24 HOMES—erected under a $12,000 ceiling offered a challenge to 19 builders (pages 68 to 75)
Six men, working with a gasoline truck crane can hoist 14,000 square feet of Cemesto to a roof... and still have time to lay 8,000 feet of roof deck—ALL IN AN 8-HOUR DAY!

And this is no ordinary roof deck... for Cemesto* is a multi-function material—a fire-and-moisture resistant asbestos cement covered panel with a cane fibre core. It provides insulation, interior finish, and great strength with light weight.

That's why you find Cemesto so widely used today for fast, low-cost construction of not only roof decks, but also "curtain" walls and partitions. Cemesto's durable exterior and interior finish needs no painting and little maintenance.

IT'S AVAILABLE: Cemesto* is available NOW... for prompt delivery.

You are invited to write today for details on Cemesto applications in which you are interested. In the meantime, you'll find complete specifications on Cemesto in Sweet's File, Section 10a/7.

THE CELOTEX CORPORATION, CHICAGO 3, ILLINOIS

FOR ROOF DECKS... "CURTAIN" WALLS... PARTITIONS
How to get variety... in multi-house building

Window treatment is an effective method.
Use windows of varied heights and widths in bays, in corners, as picture windows... spotted differently throughout each house. And leave muntins in some; remove them from others. There's your variety. Use standard Fenestra* Residence Steel Casements. There's your economy.

Builder Joseph Merrion is doing it. A number of the houses in his Chicago building development have the same basic floor plan. Yet window variety helps give each its own appeal.

Standardization = Economy + Quality
Use of standard casement sections streamlines Fenestra production. And the fine quality of workmanship in the shops of America's first and largest steel window manufacturer assures you strong, attractive windows—at a cost that helps you stretch your building dollar.

A full range of types and sizes provides a right window for every need. See your Fenestra dealer today or write to Detroit Steel Products Co., Dept. AB-12, 2260 East Grand Blvd., Detroit 11, Mich.
ANY lumber dealers have handled Upson Products for 35 years.

Hundreds have handled Upson Products for more than 25 years. Thousands more have handled Upson Products for more than 15 years.

Practically without exception in city after city—town after town across the country, you will find that the oldest, most successful, most respected dealer in the community sells Upson Products.

Through the years, these men have built stable, profitable businesses by unwavering determination to give the customer the most his money will buy. Their never-failing loyalty to quality has made it possible for us to keep our own quality standards at the highest possible point.

Our long association with so many quality-conscious dealers is an asset we prize beyond price.

So again at Year’s End, as is our custom, we wish to publicly express our warmest appreciation.

THE UPSON COMPANY
Lockport, New York
Volume 70  December, 1948  Number 12

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Everybody everywhere wants a bathroom that's new as tomorrow. Here the charm of provincial design is combined with the modern conveniences offered by American-Standard Plumbing Fixtures. The roomy bath is the corner model MASTER PEMBROKE, the graceful lavatory is the COMRADE, and the low, free-standing water closet is the quiet COMPACT.

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Whatever the job, you can’t beat American-Standard as a single, reliable manufacturing source for heating equipment and plumbing fixtures. For full details, contact your Heating and Plumbing Contractor, American Radiator & Standard Sanitary Corporation, P. O. Box 1226, Pittsburgh 30, Pennsylvania.

AMERICAN-STANDARD
First in Heating and Plumbing
Significance of the Campaign and Election

EXCEPTING ITS RESULT, the most significant fact about the recent political campaign was that there was virtually no discussion by the politicians of the most important and fundamental issue confronting the American people. This issue was a socialist planned economy versus free private enterprise over which there had been almost constant controversy on the radio and in the press for fifteen years.

Mr. Truman in the political campaign advocated all the socialistic policies necessary to present the issue to his opponent. But Mr. Dewey persistently declined the challenge. We do not recall having heard or read anything of consequence that he said in advocacy of or defense of private enterprise in general or against any specific socialistic policy. We do recall enough socialistic policies that he indorsed to indicate that his defeat was no serious blow to private enterprise. Henry Wallace had at least the virtues of clarity and consistency. He advocated in language that could not be misunderstood a complete socialist planned economy beginning with government ownership of banks, railroads and all utilities furnishing light, power and heat.

Why did the principal spokesmen of the Republican party evade the greatest issue confronting the American people? Doubtless because they were confident they had all real believers in private enterprise "in the bag," and they desired to avoid risking loss of the votes of important pressure groups of people who in theory believe in private enterprise, but who in practice favor specific socialistic policies by which they hope to benefit at the cost of everybody else.

Do the lack of discussion of the paramount issue during the campaign and the result of the election show that the cause of private enterprise is lost? No, it does not indicate that that cause has suffered even a serious setback. There is as much sentiment against socialistic New Deal policies as there was before the political campaign. This sentiment was not created mainly by politicians. It was created mainly by men in private life some of whom have been writing and speaking against such policies for fifteen years. The principal candidates of the Republican party have evaded attacking the socialistic domestic policies of the New Deal in four consecutive national political campaigns—in 1936, 1940, 1944 and 1948.

The prosperity during the post-war period of which Mr. Truman and the New Dealers were the lucky beneficiaries in the election was due to private enterprise operating under policies and conditions quite different from those that Mr. Truman advocated at the beginning of the post-war period had been adopted. And it seems very likely that the present prosperity will not continue during Mr. Truman's next administration unless most of the policies he advocated during the recent campaign are defeated.

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The Truman administration undoubtedly will seek the passage by Congress of the same kinds of socialistic legislation that Mr. Truman has advocated ever since he has been president. The task of educating and arraying public opinion against it will have to be performed by the same kind of people in private life who created most of the sentiment against the New Deal. Unfortunately, they may be helped by events. Perhaps the principal reason for Mr. Truman's election in 1948 was that business in general had been so good, employment so high, national income so large in the post-war period. These conditions of prosperity would not have prevailed if the government controls and socialistic policies that Mr. Truman advocated at the beginning of the post-war period had been adopted. And it seems very likely that the present prosperity will not continue during Mr. Truman's next administration unless most of the policies he advocated during the recent campaign are defeated.

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The prosperity during the post-war period of which Mr. Truman and the New Dealers were the lucky beneficiaries in the election was due to private enterprise operating under policies and conditions quite different from those that Mr. Truman and the New Dealers tried to impose. If Mr. Truman and the New Dealers get their own way in Congress during its next session, that will probably prove to be bad luck for Mr. Truman, the New Dealers, business and everybody else excepting, perhaps, the Republican party.

Forms in place for concreting with Atlas Duraplastic. Note steel bars and beams that forced work to be done largely by hand.

Finished columns have clean, smooth appearance, free of blemishes or air bubbles.

How Duraplastic licked a tough concrete column problem

Outstanding proof of its placeability—concrete successfully placed in a network of steel 12 feet deep!

Filling the column forms with concrete in this mass of vertical and horizontal steel reinforcement was no easy task.

The columns were 12 feet deep with steel bars and beams so close together that no vibrator could be used. Placing with Atlas Duraplastic air-entraining cement was done entirely by hand using long bars for spading on the inside. Other workmen pounded on the outside of the forms with mallets. Concrete had a slump of approximately 5 inches. Cement content was about 7 sacks per yard and water-cement ratio 5-3/4 gallons. There were no signs of bleeding or segregation when the concrete was mixed at ground level, hoisted to the upper floors and distributed to the forms in wheelbarrows.

When the forms were removed, contractors were pleased to find a smooth, excellent-looking surface, free of blemishes or air bubbles.

More and more contractors are profiting from the unique features of Atlas Duraplastic for structural work. More uniform, more workable and more durable, Duraplastic costs no more than regular cement. It provides the proper amount of entrained air by intergrinding with the cement the precise amount of air-entraining material needed for satisfactory field performance. No new methods or materials are required.


OFFICES: Albany, Birmingham, Boston, Chicago, Dayton, Des Moines, Duluth, Kansas City, Minneapolis, New York, Philadelphia, Pittsburgh, St. Louis, Waco

ATLAS DURAPLASTIC
AIR-ENTRAINING PORTLAND CEMENT

MAKES BETTER CONCRETE AT NO EXTRA COST

"THE THEATRE GUILD ON THE AIR"—Sponsored by U. S. Steel Subsidiaries—Sunday Evenings—ABC Network
Cut Building Costs 3 Ways

1. STEEL CASEMENTS
   No extra hardware to buy, installation costs cut 80%. Planing and fitting eliminated.

2. METAL SCREENS
   Factory finished, no painting necessary. Precision made, ready to install without fitting.

3. BASEMENT WINDOWS
   Standard sizes, ready to install, eliminating work of fitting, trimming and painting.

Have you ever asked yourself "How can home building costs be reduced?" Now, that's a practical question—and here at Ceco we have an answer. Certain Ceco products will reduce home building costs. Take steel windows for example: They cost less installed, because there are no hidden costs to overlook, such as hardware, prime coat, accessories, additional labor costs. Then, too, steel windows last, and last, and last. There is no need for repair—they cannot rot...they are Bonderized and painted for protection against rust. And that goes for steel basement windows, too. Another way to save is provided by Ceco metal frame screens. Installed, they actually cost less than old-style screens, are factory finished—need no on-the-job painting, trimming, or fitting. So, to reduce building costs, recommend Ceco metal casements, basement windows, and metal frame screens.

