upon the completion of the first rough lay-
PLAN NOW TO TAKE ADVANTAGE OF THE

Fourth Annual Chicagoland Home and Home Furnishings Festival

SEPTEMBER 17-OCTOBER 8

HERE is the industry-wide event which last year attracted more than 1,200,000 home-minded visitors to the 78 demonstration homes. Sponsored by the Home and Home Furnishings Council of Chicagoland in cooperation with the Chicago Tribune, the 1950 Festival for the fourth consecutive year will provide the ideal setting for your sales messages.

Festival homes demonstrating the latest designs and equipment are being rushed to completion for the event. When finished, many of them will be completely furnished and decorated to exhibit 1950’s newest furniture, appliances, building materials and equipment, and other products of interest to home planners.

Again the Chicago Tribune will lead off the Festival with a supplement on Sunday, September 17, announcing the event to more than 1,000,000 Sunday Tribune families in Chicago and suburbs and inviting their attendance to the displays.

Three previous, highly successful Festivals have paved the way for the greater sales volume to be developed during this outstanding promotion. Here is the nation’s most intensively pre-sold market for home merchandise. As the chart shows, the Tribune is Chicago’s Number One sales producer for home merchandise.

PLAN NOW TO CASH IN!

Forms for the Festival supplement will close on Friday, September 4. Consult with your advertising counsel today, or ask a Tribune representative to bring you complete information about using Chicago’s foremost home and home furnishings medium to build sales. Phone Superior 7-0100—or address your nearest Tribune representative.

BACKED BY YOUR INDUSTRY!

The Chicagoland Home and Home Furnishings Festival is sponsored by the following 16 trade organizations representing more than 11,000 manufacturers, builders and retailers in every branch of the industry, in cooperation with the Chicago Tribune.

The American Furniture Mart
Chicago Floor Covering Association
Chicago Furniture Manufacturers Association
Chicago Metropolitan Home Builders Association
Chicago Retail Furniture Association
Chicago Retail Merchants Association
Electric Association
Furniture Fabric Men’s Association
Lamp Manufacturers Association
Manufacturers Agents Club
The Merchandise Mart
National Association of Bedding Manufacturers
National Association of Music Merchants
National Retail Furniture Association
Peoples Gas Light and Coke Company
State Street Council

LEADING BY NEARLY $4,000,000!

Retail and general advertisers of home furnishings, housing equipment, building materials, electrical appliances, musical instruments, and radio and television in 1949 placed in the Chicago Tribune $6,126,028, or 54.3% of their total promotion funds in Chicago newspapers. This was $3,943,030 more—180.6% more—than they placed in any other Chicago newspaper—and far more than they placed in all other Chicago newspapers combined.


MEMBER: FIRST 3 MARKETS GROUP, AND METROPOLITAN SUNDAY NEWSPAPERS, INC.
NEW HUNTER
PACKAGE ATTIC FANS

Low cost • Easily installed

COOL COMFORT
For Hot Summer Months

The new Hunter Package Attic Fan is a complete home-cooling system—low in initial cost, economical to operate, designed for fast, inexpensive installation. No other small investment gives homeowners so much comfort and pleasure.

Easy to Install: Delivered on the job as a compact unit, complete with ceiling shutter and modern metal trim, the Package Fan is quickly installed in rough ceiling opening. No suction-box to build; no accessories needed. Requires only 18" attic clearance, fits any standard hallway.

Performance Guaranteed: Quiet, trouble-free operation is assured by Hunter's 64 years' experience in manufacturing fans exclusively. Available in capacities from 4750 to 9500 CFM, with air delivery ratings certified. Fan guaranteed 5 years; motor and shutter, 1 year.

MAIL FOR FAN MANUAL
Hunter Fan and Ventilating Company
381 S. Front Street, Memphis, Tenn.

Send copy of "How to Cool for Comfort" to:
Name
Address
City State

Design Heating Systems
(Continued from page 166)

outs of the proposed design they can analyze the several design objectives together. With a full understanding of these objectives the heating man can begin the layout of the heating system with an eye toward creating a satisfactory indoor comfort environment. At the same time the architect can be confident that his design will not be unintentionally marred by a contractor who is unacquainted with his plans.

The practical architect recognizes that one cannot sacrifice all in the interest of art either. For instance, as a result of location, area and directional exposure, some rooms of a house layout will be harder to heat than others. If the heating contractor is given the opportunity to compute carefully the respective heat losses of each room in the design while they are still in the drawing board stage, he can often make suggestions which will prove meritorious in correcting individual room heating problems. At least, warm air registers and return air grilles can be more strategically located for efficient room heating as well as for better utilization of space.

This also pertains to such structural details as interior wall construction and joist placement. An oft-repeated complaint of the warm air heating man, particularly with regard to two-story homes, is a lack of sufficient wall space through which to run stacks or rises (vertical ducts). Another repeatedly encountered problem is the layout of second floor joists that make placement of transition ducts to various upstairs rooms practically impossible. Sometimes the shifting of a lone stud or joist will facilitate air duct installation. The
WHY IT PAYS TO STOCK-PILE

STRAN-STEEL FRAMING

In any industrial operation there are times when additional buildings and plant alterations of a temporary or permanent nature are required. At such times a stock pile of Stran-Steel framing members pays off handsomely.

MULTI-PURPOSE. Stran-Steel framing can be used on any enclosed building or shelter-type structure such as garage, shed, warehouse, lean-to or canopy ... also for permanent and movable incombustible partitions.

NAILABLE. All joists, studs, rafters and purlins have patented nailing groove, permitting the application of collateral material, inside and outside, with ordinary tools and nails.

RE-USEABLE. Framing members are of light, tough, high-quality steel . . . they are incombustible and virtually indestructible . . . can be used over and over. In storage they will not shrink or lose their usefulness.

FAST ERECTION. No special skill is required . . . ordinary workmen using carpenters' tools can erect Stran-Steel framing swiftly, accurately and economically. The "in place" cost is usually less.
Design Heating Systems

(Continued from page 166)

keen-eyed heating contractor will spot those problems in the blueprint and when modified structural details have been worked out the general contractor can frame the building accordingly.

Other structural details about which the heating man can offer constructive suggestions are the most efficient and convenient location of the heater room, coal bin or oil tank, as well as provision for simplified ash removal (where a coal furnace will be used). After having had the opportunity of figuring the heat loss of the proposed house which will auto-

**Kitchen Kanopy**

*a Better and Better looking ventilator to help you MAKE QUICK HOME SALES*

**QUIETER OPERATION:** specially made motor means quieter operation with no vibration.

**EASIER TO INSTALL**

**DOUBLE FILTER:** exclusive feature—Easily removed for cleaning—quickly, effectively removes cooking odors, heat, and greasy vapors.

**GRACEFUL DESIGN:** for eye appeal! Economical in price, operation, and installation! Kitchen Kanopy offers SALES PLUSES for the home builder.

for dealer information write, wire or call

**COMFORT PRODUCTS CORP.**

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---

AN EXTRA large register or damper in the side of warm air trunk running through laundry room facilitates housewife's clothes drying

matically dictate the furnace size, the heating man can also advise the architect about the correct size of chimney to provide the best flue venting results.

Provision of heating outlets for the recreation room or hobby shop as well as roughed-in ducts for future rooms (if the client has specified that he will eventually add more rooms) can be accomplished with the aid of the heating man on hand when the house is in the blueprint stage. Provision for the future addition of summer air conditioning equipment can also be made in the original de-

WARM air from register opening under kitchen sink heats space for drying tea towels, dish clothes

sign if the client has specified that he will eventually want year round air conditioning.

When included in the original layout, these items can generally be added to the system at little or no extra addition to the cost of the installation. So can those extra little

(Continued on page 210)
DOLLARS For Our DEALERS!

The award to Pittsburgh INTERLOCK of the Good Housekeeping Guaranty Seal and increased consumer response to our national advertising has swamped dealers with more orders than they've ever had for the plastic wall tile that "locks on walls" for a lifetime!

25% faster installation means lower cost per INTERLOCK job! No grouting! No clean-up! Beautiful jobs mean satisfied customers! MORE PROFITS for you!

Mail this coupon today for full "profitable" details!

JONES & BROWN, Inc.
National Distributors
PITTSBURGH, PA.

JULY 1950
A good man is 5 times as good when you give him a STANLEY-CARTER J5 POWER PLANE

The combination of 1 b.p., 18,000 r.p.m. motor and the spiral cutter fits doors, sash, screens, storm sash, transoms, etc., up to 5 times faster than by hand. Smooth, waveless surface even against the grain. Won't splinter out. Bevel cuts up to 45° and any size cut from paper to any width up to 2 1/2". Attachment for sharpening cutter. Bench bracket converts the J5 to high-speed jointer. Rugged, lightweight aluminum alloy body. Three wire cable at rear, out of way. Double pole, momentary contact, safety trigger switch with lock. Metal carrying case for Plane, attachments and accessories.

STANLEY

This trade mark on electric tools tells you the most important thing you want to know about tools

When you buy an electric tool you have to take somebody's word about gears, motor, bearings, shaft, switches, power, etc. Whose word about tools could be more reliable than the word of "Stanley"—tool makers for over 100 years. On an electric tool the name Stanley means the tool is quality built, thoroughly tested and honestly rated. Covered with a generous guarantee and serviced by a network of Stanley Service Stations. See your dealer or write for complete catalog. Stanley Electric Tools, 492 Myrtle Street, New Britain, Connecticut.

Association News, cont'd

Coogan . . .

(Continued from page 67)

3. HOUSING STANDARDS: These should come from builders instead of from planning boards and other groups. By working with colleges, authoritative facts instead of theory can be established as to what kind of houses should be built in various areas.

4. CLOSER GOVERNMENT CO-OPERATION: Foster closer co-operation with government so industry's experience will be sought when Federal regulations are written.

5. LOCAL MORTGAGE CO-OPERATION: Good relationships between the industry and the mortgage business nationally should be followed up locally through joint understanding and activity with financing institutions.

6. LOCAL COOPERATION WITH ARCHITECTS: National work between the NAHB and the AIA should be followed up locally to improve house design.

7. COOPERATION IN CIVIC AFFAIRS: NAHB local associations should set up civic committees to work with municipal boards and officials on building matters.

8. ACTIVE FHA AND VA COMMITTEES: More work with FHA and VA local offices is required so they may have more practical knowledge of building problems.

9. IMPROVED DESIGN: This should be encouraged through local NAHB associations.

10. FIELD TESTS FOR MATERIALS: Manufacturers should be induced to field test materials and products before releasing them.

11. HOME BUILDING SEMINARS: Encourage colleges and universities to establish "refresher courses" and seminars in modern building techniques for builders and their crews.

12. BUILDER RESPONSIBILITIES: This should be determined so that the public would have a

(Continued on page 172)
Three years of research by TYLAC engineers has perfected a principle that is destined to become one of the most important developments in the progress of the pre-fabricated wall board industry. With the introduction of the New Contour Bevel Score Line Miracle Walls by TYLAC are today without a peer in the entire field. The former U shape score lines now have soft, rounded edges that afford even longer life to TYLAC's Hi-baked Plastic Enamel surface yet full bendability is retained. These rich, natural appearing score lines enhance TYLAC'S lasting beauty because Contour Bevel lines are soft, straight and sm-o-o-o-th. They do not accumulate dust, dirt or grease — cleaning is easier and quicker.

With this important "Sales Builder" feature the new Miracle Walls by TYLAC afford far greater Sales and greater Profits for Jobbers and Dealers everywhere.

Write us today for our new liberal Sales plan, our many advertising and Dealer Helps, Prices and Discounts.

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

JULY 1950
THIS ADAMS-RITE DEADLOCK HAS A 7/8" BACKSET!

Use Series 970 for narrowest extruded aluminum, steel or wood stiles. Depth is only 1-1/2". Will take 1 or 2 standard cylinders which can be keyed to job, or Adams-Rite Thumb Turn (as shown) for emergency on-side operation. Locks and turns are reversible. Fifteen other standard backsets to 1-3/4". Series 980 is identical except for 3-1/4" diameter, 5-pin tumbler cylinder and 15-16" backset. Rugged steel and brass construction, armored bolt with 5/8" throw. Bronze or aluminum face and strike. Radius, flat and bevelled face interchangeable. Write for complete data.

W. P. "BILL" Atkinson, NAHB first vice president, is assisted in donning Indian garb by Dale Belkarn, left, president of the Albuquerque Home Builders Association and Paul Boswell, Albuquerque city commissioner, at meeting held by New Mexico group at which Atkinson, who was guest speaker, was dubbed "Chief Build 'Em Many Houses"

Coogan ... (Continued from page 170)

better understanding when homes are bought.

13. IMPROVED LABOR RELATIONS: Labor must be shown that private enterprise is the best system.

14. CODE OF ETHICS: The NAHB code is to be brought up to date and publicized, with every member of the association observing spirit and letter.

15. HELP FOR NAHB LOCALS: Aid is to be given local associations to help them improve service to members.

Vigorous action to achieve these objectives, Coogan believes, will vastly improve the status of home builders, and enable them to do a better job than before.

GILSON One-Bag Mixer

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

GILSON BROTHERS CO. 1900 - 1950
Manufacturers of Contractors Equipment Since 1911
Most modern homes owe their beauty to clean simplicity of design—inside and out. Such beauty is always enhanced when telephone wires are concealed within the walls.

Telephone conduit, built in during construction, makes concealed wiring easy. And it promises that more telephones may be added later with the same regard for handsome walls and woodwork. One or two lengths of pipe or tubing placed in the walls are usually enough for the average house—and the cost is low.

Your Bell Telephone Company will be glad to help you plan telephone wiring facilities for any type of home. Why not call your Telephone Business Office for free telephone planning service?
Faster for any cut!
AMERICAN 8½ SAW


★ SEE COUPON BELOW

Speed Up SANDING!
AMERICAN Sanderplane

MANY USES
from touching up your finish to sanding wood + metal marble + stone composition board

This American Portable Belt Sander will save you time and eliminate tedious hand sanding and planing for you on many jobs! Use this easy-handling belt sander in your shop-and on location—for touch up sanding, roughing, or final finish ... Two models—with and without dust collector bag. Speedy ... rugged ... efficient ... dependable. Send for descriptive literature and prices.

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☐ American Sanderplane Belt Sander

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TENAS DEALER OFFICERS

GROUP of officers of Lumbermen's Association of Texas at group's 54th annual convenion in Galveston April 23-25 (top row, from left) Gene Ebersole, executive vice president; H. L. Stokely, director; Jack Dionne, honorary secretary; W. B. Oldham, director; Lyn Boyd, director; W. B. Carrao, third vice president; (lower row) Vernor Milliken, treasurer; Warren F. Keys, second vice president; W. B. Henderson, retiring president; John B. Armstrong, new president; and W. B. Milstead, first vice president. More than 1,500 persons attended meeting at which Capt. Eddie Rickenbacker was guest of honor. Other speakers included Harry Wood, news analyst; H. B. Nortin, NRLDA executive vice president; Courten Maxwell, publisher and George Roche. "Stop 'n' Sales Plan" creator

Texas Lumbermen
(Continued from page 67)

Members, State-Economy Commission: Chesley M. Grogan, Atlanta; John A. Couch, Haskell; Gene Ebersole, Houston.

James Rockwell, Houston, Board of Regents, University of Texas; Edward L. Leyendecker, Laredo, county treasurer; J. Lee Johnson, Superintendent, "Man of the Year" at Fort Worth; Dick Hughes, national director, NAIIB; E. Olah, Houston, Optimist Club president; and Charles T. Prunty, Woodbrough, district governor of the Lions Club.

Southern California

All of the 1949 officers of the Southern California Retail Lumber Association were re-elected at the group's 36th annual convention in the Los Angeles Ambassador Hotel April 13-15. They include President Thomas J. Fox, Santa Monica, and Vice Presidents C. Gilmore Ward, Santa Ana, and Gerald V. Curran, Pomona.

One of the highlights of the meeting was the presentation of certificates to students who completed retail lumber courses sponsored by the association in cooperation with the University of Southern California. The ceremony was preceded by a talk by Dr. Claude W. Fawcett, coordinator of industry training at the University.

Other prominent convention speakers were Dr. Roscoe Pound, dean emeritus of the Harvard Law School; Frank C. Russell, president of the F. C. Russell Co., Cleveland; Joseph Schwartz, pension consultant, Los Angeles; W. C. Bell, managing director, Western Retail Lumbermen's Association; and Russell Bjorn, public relations consultant.

Northern California

J. H. Kirk of Kirk Lumber and Building Materials, Santa Maria, was elected president of the Lumber Merchants Association of Northern California at the Association's 10th annual convention at the Ahwahnee Hotel, Yosemite National Park April 24-25. Other officers are Russ Stevens, Headburg, vice president; E. E. Hort, treasurer, South San Francisco; and Jack F. Pomeroy, executive vice president, San Francisco. Attendance at the convention was about 350. There were no exhibits of products.

Speakers included Rep. Richard Nixon of California, candidate for U. S. Senate; C. B. Sweet, NRLDA president; Prof. William A. Spurr, Graduate School of Business, Stanford University; Robert Williams, Allied Building Credits; Arthur Hood, editor, American Lumberman magazine; and Robert Vance, general sales manager, National Plan Service, Inc.

Arkansas

The 46th convention of the Arkansas Association of Lumber Dealers was described as one of the most successful. 323 persons registered for the annual meeting, and 96 manufacturing and distributing firms took part in the program.

Resolutions adopted by the convention condemned the high rate of govern...
These Grade Marks are Guides to Quality and Uniformity of FDI Inspected Douglas Fir doors

Every Douglas fir door that carries an FDI grade mark comes from a mill inspected regularly by the Fir Door Institute.

Doors that carry the FDI seal meet the official standards of the U. S. Department of Commerce as to quality and manufacture.

The Inspection Service of the Fir Door Institute is completely independent of mill supervision. This means it is especially valuable to manufacturer, distributor, retailer, architect and builder.

Doors stamped with FDI grade marks are your assurance an independent inspection service has found them to be up to grade, and, in many instances, even better!

Insist on doors, then, which carry this FDI “Quality Guide!”

Fir Door Institute
Tacoma 2, Washington

Mills subject to regular Fir Door Institute inspection are always glad to provide Notarized Certificates to buyers, upon request, showing that doors shipped have been found to be up to U. S. Department of Commerce Standards for the grade purchased.

Remember—More than 6 out of every 10 doors in today’s homes are Douglas fir doors!
Association News, con’d

(Continued from page 174)

government spending and urged repeal of Federal public housing legislation.

New officers elected were George Packard, Fort Smith, president; E. E. Bonsteel, Harrison; Arthur Holt, Marked Tree, and Byron Howlett-Monticello, vice presidents. A. C. Davidson, Little Rock, was re-elected treasurer. E. DeMatt Henderson, Little Rock, is secretary.

Among the convention speakers were Ralph W. Carney, the Coleman Co., Wichita, Kans.; Joseph King, NRLDA Washington counsel; Neill Bohlinger, Little Rock attorney; Edmund Harding, "the Tarheel humorist"; and Prof. John Kane, University of Arkansas School of Business. Special guests included Charles Kemper and Allan Flint, president and secretary of the Southeastern Lumbermen's Association; and W. T. Nethery of the Southeast Missouri Lumbermen's Association.

Mississippi

"Should the Administration's FEPC program be put into effect, it would place the United States next to Soviet Russia in regimentation," Rep. William M. Colmer of Mississippi told delegates to the 24th annual convention of the Mississippi Retail Lumber Dealers Association at Biloxi April 12-13. Speaking on "Congressional Highlights," Rep. Colmer warned of a "danger facing America today from within" and added that "Democracy is on trial for its life. We cannot

afford to be complacent."

Other well-known convention speakers included C. B. Sweet, NRLDA president; Gates Ferguson, Celotex Corp.; Ray Andrew Hill, National Paint, Varnish and Lacquer Association; and Nathan Howard Gist of New York City. Attendance was approximately 400 and there were 45 exhibits.

Earl M. Jones of Jackson was elected president for the 1950-51 (Continued on page 178)
Three reasons why it pays to specify
K&M "CENTURY" ASBESTOS-CEMENT SHINGLES

When customers ask, "Which roof is best?", you're on firm ground when you recommend "Century" Asbestos-Cement Shingles. Consider these facts:

1 Smart, modern appearance pleases every home owner! K&M Asbestos Shingles are attractively textured, with built-in colors. The variety of colors—White, Black, Spanish Red, Surf Green, and Graytone—means you can be sure of satisfying every owner's taste!

2 Amazing durability makes a better roofing job! K&M Asbestos Shingles resist fire, weather, rot, rust, and termites—the roof will last the lifetime of the house!

3 Owners appreciate the three-way economies! The moderate initial cost of K&M Shingles starts the savings. Then, they are specially designed for quick, easy application—save on both time and labor. And finally, K&M Asbestos-Cement Shingles don't ever need painting to provide perfect, lasting protection!

With outstanding advantages like these, you can see how easy it is to build your business—increase your profits—with K&M "Century" Asbestos-Cement Shingles. Ask your K&M Dealer for complete details, or write us direct.

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA
Original manufacturers of Asbestos-Cement Shingles in this country.
16 page booklet shows how to install plastic wall tile—includes designing and planning, wall preparation, cutting tile, proper clean-up and maintenance. This new book also explains the unusual features of WILSON LOCKBACK PLASTIC WALL TILE, and how it differs from ordinary plastic tile. Write for your free copy.

PLASTIC WALL TILE INSTALLATION MANUAL

EXCLUSIVE "UNDERCUTS" provide a MECHANICAL LOCK between tile and mastic! EXCLUSIVE REINFORCING RIBS prevent tile from "dishing"... drying mastic cannot pull surface of tile concave!

OVER 20 beautiful Softglo colors to achieve every decorative effect! Straight edges; sharp, square corners; exact uniform dimensions for ease and economy of installation.

WRITE TODAY for your FREE Installation Manual!

WILSON PLASTICS, INC. 1531 MILAN RD. SANDUSKY, OHIO

Here’s the amazing Calcinator disposal unit... AT NEW LOW COST!

CALCINATOR

Get rid of ALL GARBAGE — ALL BURNABLE TRASH!

☆ NO SEWER PROBLEMS!
☆ TAKES ALL BONES AND STRINGY VEGETABLES!
☆ INSTALLED ANYWHERE ON MANUFACTURED, MIXED OR L.P. GAS, OR ELECTRICITY!
☆ COMPLETELY AUTOMATIC!

Don’t build grief into your homes with a disposal unit that won’t do a complete job, may cause sewer or septic tank trouble. Assure lasting satisfaction with Calcinator—the only completely automatic unit that disposes of all garbage completely! More space in kitchen, basement or utility room, too—Calcinator disposes of all burnable trash, too!

CALCINATOR DIVISION VALLEY WELDING & BOILER CO., DEPT. 47 • BAY CITY, MICH.

Association News, cont’d

New Secretary-Treasurer Named by Indiana Dealers

The board of directors of the Indiana Lumber and Builders Supply Association has announced the appointment of Carl W. Nagle, Indianapolis, as secretary-treasurer. Nagle was recently associated with the Travelers Insurance Co. as a field representative and is a former assistant manager of the Indianapolis Merchants Association.

CARL W. NAGLE

Nagle attended Butler University and served in the recent war as an Army Air Forces officer. A member of the Indianapolis Junior Chamber of Commerce, he received that organization’s Milestone Award for outstanding service in 1948.

(Continued from page 176)

term; R. C. Stockett, Jackson, was named first vice president; and W. P. Kelly, Winona, second vice president. Other officers are R. B. Vaughn, Biloxi, national dealer director; F. H. Cameron, Clarkdale, alternate national director; and E. B. (Ted) Lemmons, Jackson, executive secretary-treasurer.

Arizona

Attendance at the annual convention of the Arizona Retail Lumber and Builders Supply Association was the largest in the group’s history. Official member registration for the meeting, held April 20-22 at the Maricopa Inn, Mesa, was approximately 150, with 22 exhibitors.

Elected to the presidency for 1950-51 was James C. O’Malley of Phoenix. Other new officers are W. C. Ketchum, Prescott; H. C. Schenkert, Douglas; and Knox Corbett, Tucson, vice presidents; and Leslie Childers, treasurer. Gus R. Michaels is the executive secretary-manager.

Convention speakers included C. B. Sweet and H. R. Northorp, NRLDA president and executive vice president; Virgil G. Peterson, assistant manager, Red Cedar Shingle Bureau; and J. E. Holbrook, western manager, the Paraffine Companies, Inc.
Now television helps you sell
Armstrong's Building Materials

Now, for the first time, the powerful new force of television is being used to help you sell building materials.

A new program, "Armstrong's Circle Theatre," went on the air June 6, over NBC—television's largest network. Every Tuesday night, the television camera lets millions of viewers stroll through the lobby of Circle Théâtre, where they see and hear about Armstrong's Temlok®, Armstrong's Monowall®, and Armstrong's Cushiontone®—as well as Armstrong's Resilient Floors. The program includes interesting and helpful demonstrations of Armstrong materials, filled with building and decorating ideas.

The plays on Armstrong's Circle Theatre are produced to a high standard of family entertainment. Every play is the work of an outstanding modern dramatist. Well-known stars from Hollywood and Broadway head the fine casts appearing on Armstrong's Circle Theatre.

Television may well have a profound effect on your business. Its power as an advertising medium is truly amazing. The audience is growing by leaps and bounds. New stations are constantly being added to NBC's national network. As the full force of television advertising comes into play, builders who use the Armstrong Line will be first to benefit. If you're not using Armstrong's Building Materials now, get full details soon from your Armstrong lumber dealer or write to Armstrong Cork Company, 1607 Ocean Avenue, Lancaster, Pennsylvania.

Tune in Armstrong's Circle Theatre
every Tuesday, 9:30 p.m. (Eastern Daylight Saving Time) NBC-TV
Association News, cont'd

Dayton Home Show
Visited By 30,000

Previous attendance records were broken at the third annual Dayton, Ohio, Builders Show when 30,000 persons visited the exhibition at the Dayton Fairgrounds Coliseum between April 15-21. There were 102 display booths. The Montgomery County Builders Association was the sponsor.

The association presented a "Pavilion of Homes," an exhibit containing plans and photographs of homes planned or built by members.

General chairman of the event was M. E. Kimney, association vice president; and A. H. Palace, secretary, served as show manager. Other members of the committee were Joseph P. Haverstick, NAHB secretary; Lou Zweiger, Stanley Swango, Jr., Robert J. Haverstick, association president; B. A. Wettig and Sam Davis.

CUTTING ribbon at opening of Dayton Builders Show is Miss Virginia Patterson, WLWD television star on M. E. Kimney, general chairman (left), Robert J. Haverstick, Builders Association president, and Russell E. McClure, Dayton city manager, assist in ceremonies.

Be safe . . . be sure with

Wintite SASH LOCKS

Do you know that most home burglaries are through "window entries"? Use tamper proof Wintite Sash Locks as a leading safety feature of your homes. Streamlined Sash Lift to match . . .

See your dealer or write for FREE BOOKLETS

☐ Matched Cabinet Hardware
☐ Colonial Cabinet Hardware
☐ Wintite Sash Lock

Name

Address

City State

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AMERICAN CABINET HARDWARE CORP.

Dept. 7-N

Backford, Ill.

For bricks, blocks, mortar in buckets, sand, roofing, lumber, boxes, dirt, sacks, etc.

One man can handle and operate easily trailed up to 35 miles per hour.

Clutch and Brake Assembly (own design).

Write for FREE Literature and Prices!

SAM MULKEY COMPANY

1621-DD Locust Kansas City 8, Mo.
If you plan to have **STURDY Attractive doorways**

**USE Richmond UNIVERSAL KNOCKDOWN STEEL FRAMES**

Well designed RICHMOND knockdown Frames add to the appearance of your doorways to make your homes more desirable and easier to sell.

You cut costs, too, because these versatile frames permit the jambs to be used for either hand of the door. Hinges are welded on at the factory the same distance from either end and the latch cutout is centered. Coming in three pieces, of first quality 18-gauge steel, makes ordering easy and lets you store a maximum number in a minimum amount of space. Simply assembled, yet sturdy, the frames eliminate the need for casings. A red oxide primer coat is baked on at the factory.

Available for both interior and exterior openings, RICHMOND Knockdown Steel Frames come in the following sizes—Width—1'6" and up in 2" multiples; Height—6'6"; 6'8" and 7'0".

Get your copy of RICHMOND'S free new booklet on Steel Frames—SEND IN COUPON TODAY!

**THE Richmond FIREPROOF DOOR CO.**

P. O. Box 97, Friends Station

Richmond, Indiana

JULY 1950
San Francisco, Los Angeles Builders in Joint Meeting

A discussion of 1949 and 1950 national housing legislation and its effect on the industry occupied an important part on the program at the annual joint meeting of the Associated Home Builders of San Francisco and the Home Builders Institute of Los Angeles. This year’s meeting took place April 20-23 at Los Angeles.

The meeting, led by the two presidents, Earl Popovich of San Francisco and William H. Evans of Los Angeles, was concluded by a tour of the Lakewood-Long Beach area. San Francisco builders were also shown projects in the San Fernando Valley by Institute officials, including President Evans, K. Sande Bennes, reception chairman and Clifford L. Rawson, secretary-manager.

The builders recommended that the public housing question be placed on the ballot to give voters an opportunity to decide the issue because “public housing authorities are going far beyond their jurisdiction in propagandizing the public to subsidize rental tenants in government-operated housing projects.”

1,800 Attend L-P Gas Convention, Trade Show

Peter A. Anderson, president of Utilities Distributors, Inc., Portland, Me., was elected president of the Liquid Petroleum Gas Association at its convention and trade show in the Palmer House, Chicago, May 11. He succeeds Si G. Darling of Pratt, Kan. Attendance at the annual meeting reached a record 1,800.

Other officers for 1950-51 include William S. Lander, Charlotte, N. C., first vice president; F. N. Mahan, Denver, Colo., second vice president; Walter Miller, Chicago, treasurer; and Arthur C. Kreuter, Chicago, secretary.
One call solves all your plywood needs!

Nationwide Roddiscraft Complete Service Makes
Plywood and Door Buying One Simple Operation

The line to Roddiscraft saves time in buying.

One call, one order, to the nearest Roddiscraft warehouse fills all your plywood and door needs...

Douglas Fir Plywood  •  Fir Doors  •  Hardwood Plywood  •  Marine wood  •  Cupboard Door Stock  •  Counterfronts  •  Solid Core Flush Doors  •  Housemart Hollow Core Flush Doors and General Electric's great surfacing laminate, Textolite®.

If you want a special hardwood, not carried in stock, prompt shipment can be obtained from the mill.

Trained Roddiscraft warehouse personnel give you complete service. They will assist and advise you, if you wish.

To save time and money, to always be sure, turn your plywood and door buying into one simple operation. Order from Roddiscraft where every need is filled right on schedule.

Roddiscraft warehouses serve key markets from coast to coast. Check the list below for the Roddiscraft warehouse nearest you.


Roddiscraft
RODDIS PLYWOOD CORPORATION
MARSHFIELD, WISCONSIN

NATIONWIDE Roddiscraft WAREHOUSE SERVICE
Cambridge 29, Mass. 729 Vassar St.  2660 E. 14th St.
Charlotte, N. C. 120 E. 27th St.  Louisville 10, Ky. 1201-1 S 15th St.
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Cincinnati 2, Ohio 457 S. Sixth St.  Milwaukee 8, Wisc. 4005 W. State St.
Dallas 16, Texas 2800 McKinney St.  Detroit 14, Mich. 11651 Jefferson St.
Huntsville 10, Texas 3423 Sichel St.  Fort Worth 9, Tex. 103 W. 15th St.
Kansas City 2, Kan. 30-33 Southwest Blvd.  Philadelphia 4, Pa. 4453 Drexel Ave.
L. I. City, N. Y. Balance & Concourse Ave.  St. Louis, Mo. 4453 Drexel Ave.
San Antonio, Texas 727 N Cherry St.  San Antonio, Texas 727 N. Cherry St.
San Francisco 34, Cal. 365 Williams Ave.

JULY 1950
BAND SAW practically any material accurately up to TWICE AS FAST with a Boice-Crane

Super-smooth sawing that saves handling labor on every cut: Close balance, and light, strong Torsolite wheels permit twice the speed of older 14-inch machines. Less vibration. Long blade life.

High safety rating. Wheels and blade, except at cutting point, are entirely enclosed. Blade guides adjusted by single control with full safety even when operating.

Capacity: blade to guard, 3¾". 47" dia. work clears stock up to 7½" thick. Blade speed at 1000 r.p.m. 4,400 f.p.m. Blade length: 30" width: 8", 10", 12", 16" and 20". Overall height (Blade model) 47"; fixture 56 ½" with one-piece frame. Cabinet type base has sealed-off motor compartment. Table (15" x 15½") tilts on double trimming. Single and 8-speed back-grained models. Band-Filing and Bond-Folding attachments available.

Boice-Crane durable, intermediate capacity power tools are designed for ready adaptability to a wide range of projects. Sold through industrial supply distributors in most cities.

The Air Conditioning Picture

By William W. Brooks

Plumbing and Heating Industries Bureau

EVEN WITHOUT technical training in the science of air conditioning, some of the basic principles can be easily understood.

Of paramount importance in anything having to do with houses, and particularly true of air conditioning, is the quality of installation. It is the priceless ingredient. The finest materials and equipment, if not properly installed, lose the superiority for which a premium is paid.

First of all, what should a good air conditioning system or unit do? What are its selling points for operative builders and property managers? Air conditioning is essentially control, and if the control is efficient, it will accomplish all or nearly all of the following:

1. Alleviate skin dryness, colds, and unconfortable air temperatures.
2. Eliminate much household dust, and much of the pollen which plagues hay-fever victims.
3. Insure longer wear of fabrics by keeping them moistened to a proper degree.
4. Prevent cracking, splitting, and warping of woodwork.
5. Keep paintings and bookbindings in good condition and aid growing plants.

Air conditioning involves humidity, air movement, air purity, and air temperature. Good air conditioning will mean control of each of these factors. The body has an air conditioning system of its own which works quite well under normal conditions. A temperature of 75 to 80 degrees Fahrenheit with a saturation of 40 to 50 per cent is ideal and allows the body to perspire and throw off excess heat into the moving air and onto cooler surfaces in the room.