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Ceco does more than design and manufacture fine construction products. Besides their wealth of technical engineering skill, there is available construction knowledge gained by 36 years of experience on the job. In 23 offices strategically located from coast to coast, Ceco stands ready to help you reduce home building costs. Call on Ceco today!

CECO STEEL PRODUCTS CORPORATION
GENERAL OFFICES: 5601 West 26th Street, Chicago 50, Illinois

Offices, warehouses and fabricating plants in principal cities

Other Ceco products include—Combination All-Aluminum Storm Panel and Screen for Wood Windows, Steel Joists, Meyer Steelforms, Reinforcing Steel, Roof Deck, Metal Lath and Accessories, Highway Products, Corrugated Roofing

In construction products CECO ENGINEERING makes the big difference
Another addition to the
Pittco De Luxe line of Store Front Metal

- This double-faced rectangular sash (Pittco De Luxe 15C) was designed as a companion piece to Pittco's single-faced rectangular sash (12C). Both are extremely popular with architects who demand a plain surface, rich in tone and gloss, for certain modern store front designs.

This new sash is especially suitable for installations above the first floor level... the sash can be reversed so that necessary replacements can be made easily from inside. It can be used with any of Pittco's wide variety of De Luxe mouldings. And its strength and clear, sharp profiles are assured by its extruded method of manufacture.

Choose Pittco for your store modernization work. The ease and simplicity of setting procedures for both the De Luxe and Premier lines reduce installation time and save money. Qualified technicians from your nearest "Pittsburgh" warehouse will gladly advise you on the creation of rough work to receive "Pittsburgh" products properly. And experienced crews of "Pittsburgh" workmen set metal and glass quickly and skillfully.

"Pittsburgh" service pays off in satisfied customers as well as profits.

PITTCO
STORE FRONT METAL

PAINTS • GLASS • CHEMICALS • BRUSHES • PLASTICS

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Take this low-cost Portable Saw-Shop to your job!

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To build more and better houses faster—builders use this portable, low-cost DeWalt. Because most of its working parts are now of light-weight, heat-treated aluminum, operators find it easier to handle—safer than ever before—and it does the fast, accurate work they want. It's a machine you can get quickly. Write for catalog. DeWalt, Inc., 112 Fountain Avenue, Lancaster, Penna.
When you buy or specify Roddiscraft doors or hardwood plywood, you are sure of a craftsman’s product.

In spite of modern production methods — in spite of automatic machines — craftsmanship still determines the quality of wood products. The characteristics of wood differ widely. Knowledge of these differences influences log selection, veneer cutting, drying, bonding, sanding, finishing. At Roddis the men who govern these operations are craftsmen who know wood.

True to tradition at Roddis, craftsmanship is often a family affair. A large part of the personnel is made up of families of craftsmen with many years of experience — your assurance that each production step is in trained hands.

Yes, when you buy or specify Roddiscraft — you are assured of craftsmanship quality doors and hardwood plywood. Compare Roddiscraft and see for yourself.

Another family circle of Roddis craftsmen representing more than 100 years of experience — the Herkert brothers — Charles — log yard jammer operator — responsible for classifying and stacking logs — John, lathe operator whose knowledge of wood is vital to veneer cutting — Louis — on the belt sander where skill and fine touch assure satiny smooth finish and uniform thickness — and finally, at the end of the chain — Eddie, plywood inspector and retoucher — a perfectionist — with him it’s perfection or rejection.
Good workmanship requires that all head joints in both face brick and back-up work be completely filled with mortar, by any of the three methods pictured below.

**Method 1.** Plenty of mortar should be thrown on the end of the brick to be placed. The brick should then be pushed into place, so that the mortar oozes out at the top of the end of the brick to be placed, head joint.

**Method 2.** A dab of mortar should be spotted on the corner of the brick already in place. Then plenty of mortar should be thrown on the end of the brick already in place. So that there will be more than enough mortar to fill the joint completely when the next brick is pushed into place.

**Method 3.** A full trowel of mortar should be thrown on the wall. Then the brick should be shoved into this deep bed of mortar. So that the mortar oozes out at the top of the joint.

**Brixment** permits the bricklayer to do the kind of work pictured above. It does not stiffen up too fast, when it hits the brick. It remains rich and plastic long enough to allow the bricklayer to place the brick, easily and accurately.

In addition to its greater plasticity, Brixment mortar has higher water-retaining capacity and bonding quality, and greater resistance to freezing and thawing. Because of this combination of advantages, Brixment is the leading masonry cement on the market.

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Gives you the tools and ammunition to do an easier selling job!

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- Rich, full color floor and window display cards—"attention stoppers"—designed to give your customers suggested floor plan ideas, and call attention to the quality, permanent features of Hako Factory Waxed Asphalt Tile Flooring—The Profit Line.

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Phone, Wire or Write Today
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CLIPPER MASONRY SAWS  *Speed Production*

WORK LIKE MAGIC ON EVERY JOB!

The hardest masonry materials sliced in two quickly and easily. Users everywhere acclaim Savings.

YES, the Value of Clipper is proven daily throughout the country. Whether your job is large or small makes no difference. You'll find Clippers just as Efficient on Skyscraper Jobs as when cutting Brick and Marble for Fireplace Trim. Clipper's excel in Simplicity, Flexibility, and Portability.

Here's the 1949 Model "HD" Clipper (cuts wet or dry!) with "Adjust-A-Cut" Control. You'll be amazed when you see it perform. Straight cuts, angles, notches so fast and easy. Yes, this new Clipper has many advanced features together with those which Clipper originated to make efficient masonry cutting possible.

What's the Clipper Cutting Principle?

Why Strain? You Can Zip Thru

Ever try to tear a telephone book in two? The full thickness is a real strain, but when you take a series of easy to handle sections—you can zip thru. That's the story behind the original Clipper Cutting Principle. Less arc of contact means faster cutting action.

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- Sewer Pipe cut in 14 seconds
- Concrete Blocks cut in 21 Seconds
- Natural Stone cut in 11 Seconds
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Clipper Automatic Pressure Control

Here's a Patented Clipper feature that's no secret. Users everywhere know it's smooth, automatic action that speeds cuts and makes possible Clipper's guarantee of Longer Blade Life.

Clipper Snap-on Blade Cover

It lets you cut wet without getting wet. An outstanding Clipper safety feature for both Wet and Dry cutting.

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Busy season...for friendly chimneys of brick!

Yes, this is the season when millions of "stockings are hung by the chimney with care."

And this year, as always, Santa Claus will be climbing down more chimneys of brick—by far—than any other kind.

At this season you can see most clearly why brick enjoys this timeless popularity, whether for chimneys or for an entire home.

For this is the time when youngsters and oldsters alike take new pleasure in the living qualities you build into their homes—the warmth, the comfort, the feeling of friendliness and security.

It's also the time when we would like to express our gratitude to all of you who have helped build this feeling of friendliness in our homes and in our industry—and to extend to you all, our heartiest greetings of the season.

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More and more, those responsible for the selection of heat distribution methods and equipment for modern apartments and homes realize the advantages of CH® with Tuttle & Bailey Conectors ... the principle of heating by means of air motion that assures efficient heat transmission, real comfort ... all-copper T & B heating elements that mean economical operation, fuel cost savings ... trim appearance that harmonizes with modern interiors and furnishings.

Advantages important to building owners and tenants alike that answer the demand for better heating from better-looking equipment.
Sure there's a better way to paint the side of a building... a faster, easier and less costly way. Just use the brush that fits the job.

And there's a better, faster, easier way to complete every concrete, stucco and masonry job than by using regular cement for every job. You can get the full story just by mailing the coupon below, but here's a "quick look."

If you're laying up ornamental stone or brick, or a brick wall, you can do it easier, faster and better with Stoneset or Brikset.

For a stucco home you'll want Medusa Gray Waterproofed Portland Cement in the mortar coats. In the finish coat you'll prefer Medusa plain or waterproofed White Portland Cement. To speed along any rush job there's nothing like Medusa "Medco" High Early Strength Cement.

So ask your dealer about these special Medusa Cements. And get that coupon below in the mail to us today. If you have a particular type of cement job or a special problem, we'll be glad to try to help. Write us now!

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Yes! I'd like complete information about the following special Medusa products that are checked:

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City
State

Also made by Medusa Products Company of Canada, Ltd., Paris, Ontario
Yes, a fuel-thrifty Mueller Climatrol Furnace in a home wins favor for the architect, makes profitable sales for the builder. And with good reason. The heating plant is the heart of a home. And a Mueller Climatrol Furnace is made to order for today's conditions — with fuel costs high and fuel supplies low.

Mueller Climatrol's fuel-saving story is hard to beat. Your nearby Mueller Climatrol dealer can give you the full details. Ask him about the complete Mueller Climatrol line of furnaces and winter air-conditioners designed for gas, oil, or coal. Some are designed for convertibility, using gas or oil according to local restrictions. Summer air conditioning, too.

Your dealer can explain the unique burner and heat-exchanger features that protect your clients against waste-high fuel bills. He can tell you how each Mueller Climatrol furnace is scientifically engineered to serve with years of satisfying comfort and health protection. He can show you the value of giving your clients a product backed by Mueller's 91 years of specialized experience.