High humidity during hot weather and low humidity during cold weather are the factors leading to bodily discomfort and justifying air conditioning. The air temperature should be within a few degrees of the outside temperature during hot weather to avoid shock to the system upon leaving or entering the dwelling, but humidity can be altered to a much greater and more healthful degree without ill effects. There should be no noticeable reaction on entering an air-conditioned room, but a gradual arrival at a feeling of comfort.

Air conditioning units function through one of the following: refrigeration, ice water, evaporation, or adsorption. The latter can be accomplished with dry adsorbents or chemical adsorbents. Efficient operation of the unit will also depend on ventilation, air distribution, insulation, and the heating system, if it is to be separate from the air conditioning unit.

Check your proposed system for the following controls:

1. Temperature — it should be controlled by a thermostat.
2. Humidity — it should be kept at a proper, healthful percentage.
3. Air purity — this will usually be assured by a filter.
4. Air movement — it will be regulated by the system, not independent of it.

Air conditioning is not replacing heating. The terms do not mean the same thing. Heating is the base to which air conditioning is added. Once the heat is there we want, and in reasonable comfort, the improvement called air conditioning can be added to give greater health and more comfort either in the winter or in the summer or all year around.

Winter conditioning has been called the most important. Almost everywhere in the United States, the heating season is longer than the cooling season. Once a house owner has the essential heating equipment, it becomes a matter of choice (according to whether he lives in the north or south) as to whether the next improvement toward air conditioning should be for winter or summer, or for the year round.

Winter air conditioning is cheaper, easier to provide, costs less to operate, and does more for good health. Air conditioning for the home is really improved winter heating. The hot air furnace type of heating has been improved by adding a dirt and humidifying device. Radiator heat has been improved by providing attractive con-
TEX-LOK Shingles provide real roof protection plus long life economy for home and farm owners. These interlocking type shingles have been tested in every weather—and have weathered every test! TEX-LOKS are interlocked and each is anchored at four points by concealed nailing. Double coverage, they’re built to stay put in high wind and heavy weather areas! Distinctive basket-weave pattern. Beautiful colors. Fire-resistant. There is no better shingle value on the market today.

TEX-LATCH
Another top-performing Texaco asphalt shingle! Heavy duty, double coverage and interlocking—similar to TEX-LOK but slightly different in method of locking tabs. Available in the areas served from the Edge Moor, Delaware roofing plant.

TEXACO Asphalt Roofing Products
THE TEXAS COMPANY

MEMBER OF THE ASPHALT ROOFING INDUSTRY BUREAU
Air Conditioning

(Continued from page 184)

For the new seven to eight room house, the lowest cost air conditioning is winter air conditioning, using a direct-fired warm air conditioner. This system costs from 8 to 10 per cent of the cost of the house.

A more expensive type is a split system. A split system heats both the house and air and is heated by means of an air conditioner-convector, baseboards, or radiant panel coils. High temperature hot water, circulated by a booster pump, is the preferred heating medium, with the boiler fired by coal, oil, or gas. Various methods of adding moisture to the air are incorporated in this unit. The type generally used being spray nozzles which atomize the water. This brings thousands of small globules of water into intimate contact with the air, allowing it to absorb the requisite amount of moisture. This unit is also equipped with means of filtering the dust from the air and use of filters which are discarded when dust-laden and replaced with new ones.

The split system costs from 12 to 15 per cent of the cost of the house. One important advantage of the split system is that it gives year around domestic hot water automatically and also differentiates between rooms so that, for example, garage air need not be recirculated throughout dwelling rooms.

There is now on the market a compact, gas-burning air conditioner that, like the heat pump, will provide winter heat as well as summer cooling. It costs money to operate, but it can operate as a gas driven heat pump, but only half as well as an electrically-driven one. Price of this year around unit, installed: $3.500.

In winter, the unit automatically humidifies, cleans, and circulates the air and maintains the conditioned space at a pre-determined temperature level. In summer, it automatically cools, dehumidifies, cleans and circulates the air, and maintains a constant temperature. During seasons when neither heating or cooling is required, it cleans and circulates the air.

What is the least expensive for the summer and how much would it cost? Undoubtedly, it's the attic fan. This is a large, quietly operating electric fan placed in the attic facing an open window or some similar opening. It draws air up from the lower floors through the attic stair hall or through grilles in the ceiling and blows it out of the house. It is only used at night, after dark, and the windows downstairs must be left open to admit the

(Continued on page 188)
The Right Window
For Your Industrial Buildings

There's a Lupton Window for every industrial need:

For office sections, there is the Lupton Architectural Projected Window illustrated above. 1¾-inch deep ventilator members and welded ventilator construction assure long service with minimum maintenance. Features include solid bronze hardware, abundant daylighting, controlled natural ventilation.

For production and warehouse sections, there is a choice of Commercial Projected, Pivoted and Security Windows—each designed and built by Lupton to do a particular job.

Lupton Window installations save you money—in prompt delivery from warehouse stock, in faster installation. Let us send you the complete Lupton Catalog of industrial and residential windows. Write us today.

MICHAEL FLYNN MANUFACTURING COMPANY
700 East Godfrey Avenue, Philadelphia 24, Penna.  
Member of the Metal Window Institute

LUPTON
METAL WINDOWS
SISALKRAFT OVER SUBFILL FOR BETTER CONCRETE SLABS

Air Conditioning
(Continued from page 186)
cooler night air. The object is to let the cool air move continuously through all the rooms to literally cool off the furniture, the rugs, and the inside walls and floors. Then, in the morning, the windows are closed, the fan is stopped and the house will not be as warm during the day as it would if it had kept the heat of the previous day.

Such a fan would cost from $100 up to perhaps $400, depending on size and installation conditions with only a few additional dollars to run during the winter. Another advantage is that it can be installed in the wall or in any room of the house.

If city water is cold enough and inexpensive enough, summer cooling can be obtained and some dehumidification for from $300 to $500 with a seasonal cost of perhaps $30 to $40. If ice can be delivered in bulk at reasonable rates, it is possible to put in the necessary equipment for from $300 to $500 and cool a house in hot spells for $25 to $60 for the season.

One of the new dehumidifiers that will give much comfort by reducing humidity costs approximately $750, with a fairly low operating cost. All of these prices are given on the assumption that a warm air conditioning system is already installed and that these air conditioners are added to it. (Continued on page 190)

SHEPHERD RADIATION ELECTRIC HEATERS and VENTILATING FANS

Here’s a Completely New, Improved 8” Automatic Fan for Small Rooms

Model No. 1 (8” diameter). Also available in 10” size—Model No. 81

- Quickly installed in ceiling, wall or cabinet
- Designed for bath-rooms, kitchens, powder rooms, etc.
- Low in cost

This new, low cost 8” automatic fan, designed specifically for small rooms of limited wall space, fits almost all standard construction and rooms horizontally or vertically. The powerful, quiet, totally enclosed fan motor and 8” propeller assure long, trouble-free operation. Motor blades assembly, enclosed to the removable grille, and plug-in connection simplifies cleaning. The No. 1 model has a rating of over 650 C.F.M. (free air delivery).

This type fan is also available in the standard No. 81 Model with 10” blades, having a rating of over 900 C.F.M. (free air delivery). Both sizes feature double automatic weatherstripped self-closing, adjustable shutters and weather seals to prevent back drafts and sweating.

Write Dept. AB-1 for complete details
Each month, builders throughout America are looking forward to examining the latest design being added to the Weyerhaeuser 4-Square Home Building Service.

More and more, builders are making it a point to study these new homes because they find in them modern ideas in design and construction that are helpful to them in their business.

Each month the newest design, as well as the complete Service, are nationally advertised in leading home magazines. Thousands of inquiries are received from families who have indicated their interest in these modern, practical homes. They are referred to their local 4-Square Lumber Dealers.

Builders are gaining many benefits from this valuable Service . . . for both custom building and group developments. If you have under consideration one or a hundred houses, it will pay you to examine the variety of designs in this Service at the office of your 4-Square Lumber Dealer. Complete blueprints and material lists are readily available for every design.

Weyerhaeuser
4-SQUARE LUMBER AND SERVICES

WEYERHAEUSER SALES COMPANY, ST. PAUL 1, MINN.

Build for Greater Value with the
4-SQUARE BUILDING SERVICES
HOW TO MAKE
ACCURATE ESTIMATES

NEW
REVISED
TAMBLYN BUILDING LABOR CALCULATOR

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

HOW TO USE THE TAMBLYN
BUILDING LABOR CALCULATOR

... simple multiplication of figures

To figure the cost of laying 8" x 8" x 16" cinder
blocks analyze the cost of 100 square feet as follows: (Wage rates and material prices as-
umumed.)

111 Pcs. 8" x 8" x 16" cinder
4.4 C. F. Mortar

Total Material Cost

$36.52

$8.00

$28.52

4.0 Hrs. Mason
4.0 Hrs. T Yder
4.0 Hrs. Foreman

Total Labor Cost

$36.52

$50.40

$20.90

Or $.28 per square foot for material—and
$.50 per square foot for labor.

Figuring for all the trades is as easy as this example—and accurate.

WHAT CONTRACTORS SAY
ABOUT THE TAMBLYN SYSTEM

"I think it is the best system I have seen."

"...just the thing I wanted..."

"...I want to congratulate you upon an
excellent piece of work."

THE TAMBLYN SYSTEM
1115 Sc. Pearl St., A-41, Denver, Colo.

Rush the Tamblyn Building Labor Calculator
for free 10-day trial. At the end of 10 days I
will return it and send my check for $10.00

Name:
Address:
City, State:

Get Your Share
of Institutional Building

Air Conditioning
(Continued from page 188)

The heat pump (reverse cycle re-
figeration) has been getting wide
publicity in the years since World
War II. Considerable experimental
work has been made on this system
and it has now been pronounced as
out of the experimental stages. One
manufacturer sold 300 units in 1949.
For years the high cost of installa-
tion and operation blocked any widespread
use. Average cost per system is from
$1,500 upwards. A formidable obstacle
is the cost of electricity needed to
operate the heat pump.

The heat pump heats, cools, and,
with attachments, dehumidifies, hu-
midifies, cleans the air, and kills
germs. Essentially, the operation is
simple: heat is extracted from earth,
water, or air, and transferred via
pipes to the home. Most systems use
a liquid refrigerant which vaporizes
when warmed. The gas is boosted to
higher temperatures by compressors
gives off heat as building air is
circulated over the coils. As the gas
cools it becomes a liquid, pressure
is reduced, and the cycle begins again.
For cooling, the flow of the refrigerant
is merely reversed.

One type of heat pump gets heat
from the air. This air-type was
developed largely for use in areas where
the temperature does not drop below
10 degrees F., because too much elec-
tricity is required to get heat from air
much colder than that.

The heat pump industry predicts
that costs will soon be comparable
with oil, gas, and coal.

Latest figures show that about 30
per cent of all heat pump installa-
tions are residential types, with 70 per cent
of these located in California.

A radiator heating system having
no duct work for circulating air can
have individual room coolers that will
condition one or two rooms for about
$500 per room. A variation on this is
called a "remote room air conditioner"
and is adaptable to use in homes as-
well as apartments. The condensing
unit for the remote air conditioner
is not located in the room to be condi-
tioned, but in the basement, closet, or
joining room out of sight. One con-
densing unit, properly sized, can serve
two or more room units where re-
quired.

Cost of air conditioning is im-
portant because it varies widely ac-
cording to house and location. Even-
house, however, can be conditioned in
two ways or another.

To help builders and property man-
gagers select the type of air condition-
ing systems or units applicable to their

(Continued on page 192)
Here's what the men who use ATLAS MORTAR say:

"We're convinced that for top-notch, low-cost masonry work the best bet on the job is Atlas Mortar..."*

"Smooth... and fat." Masons like the smooth, easy way their trowels respond to plastic, buttery Atlas Mortar.

"An ideal set." The satisfactory hardening of Atlas Mortar Cement is proved by its performance under field conditions.

"Pleased with results." Contractors for years have praised the excellent appearance and color of Atlas Mortar.

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

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

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


SKILLED HANDS PREFER

ATLAS MORTAR CEMENT

THE SATIS OF MASONRY CEMENTS

NBC SUMMER SYMPHONY CONCERTS—Sponsored by U. S. Steel Subsidiaries—Sunday Evenings—June to September

JULY 1930
(Continued from page 190)

projects, here is a list of air conditioning units, with the number of companies making them:

1. Central plant, summer.
   (Consisting of blower, filter, cooling coil for connection to remote compressor or cold water supply, and duct distribution of air).
   Forty-five companies.

2. Central plant, summer-winter.
   (Consisting of blower, filter, humidifier, direct fired warm air furnace, cooling coil for connection to remote compressor or cold water supply, and duct distribution of air).
   Seven companies.

3. Central plant, winter.
   (Consisting of blower, filter, humidifier, heating coil, cooling coil, and duct distribution of air).
   Eight companies.

4. Evaporative type, summer.
   (Consisting of blower, filter, pump, and sprays or mist for cooling by evaporation).
   Forty-three companies.

5. Room type, floor cabinet, under 3 horsepower, summer.
   a. (Consisting of blower, filter, and cooling coil for connection to remote compressor or cold water supply).
   Twenty-five companies.

6. Room type, floor cabinet, over 3 horsepower, winter-summer.
   (Consisting of blower, filter, humidifier, and cooling coils for connection to steam or hot water supply and remote compressor or cold water supply).
   Twenty-five companies.

7. Room type, floor cabinet, winter.
   (Consisting of blower, filter, humidifier, and heating coil for connection to remote boiler).
   Nineteen companies.

8. Store type, floor cabinet, over 3 horsepower, summer.
   Consisting of blower, filter, cooling coil, and compressor, with air discharge approximately 6 feet above floor).
   Twenty-five companies.

ONLY THE
TRADE-WIND CLIPPER
HAS ALL THESE
ADVANTAGES

[Image of Trade-Wind Clipper]

For the best method of ventilating kitchens, bed-rooms, laundries, dens or other small rooms specify and install the Trade-Wind Clipper. This proven ventilator is the only small room unit that gives the home owner every worthwhile advantage.

Squirrel cage blowers, accepted and used in air conditioning systems and for forced air heating, are used exclusively in the Trade-Wind Clipper. This forced air discharge, located at the ceiling, draws all unwanted air and expels it instantly. Trade-Wind also has located the motor completely outside the greedy air stream. The motor stays clean indefinitely—requires for less service—and is guaranteed for 5 years. No other small room ventilator combines all these outstanding advantages. In addition, Trade-Wind Clippers are easy to install—they are competitively priced—and they make every new owner another salesman for the Trade-Wind line.

Get the complete story from your local supply source, or mail the coupon today.

MAIL THE COUPON TODAY

TRADE-WIND MOTORFANS, INC.
5708 S. Main St., Los Angeles 37, Calif.

Please send me the complete story on the Trade-Wind Ceiling Ventilator.

Home

Address

192

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

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

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

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

AMERICAN BUILDER
WHY SHOULD AN INSULATION BE EASY TO APPLY?

Insulation is only as good as its application. And correct application must be continuous—with no gaps, voids or differences in thickness...no opportunity for skimping.

With Balsam-Wool, ease of application is actually "built in"—a part of the product design. Balsam-Wool comes to the job as a completely finished product with uniform, factory-controlled thickness and density. It is clean and non-irritating—pleasant to work with. It is quickly and easily cut to proper length. Balsam-Wool's two spacer flanges assure a tight, foolproof fit and proper air spaces front and back. These tough flanges are nailed or stapled to the face of the studs, joists or rafters for lasting security. The ends are also sealed to plates or headers, providing continuous vapor barrier protection over the entire stud or joist space—no butt joints or openings at ends. No wonder Balsam-Wool provides positive protection!

- Integral continuous vapor barrier
- Sturdy wind barrier
- Double air spaces
- Special spacer flanges
- Double bonding of mat to liners
- Rat and termite treatment
- Highly fire retardant
- Riged quality control

To bring you up-to-date authoritative information on application, the makers of Balsam-Wool have prepared 32 application data sheets...a little "library" of valuable data, contained in an A.I.A.A. folder. Send today for your set—it is yours for the asking. Just mail the coupon.

Balsam-Wool
SEALISED INSULATION
BALSAM-WOOL Products of Weyerhaeuser • NU-WOOD*
PLUS VALUE
IN RESIDENTIAL AND
APARTMENT CONSTRUCTION

Low original cost plus economy of installation and continuing owner satisfaction make LEMCO Casement Windows the choice of builders throughout the country.

LEMCO also offers Aluminum Awnings in two types—LEMCO Panoramic and LEMCO Series 62 Monumental.

WRITE FOR DESCRIPTIVE LITERATURE

AMERICA'S OLDEST CASEMENT WINDOW MANUFACTURER

STEEL PRODUCTS, INC.
14 MARKET STREET, JAMESTOWN, N.Y.

Balanced design — easy operation

HANSEN — the Tacker with 1001 uses —

Tacks insulation, ceiling tile, metal lath, etc.

Zip! Zip! Fast as you grip!

With Hansen in Your Hand — you can do all kinds of tacking and fastening jobs. Thirty-six different models. Eighty staple lengths. For screens, ceiling tile, insulation, metal lath, etc. Ideal for all types of building and construction.