Years of national advertising and hundreds of thousands of satisfied users have established the name Mueller Climatrol. You know the value of that in support of an architect's recommendation, and in closing a profitable sale for a builder.

MARLITE GIVES THE BUILDER A BREAK

You'll please your customers—and make your work easier and more profitable—if you plan on Marlite plastic-finished wall and ceiling panels to create interiors of sparkling beauty and economical utility.

Your customers like Marlite for its gleaming beauty and the ease with which it can be kept sparkling clean and lustrous—its sealed surface is the reason!

And you'll like Marlite because these wall-size panels go up quickly and easily over new walls or old, provide an opportunity to increase your business and profits on new construction and modernization. And, because Marlite is adaptable to every type of building, domestic and commercial, where sanitary, colorful walls and ceilings are needed, you'll find Marlite opens up countless new business opportunities for you.

EASY TO INSTALL—you can do the entire job with regular carpenter's tools.

SUITABLE FOR COMMERCIAL OR DOMESTIC BUILDINGS—wherever beautiful, serviceable interiors are required.

EQUALLY EFFECTIVE IN NEW CONSTRUCTION OR MODERNIZATION.

ADAPTABLE TO MANY USES—Walls, ceilings, counters, bars, etc.

SOLD BY LEADING DEALERS EVERYWHERE.

PART OF A COMPLETE LINE OF WALL PRODUCTS.

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CONTROLLED

Radiant Warmth AND YEAR 'ROUND

HOT WATER from the same boiler

B & G Hydro-Flo Heating adds a proved selling feature to any home . . . because it is known the country over to offer more benefits per dollar!

Here's controlled radiant warmth . . . fuel economy . . . supreme comfort in any weather. This forced hot water system permits a choice of radiators, baseboard units, convectors, or completely concealed radiant panels. Whatever your selection, you'll have the finest in automatically controlled winter warmth.

The B & G Hydro-Flo System matches the heat supply to the weather—so exactly that from Fall to Spring indoor temperature is held constantly at the comfort level.

Besides, Hydro-Flo Heating provides a year 'round supply of hot water for kitchen, laundry and bath—no separately fired heater needed. And in this day of automatic clothes washers and dish washers, abundant low-cost hot water is imperative.

Everyone can enjoy the benefits of Hydro-Flo Heating because it comes within the cost limits of even modest houses. Write today for new booklet "Capture the Sun With B & G Hydro-Flo Heating."
Now Johns-Manville has 2 factories making Insulating Board Products!

This modern plant has been operating at top speed for the past nine years, in an effort to catch up with the demand for J-M Glaze-coat Building Board, Decorative Ceiling Panels, Bevel Planks, and other insulating board products. Despite capacity production, allotments to dealers have had to be on a limited basis.

Now a huge new plant has just been completed at Natchez, Miss. Like Jarratt, the Johns-Manville Natchez plant has the source of its principal raw materials right at its doorstep. It is located in the heart of Mississippi’s vast pine forests. The entire production of Natchez will be devoted to the J-M Insulating Board line.

Better products—greater production!

- From these 2 big plants will come an ever-increasing flow of Johns-Manville Insulating Board Products, including Building Board, Decorative Ceiling Panels, and Bevel Planks. These products have a smooth, finely textured, decorative surface called Glaze-coat, produced by J-M finishing process.
- Other items in the line include Weatherite Sheathing and J-M Insulating Lath, widely used to improve construction and cut costs.

All these insulating board products offer customers many extra advantages. They are structurally strong and tough yet light in weight... are made to exacting standards of uniform density throughout... and have clean sharp edges that help to make a neat job.

For further information about the various sizes and kinds of J-M Insulating Board products, write Johns-Manville, Box 290, New York 16, New York.

Johns-Manville
BUILDING MATERIALS
It's a Box of "Matches" that will "LIGHTEN" YOUR HARDWARE PROBLEM

Now YALE gives you a complete "Package of Protection" for front and back doors.

XP22 Front and Back Door Lock Set has XP74281 Handle Set for front door... plus 170 KA Tubular Deadlock for back door.

A. Exposed front door units are matched in design.
B. Back door deadlock has chromium plated inside trim to match modern kitchen fixtures.
C. Keys match for both locks.

Other Yale packaged combinations are:

XP2 which consists of XP291 tubular latch set and 170KA tubular deadlock with matching cylinder collar for front door, plus 170 KA tubular deadlock for back door.

XP1—same as above, without back door lock.

The combinations are also available in XH design.

Simplify your hardware selection—choose a YALE "Package of Protection". THE YALE & TOWNE MANUFACTURING COMPANY, Stamford, Conn., U. S. A.

Makers of the famous YALE lines of Locks, Door Closers, Hardware; Pumps; Heating Units; Hoists, Industrial Trucks, Scales.
THE
OWNER-BUILT
HOUSE TAKES AFTER
ITS OWNER

Some houses are merely living quarters. But the owner-built, owner-occupied house is an expression of individual taste... outstanding for its expert design and exacting construction.

House & Garden readers to a large extent are owner-builders. Their choice is the final choice in blueprints, materials... installation, equipment. Brick or stone, steam or radiant heat... their okay decides the purchase. Leading families with leading incomes, they influence the selections of others... set the building trends of the future. These people are important to you because theirs is the power of decision... the power to specify your product.

79% of House & Garden readers live in a house

78% own their home

House & Garden
...for the OWNER-BUILDER market
Truscon Projected Windows Serve a Wide Range of Architectural Planning Needs

Perfect complement to every type of traditional or modern architecture, Truscon Projected Windows combine efficiency and distinctive appearance with economy and long life. Advantages of projected window design include maximum flexibility of ventilation control . . . protection from inclement weather . . . ease of screening . . . and choice of different types to meet exact application requirements.

Shown on this page are typical examples of the many recent installations of Truscon Projected Windows in commercial, manufacturing and institutional structures. Write for free catalog containing full information about Truscon Steel Windows.
American Builders Recommend

KRESKY THE FORCED AIR INDUCTION OIL HEATING

BECAUSE KRESKY IS THE SOLUTION TO ANY HOME HEATING PROBLEM

No matter the size of the house...or whether located on top Pike's Peak or in the lowlands...with or without a basement...or if the preference is for forced warm air circulation, radiant heating, or air conditioning heating, there is a dependable, money saving automatic KRESKY Model designed to fill the need.

THE KRESKY BURNER MADE OIL HEAT LOW COST HEATING

This is the famous Kresky Patented forced air induction oil burner, the heart of every Kresky model. This is the burner which will give your customers, as it is giving to thousands of home owners, the type of heat they desire. Quick heat, carefree heat...and soot-free heat even with poor draft conditions. Your Kresky dealer will be glad to demonstrate the superiority of the KRESKY burner.

YOU CAN INSTALL KRESKY UNITS WITH LESS COST

Every KRESKY Unit is engineered to specifications...factory tested and inspected. This means even if you're building with pre-cut materials, on arrival the KRESKY Units fit into the framing perfectly. Heating contractors know this, and also that less time is required to install a KRESKY.

KRESKY OFFERS YOU ON-THE-SPOT SERVICE, TOO

Through a nationwide network of distributors and dealers, authoritative KRESKY advice and service is as near to you as your telephone. If you do not know your KRESKY Dealer, fill out this form and mail today.

Kresky Superiority Can Be Demonstrated

KRESKY MFG. CO., INC.

601 SECOND STREET
PETALUMA, CALIF.
Better Homes & Gardens is selling these Building Products October, November and December.

All the brands listed on the next two pages are being sold through Better Homes & Gardens during the current quarter... October, November and December.
### Building Products Being Sold This Current Quarter in Better Homes & Gardens

#### AIR CONDITIONING & HEATING
- Aeropel Fans
- Airtemp
- American Radiator
- Arvin Portable
- Bell & Gossett
- Bryant
- Burnham Base-Ray
- Burnham Portable
- Continental Radiant
- Climatrol
- Co-Z-Air Portable
- Crane
- Dearborn Portable
- Dale Valves
- Dust-Stop Filters
- Dunham Baseboard
- Electrasteam Portable
- Flexscreen Fireplace Screen
- Gardner Radiator Enclosures
- Heatilator Fireplace Forms
- Honeywell Controls
- Inst. Boiler & Radiator
- Janitrol
- Ko-Z-Aire
- National Radiator
- Nu-Way
- Oil-O-Matic
- Palomaire Portable
- Petro
- Price Fireplace Forms
- Rheem Console
- Roberthaw-Fulton Controls
- Trane Convecto-Radiators
- Van-Packer Chimneys
- Warm Morning Heaters
- Waterbury

#### APPLIANCES & EQUIPMENT
- Admiral Refrigerator
- American Gas Ranges
- Arvin Iron
- Arvin Grill
- Apex Washer
- Automatic Washer
- Bendix Washer
- Betty Cracker Iron
- Big Ben Time
- Bissell Sweeper
- Boss Range
- Bruce Doozit
- Cadillic Vacuum
- Coloric Range
- Cameron Dishwasher
- Coolerator Home Freezer
- Coolerator Refrigerator
- Crosley Range
- Deepfreeze Homefreezer
- Dexter Washer
- Dimora Floor Polisher
- Easy Washer
- Electrasteam Range
- Everhot Appliances
- Filter Queen Vacuum
- Florence Range
- Frigidaire Dishwasher
- Frigidaire Range
- Frigidaire Refrigerator
- General Electric Dishwasher
- General Electric Disposall
- General Electric Fluorescent Lamps
- General Electric Homefreezer