Association News, cont'd

Public Interest Increases
In Builders' Bank Exhibit

Local interest in home ownership has increased nearly 25 per cent since March 1 and is nearly double that of a year ago, according to George C. Johnson, president of The Dime Savings Bank of Brooklyn. As evidence, Johnson pointed to a jump during the past 30 banking days of 22.4 per cent in the number of people visiting the Library of Homes and Home Buyers' Exhibition at the bank's main office, sponsored jointly by "The Dime" and the Long Island Home Builders Institute.

Since the spring home sales season moved into high gear around the first of April, average daily attendance at the free display of builders' offerings has risen from 428 to 533. A year ago the average was 272. Between March 1 and May 12, a total of 16,050 persons examined the displays of the 79 participating Long Island builders.

Occupying more than 5,000 square feet adjacent to "The Dime" main banking floor, the exhibit is open daily from 9 a.m. to 3 p.m. and until 7 p.m. Thursdays. There is no admission fee and no attempt is made to sell houses. Trained attendants are present to answer all questions pertaining to home ownership.

Wood Preservers' Convention
One of Group's Largest

The 46th annual meeting of the American Wood Preservers' Association, held recently in the Rice Hotel, Houston, Texas, was one of the largest in the group's history with more than 500 persons attending. Fred W. Gottschalk, technical director of the American Lumber and Treating Co., was elected president at the meeting, succeeding J. S. Giddings of the Santa Fe Railway.

Other new officers are W. R. Yvager, Western Electric Co., first vice president; R. H. Becher, Koppers Co., second vice president; and H. L. Dawson, secretary-treasurer.

A cooperative test has been undertaken by several association members to deter—

(Continued on page 190)
LOW, LOW upkeep cost

... a big reason Mr. Olden has been buying Servels since 1940

Ten years ago, Mr. B. M. Olden purchased his first Servel Gas Refrigerators. More than 100 were installed in his Red Apple and Wm. Tell Apartments, Santa Monica, Califomia. In all the years since then, says Mr. Olden, he hasn’t spent a single penny for repairs. And because of this perfect record, he decided recently to place Servels in every kitchen in Ye Olden Manor, Los Angeles (shown above). In addition to Servel’s amazing record for low maintenance cost, Mr. Olden also praises Servel’s operating economy . . . silence . . . and freedom from moving parts.

Worry-free performance is characteristic of Servel. The reason is Servel’s different, advanced freezing system, for in a refrigerator it’s the freezing system that really counts. In Servel’s, there’s no motor to wear; no machinery to stop and start . . . to grow noisy . . . to need repairing. Instead of pistons, pumps and valves, Servel operates simply on a tiny gas flame. This means extra years of service, without the worry of big repair bills. So if you’re thinking of buying refrigerators, don’t fail to compare Servel. Servel, Inc., Evangville 20, Indiana.

*FOR EXAMPLE—

MINNEAPOLIS, MINN. "Repairs on our 44 Servels cost less than $10 in ten years."

MOBILE, ALA. "After nine years, our 300 Servels cost only 1¢ a month per unit for upkeep."

PHILADELPHIA, PA. "Exceptionally low maintenance cost over a period of nineteen years."
ADD AN EXTRA ROOM WITHOUT ADDING TO BUILDING COST!

Murphy Beds

Builders from coast to coast have found that the answer to the demand for the "extra" room is a Murphy Bed. Although they require only a minimum of space, Murphy Beds are built to receive STANDARD MATTRESSES for MAXIMUM sleeping comfort.

NEW MODELS!

Require only 13" depth

Although the "Sidebed" illustrated and the new "Economy" recess model maintain the same high standards of quality and comfort as all Murphy Beds, they require even less space.

Both new models are adaptable to many types of concealment. They are ideal for building into recesses, book cases, cabinets, credenzas and other custom-built units. Also available are standard Murphy recesses, such as the shelf and drape unit illustrated with the "Sidebed", and a canopied unit for use with the "Economy" and other Murphy recess models.

Each of the new models features a patented counter-balanced control that assures years of easy, trouble-free service.

Send today for complete data file on all Murphy recess, pivot and roller models and Cabanette Kitchens.

9 West 44th St., New York 18, New York
Please send your free data file on Murphy Beds and Cabanette Kitchens.

NAME:
ADDRESS:
CITY... STATE:

Association News, cont'd

NEW OFFICERS of South Dakota Retail Lumbermen's Association hold business session at recent annual convention in Sioux Falls. They are (from left) John Robinson, Sioux Falls, vice president; H. A. Ellig, Webster, director; R. C. "Chay" Knocht, Rapid City, director; and Myrlo V. Hilton, Vivian, president. 759 dealers from South Dakota, Minnesota, Iowa and Nebraska attended, along with 325 sales representatives. Among outstanding events were a Hoo-Hoo conciliation and initiation, and the annual banquet mine the effect of variations of chemical analyses of accepted standards of creosote on the wood preservative value of creosote. The program is under the general direction of the Forest Products Laboratory, for land installations, and of the William F. Clapp Laboratories for marine test installations. Cooperating companies are the Barrett Division of the Allied Chemical and Dye Corp., Bernath Lembcke Co., Koppers Co., and the Bell Telephone Laboratories.

Easy to Install... Lasting Satisfaction

Combine the expertly-designed Allith garage door hardware with your own or any standard door. Result . . . a rugged, easily-operated overhead door that gives full and lasting customer satisfaction.

Quickly installed, standard set fits any opening up to 9' wide x 7' 6" high when doors do not exceed 375 lbs. Other sets available for openings up to 10' wide x 10' high.

AMERICAN BUILDER
You can win medals (and money) with

MICARTA
PRE-BONDED
TO PLYWOOD

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

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

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

- You can buy 3/8" Micarta panels, already bonded to exterior grade Weldwood Plywood, from your lumber dealer.
- Pre-bonded Micarta is made in new sizes (less waste): 24" x 96" 48" x 96" 30" x 60" 30" x 96".
- You can saw, trim, plane or drill these ready-to-use Micarta panels with inexpensive hand tools. (Complete instructions on request.)

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

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

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

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

Discover MICARTA today!

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

Please send me free sample and full information on MICARTA.

NAME

COMPANY

ADDRESS

CITY STATE
Association News, cont'd

'Good American Home' Program Expanded in East

A "Good American Home" program is presently being launched in New York, Long Island and New Jersey, according to Ted Baldwin of New York City, developer and co-ordinator of the promotion.

It is sponsored in these areas by the Long Island Home Builders Institute, the Home Builders Association of Northern New Jersey, and the Home Builders Association of Metropolitan New Jersey in cooperation with the New Jersey Lumbermen's Association and the New York Lumber Trade Association, the Northeastern Lumbermen's Association and the New York State Savings and Loan League, the New Jersey Savings and Loan League and the Council of Insured Savings Associations of New York State.

The National Retail Lumber Dealers Association and the United States Savings and Loan League sponsor the program nationally.

In Detroit where the program was sponsored by the Home Builders Association of Metropolitan Detroit, approximately 250,000 visitors inspected the demonstration homes in the first thirty days they were open. Detroit universities, private enterprise and civic authorities cooperated in the undertaking as they are doing in other cities.

Other cities where the program is being carried out are Cleveland, Ohio, and suburbs, Worcester, Mass., and Buffalo, N.Y.

The "Good American Home Program" is based on a scientific breakdown of the family budget in the middle and lower income brackets to demonstrate to families how they can afford to buy homes. Homes in the program have a price range from $7,500 to $12,000.

Tulsa Home Show Committee Rewarded with "Oscars"

A capacity display area with more than 100 booths, entertainment and a number of special events featured the 1950 Tulsa, Okla., Home Show, sponsored by the Tulsa Home Builders Association May 18-21. Approximately 25,000 tickets were sold in advance.

An interesting idea for rewarding individuals for their work in organizing the show was the presentation of "Home Show Oscars" (trophies) to the member selling the largest number of tickets, the one selling the most booths, and the exhibitor with the most outstanding booth. The latter was the largest of the "Oscars" and prior to presentation was displayed at the National Bank of Tulsa.

I. A. Jacobson, association vice president, was general chairman for the show. Heading ticket sales was Arthur J. Black, with Jimmy Dossley leading the booth sales committee.
HERE'S real news, Mr. Builder.
The low cost of the new Gold Bond Mat-Thick Sealed Blanket enables you to give even your lowest-price homes the benefits of fireproof, top quality insulation. These rugged, lightweight blankets are completely enclosed with breather cover on three sides, and a vapor barrier on the fourth side. Designed for today's competitive market! Available now in most territories at Gold Bond Lumber and Building Supply Dealers.

Sealed blankets fill usual 8 ft. wall height from floor to ceiling in our operation. Heavy duty nailing flange. Greater lengths on special order. Meets F H A and Building Code requirements in nearly all areas.

NATIONAL GYPSUM CO.
BUFFALO 2, NEW YORK
Association News, cont’d

**NAME NEW JERSEY EXECUTIVE TO LEAD MORTGAGE BANKERS**

The president of the Mortgage Bankers Association of America for the 1950-51 term will be Milton T. MacDonald, vice president of the Trust Company of New Jersey, according to an announcement by the association’s nominating committee at the spring meeting of the board of governors at the Drake Hotel, Chicago. He will succeed R. O. Deming, Jr., of Oswego, Ill., with formal election taking place at the group’s annual convention in Detroit Sept. 27-29.

MacDonald, a native of Brookline, Mass., received his A.B. degree from Harvard in 1918 and is also an alumnus of the Graduate School of Banking at Rutgers University (1943).

**CANADIAN HEADS VERMICULITE GROUP**

Stanley K. Robinson of F. Hyde and Co., Montreal, Canada, was elected president of the Vermiculite Institute at the group’s annual meeting in May at Washington, D. C. He succeeds W. R. Simpson of the Vermiculite Products Corp., Washington.

Other officers named were Walter J. Bein, treasurer; Edward R. Murphy, executive secretary; and C. A. Pratt and John Myers, directors.

**SEAL-ALL CLIPS**

A simple sturdy clip designed to interlock shingle sections and prevent raising of asphalt shingle tabs. The perfect clip for hexagonals, 3 in 1 strips and individuals laid up.

- Made of solid copper wire—pliable yet strong enough to anchor single sections.
- Cannot rust out.
- Hammer is only tool necessary.
- Easy to handle.
- Beauty of roof unmarred.
- Perfect on repair jobs to correct leaky, unsightly roofs.
- Millions in use since 1935.

**BUILDERS AND DEALERS** For complete information and free samples, write today.

**SEAL-ALL CLIP COMPANY**

BOX 3028

FLINT 1, MICH.
Hardware that stands up to "hard wear."

No greater security . . .
no greater convenience!

**XP22 FRONT AND BACK DOOR SET**
Consists of XP74281 Handle Set for front door . . . 170KA Tubular Deadlock for back door. Latter has chromium-plated inside trim to match modern kitchen fixtures. Front and back door keyed alike.

**CR231 KNOB SET**
Offered in following styles—latch set, no locking on either side; bathroom set with push-button on rose, emergency key, chrome inside, bedroom set, push-button on rose, provision for emergency key. Automatic throw-off.

**XH DESIGN**
Same combinations as XP22 Set.

**1011 PUSH-PULL SCREEN DOOR CATCH**
Heavy-duty catch for screen and combination doors. Works easy . . . no knob to turn. Sure-holding, positive lock. Quick to install. Rustless metal, bright brass finish.

**570 SCREEN DOOR CLOSER**
Liquid-type. Quick, quiet, complete closing. Easy to install and adjust . . . no reversing . . . screw holes spotted by full-size marker.

**506 AIRLINER SCREEN DOOR CLOSER**
Pneumatic-type. Adjustable spring is completely concealed against dirt and rust. Modern appearance, attractive finish. Easy to install on doors of either hand, inside or outside . . . requires only 2 in. between doors.

---

First choice for screen doors!
**The Milwaukee Combination**

**SASH BALANCE and WEATHERSTRIP**

Available with or without bronze covers that completely hide spring, as shown above.

**PERMITS REMOVAL OF SASH WEIGHTS, INSULATION OF MULLIONS.**

**Slash Labor Costs!**

Simple installation allows one man to easily install 80 or more windows in 8 hours. No high-priced skilled labor needed. This means you can get more satisfied customers at lower cost, higher profit!

**Tops in Operation!**

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

**EFFICIENT FOR OLD OR NEW BUILDING**

**ATTENTION MILLS AND LUMBER YARDS**

**IDEAL FOR PRE-FIT WINDOWS**

Mail this coupon today!

---

**INTERNATIONAL STEEL CO.**

1804 Edgar St., Evansville, Ind.

---

**Need a Chimney?**

**VAN-PACKER**

**PACKAGED CHIMNEY BUILDERS**

- **SAVE MONEY**
  Costs up to 50% less than brick.

- **SAVE SPACE**
  Hanges from ceiling or below joists. Use space underneath.

- **SAVE TIME**
  Install in 3 man hours or less.

**AVOID JOB DELAY**

Immediate delivery to job of complete chimney.

Meets FHA requirements

Underwriters' Lab. tested and approved for use with all fuels.

---

**Corright . . .**

**(Continued from page 69)**

"Another fundamental cause of dissatisfaction was that no government tenant was allowed to acquire the freehold of his home. This was a most important single item of the opposition appeal to the people. Perhaps it would not be amiss if at this point I give you the policy of our new national government in a few words. After fourteen years of Socialism, which may be regarded as a fair test, our party came out with a plain and undisguised programme of Capitalism versus Socialism, of the value of the individual to the state and the danger of breeding up a tribe of people who sought to live easy on the various sops thrown to them by the government.

“Our new party says it has a programme of sound moral reform. The members of our party never "leaned" on the government. They revived the age-old doctrine that a man has the right to create something, to own it, to sell it, to lease it, to give it away or to bequeath it without let or hindrance from an interfering state. They believed in God. They honour the King. They are loyal to the Empire. Indeed one might truly say that they are everything that a socialist is not. That is why the issue before the people at the election was so plain and straightforward and unmistakable. That is why the National party, now in office, polled the highest poll ever recorded in this country and that is why the National party, now in office, polled the highest poll ever recorded by a single party. They hold office with 52 per cent of the total votes polled.

"P.S. Of course, the National Association of Home Builders will realize from my hastily improvised statement that the whole policy of the government was to put the private builder out of business. With import control over building requirements a gradual "squeeze" was effected. Socialists who have never been in business at all have known to procure import licenses and then sell them to the trade at a good profit. This is one type of barnacle that finds socialism profitable."

**Sweet . . .**

(Continued from page 68)

istic one, and an American nation still not aroused to what it had wrought for itself out of its own native, greed, and unconcern. I see myself being spoken to again by a curious little boy who is saying, "Grandfather I thought you were going to tell me about when Daddy was a little boy." He seems too young to understand such a transition from his father's childhood days to his own. I find myself diverting him with the suggestion that we turn on our telecine and see what "Big Brother" has for us tonight.

**your GHQ for steel service . . .**

Here is a Service Department for builders — where expert engineers, designers, and estimators will help you solve any building problem.

You will find the answer to all your steel problems at International Steel. Large stocks of various steel shapes, standardized methods of manufacture, and a large, fully equipped plant enable us to make quick delivery of your structural steel.

Write today — let International help you solve all your building problems.
BONDED HARDWOOD BLOCK FLOORING

by Higgins

WORLD-FAMOUS BOAT BUILDERS

Gives you the advantage of quality flooring installations in HOUSING PROJECTS

Higgins Flooring helps you win more bids, finish more jobs per year—get your money in faster—win compliments from owners.

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

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

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

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

Higgins Incorporated

BONDED HARDWOOD BLOCK FLOORING

JULY 1930
**Kitchens in Large Apartment Project Feature Good Planning**

Kitchens in the Sherman Garden apartments, Evanston, Ill., illustrate how efficient planning can be achieved in a small space.

To provide more square foot area for other rooms in each unit, the kitchen necessarily had to be small. It was desired to have a service entrance from a rear stairway, a convenient entrance to an adjacent dining area, and yet have an uninterrupted work triangle set up between the three basic kitchen units—range, refrigerator and sink. This was accomplished by a broken L-shape kitchen arrangement.

**Typical kitchen in Sherman apartments**

Though the distance from sink to refrigerator is slightly greater than desirable, this arrangement was made in order to place the sink under the kitchen window. The refrigerator is located opposite this window wall (see illustration). As arranged, four features make the kitchens efficient:

1. Adequate counter space,
2. Rear service entrance,
3. Undisturbed work triangle (the path taken by the housewife between range, refrigerator and sink in preparing and serving meals),
4. Ample lighting over work counters and sink. Other features are easy-to-clean floor coverings and counter areas, and a handy folding table.

The apartments are constructed of concrete, brick and steel, and are designed for complete modern living. They include such features as radiant heat with individual control for each apartment, cold storage lockers, conveniently located lounges and playrooms, a children's recreation area and spacious garden court.

Kohler bathroom and kitchen equip-

(Continued on page 206)
KOHLER
Enameled Iron LAVATORIES
in types and sizes to meet every need

Whatever the need—you can win clients' approval with one of these eight lavatories. All have beauty of design and practical features that satisfy. And the name "Kohler" assures first quality—in materials, in workmanship.

Surfaces are lustrous, durable, glass-hard, easy-to-clean. Kohler enamel resists cracking or crazing because it is applied at high temperatures to iron cast for rigidity. The chromium-plated brass fittings are engineered for highest efficiency and long service. Dept. 13-P, Kohler Co., Kohler, Wisconsin.

1. HAMPTON: K-2710-A, 19 x 17", 22 x 19". Available without legs or towel bars.
2. TAUNTON: K-2740-A, 16 x 14", 20 x 14", 24 x 14".
3. DELTON: K-2745-A, 18 x 15".
4. TRAVELER: K-2750-A, 13 x 13".

KOHLER OF KOHLER
PLUMBING FIXTURES - HEATING EQUIPMENT - ELECTRIC PLANTS - AIR COOLED ENGINES

JULY 1950
SAVE SPACE +
ADD FLEXIBILITY +
ADD BEAUTY

with
FOLDOOR

"Swing" is old fashioned!
The "pleat's" the thing in doors!
America's new pleat-type door closure with the cornice that gives it a "finished look."

FOLDOOR is the answer to space saving, to an unheard of flexibility of room arrangements, to new, up-to-the-minute beauty.

FOLDOOR is the best looking door closure you ever saw. Folds into beautiful pleats into an unbelievably small space, can be operated by a child . . . and open or closed, retains its beautiful pleated lines to add charm to any room.

Built on a rugged, rust-resistant steel frame, FOLDOOR comes in a wide choice of beautiful, colored plastic fabrics to harmonize with any color scheme and is topped off with an attractive, formed cornice that gives it a "finished look."

FOLDOOR is the ideal closure for closets, rooms, alcoves, and can be used to excellent advantage for partitions . . . fits into all homes, modern as well as period . . . just the thing for stores, offices and institutions. Available in stock and made to order sizes. Write for descriptive literature and specifications.

Excellent installing distributor territory still open. Write for information.

W. C. Coleman Honored
On 80th Birthday

William C. Coleman, president of the Coleman Company, Inc., celebrated his 80th birthday on May 21, receiving wide recognition for his 50 years of service as an inventor, industrialist and church and civic leader.

In Wichita, Kans., where Coleman has lived for more than 48 years, Mayor Earl K. Duke proclaimed May 14-20 “Coleman Week.” The week was climaxed by a Chamber of Commerce dinner at which the principal speaker was Arch N. Booth, manager of the Chamber of Commerce of the United States.

During the week congratulatory messages were received from President Truman, Gen. George C. Marshall and many other government and business leaders. The total of such messages was estimated at 2,500.

At the end of the week-long celebration, Coleman disclaimed all thoughts of retirement and announced plans for considerable business activity.

Apartment Kitchen

(Continued from page 204)

ment is used exclusively throughout the 132 apartment units in the new structure which contains 13 apartment with two bathrooms, 40 units with one bathroom and a washroom and 79 others with a single bathroom.

Sherman Gardens were developed by 33-year-old Herbert S. Greenwald, Chicago. Architects were Holman, Holman, Klekamp and Taylor.

W. C. COLEMAN

Tubular Steel

SCAFFOLDING and EQUIPMENT

pays for itself on all kinds of BUILDING JOBS!

Now . . . attach and remove braces without removing using nuts. No tools required. Exclusive Bil-Jax brace lock cuts to a fraction the time usually required to erect or take down steel scaffolding.

Available on a sale or rental basis.

Write for details.

BIL-JAX INC. 231 E. 116 ST.

Jiffy

SAWHORSE BRACKETS

SET UP OR TAKE DOWN WITHOUT HAMMERS OR BOLTS

2" x 4" FOR 1805

COLORFUL COUNTER DISPLAY

PACKAGE SELLS $1.50

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

GRAND HAVEN STAMPED PRODUCTS CO.

GRAND HAVEN, MICH.
Emphasis on 'Extras' Help

Pre-sell 65-Home Project

A well-planned model home brings more than enough purchasers to Texas Development

EMPHASIS on features which contribute to greater living comfort and attractiveness resulted in sales of 35 to-be-built homes from a single Sunday open house at one completed model home in a 65-home project developed by the Fred L. Galbraith Co., Dallas, Texas. The remaining homes in the project were sold soon after, and enough firm, active applications were left over for the Galbraith company to sell the majority of another group planned for spring construction.

Site of the project, now nearing completion, is the Berkshire district in Dallas. It has curving streets and irregularly shaped lots varying between 60 and 120 feet in width.

Eleven different plans were developed for two- and three-bedroom houses of brick veneer exterior. Each was planned in three different elevations, so that in the entire group there would be only two homes alike. And under the Galbraith plan even the "duplicates" could be individualized through selection of color and trim details by the home buyer.

(Continued on page 209)

White Fir, thanks to the care given its production by member mills of the Western Pine Association, will stay straight in the yard and on the job. It saws and nails easily—takes and holds paint, enamel and natural finishes excellently.

White Fir is an excellent all-purpose, economy wood for concrete forms, sheathing, subflooring, and roofing lumber; for joists, studs, rafters, sills and plates; for interior and exterior trim and mill work; for industrial boxes and crates.

For more information about White Fir send for free illustrated 56 page book. Address—

WESTERN PINE ASSOCIATION
Yeou Building - Portland 4, Oregon
Plan 'Report to the Public' For National Home Week

Plans for National Home Week, to be observed from coast-to-coast September 10 to 17 are currently being worked out in detail, it has been announced by the three major business groups sponsoring this year's observance—the National Association of Home Builders, the National Retail Lumber Dealers Association and the National Association of Real Estate Boards. The Week will be used for a "Report to the Public" on the achievements of the private industry home builder and allied interests and will include civic celebrations, exhibitions of building materials and construction projects, exhibit homes, parades, lectures, special newspaper displays, radio presentations, and other activities.

In observing the Week, individual home builders, realtors and lumber yards will set up exhibit houses and other displays for public inspection. There will be on-site demonstrations of building methods; displays of new materials, equipment and home appliances; model homes, and general "open house" throughout the building, real estate and building supply business.

Since first National Home Week was staged in 1948, with local celebrations sponsored by home building associations, the event has grown into a major observance, with several million persons visiting display houses and studying demonstrations of modern building practices. The builders were joined by manufacturers, banks and financing institutions, building suppliers and others in the industry. This year, the two associations representing the real estate and lumber and supply business formally added their sponsorship, thus greatly broadening the scope of the event.

A statement issued jointly by the NAHB, the NAREB and the FMA stated:

"National Home Week will be a gigantic educational effort to enable the American public to learn more about home building and home ownership."

"The home building industry is in the midst of the greatest house construction program the world has ever seen. Every 30 days, home builders and those who supply materials and handle property are providing enough new houses to make a city the size of Denver, Colo., Louisville, Ky., or Columbus, Ohio."

"This great program, which is enabling more than half of all American families to own their own homes, is a great achievement. Because people everywhere are interested in home building, National Home Week will be sponsored in every city to enable citizens to understand more fully how homes are produced; what makes good houses, and how home ownership can easily be attained by average families."

"Everybody likes to watch building, and to see new homes. National Home Week will make this possible on a gigantic scale."

The three associations stressed that all branches of the industry, from manufacturing and supplying through building and financing will have a chance to participate in the Week. Each city will have its own celebration under the direction of a local committee.

Hardwood Flooring Sales Up

Maple Flooring Manufacturers Association member and non-member manufacturers of Northern Hard Maple, Beech and Birch flooring reported new orders booked in the amount of 23,675,000 feet for the first four months of 1950. This is an increase of 58.6 per cent over the same period in 1949, according to figures released by the statistical department of the MFMA.

9 FEET WIDE!
THE NEW STANDARD WIDTH GARAGE DOOR

In this TAYLOR exclusive (patent pending) the door face is an integral part of frame making a stronger, lighter door. Sturdily constructed of rust-resistant Galvannealed Steel, this door requires no primer coat. Galvannealed Steel costs 20% more, but we sell at competitive prices.

Write now for prices and further information. We can make IMMEDIATE DELIVERY.

Door has distinctive horizontal lines. Two lock catches on either side of door assure tight closure. Windows available.

Doors also available in 8' x 7' single and 16' x 7' double sizes.

R. L. TAYLOR INC.
12480 EVERGREEN ROAD • DETROIT 28, MICHIGAN
Emphasis on Extras

(Continued from page 207)

Once the basic designs were set, care was put into the selection of the “extras” for livability and charm. Because Dallas is in a region of high summer warmth, particular attention was paid to the summertime comfort factors and equipment which would contribute to shading and cooling the homes.

Among the features were the buyer’s choice of colors and of the exterior brick and trim, built-in wardrobes and dressing tables, all-tile baths and showers with tile dressing tables and colors in bathroom fixtures, screen door grills and central heating.

Kaiser Aluminum shade screening was installed in all windows and screen doors. Attic exhaust fans were installed as standard equipment, and custom-made venetian blinds were made standard.

To give the purchaser all assistance possible with decorating and furnishing problems, the services of an interior decorator were offered.

G.I. and FHA financing were arranged for each of the planned homes, with the prices ranging from $9,800 to $12,500.

Full-Page Open House Ad

Announcement of the open house was made through a full-page advertisement in a Dallas newspaper, and between 8 o’clock Sunday morning and 6:45 that evening from 3,500 to 4,000 persons inspected the model home.

This open house, with the selling emphasis put on the plus-provision for better living, brought 25 immediately-committed sales before the day was over. Within the next two or three days ten more sales were concluded to other families. The model was pricEd at $11,000.

Without further advertising, the model home was kept open for a few more Sundays, but soon was closed because all of the homes were sold. In addition, Galbraith acquired from visitors a list of over 50 applicants for homes in the company's next project.

Many of the buyers paid down on deposit much larger payments than the minimum required under financing plans, and all were encouraged to do so, according to James O. Abston, Galbraith general manager.

“We seek to build homes, not just houses,” he declares.

“The additional features are what people want in their homes today. The appeal of these features does a selling job that actually gives the home-buyer greater value by helping to bring down building costs.”
Design Heating Systems

(Continued from page 168)

convenience facilities which are possible as a result of the applicational flexibility of the warm air winter air conditioning system. An example is the installation of an extra large register or big damper in the side of the warm air trunk running through the laundry room so that when wash day weather happens to be damp and muggy the circulation of warmed air in the laundry room can be used to dry clothes quickly.

Another help for the housewife is to have a warm air register located in the space used for hanging wet tea towels under the kitchen sink. This arrangement makes a fine towel dryer and also serves to keep this area well ventilated.

The heating system can also be used to overcome the inconvenience of a cold bathtub. The tub is placed on a small platform which has been built.
Exhibit Home Offers

Convenient Features

A NEW "House of the Year" was opened in May by Newell and Daniel, New York developers, in their community in the Village of Lake Success, Long Island. The three-bedroom home, priced at $26,900, was designed to afford convenient access from its entrance to every part of the house without requiring the crossing of other rooms.

The exterior of the exhibit home has a combination of brick and stained cedar shingles, with slate-surfaced asphalt shingle roofing. Its over-all length is 78 feet, providing a low, rambling effect despite a usable second floor.

Built-in features include a wardrobe closet which occupies an entire wall of the master bedroom, a combination cabinet and dressing table with Formica top and recessed sink in the master bath, and a bookcase in the third bedroom. The latter room, separated from the living area by folding doors, can be used as a den or television room.

A solid window wall separates the living-dining room from the open terrace, affording a view of the rear garden and barbecue grill. The garage has a rear door for deliveries and a door to the kitchen. Kitchen equipment includes a 10-cubic foot refrigerator, electric push-button range, clothes washer and dishwasher, an 8-cubic-foot freezer, steel cabinets and Formica work tops.

Floors, except in kitchen and bathrooms, are hardwood. Bathrooms have glazed colored tile and colored fixtures. There is a finished stairway to the second floor, where additional rooms can be added. Panel heating is installed.

Some homes in the new group will be priced from $23,900, without the expansion attic and some of the exhibit home's other features. Newell and Daniel expect to complete the first 54 homes in the group this year. The builders said that the community, when completed, will consist of approximately 500 homes, of which nearly 400 have been completed and occupied.

FLOOR plan shows convenient access to all rooms from kitchen

Hidalift

THE 100% CONCEALED SASH BALANCE


designed for
easy, fast installation... smooth, lifetime operation

Out of sight — ready for action
Hidalift is completely concealed in the sash at all times. . . . no unsightly window appearance.

Available in two types
Furnished in either the cup type or "L" hinge anchoring bracket. Pushed complete. Each set includes four balances ready for quick, easy installation.

Exclusive Hidalift tensioning screw
A feature of both cup or "L" type. The tensioning screw allows simple adjustment at any time after installation with an ordinary screwdriver.

2-way tension adjustment
The "L" type Hidalift balance can also be easily tensioned during installation by winding the bracket arm.

QUALITY PRODUCTS FOR OVER A CENTURY

HIDALIFT DIVISION

Gentlemen:

☐ Send complete literature and prices on Hidalift
Please check ☐ Dealer ☐ Builder

Name:
Address:
City:
State:

T & S

211
Design Heating Systems
(Continued from page 210)
as well as the available means of meeting these requirements. He should have a mental appreciation of the design objectives towards which the architect is striving. He should be flexible in his approach to the problems of meeting the heating needs of the house which is being designed, and be able to offer suggestions.

A major contribution of the National Warm Air Heating and Air Conditioning Association to the heating design needs of both the architect and the heating contractor has been the publication by the National Warm Air Heating and Air Conditioning Association of a full library of methods manuals. Written in practical, easily understood terminology, these manuals contain the industry-accepted standards for designing and installing each of the conventional types of warm air heating systems.

Included among these manuals are:

- Manual 1 — How to Make a Comfort Survey — How to Make Floor Plans
- Manual 2 — How to Check Frame House Construction
- Manual 3 — How to Figure Heat Losses
- Manual 4 — Warm Air Perimeter Heating
- Manual 8 — A Yardstick for Classifying Warm Air Winter Air Conditioning Systems

Faithful adherence to the design and installation data contained in these manuals, coupled with the skilled craftsmanship of a reputable heating contractor, will guarantee a comfort-producing warm air heating system. Planning the system in coordination with planning the house will result in an integrated design that is efficient and effective . . . from either the standpoint of sales appeal or that of client satisfaction.
ORANGE grove makes a setting for concrete block home project

**Low-Cost Concrete Block Houses Find Ready Market**

SOUND values in concrete block houses featured a 400-house tract built by H. R. Wilson and Associates, Pasadena, Calif., in an orange grove near that city. The first group—24 homes—was sold within three weeks after completion at $5,500.

Known as Security Homes, the houses are constructed of pumice hollow-tile blocks, reinforced vertically and horizontally with steel and concrete. The blocks form both the interior and exterior surfaces. On the interior they are finished with a cement paint called Texolite; and a variation of the same paint, made with an oil emulsion base, is used on the outside.

The four-inch concrete floor on 18-inch foundations is underlaid by an asphalt membrane. The 2x8 ceiling joists are exposed on the underside, as are the 1-inch T and G boards over them. Two layers of roofing felt are hot-mopped on the boards and covered by aluminum foil.

The house contains 635 square feet of floor space and has a 13x16 living room, a 10x12 kitchen and two bedrooms, 8x12 and 10x12. Asphalt tile flooring covers the kitchen, bath and hall. All-steel sash and copper screens are used.

Lots in the development average 60x105 and both a 15-foot cesspool and a two-compartment 750 gallon septic tank are provided. Streets are paved and cost of utilities borne by the developers. There are 12 elevations of the plan.

**INTERIOR view showing exposed joists, painted block walls, large glass area.**

**FLOOR plan, right:**

- Bedrooms are separated by one thickness of 1/2-inch gypsum wallboard. Neither bedroom has doors.
“$8628 per house
(12 sq. asbestos shingles on gypsem)
$7563 per house
(13 sq. wood shingles on gypsem)
—that’s what ES-NAILS saved me... good money in the bank!”
—says a prominent New Jersey builder.

In full, he stated: “I use ES-nails to attach both wood and asbestos shingles directly to gypsum sheathing—and they really do a job.

“ES-nails give better results than other types of construction...we are highly pleased with their locking ability—and use them exclusively.”

Other practical reasons for using ES-nails include: their ease of application—no special tools are required, use of a regular shingling hammer...they are self-locking, attaching wood or asbestos shingles directly to gypsum or insulation sheathing...and they can be driven at any convenient point—no need to locate studs.

For more information about the value of ES-nail construction—and the savings it will mean to you, call your supplier, or write: Elastic Stop Nut Corporation of America, 2530 Vauxhall Road, Union, New Jersey.

INDUSTRY BRIEFS

Samuel L. Cribari has been elected a vice president of Marquette Cement Manufacturing Co. He will continue to be in charge of all sales divisions of Marquette and its subsidiary companies, a function he has handled for seven years as assistant to the president. The appointment climaxes a career begun as an office boy in 1920. After a seven-year apprenticeship during which he attended night school Cribari was made assistant credit manager in 1927. Three years later he became Southern credit manager in Marquette’s Memphis, Tenn., office. In 1933 he returned to the company’s general offices in Chicago as credit manager. Two years later he was appointed assistant treasurer and in 1943 became assistant to the president, charged with full sales responsibilities.