#### APPLIANCES & EQUIPMENT—CONT'D
- General Electric Kitchen
- General Electric Lamps
- General Electric Range
- General Electric Refrigerator
- General Floor Polisher
- Gibson Range
- Gibson Refrigerator
- Grand Range
- Handyjet Appliances
- Hamilton Clothes Dryer
- Hardwick Range
- Harper-Wyman Gas Burners
- Hoover Junior Vacuum
- Hoover Vacuum
- Horton Ironer
- Hotpoint Disposall
- In-Sink-Erator Disposal Unit
- Inoxrite Ironer
- Kelton Time
- KitchenAid Coffee Grinder
- KitchenAid Mixer
- Knapp-Monarch Liquidizer
- L & H Range
- Lewyt Vacuum
- Magic Chef Range
- Maytag Dutch Oven Range
- Maytag Washer
- Monarch Range
- Nesco Rooster
- Norge Range
- Norge Refrigerator
- Philco Homefreezer
- Philco Refrigerator
- Prestiline Range
- Proctor Toaster
- Schaefer Homefreezer
- Servel Refrigerator
- Seth Thomas Time
- Simplex Ironer
- Speed Queen Washer
- Standard Gas Ranges
- Sunbeam Mixer
- Tappan Range
- Thor Automatic Washer
- Thor Gladiator
- Toastmaster Toaster
- Tyler HarderFreez
- Vois Washer
- Wagner Sweeper
- Westclox Time

#### FLOOR COVERINGS
- Armstrong Linoleum
- Flexachrome Plastic
- Husco Block
- KenTile Tile
- National Oak
- Paloma Linoleum
- Sloan Linoleum
- Tile-Tex Asphalt

#### HARDWARE—CONT'D
- Graber Traverse Rods
- Invizable Sash Balance
- Keystone Wire Mesh
- Kinsin Metal Trim
- Kirch Blind Hardware
- Knafe & Vogt Closet K-Veniences
- LOP Glass
- NuTone Chimes
- Page Fence
- Plastic Wood
- Pittsburgh Glass
- Pyrene Fire Extinguisher
- Smooth-On Cement
- Stanley Trim
- Taylor Thermometers
- Three-in-One Oil
- Yale Trim

#### INSULATION
- Armstrong Temlok
- Baldwin-Hill
- Balsam-Wool
- Carey
- Celotex
- Chamberlin
- Eagle-Picher
- Fiberglass
- Flintkote
- Gold Bond
- Homasote
- Inst-Cotton
- Johns-Manville
- Kimsul
- Marlite
- Nu-Way
- Zonolite

#### METALS
- Keystone Mesh
- U. S. Steel

#### MILLWORK & LUMBER
- Alcoa Windows
- Alcoa Windows
- Crawford Doors
- Curtis Preshine
- Eagle-Picher Windows
- Masonite Preswood
- Modernfold Doors
- National Oak
- Ponderosa Pine
- Thermoseal Windows
- Weldwood Plywood
- West Coast Woods
- Western Pine

#### PAINT & RELATED PRODUCTS
- Albron
- American Turpentine
- Cabot Stains
- Cuprinol
- Devoe
- Flatlux
- Giddien
- Imperial Wallpaper
- Laver’s Luminous
- Luminall
- Masonite
- Minwax
- Muru-Tex
- Pentachlorophenol

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**BETTER HOMES & GARDENS**
THE reason that Better Homes & Gardens is such a top-notch spot for these ads is just this: BH&G editorial content is 100% service on better living. 100% service appeals only to the husbands and wives who run better homes. That means husbands and wives who not only have the interest but the income for everything that makes for better living. Better Homes & Gardens’ 3,000,000 high-income families are the heart of the market for everything that goes into homes. They are your best customers. That’s why it pays you to have the brands they’ve been pre-sold on in Better Homes & Gardens.
Builders across the country are using CHASE® COPPER TUBE for soil, waste and vent lines!

HERE'S WHY...

FAST DELIVERY!
No need to wait for material for soil, waste and vent lines. Just ask for Chase Copper Tube—you'll get it right away, in all the sizes you need.

FAST INSTALLATION!
Fewer connections—tube comes in 20-foot lengths. Joints quickly made with solder-type fittings. You can pre-assemble into sturdy units that stand rough handling.

SUPERIOR MATERIAL!
Smooth tube surface does not hamper flow of wastes. Pockets at joints eliminated by solder-type fittings. Excellent resistance to corrosive action.

Write for literature on Chase Copper Tube for drainage lines. Address Dept. AB128.
USE
STANLEY BLACK
ORNAMENTAL HARDWARE

For added charm in any setting

Stanley Black Ornamental Hardware gives added charm and distinction to Colonial, Early American, Modern and Spanish architecture and decoration.

Popularly associated with natural wood finishes like knotty pine and pecky cypress, Black Hardware is just as attractive with Early American painted surfaces—white, ivory, red and blue. It is ideal not only for summer camps, lodges and guest houses, but also for single and multiple family dwellings, apartments and private executive offices.

Since there's no need for the precise, time-taking mortising required for conventional hardware, Stanley Black Ornamental Hardware is far easier and quicker to install. This means a real economy on big jobs—a worthwhile saving on small ones.

Your customers will appreciate the extra beauty Stanley Black Ornamental Hardware gives to the homes you build. Recommend it! A descriptive folder illustrating the whole line gives full details.

The Stanley Works, New Britain, Conn.

Get a supply of these idea books Form No. F9 showing the possibilities of Stanley Black Ornamental Hardware all over the house...all types of interiors.

STANLEY
HARDWARE • HAND TOOLS • ELECTRIC TOOLS • STEEL STRAPPING
For first-class beauty
that lasts and lasts
It pays to build with
Milcor
Steel Casings

Architects and buyers thank you for a better job that actually costs less

That's right. Milcor Casings made from steel produce a beautiful, finished job that actually costs less than a job done with less durable materials. The reason is simple: Erection is easy. You don't have to sand before painting. You need fewer coats of paint. Milcor Casings cannot warp, shrink, or crack. Adjustments do not have to be made after the job is once done.

Milcor Casings Give You These Advantages, Too!

1. Simple, speedy erection: All styles are straight and uniform. You get perfect mitres at corners.
2. Steel is permanent: In addition to the advantages mentioned above you get resistance to fire and impact.
3. Good plastering is easy: The expanded metal wing feature permits the plaster to key through and form a strong bond with the lath beneath — a bond that protects against corner cracks caused by strain due to settling.
4. Greater interior beauty: Milcor Casings expose only a narrow face, flush with the plaster to give a feeling of greater roominess. The flush-tight junction of wall and casing insures a sanitary finish easy to clean, with no cracks to become clogged with dirt.

Recommend Milcor for Lasting Satisfaction

Milcor Casings are a part of a complete line of steel building products. Look for full information on the complete Milcor line in your Sweet's File for Builders.

Write for literature on Milcor Casings — and on other products in the Milcor steel building products line, today.
SEE FOR YOURSELF this new low-cost moulder that’s the sensation of the industry — the XL MOLDMATCHER! Costs less to buy, costs less to operate, pays for itself faster! Turns out any kind of fine moulding or wood specialties up to 2” x 4”, including drapery rods, dowels, venetian blind accessories, etc. It’s a real money-maker!

There’s a MOLDMATCHER around the corner from anywhere! Ask your neighbor!

Write today for full details and name of nearest dealer!
Promotes sales, builds profits

CALIFORNIA. “We have had complete enjoyment and satisfaction from the Servel unit you installed in my new auto sales agency,” says W. R. Shadoff of Pomona, California. “The air is clean and fresh at all times.”

Servel All-Year Air Conditioning

wins praise from store owners the country over

The four stores pictured here have widely varied sales problems and are located in different parts of the country. But the owners are unanimous in their praise of the way Servel All-Year Air Conditioning has helped their business. And their statements are typical of hundreds of letters sent in by other business and professional men, testifying to the business-building benefits of this amazing year-round air conditioning system.

With a “flick of the finger,” the Servel unit supplies cool, dehumidified air in summer . . . and warm, properly humidified air in winter. In between seasons, the same single unit provides independent air circulation at prevailing temperatures. Year round, it filters dust, dirt and irritating pollen from the air. Every Servel unit is covered by a 5-year factory warranty.

In a Servel-conditioned store, stocks remain fresh and new-looking . . . customers are more comfortable . . . personnel more efficient and energetic. Many merchants feel that the Servel All-Year Air Conditioning Unit will “pay for itself” in a very short time through these benefits.

Do you have clients or prospects who would benefit from the year-round comfort and business-building advantages of Servel All-Year Air Conditioning? Your local gas company will be glad to give you detailed information on specifications, installation, etc. Or, write direct to Servel, Inc., 1812 Morton Avenue, Evansville 20, Indiana.
say business men

LOUISIANA. “We have used Servel All-Year Air Conditioning for more than six years and consider the original cost repaid many times over,” writes David C. Silverstein, of Silverstein’s Women’s Apparel, Monroe, La.