Douglas G. Pilkington, formerly western advertising manager of Progressive Architecture, has been appointed field representative for the wood window industry. Announcement of the appointment was made by E. W. Ruckick, general manager of Ponderosa Pine Woodwork, Chicago. Pilkington joined Progressive Architecture in 1943, serving until March 1950. Prior to that he was in charge of lumber dealer products in the Chicago area for the National Gypsum Co.

Herbert Malarkey, formerly president of M and M Wood Working Co., makers of Malarkey Plywoods and doors, announced his retirement from active management late in April. Simultaneously Thomas B. Malarkey, former vice president and secretary, was elected executive vice president to assume management of the corporation. Former president Malarkey, who served 28 continuous years with M and M, said he had “long contemplated” withdrawing from active service. He will continue to serve as a member of the board of directors.

PORTABLE — powerful — accurate. Saves from $200 to $400 on small home jobs. Saws rafters without marking or handling the material twice—faster than you can lay them out!

WRITE TODAY FOR FREE BULLETINS

J. D. WALLACE & COMPANY
136 So. California Ave.
Chicago 12, Ill.
How Simple Changes Add To Kitchen Efficiency

A practical example of the work of the Kitchen Planning Department of the Southern California Gas Company can be found in the study of a plan prepared for Wm. R. Floory by his architect and the same plan as revised by the Gas Company. In the original plan the toilet in bath No. 2 was on the right-hand side of the room. By the simple expedient of moving it to the other side, a straight passageway through to the service porch was provided eliminating the jog, the door opened flat against the wall instead of bumping the toilet, and six inches of space was gained and added to the bedroom closet.

In the service porch the space for the shower, laundry tray, automatic washer and water heater was very tight. Though changes in revised plan, above, seem to be slight, notice extent of added utility provided in the same overall area the studs at both ends of the space were turned flat allowing two more valuable inches. On the opposite wall the window was placed over the toilet to make room for a cabinet over the lavatory. A 40 gallon water heater was installed instead of the 30 gallon size which would not have taken care of this growing family, and the heater was raised so a cabinet could be placed under it. The light fixture was moved off center to eliminate shadows. The convenience outlet at the ironing board was placed high on the wall so that the cord would be high as a convenience to the ironer. The broom closet was divided into two sections—the top section for brooms and mops and the bottom for soaps and powders, making them easy to reach.

The general layout of the kitchen remained the same but many refinements were made. The space for the refrigerator was increased so a larger box could be installed; the cabinet over the refrigerator was pulled out 6 inches and vented to the attic for free circulation of air. A false wall was placed along the refrigerator permitting cabinets and counter space on the other side; this was a valuable addition because counter space was needed there to facilitate serving to the dining room and it also made a convenient storage for dishes used in the dining room.

The range was moved so there would be room for a floor-to-ceiling pot and pan cupboard and enough additional room for counters on both sides of the range permitting the housewife to use both sides when serving from the range.
Avoid costly errors with this...

NEW UNIVERSAL Level Transit

Price $165.00 complete with tripod

N ow David White offers you, at the lowest price anywhere, the finest of Universal Level Transits with 45° protected arc, internal focusing, and coated optics.

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

You'll find this instrument properly used will be your best insurance against costly layout and building errors. The new 45° protected arc means easier, more accurate readings, less likelihood of instrument damage through accident. Internal focusing assures you of dust and dirt-free inside lens surfaces, better protection for optical parts and mechanism. Coated optics mean clearer, distortion-free images, sharper definition, positive readings at greater distances and under adverse conditions. Instrument spindle supported on ball bearings for perfect horizontal adjustments.

Ask your nearest dealer to give you complete information on this and other fine engineering instruments. Or write direct to David White Co., 511 W. Court St., Milwaukee, Wis.

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

INDUSTRY BRIEFS

Roy C. Ingersoll, previously vice president of Borg-Warner Corp., was elected president to succeed C. S. Davis, president of the corporation for the past 21 years, at a recent meeting of the board of directors. Davis was elected to the newly created office of chairman of the board. G. A. Shallberg, previously executive vice president, was named chairman of the executive committee. Ingersoll, in addition to his duties as president, will assume the duties formerly assigned to the office of the executive vice president. Both Davis and Shallberg will remain active in the corporation in their new positions. A new vice president of Borg-Warner also was announced. He is A. P. Emmert, of Muncie, Ind., president of the corporation's Warner Gear Division, a position which he will continue to hold. There are three other Borg-Warner vice presidents—H. E. Blood, J. L. Dryden and G. P. F. Smith.

The appointment of Gordon G. Morrison as manager of the company's sales training department has been announced by Marvin Green.

The Nichols Wire and Aluminum Co. has announced the appointment of E. C. Manix as general sales manager. Manix has been associated with the company since early in 1947, in the position of sales manager, eastern division, with offices at South Deerfield, Mass. Before his association with the Nichols Co. he operated the Arm's Manufacturing Co. and the Armsworth Sales Co.

Howard D. White, former executive vice president of the Liquefied Petroleum Gas Association, returned to the organization June 1 in the same capacity. Since Oct. 31 of last year he has been identified with the Ferlite Development Corp., Albuquerque, N.M. Arthur C. Kreutzer, managing director of the association during White's absence, has been named vice president and general counsel.
$19,900 Ranch Homes Find Ready Sale In Well-Planned Subdivision

A NEW subdivision featuring a “Saddle-Ranch” house is finding ready acceptance at Saddle-Wood Hills, Hillsdale, N. J., where Tandy and Allen, Inc., its builders and developers, have sold 170 of the homes since the first model was completed around March 1 of this year. The seven-room ranch-type house is priced at $19,900. It has four bedrooms, one of which can be converted to other uses, an attached two-car garage and two full baths. Minimum plots are one-third of an acre.

The house is built on four levels consisting of a full cellar, garage, main living floor and multi-purpose room over the garage. Exclusive of the garage, it contains 1,900 square feet of floor area.

The foundations are of cinder block covered on the outside by two coats of waterproof cement surmounted by another two coats of asphalt waterproofing compound. Two steel girders projecting from the cellar support the main floor. Heat is by oil-fired furnace and a forced-circulation hot-water system, with a 550-gallon tank buried in the ground. All plumbing is either of copper or brass. The 460 square-foot garage has space for a hobby and storage area and a freezer.

Interior walls are of three-coat plaster except for the main wall in the living room, which has a pickled-oak finish, and the end wall of the multi-purpose room, which is panelled with knotty pine in natural-grain finish. All structural lumber is No. 1 kiln-dried Douglas fir. Save for the asphalt tile in the multi-purpose room and the inlaid linoleum in the kitchen, flooring is of selected oak. Insulated

(Continued on page 219)
WEATHER-BLOC
SINGLE UNIT VENTILATOR
for GLASS BLOCK
in HOMES, STORES, OFFICES

OUTSIDE FACE
“Finger-Tip” ventilation control is adjustable on glass blocks.

Inside Face
Permanent glass diffuses heat in any angle.

Weather-Bloc takes no longer to install than single glass blocks—simply set in place of glass blocks. No caulking or special preparation is required. For installation in completed construction, break out the glass block where ventilation is required and replace with Weather-Bloc. All parts can be cleaned or replaced from inside the room.

HELPFUL... (Continued from page 79)

volume. This has separate doors to freezer and refrigeration compartments. If family needs more freezing space, separate freezer can be located in laundry room. However, for average family needs, the combination unit has been found adequate.

2. Automatic electric range with pushbutton controls. This has automatic oven timer and pushbuttons that light up in different colors to show heat settings of the four surface units and oven. Timed appliance receptacles are located in the backsplash.

3. Automatic electric dishwasher equipped with Disposall. The job of cleaning up after meals is reduced to a minimum here. Housewife scrapes food waste from plates into sink drain, then turns on cold water to operate Disposall. New faucet has single lever control for regulating temperature and volume of water. Storage compartments are built into the backsplash of the sink, bar, soap and other articles can be kept. Dishwasher washes, rinses and electrically dries five dozen dishes as well as pots and pans and silverware, at the setting of a dial.

4. Steel base and wall cabinets are sound proof and have roller bearing drawers. They match the appliances in color and design.

Kitchen Remodeling (Continued from page 116)

frame. A material which never solidifies is used under the frame and permanently prevents moisture penetration.

Distinctive features are incorporated in the remodeled kitchens. For example, the countertops adjacent to ranges are covered with stainless steel so that hot pans can be placed on them. Frequently a maple cutting board is used on the counter; occasionally Wille makes a reversible cutting block with Formica on one side so that it matches the countertop when not in use. Shelves, either side of the windows, have both top and bottom surfaces covered with Formica. Old doors have been covered with Formica to give them new value.

Waste King Pulverators and Trade-Wind Clipper exhaust fans vented to the outside are also standard items in these remodeled kitchens. The new wiring harness for the kitchen provides numerous convenience outlets and ample lighting facilities.

One of the important facts that contribute to Wille’s success as a kitchen remodeler is his color planning that makes the room a pleasurable one for the housewife’s daily work.

FOURTH EDITION
SIMPLIFIED CARPENTRY ESTIMATING
By J. DOUGLAS WILSON
Coordinator, Apprentice Education, Carpenter and Cabinet Making Los Angeles City Schools Los Angeles, California
and CLELL M. ROGERS
Mathematics Instructor, Venice High School, Venice, California

A practical text on carpentry estimating, covering rough lumber, finish lumber and hardware, in which the parts of a house are analyzed under six main divisions. Material lists, short cut rules and tables supplement the text and guard against anything being overlooked in making up the final estimate. Valuable information is given for making labor time estimates.

While designed as a beginner’s text the Fourth Edition is complete enough for the use of builders and lumber dealers. Simple arithmetical methods for accurate estimating, are given. Helpful tables that save much time in figuring and a full index make the book suitable for quick reference in the shop or on the job.

Contents

Book Department
AMERICAN BUILDER
Simmons-Hoodam Publishing Corporation
30 Church Street New York 7, N. Y.
$19,900 Ranch Houses...

throughout, the dwelling has roofing of heavy-grade asphalt shingles. Each window is of insulated glass, including a floor-to-ceiling window in the living room and a similar expanse in the form of a curved bay window in the dining room. Screens are supplied.

Exteriors employ combinations of two-course cedar shingling, vertical cedar boards in natural-grain finish and brick veneer. Twenty-five material and structural combinations are used in the project and further variation in exterior is made possible by a wide selection of colors.

At the entrance is a terraced, 170-square-foot flagstone patio partly enclosed by a brick wall. The center-hall entry opens, on the right, to a grouping of three bedrooms and, on the left, to an approach to the kitchen. All bedrooms have shoulder-height windows for privacy and optimum cross-ventilation. The wardrobe closets have built-in sliding-steel doors.

The master bedroom is served by a bath containing a tile stall shower enclosed by glass. Another bath of colored ceramic tile, containing a tub with overhead shower, serves the two other rooms in the bedroom area.

A two-way fireplace of Roman-face brick, with flagstone hearths, serves both the living and dining rooms. In the wall separating the dining room and kitchen is a pass-through for electrical equipment. Included in the price of the home, consists of a range, vent fan, dishwasher-sink combination, washing machine and eight-cubic-foot refrigerator.

Measuring 20 by 20 feet, the multi-purpose room has a vaulted cathedral ceiling. It is adjoined by two deep closets.

Nationally-known building products used in the “Saddle-Ranch,” include Libbey-Owens Ford glass, United States plaster, Revere copper, American Standard bath fixtures, National Gypsum plaster and sheathing, General Electric kitchen equipment, Carey shingles, Schlage hardware, Armstrong linoleum, Kentile, Mosaic tile, Ryerson steel, Cellulite insulation, Capitol kitchen cabinets, ABC aluminum windows, Federal boiler, Bell & Gossett circulator and controls, Minneapolis-Honeywell furnace controls, Tuttle and Bailey convectors, Weatherbest shingles, Mengel doors and Pratt and Lambert paint.

The “Saddle-Ranch” project is being financed through the Prudential Insurance Co. of America. Purchasing terms for the veteran offer a 4 per cent 20-year mortgage for $18,500, with a down payment of $1,490 and a monthly carrying charge of $134.11, or a 4 per cent 25-year mortgage for $17,000, with a down payment of $2,990 and a monthly carrying charge of $111.76.

Available to the non-veteran is a 4 1/2 per cent 20-year mortgage for $14,500 with a down-payment of $5,490 and $113.79 monthly. The carrying charge of all instances includes interest, amortization, taxes and insurance.

Saddle-Wood Hills development covers some 250 acres of rolling, wooded terrain with a lake and seven-acre park. It is 25 minutes’ motoring distance from New York City’s George Washington Bridge.

The community was launched late in 1948 with the construction of 25 custom-built units, after which Tandy & Allen began producing the “Saddle-Wood,” a seven-room ranch-type home. For its work on the “Saddle-Wood,” the firm won a certificate of approval from the Revere Quality House Institute.

Recently, Saddle-Wood Hills was awarded third prize in the category of developments of 50 or more large-sized homes in the nation-wide neighborhood development contest sponsored by the National Association of Home Builders. The judging was on the basis of 70 per cent consideration for the quality of community planning and 30 per cent for architectural plan.

JULY 1950
**Large 'Selling Space' Is**

**New Material Store Feature**

Heavy advertising program marks opening of Denver firm's expanded facilities

The recent opening of the new materials store and lumber yard of the Barr Lumber Co., Denver, was the climax of an intensive promotional campaign to draw attention to the attractiveness and convenience of the new facilities. A week prior to the opening 100,000 eight-page brochures were distributed through the city's metropolitan area. 200 column inches of advertising were printed in the Denver Post and Rocky Mountain News, and 10-inch and 25-inch ads were run in 30 smaller newspapers within a 50-mile radius of Denver.

Within the main building are 5,040 square feet of space most of which is actual "selling space." Well-planned displays of merchandise enable the inexperienced purchaser to find exactly what he wants, whether or not he is familiar with the nomenclature of building materials. Impulse buying is encouraged through extensive use of point-of-sale merchandising displays.

The site of the new Barr plant is an entire city block in an outlying industrial district of the city, following a trend to provide adequate parking space for customers and more room for expansion. A large parking lot adjoins the premises.

Liberal use of modern materials was made by the architects. Outside walls are Nu-Britestone with stainless steel cornices. Seven hundred square feet of glass along the front of the building makes one large show window of the entire inside show room.

Decorator colors, deep greens and browns, complement the interior materials—bleached hardwood insulating board, and acoustical tile ceiling; and the six private offices are furnished in functional modern, with light woods predominating. Fluorescent lighting is used throughout the offices, showrooms, and sales rooms.

The warehouse is a part of the main building itself, and the customer can walk directly from the front sales room into the warehouse where he may see and select whatever he wants. Within the 4,000 square feet of floor space in the warehouse-showroom 50 carloads of building materials such as nails, flooring, roofing, sash, doors, cement, sheet-rock, and lumber can be stored.

Several \"Hyster\" loaders are used in the yard, this power loader picking up, moving, and setting down an entire...
wagonload of lumber in one operation.

One unusual feature of a load of lumber from Barr is its neatly packaged appearance. Each order reaches the customer tightly bound in steel tape, thus eliminating all possibility of loss to the customer through mishandling during delivery.

The main showroom contains a model kitchen, many other appropriate displays, and a complete display of wood doors. From the 30 door models shown, each customer can find a style exactly to his liking.

Another new Barr feature is an outside Self-Serve department. Here, broken lots of materials of all types are on display and the customer simply drives in and selects and buys what he wants from the current lot of "bargain counter" buys.

The grand opening amounted to a two-day home show, with all-day demonstrations of how-to-do-it subjects pertaining to building. Cabinet building was demonstrated in the company's mill shops. Drafting, waterproofing, and painting were demonstrated in the sales rooms. Home shop

PLENITY of space is given to manufacturers' point-of-sale merchandising displays which encourage browsing and "impulse" buying tools and their uses were shown in the warehouse adjoining the main building. Twenty-one prizes were awarded.

An old and steady advertiser, the firm is seeking to build still more direct-to-home-owner business. In addition to furnishing the building materials, it offers the customer a home-planning and home-financing service. It also counsels and designs plans for home modernization and repair.

After fifty years in Denver, Barr already enjoys a major portion of Denver's professional building trades business, and now hopes to secure a larger share of the "do-it-yourself" consumer business. Executives of the firm are William K. Barr, president; James Cooley, vice president; Mrs. W. B. Barr, secretary and wife of the founder, and Guy Goodrich, sales manager.

**Microfilm Protects Land Titles**

More than 6,000,000 deeds, covering every parcel of public land granted to the citizens of the United States since 1788, are being microfilmed in the Bureau of Land Management, Department of Interior. Every piece of property in Alaska and the United States, except the District of Columbia, Texas and 18 Eastern states, can be traced to these patents (deeds) in Washington. By law the maintenance of these patent records is the responsibility of the Bureau of Land Management.

The microfilming program has been inaugurated primarily as a means of protecting these records, many of which are deteriorating from age and showing wear and tear from handling.

**In Earthquake and Tornado districts ...**

**... HOME OWNERS INSIST ON DRY WALL CONSTRUCTION**

"San Antonio is (a district) where dry wall is a must because of the earth heave problem with which they are faced there. Up until about six years ago, they used wood boards, over which they stripped canvas and then papered, but when dry wall construction, as we know it today, became available on the market, they turned to that method of providing interior finish."

That is the statement of Mr. Carl G. Luns, Director of the Technical Service Department of the NAHB. This is supported by letters from many an owner of a home built with Homasote Dry Walls. These homes have survived tornados and even tidal waves.

For 32 years Homasote has been used for Dry Wall Construction—in millions of dollars of private homes. Since 1936 its use has been supported by intensive research costing more than $500,000.

Dry Wall Construction—with Homasote Big Sheets—offers many major advantages...The average wall is covered with a single sheet; batten strips and unsightly wall joints are eliminated. In a single material you provide lasting insulation value and great structural strength.

Dry Wall Construction—with Homasote Big Sheets—means walls that are permanently crackproof, ideal for paper or paint, lending themselves to modern decorating effects, modern mouldings and trim.

Let us send you performance data and illustrated literature on Homasote and allied products.

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**Send for Illustrated Literature**

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<th>HOMASOTE COMPANY</th>
<th>Dept. 70, Trenton 1, New Jersey</th>
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<td>SEND FOR ILLUSTRATED LITERATURE</td>
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<th>Standard Homasote (Big Sheets)</th>
<th>Wood-textured Homasote (Panels)</th>
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<tr>
<td>Stratified Homasote (Tiles and Panels)</td>
<td>The Nova-Shingle and the Nova-Spand</td>
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<td>The Nova Roller Door</td>
<td>Shingling City</td>
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Dry Wall Construction—with Homasote Big Sheets—means walls that are permanently crackproof, ideal for paper or paint, lending themselves to modern decorating effects, modern mouldings and trim.

Let us send you performance data and illustrated literature on Homasote and allied products.
New Uses For Vermiculite Help Solve Building Problems

New uses are constantly being found for lightweight aggregate insulating concrete. Among these are roof decks, floors on ground, radiant heat sub-slabs, floor fills in multiple-story buildings, masonry wall insulation, and milk cooling tanks. Vermiculite concrete, in which vermiculite aggregate replaces sand and gravel as aggregate has the general appearance of ordinary concrete but is much lighter in weight and has higher insulating ratings. The weight, strength, and insulation value of vermiculite concrete vary with the amount of cement used in the mix as shown in the following table:

<table>
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<tr>
<th>Co. ft. of vermiculite aggregate</th>
<th>Compressive strength in pounds per square inch, one-inch disc on 6x12 inch Portland cement</th>
<th>Thermal conductivity in B.T.U. per hour per foot per square inch, one-foot per hour per degree F.</th>
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<tr>
<td>16</td>
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<td>79</td>
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<td>*11, 16⅔, and 44 gallons or water used, respectively, in these mixes.</td>
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Vermiculite concrete is mixed in a mechanical mixer, preferably of the plaster mixer type which has a stationary drum with rotating paddles. Neither water nor aggregate should be added to a batch during the mixing operation. Vermiculite concrete is placed immediately after mixing has been completed. If carefully screened, troweling is unnecessary. The same rules for curing regular sand-and-gravel concrete apply to vermiculite concrete.

For Roof Decks

The 1 4 mix is recommended for roof decks. In this type of roof construction, the vermiculite concrete slab forms a light-weight monolithic deck, incorporating the insulation.

Additional insulation can be provided simply by increasing the thickness of vermiculite concrete.

It is placed over a permanent form, such as ribbed metal lath, waterproof gypsum or asbestos board, paper-backed wire mesh, etc. Forms are fastened to wood or steel joists spaced up to and not exceeding 32 inches on centers. The vermiculite concrete slab, of a minimum thickness of two inches, is reinforced with 6x6-inch 10 gauge wire mesh. If paper-backed wire mesh or ribbed metal lath is used as the form, no additional reinforcing mesh is required.

When vermiculite concrete is used over a structural deck, the entire area of roof insulation can be placed immediately.
The structural deck may be designed dead level. Cants, saddles, and drainage slopes of vermiculite concrete may be cast monolithically with the slab. The customary built-up roof of asphalt or pitch-and-gravel is applied over the vermiculite concrete slab after it has set and dried out.

Vermiculite concrete does not burn and offers high resistance to the passage of heat. An exploratory fire test made on a four-inch slab disclosed that after several hours' exposure to a flame temperature of 2000 degrees Fahrenheit, the cold side of the slab had reached only 186 degrees Fahrenheit.

For Floors on Ground

The 1 6 mix is also used for floors on the ground. The floor area is filled with gravel to within three inches of the top of the concrete footings. Heavy, asphalt-impregnated roofing paper is laid over the fill. A three-inch thick slab of vermiculite insulating concrete is placed level with the top of the footing or sill. To provide a permanent wearing surface, a two-inch topping of sand concrete is placed over the vermiculite concrete. The topping should not be extended over the footing.

Existing "cold" concrete floors can be made warm and dry by placing a three-inch slab of vermiculite concrete, 1 6 mix, over a vapor barrier of heavy, asphalt-impregnated roofing paper laid on the existing floor. The vermiculite concrete is then covered with a two-inch sand concrete topping.

For vermiculite concrete floors radiant heated, the 1 6 mix is again recommended. The floor area is filled with gravel to within four inches of the top of the concrete footing. A vapor barrier, consisting of two layers of glossy-surfaced, asphalt-impregnated paper, with edges lapped four inches and sealed, or two layers of tarred felt in three mopings of hot pitch, is laid over the gravel. The vermiculite insulating concrete slab, four inches thick, is placed on the vapor barrier level with the top of the footing. Radiant heating pipes or ducts are laid on the vermiculite concrete slab and covered with a sand concrete topping to a thickness of one inch above the pipes. A light wire mesh embedded in the sand concrete topping minimizes cracking. Heat loss from the sand concrete topping through the footings can be prevented by installing a wooden sill the full width of the foundation wall. The sand concrete topping can then be placed up to this wood sill which also provides an excellent

(Continued on page 229)
Dealers' Farm Buildings Day Draws 1,000 in Oklahoma

MORE than 1,000 Oklahoma farmers and ranchers attended the second annual Farm Buildings Day, held at the Oklahoma A. and M. demonstration farm in Oklahoma City, May 6. The event marked completion of one year for the Oklahoma Farm-Fitted Plan Service, launched by the college with the active cooperation of the Oklahoma Lumbermen's Association. On exhibition were a Grade A milking barn and a hog shelter built from the plans, plus extensive exhibits on building topics and a short speaking program.

The plan service was started with one basic idea—that Oklahoma buildings for farm and ranch should fit Oklahoma conditions and materials. The Grade A milking barn seen during the day, accordingly, was only a 20 by 40 foot building for six cows—but agricultural engineers Gordon Nelson and C. V. Phagan, its designers, stated that, because of mild Oklahoma winters, it could be used with a herd of almost any size. A frame construction plan for this barn recently was issued by the plan service. The hog shelter, an 8 by 16-foot unit for two sows and litters, was one of three such units included in a plan for a hog production layout, also released as an Oklahoma Farm-Fitted Plan.

The California Redwood Association furnished redwood for the shelter and also had a complete separate display. Construction of the shelter was by the Hobart, Okla., High School vocational carpentry class. Starting with a pile of lumber in the forenoon, the 11 boys and their instructor, R. C. Kleiner, had completed the job by late afternoon, even

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Adjustable STEEL TRESTLES

For Interior and Exterior Scaffolding

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SMOOTH, INSIDE SURFACE, NO JOINTS, SEAMS, OR RIVETS.

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Goldblatt Tool Company

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building materials dealers a chance to see Oklahoma Farm-Fitted buildings in actual use or construction. All members of the Oklahoma Lumbermen’s Association are receiving sample copies of the plans regularly as they are issued by the college.

The most popular building at the field day was the modern Oklahoma Farm home built a little over a year ago and kept completely up-to-date since with the latest in electrical devices and work for furniture and furnishings from commercial companies. Plans for this five-rooms-and-bath house, though not included in the Oklahoma Farm-Fitted service, were drawn with weather and farm needs in mind.

A 100-foot exhibit, prepared and presented by the college, traced an imaginary Jones family through the steps essential to getting a good house to meet their needs at a reasonable cost. One step illustrated that, in terms of farm products, farm building costs are not much different than before World War II. A house that could be built for the price of 47 one-thousand-pound steers or 8,000 bushels of wheat in 1940 now can be built for 42 such steers or 5,500 bushels of wheat, according to the exhibit.

Another exhibit prepared by the college showed scale models of three types of milking barns. Two were of the one-or two-row type often used on farms, while the third was of the elevated stall or “milking parlor” type. Still another exhibit, prepared by the Oklahoma extension service, featured steps in landscaping a farm home and premises. “Plan, then plant” was the theme of this display.

C. V. Phagan, extension agricultural engineer, speaking to the farm audience at noon, listed these essentials in erecting a satisfactory house: money or collateral, good building materials, approved methods of construction, and good planning. He also stressed the need for meeting the special needs of the family, such as a clean-up place for the working farmer or a canning center for the homemaker, as well as meeting such requirements as placing the home the proper distance from the road, away from sources of objectionable odors, and in a spot with pleasing views.

Gordon Nelson, A. and M. agricultural engineer, spoke on planning milking barns that fit the farm. He urged farmers not to stint on costs when building a milking barn, but to erect the best barn possible that will fit their herd. “Surveys show,” he said, “that only six per cent of the cost of milk production can be charged to the barn, therefore any saving in cost of a barn actually has only a small effect on cost of production.” His list of essentials in erecting a barn included study of plans, a close check of the selected plans with the local dairy inspector, and consultation with the local dealer for ideas on construction and materials.

The next major event scheduled by the Oklahoma Lumbermen’s Association is its fourth annual convention and exhibition, to be held Oct. 17-18 in Oklahoma City.

---

Models of Grade A dairy barns made interesting exhibit.
WHITER THAN FINE WHITE PAINT*

Side your jobs with Carey Ceramo—for faster sales at better prices. Ceramo is actually whiter than fine white paint, makes painting passe! And Ceramo is permanently white, needs no periodic beauty treatment. Its flint-hard ceramic surface resists penetration of dirt, grime, stains, renews its beauty with every rainfall.

What’s more, Ceramo will not rot, burn, warp, crack or curl—requires no upkeep.*

Ask your Carey dealer to show you a sample—get all the facts about Carey Ceramo.

*Laboratory test data available on request.

New Modern Building
Boosts Dealer’s Sales

A NEW APPEALABLE increase in sales has marked the operation of a new yard and office completed recently by the E. B. Harris Lumber Co., Inglewood, Calif. Located only one block from the old yard, where the company had been doing business for 40 years, the new facilities have many times the attractiveness and convenience of the old.

The company does little business with large developers, catering chiefly to small contractors, carpenters and home owners; and for that reason the management placed extra emphasis on an attractive exterior and ease of accessibility. They report that not only have cash sales picked up greatly since the move, but that the whole sales volume, including contractor business, has increased.

The move became necessary when the city of Inglewood bought the old property for civic expansion. The company had acquired a large piece of land alongside the Santa Fe tracks and with a frontage on La Brea Ave., one of the major north and south streets from Los Angeles to the southern suburbs. They combined this with 562 feet along Florence Ave., a major east and west artery, just south of the Santa Fe tracks to provide a large and attractive site for the new buildings. A 6 foot wire fence encloses the entire yard, purposely chosen to permit motorists on Florence Ave. to see the lumber yard plainly.

Being favored with a choice location, the firm decided to take full advantage of it by building an outstanding office. It was set back from the sidewalk with a wide planting area in front; and a planting box of Roman brick was built to base the wide ceiling-height plate glass windows.

The office building is built of Redwood, stained in its natural color, which contrasts with the white sheds behind. The words “E. B. Harris” on the pylon are painted in yellow and “Lumber Co.” in green, with neon tubes ringing the letters. Parking for customers is provided on both sides of the office building.

(Continued on page 237)
OFFICE section of new building is tastefully decorated and furnished: outer office and reception area above; and private office.

In the pleasing interior, the curved counter has a facing of curly birch plywood and a linoleum top. Armstrong asphalt and acoustical tile are used on the floor and ceiling. Lights are inset. The wainscot is redwood with a V-joint left in its natural state. Panelray individual heaters are used for the various rooms. Two wide upholstered settees are provided for customers.

A popular and unique feature is the “Customers' Room,” for builders who wish to discuss problems with their customers, to go over plans or to telephone. This room is also furnished in redwood with an asphalt tile floor and has upholstered furniture.

Thirty-one foot driveways lead from the parking area on each side of the office into the yard; thus even when trucks are parked along the three sheds which are immediately behind the office building, there is plenty of room for other cars to get in and out of the yard. Driveways between piles of lumber are 26 feet wide. The entire yard is paved with blacktop. The building on the south stores flat items, such as wallboards, in racks; in the north building there are pine

There's a definite place for Trimedge in today's glamorous kitchens! Trimedge sink frames, pre-formed of extruded aluminum, give longer lasting beauty to sink-well installations. They're decorative, practical, permanent, economical and easy to install. Six types shown.

See your local Trimedge distributor, or write for Sink Frame Folder today.

TRIMEDGE, INC.
4021 MAHONING AVENUE
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Aluminum Windows for Ground Level Service

They'll never rot, warp, or stick—never need a drop of paint! Once placed, they're vet for the life of the house. Positive concealed locks, variable tilt ventilation. Of sturdy aluminum alloy extrusions, the price competes with wood or steel. Send coupon for all details!

Valley Metal Products Co.
Plainwell, Michigan

Mail Today for Prices

Please send specifications, installation data and price list on Vampco Basement Windows, Dept. AB 7.

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Business________________________
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ALUMINUM
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Look — No Rust
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For Lifetime Ground Level Service

Stainless Steel Sink Tops and Bowls
Eliminate costly replacement expense

A Largest variety of seamless drawn bowls in the United States. Depths to 16".

B Single, double and triple bowl combinations. Back ledges available if desired. Also sink and tray units.


D Scullery and pantry sinks with legs or wall brackets. Supplied with or without drainboards and splashbacks.

For information write to:

Legion Stainless Sink Corp.
21-01 40th Avenue, Long Island City 1, New York

Industry Briefs

Stanley Woodward, formerly vice president in charge of the Southern division of The Ruberoid Co., has been elected executive vice president of the company, it has been announced by Herbert Abraham, president. Woodward has been associated with the company as a vice president and director for the past 22 years. Prior to that he was vice president of the Continental Roofing and Manufacturing Co., of Baltimore, which helped to organize in 1922 and which was acquired by Ruberoid in 1928.

Robert L. Wood's appointment as an architect representative in the Boston area for the Insulite Division of Minnesota and Ontario Paper Co. has been announced by M. C. Fairfield, Insulite Sales Manager. Wood, who will use his headquarters in Boston, is an engineering graduate of Yale University. Prior to joining Insulite, he was district manager in Boston for the Engineering Products Corp., Bridgeport, Conn. Wood was also a sales engineer for Westinghouse Electric Corp. in the New England district for several years.

Howard L. (Red) Clary, formerly general sales manager, has been appointed vice president in charge of sales of the Norge Co., according to an announcement by G. P. F. Smith, president. Clary, an alumnus of Carnegie Tech, joined the Norge Central office in August, 1945, as sales promotion manager. In 1942 he was assigned the task of organizing the stock pile of 700,000 refrigerators then on hand throughout the nation for the War Production Board. Other Norge promotions and new assignments include: John M. Tenney, refrigeration sales manager; R. H. Pizor, western regional sales manager; Dean Spencer, New England regional sales manager; Richard C. Laramy, sales manager of home heaters; and Robert M. Reed, eastern regional sales manager.
boards, redwood siding, sash and doors, etc. Both buildings have garage doors which can be closed for protection against the weather.

Finish lumber is stacked vertically in the center shed. Lined with sheathing, painted white, and containing four skylights, this building has a very bright interior. The lumber is raised from the floor by building platforms; racks are divided into sections for convenient separation of various sizes and grades. Small moldings are stored horizontally in small spaces between vertical piles. Just behind the finish shed is a small mill equipped with planer, jointer, rip-saw and cut-off saw.

No. 1 and low-grade lumber are stored on opposite sides of the yard behind these buildings, with piles limited to 6 feet in height to enable one man to work on them. Odds and ends are placed far back in the yard. An intercommunication system connects the office with the yard.

---

**Finish lumber** is stacked vertically in center shed, with small moldings stored horizontally in small areas between vertical piles.

**Vermiculite**

(Continued from page 223)

nailing strip for securing carpeting or other floor covering.

Radiant Heat Installation

The vermiculite concrete sub-slab serves a four-fold purpose in radiant heat installations: (1) it retards heat loss to the ground and laterally through the foundations; (2) it accelerates heat flow through the top slab, reducing the time lag in securing comfortable room temperatures; (3) it eliminates a reservoir of heat in the ground under the floor; (4) it prevents condensation in summer by reducing the thermal capacity of the floor so that its temperature can equalize more rapidly with the air inside of the building.

Vermiculite concrete, 1.6 mix, is an adaptable and efficient material for insulating masonry walls. Single unit walls are insulated by filling the cores of the blocks with vermiculite concrete. This wall does not provide as much insulation as double ("cavity") walls, but it has approximately twice as much insulation value as a wall with the core left unfilled.