OKLAHOMA. “The Servel installation has contributed much toward the efficiency of our staff,” reports Clarence R. Green, Manager of the Alfalfa Electric Cooperative, Inc., of Cherokee, Okla.

TEXAS. “I am well pleased with my Servel unit,” states J.W. Hetherington, jeweler, of Texas City, Texas. “People prefer to shop where the temperature is normal and the air pure and clean.”

Servel
All-Year AIR CONDITIONER
Distinction, harmony...variety...achieved with

**ASPHALT SHINGLES** and Limestone

In their Bedford Heights development, Indiana Limestone Company, Inc., under the guidance of W. W. Cordes, Architect, and F. W. Pressler, Associate, of Cincinnati, have combined the dignity and permanence of Limestone with the warmth, versatility and long life of Asphalt Shingles to achieve a community of individualized homes of unusual distinction. Through design and color the charm captured in the typical home above has been multiplied by all of Bedford Heights.

*Throughout the United States, Asphalt Shingles are contributing their many unique advantages to the success of scores of outstanding modern community and industrial housing developments.*

**CONSTRUCTION'S BIGGEST DOLLAR'S WORTH**

---

**Its trees, hills, park and houses are for employees**

Bedford Heights is proving itself both a practical product demonstration project and a conspicuously successful employee housing development for the Indiana Limestone Company. In the capable hands of J. Harry Dickman, veteran operator builder of Cincinnati, and with the creative imaginations of W. W. Cordes, Architect, and F. W. Pressler, Associate, fitting design to material and setting, an industrial housing community of unusual distinction is nearing completion. With contemporary design calling for long horizontal lines, Indiana limestone strips are being cut in random lengths up to 4 feet. Asphalt Shingles have been used throughout in black, brown and gray color groupings.
"Coleman Floor Furnaces CUT COSTS, UPHELD VALUE
2 WAYS" ... For Richmond, Va., Builder

Buyers feel Coleman equipment proves high quality of Duke Company's houses.

Costview Addition No. 3, developed and built by Duke Construction Co.—heated throughout with Coleman Floor Furnaces to hold down costs, yet give top-quality automatic heating of the kind buyers want.

Ludwig Bloch, aggressive vice president of Duke Construction Co., Richmond, Va., one of South's small home building leaders.

This is how Coleman Floor Furnace fits into floor. Takes no room space. No basement excavation needed. No costly duct work. No added plumbing expense.

Automatic Gas, Oil, LP-Gas FLOOR FURNACES

See how Coleman may help you, too, in designing to beat "price resistance"

Duke Construction Company is only one of the many leading building firms now switching to Coleman Floor Furnaces. Scores of these leaders are learning how Coleman helps cut costs: eliminates costly duct work, saves basement excavation costs, cuts skilled-labor expense for installers and plumbers.

And, like the Duke company, they are also learning two other Coleman advantages: First, how Coleman engineering really gives home-owners the "warm-floor" heating and the clean automatic heat they want. Second, how Coleman reputation for quality and service helps sell houses—by proving to prospects that the builder is using the best heating equipment the money will buy.

You, too, want to see proof of these advantages that are switching so many builders to Coleman. Use the coupon below and let us tell you how we can help meet your problem of holding down building cost and selling price. Tell us what kind of fuel you want—gas, oil, or LP-gas—we make models for all three. Do it—today!

THE COLEMAN COMPANY, INC.,
Wichita 1, Kansas; Philadelphia 8 (Terminal Commerce Bldg.), Pa.; Los Angeles 54, Calif.


Please send me free information about your special cooperation for builders and contractors, and Floor Furnaces Catalog for Builders. I am especially interested in:

Gas, Oil, LP-Gas

Name ________________________________

Address ________________________________

Town __________________ State ____________
HANDEE WITH CARE

It's not easy to handle large building boards in tight quarters without occasional breakage. Armstrong's new Temlok® Insulation Board can be damaged, too. No building material is indestructible. But carpenters like to work with the new Temlok because they don't have to "handle with care."

Temlok can take a lot of abuse without damage because it has unusual strength. The millions of wood fibers that make up Armstrong's Temlok are extra long. Interlaced and pressed together, they provide uniform strength in all directions. That keeps Temlok from splitting, warping, chipping, or splintering. Such strength doesn't mean stiffness or brittleness. The large units of Temlok Insulation Board are remarkably flexible and light in weight—easy to handle on the job.

Temlok Insulation Board comes in a variety of large sizes, 4' wide and from 7' to 12' in length. It has a light, clean finish in either the natural or painted form. Its many uses make it easy to sell either as interior finish material or as a general utility board—in commercial or residential construction.

Temlok is available also in the form of Sheathing (asphalt-impregnated, with shiplapped long edges), Panels and Planks (factory-painted interior finish with special Lok-Bevel joint), Wallboard (3/8" painted insulation board), and Lath (with scoop-beveled joints). See samples and get full details from your Armstrong wholesaler or write direct to Armstrong Cork Company, Building Materials Division, 1612 Ross Street, Lancaster, Pennsylvania.

Armstrong's Temlok
'JEEP'-PROPELLED POWER-HOUSE

... The 4-Wheel-Drive Universal 'Jeep' Gets to the Job and Furnishes Power to Operate Industrial Equipment

You can save the cost of an auxiliary engine and the time lost in loading or towing it by putting a Universal 'Jeep' on the job. It is an all-in-one industrial power unit for a wide variety of uses.

With its three power take-off points and famous 'Jeep' Engine, the Universal 'Jeep' can be used to operate electric power generators from 3.75 KVA to 12.5 KVA, as shown above—air compressors from 17 CFM to 105 CFM capacity for pneumatic tools—electric arc welders from 200 amperes to 300 amperes—capstan and front and rear mounted horizontal drum type winches—and other shaft and belt-driven equipment.

The Universal 'Jeep' has the power to deliver power and tools to the job, on or off the road. Its 4-wheel-drive traction takes it through mud, snow or sand—up steep grades—straight cross-country. In 2-wheel drive, the 'Jeep' gives you time-saving highway speeds.

See your Willys-Overland dealer and ask him about auxiliary equipment that can be mounted on the 'Jeep' and operated by the 'Jeep' Engine.

THE UNIVERSAL 'Jeep'

WILLYS-OVERLAND MOTORS
TOLEDO, OHIO
MAKERS OF AMERICA'S MOST USEFUL VEHICLES
It's the Little Difference that Makes the BIG Difference in Streamliner Doors!

Yes, there's only a little difference between an almost fit and an exact Tru-sized fit. But that difference eliminates sawing and planing... saves up to 55 minutes on a single installation. Tru-sized Streamliner Doors are precision machined to exact book opening sizes. A jamb that is plumb and square gets a perfect fit—with valuable savings of time and money!

But there's more! Every Streamliner Door is resin sealed at the factory! Protects the door from dirt and moisture! Gives an excellent base coat for fine finishing, painting or waxing! NO priming on the job!

And, more! The Streamliner is lighter and stronger than old-type slab doors because it has a special horizontal girder hollow core construction... and, Wheeler Osgood uses only specially-built plywood panels made by a secret process in their own plant as a guard against warping or twisting!

Remember—Streamliner Doors are made only by Wheeler Osgood, manufacturers of fine doors, plywood and allied millwork products for nearly 60 years!

Write for facts about Streamliner Doors.

THE Wheeler Osgood COMPANY
Plants and General Offices: Tacoma, Washington
1216 St. Paul Ave., • Broadway 9321 • Teletype TA 77
NEW YORK OFFICE 1326 Empire State Building, New York 1 4-6520
CHICAGO OFFICE 134 South LaSalle Street, Chicago 3, Illinois State 2-5335-6-7
SAN FRANCISCO OFFICE 3045 19th Street, San Francisco, California Valencia 4-2241
LOS ANGELES OFFICE 5100 So. Boyle Ave., Los Angeles 11, California Logan 5-6245
Seeing and Selling a General Electric Equipped Home

1. This beautiful General Electric kitchen-laundry inspires any buyer. In a nationwide survey, 51 per cent of the men and 53 per cent of the women said they prefer General Electric appliances. Each appliance brings you extra profit.

2. The G-E way of living in action. This Electric Sink eliminates messy clean-up jobs. The homemaker saves weeks of work each year, gets hours of extra leisure each day. Operating cost: mere pennies a day!

3. What woman could resist this General Electric Laundry Center? In this bright, sunny corner, the housewife saves time, work, money. Quick-clean washing, fluff drying, effortless ironing, efficient sewing banish washday drudgery.

4. Can they afford the G-E way of living? Yes, definitely, in a “packaged mortgage.” It costs only up to $1,300 extra each month, much less than it would cost to buy any one of these appliances on the installment plan!
for a home that features...

The G-E Way of Living!

Today's home buyers seek houses that give them easier living... electrically! Let General Electric Home Bureau help you plan G-E equipped homes for extra profit opportunities and prestige—at first cost of only $4.80* extra a month to the buyer! Your cost: zero!

What is the "G-E way of living"?

It means living in a house where the burdens of homemaking are shifted from people to modern electric appliances!

The G-E way of living is being enjoyed by thousands and thousands of families today in General Electric equipped homes. And today's home "lookers" are learning to insist on the comfort, convenience, and economy of the G-E way of living...in bungalows and in mansions.

In project after project—from ten homes to a thousand—it has been proved that—

G-E equipped homes bring the builder greater prestige—for a G-E equipped home combines beauty, efficiency, and economy—the best combination for sound sales appeal.

Talking cost and profit

The G-E way of living is easily within reach of the average prospect. A complete G-E equipped home costs him only up to $4.80 more a month, under the "packaged mortgage" plan.

And the buyer saves on operation and maintenance of efficient General Electric appliances...often, enough to cover the slight increase in the monthly payment!

Each appliance brings you extra profit—so your G-E equipped home is a more profitable home to sell.

So you see, the G-E way of living is practical for you—and for your prospect!

How can Home Bureau help you make profit out of the G-E way of living? Read the story below.

Cletus H. J. Jollie, California builder, features the G-E way of living in 76 new homes—sells 20 before completion of the project. Offered under the "packaged mortgage" plan, these General Electric equipped homes cost no more per month than similarly priced homes.

Let us tell you the whole story. And let us show you how G-E Home Bureau can help you plan homes for better living...and help you sell them faster!

Just drop a post card to the Home Bureau, General Electric Company, Appliance and Merchandise Department, Bridgeport 2, Connecticut.

*When equipment is included in a long-term mortgage.
Prospect for Public Housing

A downward trend in housing starts has been apparent since last May but has not caused much concern because the number of starts from June through July was substantially more than last year. In both August and September, however, the number of starts slid under last year’s totals. Starts for August were 83,000 as compared with 86,300 last year and for September 81,000 compared with 93,800. The most important questions the downturn brings are “Is it a buyers’ strike?” and “Is the postwar housing shortage over?”

The shortage may be over or approaching an end in some communities, but nationwide there is still a backlog. A Bureau of Census survey last year showed that 3 million families, representing approximately one out of every 12 American families, are living with relatives. Three out of every four are married couples mostly without children.

Youth is a predominant characteristic of the typical “subfamily” as the Census classifies them. The median age of the husband is 29 years and that of the wife about 26 years. The majority of those couples haven’t any children as yet, but 29 per cent have one child. As a rule the children in these families are very young, usually under six years old.

Normally a number of families live doubled-up as a matter of choice rather than economic necessity, but it is believed that there are at least a million or two who would undoubtedly do so if they could afford to pay. This backlog plus the fact that marriages are continuing at a rate higher than prewar is assurance that the housing shortage is not over.

There is undoubtedly a shortage of rental units at frozen rentals. They become bigger bargains as other cost of living items continue to rise and national income stays high.

If it could be anticipated that rent controls would be lifted entirely, in the near future it could be expected that rents would increase to an extent where there would be little differential between payments on a new house and rent, and the market for new homes would expand. This would assure builders of a continuous market and capacity use of materials and labor.

Injection of rent control into the economy during and after the war and the assumption that it will continue indefinitely under the new administration makes an entirely different set of circumstances. Control of one part of the economy requires controls in another part and eventually the entire economy is controlled. There is not much doubt that the Taft-Ellender-Wagner Bill will be introduced again early in 1949. Its provisions for slum clearance and public housing might be stepped up.

The objective of the bill introduced last year and passed by the Senate, but not by the House, is comparatively modest with respect to public housing. It aims to build 50,000 public dwelling units a year for 10 years. The total of 500,000 units would be about six month’s production at the current rate of private construction. Aimed at relieving bad housing conditions in cities it is obviously unfair to improve large cities and do nothing for small towns. Big city slums, covering many square miles, are impressive but small towns and even farms also have slums probably as large in proportion to those in big cities. Taxpayers in these small towns will share any federal deficit arising from the construction and maintenance of public housing units, but will not receive any of the benefits.

Public housing rules require rigid scrutiny of the income of families before they are admitted. The family admitted becomes institutionalized, set apart from the rest of the community, branded as a failure in its attempt to maintain an adequate income.

In accordance with the bill, in projects started after July 1, 1948, the Public Housing Administration shall “not discriminate against any families because their incomes are derived from public assistance.” Thus families on relief in big cities can be expected to be occupying brand new $7,000 apartment (not including cost of land.)
Stainless-Steel FOR ROOF DRAINAGE SYSTEMS

CONDUCTOR PIPE
- GUTTER
- DOWNSPOUT
- ACCESSORIES
- FLASHING
- RIDGE ROLL

STAINLESS STEEL GUTTER, LEADER AND ACCESSORIES

STAINLESS STEEL RIDGE ROLLS

Fig. 1 shows low ridge-flashing without a projection roll. Flashing is nailed to ridge boards with stainless steel nails. Flashing 1" extension is bent down to roof to shed water and cover nail heads.

Fig. 2 requires specially shaped ridge-piece for flashing roll. Roll is secured by screws in side apron, if more than 4" wide, should be stiffened against wind by 3/16" x 1" stainless steel clamps, or straps, about 30" apart.

Fig. 3 does not require a special ridge-piece. An excellent way of securing a large ridge roll is by clamps 3/16" x 1" stainless steel clamps, or straps, about 30" apart.

Fig. 4 shows ridge roll used without ridge board. Roll is fastened with stainless steel screws set through washers—with oversize holes—into holes drilled in the shingles.

Especially rolled for drainage systems, Sharon Stainless Type 301 fulfills all the requirements for an attractive, everlasting system. The dense, hard surface of Sharon Stainless resists abrasion. It is a solid homogenous metal that is virtually immune to atmospheric corrosion, galvanic action, and patina type corrosion.

Sharon Stainless will not chip, peel, or bleed off to stain surrounding areas. And, perhaps more important, it has a yield strength almost double that of any other material used in home drainage systems today.

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Sharon, Pennsylvania

PRODUCTS OF SHARON STEEL CORPORATION AND SUBSIDIARIES: THE NILES ROLLING MILL COMPANY, NILES, OHIO; DETROIT TUBE AND STEEL COMPANY, DETROIT, MICHIGAN; BRAINEEAL STEEL COMPANY, WARREN, OHIO; SHARON STEEL PRODUCTS COMPANY, DETROIT, MICHIGAN, AND FARRELL, PENNSYLVANIA; CARPENTER-TOWN COAL & COKE CO., M. PLEASANT, PENNA.; FAIRMONT COKE WORKS, FAIRMONT, W. VA.; MORGANTOWN COKE WORKS, MORGANTOWN, W. VA.; HOT AND COLD ROLLED STAINLESS STEEL—ALLOY STRIP STEEL—HIGH CARBON STRIP STEEL—HEDWICH SPECIAL COATED PRODUCTS—COOPERAGE HOOPS—DETROIT SEAMLESS STEEL TUBING—SEAMLESS STAINLESS STEEL TUBING IN ALLOY AND CARBON GRADES FOR MECHANICAL, PRESSURE AND AIRCRAFT APPLICATIONS—ELECTRICAL STEEL SHEETS—MILD ROLLED ANNEALED AND DESCALED SHEETS—GALVANIZED SHEETS—BRANDING GRADE STEEL—WELDED TUBING—GALVANIZED AND FABRICATED STEEL STRIPS—STEEL STRAPPING, TOOLS AND ACCESSORIES.

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Simplify Installation of Weldwood Paneling with...

**NEW WELDWOOD MOLDINGS**

Sensational New Weldwood Moldings eliminate practically all face-nailing, counter-sinking and puttying. Matching wood veneer faces blend perfectly with Weldwood-Panelled rooms.

**THE minute you see these new moldings you'll recognize their value. For here, at long last, are the ideal moldings for matching Weldwood paneling.**

In addition to perfect match and perfect fit, these new moldings eliminate the need for almost all face-nailing, counter-sinking and puttying. All that's necessary is to nail the moldings themselves to the studding. Panels are held firmly and permanently, yet there's ample allowance for contraction and expansion.

Weldwood Moldings are made of extruded aluminum in 8' lengths to fit ¾" panels. Wood facings currently available are: oak, Korina, mahogany, walnut, birch, Primavera and maple.

There's a style for every requirement: outside corner, inside corner, cap strip and divider strip.

Look into this important new development. See for yourself how Weldwood Moldings cut cost and time required for the installation of Weldwood paneling. You'll get a better finished job at less cost on residential, commercial and fixture work when you rely on the speed, ease and economy of Weldwood Moldings.

We'll be glad to send you samples and literature. Just write: United States Plywood Corporation, New York 18, N. Y.

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Weldwood Plywood and Mengel Flush Doors are products of

**UNITED STATES PLYWOOD CORPORATION**
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**Distribution services in:**

- Weldwood® Hardwood Plywood
- Douglas Fir Weldwood
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- Douglas Fir Doors
- Overhead Garage Doors
- Molded Plywood
- Aluminum* (metal-faced plywood)
- Tekwood® (paper-faced plywood)
- Flexmet®
- Weldwood Glue* and other adhesives
- Weldtex® (oriented plywood)
- Decorative Micarta®
- Flexwood®
- Flexglas®
- Fritize®


Weldwood Plywood is made in both interior and exterior types, the former bonded with extended area resins and other approved bonding agents; the latter with phenol-formaldehyde synthetic resins.
RAYMOND FOLEY—"We (in government) do not hold that it is the duty of government to provide good housing for every family. Rather, we believe it is the duty of us all together to provide a practicable opportunity for good housing to all American families." The difference is fine, but significantly important. Apparently, though, not all of the law makers in Washington believe it. If they did there would be less theory and more realism in proposed housing legislation.