Masonry walls of the "cavity" type are easily insulated by filling the cavity with the 1.6 mix of vermiculite concrete.
SYNTRON
VIBRATING FLOATS

vibrating a stiff dry mix will give you

30% to 40% Stronger Concrete Floors
5 TIMES FASTER THAN BY HAND FLOATING
Do a better job faster—customer satisfaction with better, stronger floors.
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SYNTRON CO.
618 Lexington, Homer City, Pa.

Good Sales Features Offered
In New $9,290 Development

NEW Straussman project home. Matern and York are the architects

FLEXIBILITY of room arrangement to meet future living requirements, availability of three bedrooms, and a well-equipped kitchen are features of the new Fairview Ranch development of the Straussman Construction Co. at East Hempstead, Long Island, N. Y. The $1,600,000 development will comprise a total of 165 residences on a 34-acre tract, with houses priced at $9,290 on landscaped plots of approximately 6,000 square feet or larger.

The new project marks the entry

The PARKS PLAINING MILL SPECIAL

8 MACHINES IN ONE

The Parks Model B Planing Mill Special is a low priced, multi-purpose, money-saving machine that is ideal for almost every shop. It offers a Cast Iron Double Table Rip and Crosscut, 22-Inch Band Saw, Swing Cut-Off Saw, 12-Inch Jointer, Tenoner, Upright Hollow-Chisel Mortiser and Borer, Reversible Spindle Shaper, and 18-Inch Sanding Disc.

Write for free descriptive literature.

MANUFACTURERS OF QUALITY WOODWORKING MACHINES Since 1887

The PARKS Woodworking Machine Company
Dept 30-UU, 1546 Knowlton St.,
Cincinnati 23, Ohio
of the Strausman organization into medium-priced mass home building following twenty years of building custom homes in Queens and Nassau communities. The initial group of the new houses was completed in June.

The houses, designed by Matern and York, architects, provide a number of exterior elevations and color combinations for interesting alternate designs. Large sheltered porches and outside decorative features are emphasized.

Interior features are a disappearing wall arrangement whereby one of the bedrooms may be used as a dining room or den; a large L-shaped living room and dining area emphasizing front and rear floor-to-ceiling picture windows; and a built-in bookcase which screens off the entrance vestibule. A convenient pass-thru bar connects the kitchen with the dinette for formal dining.

Kitchen equipment includes baked enamel colored cabinets, storage and broom closets, six feet of colored Formica work top area, a seven cubic foot refrigerator, four-burner range, automatic washing machine, exhaust fan and fluorescent light fixtures. Ample space is provided in the kitchen for informal dining.

The bathroom contains colored fixtures, ceramic tile and a dressing vanity with overhead fluorescent illumination. Color choices in both kitchen and bathroom cabinets and fixtures are being given purchasers in addition to choice of interior wall decorations throughout the house.

Other features include a large storage room with both exterior and interior entrances, an automatic oil-fired hot water radiant heating system, steel casement windows with metal screens, and venetian blinds.

The homes are insured under the FHA. Under the purchase arrangement, no down payment is required from veterans and monthly carrying charges total approximately $64. Carrying charges for non-veterans are about $59 a month after a small cash payment. 25-year mortgages are available to all purchasers.

The property is within walking distance of an elementary school. Two store areas, including a new $5,000,000 shopping center, are conveniently nearby.

The Strausman Company has been active in the Village of Hempstead, where more than two hundred homes were built and sold under the development name of Fairview of Hempstead. Officers include David Strausman, president; Edward Strausman, vice president and treasurer; and George Strausman, secretary.

ROLL-UP DOOR
Solves Kitchenette Closure Problem
and---gives 9 sizzling sales FEATURES

FOR KITCHENETTE, closet doors, etc.—This aluminum roll-up door is priced to meet the price of all or any type of closure, and costs a lot less to install.

ARCHITECTS like the trim modern lines.

CONTRACTORS like the low unit cost.

BUILDERS like the simplicity of installation.

APARTMENT HOUSE OWNERS say it is the first practical answer to the Kitchenette closure problem.

THE HOUSEWIFE likes the easy roll-up fingertip operation.

Now ADD THESE!
For cubic economy—a real space saver.
For sparkling good looks—Baked on enamel colors, just wipe to clean.
For ease of installation—Furnished as a unit to your size specifications.
For compactness—Rolls-up to less than a 6" diameter roll. No swing out or fold space needed.
For ease of operation—A counterbalance spring roller.

THE ALUMINUM ROLL-UP KITCHENETTE DOOR has passed metropolitan building code requirements. Approved by the New Jersey F.H.A. office and the New Jersey Tenement House Department.

THERE'S MORE—we want you to have the full and complete details at your finger tips. Building Specialty Distributors, Contractors, Builders, Architects, act now, mail coupon

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NEW glamour
FOR SMARTER BATHROOMS

Wherever exhibited, the colorful styling of Lavanette catches the eye... clinches sales.

With its new custom-look beauty, Lavanette also brings greater utility and convenience to the average size bathroom.

The Lavanette is available in 4 popular color combinations to match the colors of other bathroom equipment.

All steel construction plus mass production methods enable us to hold costs down. The additional sales appeal you get from a Lavanette installation will repay many times its slight additional cost.

FEATURE LAVANETTE IN YOUR MODEL HOME FOR NATIONAL HOME WEEK

You can demonstrate new beauty and convenience. Write today for special sales helps and complete specifications.

BEAUTY QUEEN DIVISION—THE TOLEDO DESK & FIXTURE COMPANY
300 FORD AVE., MAUMEE, OHIO

How To Build A Circular Window With Glass Blocks

A LOT of prospective home-builders have deleted circular windows and wall openings from their plans, under the impression that the cost would be prohibitive, and that the actual construction work is a tedious task. Both suppositions are wrong.

The thirty-six inch circular glass block window shown in the accompanying illustrations was completed in this ranch-type dwelling for a cost of slightly less than sixty dollars, which included glass blocks and other necessary material.

The following procedure was used:

After Celotex siding was in place on house, 36-inch circular opening was cut in sheet of plywood, which was substituted for the Celotex as the window frame.

Next, glass blocks were laid in the form of a square, facing the plywood.
Masonite Plans Campaign
To Sell New Underlayment

Masonite Corporation plans an aggressive campaign to sell its recently-announced new product, Masonite Underlayment, a quarter-inch hardboard engineered to increase the life of hard-surfaced floor coverings such as linoleum, asphalt felt base rugs, asphalt tile and rubber tile.

Describing a wide market for the new product, E. W. Hadland, manager of dealer sales, pointed out that if 5 per cent of the 1950 estimated production of nearly four billion square feet of floor covering materials were underlaid with the company's product, 200 million square feet of underlayment could be sold. It is considered.

The product, available in 3x4-foot and 4x4-foot lengths, bridges irregularities in the sub-floor and provides a regular surface on which the floor covering may be applied.

and the plasterers simply plastered flush to it.

Photos show the pleasing effect the circular window gives the dwelling. On the inside, it balances the living room, equally spaced between two corner windows. On the exterior, it gives the house a "balance" that is distinctive. The window is easily cleaned and is weatherproof.

FINISHED circular window from inside is easily cleaned, weatherproof, and offers a pleasing "balance" to living room appearance. circle, making a pleasing outline in stone to "frame" the circle. Caulking compound used as a sealer, was easily applied with a gun type applicator.

On the inside of the dwelling, the aluminum facing circle was also used, and the plasterers simply plastered flush to it.

Mr. Sam Hoffman, of F. & S. Construction Co., Inc., who selected Norman Southerner horizontally designed gas furnace exclusively In 7 large scale building projects, says:

"The lower installation cost of the Norman Southerner has enabled us to lower the selling price of our new single home units and ensure customer satisfaction with the central heating system. The units are installed in the attic space — eliminating expensive furnace room and chimney. We've also found that there's no labor costs to assembling because the Southerner comes completely assembled and factory-tested."

Be sure your selection is the proven Norman Southerner, the original compact horizontally designed gas furnace. The Norman Southerner has been field tested in thousands of installations for more than 4 years. It fits in attic, under floor or basement, in utility room or chest — requires no floor space — requires less duct work — takes less time and labor to install.

Norman Southerner Helps Builder Cut Selling Price of 1,899 Single Home Units In 7 Building Projects In Midwest and Western States

Mr. Sam Hoffman, of F. & S. Construction Co., Inc., who selected Norman Southerner horizontally designed gas furnace exclusively in 7 large scale building projects, says:

"The lower installation cost of the Norman Southerner has enabled us to lower the selling price of our new single home units and ensure customer satisfaction with the central heating system. The units are installed in the attic space — eliminating expensive furnace room and chimney. We've also found that there's no labor costs to assembling because the Southerner comes completely assembled and factory-tested."

Be sure your selection is the proven Norman Southerner, the original compact horizontally designed gas furnace. The Norman Southerner has been field tested in thousands of installations for more than 4 years. It fits in attic, under floor or basement, in utility room or chest — requires no floor space — requires less duct work — takes less time and labor to install.

Save HALF Your Time BUILDING STAIRCASES

Above—Measure tread or rise in 30 seconds. Below—Mount board with gauge for perfect fit.

ELIASON STAIR GAUGE

In 30 seconds gives you BOTH correct length and angle of stair treads, steps, closet shelves, etc., ready to mark board. Each end pivots and locks at any LENGTH OR ANGLE. Adjustable from 80° up. Saves a day or more, increases your profit $2.00 or MORE on each staircase. Fully guaranteed. Circular on request.

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Dealers and Agents Write Us

Eliasone Stair Gauge
Finds Kitchen, Bath Use Of Acoustical Tile Good Home-Selling Feature

The installation of acoustical tile in baths and kitchens has proved a valuable sales feature for his new "1950 Aristocrat" home in Wedgewood Park, according to Albert Balch, Seattle developer. Balch said, "It is my belief that the use of acoustical tile may well prove to be the most important new sales feature adopted in 1950 for use in moderate-priced homes."

The sound-absorbing material has been used chiefly for industrial buildings, stores, offices and other public places. Its ceiling application in the home reduces considerably the amount of noise made by electrical kitchen equipment and the sound of running water in the shower or tub.

After the opening of the new Balch model home visitors made many inquiries about the tile and a number of sales were made in which buyers specified the material. The acoustical tile used in the Balch development is a product of the Simpson Logging Co., Seattle.

The Balch "1950 Aristocrat" is a two-story house with 861 square feet of floor area, including two bedrooms.

Our Front Cover

The 4-color Kodachrome of the Betty Bell kitchen which appears on our front cover is published through the courtesy of the Home Planning Bureau of the General Electric Co.

MATCHED CABINET HARDWARE AB/5015 Pulls, catches, knobs and hinges in American "Brassline" cabinet hardware line match perfectly in design, giving complete harmony to the finished installation. Many patterns are available in chrome with color accents to harmonize with the general kitchen color scheme. American Cabinet Hardware Corp., 416 S. Main St., Rockford, III.

TUB-KOVE is a white, vinyl compound that seals and covers cracks at junctions of wall and bath-tub preventing steam or water from entering cracks which cause damage to plaster walls and woodwork. The strip is highly flexible, and is unaffected by water. TUB-KOVE is easy to apply and requires no special tools or equipment. Now available in the NEW installer bulk package, TUB-KOVE is a must for your maintenance problems. Remember, your first cost is your last with TUB-KOVE. Absolutely no maintenance costs after the initial installation.

A BOON FOR BATH TUB SPLASHERS

Eliminates the damage caused by water seeping down crack between wall and tub.

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Orders under 25 lbs. post paid anywhere USA. ____________ Send C.O.D. ____________

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Complete Tub-Kove Sealing Strip ____________ Installer Package ____________

INSTALLER BULK PACKAGE: Ideal for use in apartments, hospitals, hotels, housing projects or wherever large quantities are required.
COST REDUCING PLANERS

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POWERMATIC HEAVY DUTY PLANER CE-16"

Designed to meet 95% of all planer operations by cabinet shops, pattern makers, schools and industrial plants. Capacity 16" x 6"; two feed speeds, 16 & 40 F.P.M.; maximum cut 1/4". Power feed control. Fully adjustable. Price: $429.50*

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Cast iron frame construction. Cutterhead mounted in over-sized sealed ballbearings. Capacity 12 1/2" x 4"; feed speed 16 F.P.M.; maximum cut 5/8". Fully adjustable feed rollers, idler roll, chip breaker and pressure bar. Price: $351.00*

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An extra heavy duty industrial planer with sectional feed rollers and chip breaker. Capacity 20" x 8", two feed speeds, 20 & 40 F.P.M. Price: $1,175.90*

TWO OTHER COST CUTTING MACHINES

POWERMATIC 2A SINGLE END TENONER & CHECK RAIL CUTTER——

Designed for complete flexibility on any special or regular operation for any sized shop. All moving parts guarded: V-Belt drive; sealed bearings throughout. Price: $795.90

All Powermatic Machines Are Guaranteed Against Mechanical Defects.

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The four new colors of Mustang Asbestos Shingles are right for every style of architecture. Your customers will like the beauty, the charm of Mustang Asbestos Shingles.

Strong, tested advertising and merchandising help back you when you sell Mustangs! These merchandising and advertising help are yours for the asking. They are furnished at no charge to you.

WRITE TODAY! Get the full facts about how you can make money selling Mustang Asbestos Siding for remodeling jobs, for new homes, for housing projects. Write for free descriptive folder and price list. Dealer inquiries welcome.

How to Sell And Install Wall Coverings

APPLICATIONS of Marlite plastic-finished wall and ceiling panels in kitchens and bathrooms, as shown here, are made simple by explicit directions offered in a new Marsh Wall Products, Inc. manual

INSTALL it Right with Marlite, a new 14-page manual presented by Marsh Wall Products, Inc., Dover, Ohio, tells a graphic story of how to sell and apply finished wall panels. The story is told with 160 illustrations.

Valuable as a sales training piece, the manual thoroughly details steps taken by a sales-applicator contacted to do a job with Marlite. Ten chapters, following step-by-step procedures in sequence, tell how to do the job correctly. In addition to how-to-install information, a complete list of tools required is given, as well as a chapter on "tricks of the trade."

Some of these "tricks," submitted by successful Marlite applicators, tell what to do when panels become bowed, how to make bends when the radius is less than 27 inches, how to use tile patterns, and special hints on how to cut Marlite.

Where panels become bowed, this recommendation is offered: "Twenty-four hours before installation, dampen the entire back of each panel with water and stack the panels back to back, then cover them with boards and weights."

To make bends with Marlite where the radius is less than 27 inches, the manual recommends dampening and heating the back of the panel. Concluding chapter of the manual is titled "What's The Difference Between an Applicator and a Salesman?" The chapter, in a three word sentence, answers this question—"none."
NEW gas floor furnace facts!

You may know gas floor furnaces from A to Z. But if you haven't checked "Duo-Therm" lately, your facts may be as dated as last year's fishing license.

What's hot that Duo-Therm's got?

4 Feature-Packed Gas Floor Furnaces with—

Exclusive Equifeame Burner. Built to give long-life plus efficient performance with all types of gas. Clean-burning, quiet and trouble-free. Burns a uniform flame at all ports at all stages of fire.

Exclusive Comfort Selector. Eliminates "chills and fever" heating. Gets rid of that off-and-on, on-and-off operation. A flip of the switch on the side of the thermostat tailors low fire setting to fit the weather.

Revolutionary All-in-One Control. A compact, complete performance-packed package that's a cinch to convert to automatic at any time. Automatic safety shut-off standard on all models.

Generous 10-Year Warranty—on all models.

Duo-Therm Div. of Motor Wheel Corp., Dept. AB-7
Lansing, Michigan

Please cut and mail coupon for descriptive literature.

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JULY 1950
WITH THE MIRACLE WEDGE

Our first consideration is for quality. Into every "OVERHEAD DOOR" of large size go pounds of unblemished wood and heavy-duty Salt Spray Steel hardware, pounds of steel reinforcement, perfectly counterbalanced for easy operation. A door built for enduring service is always the most economical. Specify the "OVERHEAD DOOR" with the Miracle Wedge for all residential buildings, all commercial and industrial structures.

Any "OVERHEAD DOOR" may be manually or electrically operated.

NATION-WIDE
Sales - Installation - Service

OVERHEAD DOOR CORPORATION • Hartford City, Indiana
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Glendale, California • Detroit, Michigan • Hillside, New Jersey • Cortland, New York
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DOORS OF EXTRA WIDTH
The extra-wide "OVERHEAD DOOR" is equipped with an auxiliary center track supported by a steel girder bolted to the horizontal angles. Ball-bearing auxiliary rollers are attached to the center side of each door section. Unusually wide doors are equipped with girder and two auxiliary tracks.
National Hinges for every cabinet door requirement

These Semi-Concealed and Ornamental Hinges are made of cold-rolled steel and are available in a variety of finishes. Diagrams show dimensions and type of door each hinge fits. No. 460C is also available in sizes No. 460C 1/8 and No. 460C 1/4.

No. 460B Ornamental Hinges are for use with doors having 1/8-inch offset and No. 460S for flush doors. All of the above hinges are packed one dozen each in a box, each pair in a separate envelope with the proper number of flat-head and oval-head screws.

Your National Dealer will assist you to make other selections from the National line. Ask to see the National Wall Chart.

NATIONAL MANUFACTURING CO.
STERLING, ILLINOIS