LOUIS D. BRANDEIS—According to Collier's issue of August 28, the noted jurist said in 1905, "The employees should strive to make the earnings of any business as large as possible. There can be no greater mistake for the workingman than to restrict the output of the individual. . . . Any restriction upon the output of the individual reduces the fund of profits available for distribution, besides demoralizing the man who is so restricted. Nor does restriction of the output make more work for others."

COLLIER'S COMMENT—"It was said in February, 1905, by the great thinker, great jurist, and one of the leaders of many labor leaders and "radicals" now. Wonder how these folks ever lost sight of that particular Brandeis Boston speech." American Builder also wonders.

MAKE-WORK—A Joliet, Ill., contractor testified in November in a Chicago court that make-work procedures of Glaziers union No. 27, AFL Brotherhood of Painters and Paperhangers, more than doubled glazing costs of homes. He testified that union rules forbid members of the union to work with factory glazed sash or to install windows where factory glazed sash had been used in the past unless the union glaziers first re-glazed the sash on the job, in many cases using entirely new materials in the re-glazing.

CASE IN POINT—The contractor testified that he took a subcontract to install windows in some houses in a private project. The glaziers, discovering that factory glazed sash had been used in some of the other houses, refused to work until the factory glazed sash in the other houses were removed and re-glazed with glass which the builder purchased from the subcontractor.

JOLIET GLAZIERS—They probably find it difficult or impossible to buy the homes on which they work. If they do, the fault is principally theirs, and a full reading of the Brandeis speech of 1905 might be helpful to them.

PRELIMINARY INJUNCTION—Judge Walter J. LaBuy in federal District Court in Chicago November 10 issued a preliminary injunction against the AFL Chicago Glaziers union.

NORMAN MASON—The energetic NRLDA leader recently found these statements by Livingston W. Houston, president of Rensselaer Polytechnic Institute: "We should have soundly financed government-aided housing for the lowest income group. The present situation demands 1,500,000 new homes a year for the next ten years . . . America's homes have a median age of more than thirty years . . . Existing units are wearing out faster than new ones are being built."

OH, YES?—Comments Mr. Mason, "would Houston tell America what is sound financing of public housing by a government with an astronomical national debt? Does he think a house is no longer livable after 30 years of use? Has he had the opportunity to read government statistics which show our housing to be in much better condition than it was prewar? Certainly, America has a right to expect her educators to be well informed and factual."
Nature at its best—an attractive setting, showing the natural beauty of 
Century" Siding and "Century" Black Roofing Shingles.

K&M "Century" Asbestos-Cement Siding

"Century" Asbestos-Cement Siding not only assures lasting protec-
tion to your buildings, but offers a trim, attractive appearance ... 
an exterior that will strengthen with age.

"Century" Asbestos-Cement Siding has a deep-grained, weathered 
cypress finish that effectively duplicates wood ... yet resists fire, 
weather, rot, termites, rodents. And it never needs protective painting.

"Century" Siding comes in large unit sizes ... 12" x 24" ... which 
makes for speedy, accurate application. Any good carpenter can 
install them easily and quickly. Write for further details ... we’ll 
answer promptly.

KEASBEY & MATTISON
COMPANY • AMBLER • PENNSYLVANIA
AUTOMATIC HEATING

WINS PROMPT APPROVAL, SPEEDS SALES!

—say leading builders like Charles E. Metz & Son Company
(YARDLEY, PENN.)

"The name Chrysler and its reputation for quality eliminates any question in the buyer's mind regarding heating," writes Charles E. Metz, Jr. of the Yardley, Penn., firm, Charles E. Metz & Son Company. "Chrysler Airtemp heating systems—praised by every customer who owns one—have won a splendid reputation. This means they are accorded prompt approval by new buyers, which helps to speed the sale."

To insure customer satisfaction—before and after the sale—always specify Chrysler Airtemp heating. These precision-built products bear the stamp of Airtemp engineering excellence; they win good will for you year after year as they deliver perfect indoor comfort at low cost with minimum maintenance and service. Yes, it's always a wise rule to specify Chrysler Airtemp.

MORE COMFORT FROM ANY TYPE OF FUEL . . . AUTOMATICALLY!


There is a Chrysler Airtemp dealer nearby to serve you. Depend on him for prompt delivery, expert installation . . . and for the speedy, efficient maintenance that keep buyers happy.

AIRTEMP DIVISION OF CHRYSLER CORPORATION
DAYTON 1, OHIO

In Canada: Therm-O-Rite Products, Ltd., Toronto
As you know, home buyers won't take just anything; they don't hesitate to tell you what they want. Today the trend is to Electric Ranges. Another million American families switched to Electric Cooking last year. Conservative estimates indicate that this year over a million more Electric Ranges will be installed. This is a definite trend that cannot be ignored. Progressive builders recognize this trend. Electricity is a "must" in any house, and it's simple and economical to include wiring for an Electric Range leading to a range outlet in the kitchen at the time of construction. This is assurance that the houses you build are not only modern today, but will stay modern for years to come!

Follow the trend...

YOUR HOUSES

WIRE FOR ELECTRIC RANGES

Another 1,000,000 American families switched to Electric Cooking last year
EDITORS' ROUND TABLE

A gate crasher in the form of one of our advertising salesmen projected himself into the editors' November meeting. Salesmen are welcome at these meetings if they keep quiet. But, what good salesman can keep quiet for very long? And this fellow is a good salesman, a very good one. He had an idea.

The idea was that the Round Table start each month with a brief preview of the contents of the next issue. Whether he thought that would make good sales material in his hands or whether he thought it would be interesting to the readers never was made quite clear. The only way to get rid of him, however, was to acquiesce.

Once upon a time when the editors were asked about the contents of a forthcoming issue they silenced the questioner with the simple statement that it would be a "well-rounded issue." That is all out. Now the salesmen are given an outline of the issues six to eight months in advance. They like it. Maybe the gate crashing salesman likes it so well he thinks the readers should be let in on at least a part of the secret. It was not possible to find out, however, since few salesmen ever will tell editors that they are doing anything well. It was ever thus in the relations of publication to sales staffs in any business.

Anyway, here is the January issue in brief. A symposium of opinions regarding the outlook for home building in 1949 by a selected list of builders, manufacturers, retail dealers, financial men and others. As recognized authorities, their views should be an accurate prediction.

Victor Sherman reappears in the pages of American Builder after an absence of several years with an article comparing cost, utility and construction of the basement house with the basementless house.

Other features include unique financing, sales and construction methods of a large low-cost housing project; a 3-room detached tourist apartment project; a very modern retail lumber yard; a 608 apartment project of two-story, four-unit buildings; a motel where all service is rendered from the in-

(Continued to page 56)
If you want
LONG LIFE
get

BERMICO
SEWER PIPE

YOU GET DURABILITY. BERMICO Sewer Pipe stays tight, leak-proof, root-proof. It's corrosion-resistant, built for a life-time of trouble-free service.

YOU GET RUGGEDNESS. BERMICO's strong walls resist breakage, on the truck and on the job. Uniform machining of wall thickness, joints, and fittings, length and bore—withstands sudden temperature changes and soil settlements.

YOU GET FASTER LAYING. One-two-three quick hammer blows—that's all it takes to make a tight joint with BERMICO Sewer Pipe. No joining compound necessary.

FOR HOUSE-TO-SEWER OR SEPTIC TANK Specify BERMICO. Made in a full range of sizes, connections, bends, reducers, adaptors, etc. Nationally advertised. Use BERMICO Perforated pipe for drainage purposes. For further information write Brown Company, Dept. A-1, 500 Fifth Ave., New York, N.Y.

EASY TO INSTALL  EASY TO JOIN  EASY TO HANDLE

8-foot lengths reduce number of joints to be made. Root-proof, machine tapered joints require no packing. 3/4 lighter than other types of sewer pipe.

BERMICO meets with an ample margin all requirements of Commercial Standards CS 116-44 as issued by National Bureau of Standards, U.S. Department of Commerce.

BERMICO—A PRODUCT OF BROWN COMPANY

American Builder, December 1948,
EDITORS' ROUND TABLE
(Continued from page 55)
side, through a center core; a modern low-cost school for urban or rural communities; several others not yet definitely selected.

The trouble with publishing a specific list of features is that conditions do arise that make necessary the postponement at the last minute of certain stories, from time to time. There seems to be no reason why the foregoing schedule cannot be carried out, but if substitutions are necessary, the inventory of unused features will be drawn on with no sacrifice of quality or diversity.

Hope that makes our gate crasher happy, and even more important, that it will whet the reading appetites of the readers. If it is interesting to anyone besides the gate crasher the editors would like to know it.

The right way, in this column of the September issue, receives a lengthy comment from a reader. Part of it follows. "The method proposed would certainly prevent water vapor from rising past the layer of aluminum foil, particularly if that layer were not thinner than 0.0008 inches. To the extent that water vapor did not penetrate the cinder fill, the fill would act as a better insulator against heat loss, because water is a good conductor of heat. But, with the method suggested, one would not eliminate condensation on the foil itself, and the cinders. Under the method proposed by the builder in your column, whenever the daily dew point was reached, there would be heavy condensation, which naturally would increase the conduction of the cinder fill, and cause greater heat loss.

"Aluminum foil is valueless as an insulator when used as suggested in your column. There must be an air space for aluminum to function as a heat insulator. Whenever the surface of aluminum is not bounded by an air space, the surface does not function as an insulator. Even if the walls and ceiling of the building in question were properly insulated, following the law that heat flows to cold, there would be a great loss of heat, not only by conduction along the wall, through the air, and by means of every object in the room that touched the floor, but there would be a much greater
You CAN please everybody!

Architects, builders, floor layers and home owners all prefer Bruce Hardwood Floors for beauty, style, quality, and dependability.

BRUCE HARDWOOD FLOORS

Products of E. L. Bruce Co., Memphis, Tenn.

World's largest maker of hardwood floors

Bruce also makes Household Products, Terminix, Hardwood and Yellow Pine Lumber, Furniture Dimension, Moulding and Trim, Everbond X Mastic, Terminix Ventilator.
Here's the right line-up of power machines for the building industry...American-built to save time and labor on the job and cut costs! You’ll find American machines out-front in features for easy handling and accurate workmanship. Pre-satisfaction—built for top dependability. Send coupon for details.

SAVES
New Portable Electric Saw. Big power... easy handling... cuts any angle. 8" blade.

FLOOR SANDERS
Four models including 8 and 12 inch drum widths. Smooth, uniform sanding.

EDGERS
American Spinner disc-type sander finishes right up to edges of floors, stairs, closets, 5 ½" and 7" discs.

SMALL SANDERS
Many uses for the Sanderplane, a belt sander... and Speedy Spinner semi-flexible disc sander.

MAINTENANCE
Labor-saving machines for polishing, disc sanding, steel wooling and scrubbing floors. Many models... brush spread of 13, 15 or 17 inches.

The American Builder, December 1936

EDITORS' ROUND TABLE
(continued from page 56)

loss by way of radiation in the form of invisible no-temperature heat rays. These heat rays possess merely energy, until they are absorbed by the surface, in this case the floor, and then the heat which is formed flows by conduction down to the earth.

"There is a very simple way of eliminating practically all heat flow to the ground, and all condensation and moisture formation in the fiber and the flow of all vapor from the ground into the building. This is by use of multiple reflective air spaces. Three sheets of aluminum are spaced one inch apart, or two sheets of aluminum spaced two inches apart with a sheet of paper midway between them, set in the middle of 2x4 horizontal joists, would change the picture entirely.

"Such construction would eliminate the possibility of condensation formation on the aluminum. At no point within the two inches of insulation, and ⅛-inch air space on either side of it, could a dew point be reached. The top foil immediately assumes the temperature of the warmer side, and with no exchange of heat possible, there would be no condensation. The cold foil would remain cold."

Well, there it is. The Round Table is ready to continue the discussion if anything further is needed.

October saw our editors visiting Wichita, Oklahoma City, Los Angeles, Flint and Detroit, Michigan. Toledo, Columbus, Pittsburgh, Washington, D. C., Boston and numerous points between these cities.

One of our staff has developed a unique way of picking up a story when he is unable to find anyone on the job. Just outside one large city, he noted a half-dozen new, well designed and well built houses. Failing to see any identification of the builder, and failing to arouse anyone in the houses, he set up his camera. With him, that is an elaborate operation, and it usually gets results. About the time he was ready to snap his photograph a woman emerged from one of the houses. She was the builder’s wife. Everybody is curious about a man taking a picture, and our roving editor knows it. As usual, he got results, and the results will be in a future issue.
INTERIORS OF PERMANENT BEAUTY

Consistent sales build consistent profit. TYLAC dealers and distributors everywhere have always found this beautiful, superior wall covering a ready seller and an above average profit maker. But, with the advent of

The New HI-BAKED PLASTIC ENAMEL SURFACE

Miracle Walls by TYLAC

the ultimate in fine prefabricated wall board coverings — sales have stepped up far beyond their expectations.

We believe the reasons for this ready consumer acceptance, are obvious: Every known feature of superiority is "built-in" for the users benefit. Beauty, Adaptability, Permanence and Economy — are only a few of them. Four basic patterns and 18 lustrous colors offer endless varieties of combinations to suit every users individual decorative preference.

Miracle Walls by TYLAC are used everywhere: In homes, offices, stores, factories, hospitals, hotels, theatres — wherever there's an interior wall there's a use, and a need for TYLAC.

Our new, liberal sales, advertising and dealer helps program will really help you sell more TYLAC — and build more profits. Why not write us today for full information. You'll be glad you did.

"Miracle Walls by TYLAC" is the registered trademark of the Tylac Company in the United States.

The Greatest Post-War Development in the Industry

TYLAC COMPANY MONTICELLO, ILLINOIS

PIONEERS IN THE PREFABRICATED WALL PANEL INDUSTRY
The Eljer Sylenta Closet Combination combines quality features that every homeowner would prefer to have.

This vitreous china combination is easy to keep spotlessly clean because the hard, glass-like finish resists stains and is impervious to all ordinary acids.

Other features are: syphonic jet-action bowl with “Elvortex” whirlpool jet; overflow and ground-in valve seat of china—a part of the tank itself... eliminating the need for thin metal parts that are vulnerable to the corrosive action of water; ball cock, adjustable to variations in water pressure... means longer service.

The Eljer Line is complete... to meet the requirements of every purse and purpose. See your Eljer Distributor for fine plumbing fixtures, in Vitreous China and Enamed Cast Iron... available in white or popular pastel colors, or write Eljer Co., General Offices, Ford City, Pennsylvania.

Quality Features...that Cultivate Customers
 Builders Face Challenge of Election Result
On Firm Foundation With Sound Program

Survey of NAHB locals reveals efforts to really meet the low-cost house need

Far from being dismayed by the unexpected turn which the national election took when American voters returned President Truman to the White House for another four years, executives of the National Association of Home Builders have taken inventory of their assets to meet the new challenge imposed.

A survey of what NAHB has advocated in the last year, and the manner in which its local chapters have responded, shows that it could not have taken a better course had it expected the election to turn out as it did. It was the right program, no matter who was elected. So far as home builders are concerned, the election did not indicate any fundamental weakness in their basic program, but only the fact that the program needs to be carried out on a greater scale. It needs faster implementation.

Program showing results

Here are some of the results that show definite progress among the builders in recognizing the need for better industry and public relations, and in doing something to meet those needs.

First, there are the tangible, visible things that started small and are growing larger. One of the biggest of these is the annual Convention and Exposition of NAHB, staged each February in Chicago under the direction of Paul Van Auken. The one planned for February 20-24 in 1949 will be the largest to date.

Then there is the large board of directors of NAHB, which really gives nationwide representation to builders. The latest move of having the directors' meeting in Los Angeles, broke the precedent that all such meetings must be held in Washington. It also proved the value of letting the directors actually see what is going on outside their own regions.

The efforts of local chapters to focus public attention on their activities receive tangible expression in the newest "Builders Exhibit" home of the Peninsula General Contractors and Builders Assn. of Burlingame, Cal., and in the first structure of that kind, the Chicago Metropolitan Home Builders Center in the heart of the Chicago Loop.

Of even greater importance are the educational efforts of the national association in encouraging locals to form apprentice training programs and to cultivate good public relations through newspaper publicity and on the radio.

(Continued on page 62)

OFFICERS of the Peninsula General Contractors and Builders Association of Burlingame, Calif., reflect satisfaction in their smiles at opening of their new "Builders Exhibit" structure — another step in improving public relations. Left to right, seated: W. A. Gould, secretary-treasurer; E. B. Standish, president; Perry A. Bygdnes, director, Standing, Harry P. Kime, director; Harry E. Smith, executive vice president, and Richard Delucchi, the vice president.

All Exhibit Space Assigned For 1949 NAHB Exposition

Exhibits at the 1949 NAHB Convention and Exposition will carry out the theme "Home Building's Parade of Progress". Dates are February 20 to 24 inclusive at the Stevens Hotel, Chicago. Wherever possible displays will contrast original and early models of products with 1949 models. Highlights, of course, will be the hundreds of products available for today's home.

Convention and Exposition Director Paul S. Van Auken reports that competition for exhibit space in the 1949 show has been unusually keen. Within three weeks after applications were mailed to manufacturers, more than 80 per cent of the available exhibit space had been assigned, and a short time after that all space was filled.

The plan to have a special section partitioned off for power tool manufacturers to demonstrate their equipment has been abandoned. Instead the power tool manufacturers will have regular exhibits.
Cortright's Column

By Frank W. Cortright

Executive Vice President, National Association of Home Builders of the United States

The re-election of President Truman and a Democratic Congress proves that the home builders' only sure defense against public housing is the actual demonstration of the truth that socialized housing is not needed.

The false belief that the people of this country are compelled to depend on charitable government for homes must give way to the fact that the home building industry can produce them. Only when evidence of this fact is so clear that no one can miss it can we relax.

We who are close to the industry know that builders are working now to deliver Economy homes at prices that the average veteran and others can afford. It has been a difficult job finding out how to do it. But in every city a number of builders are now doing it.

But not enough of us! We have not yet given enough examples to the public to convince it that no better job can be done by Uncle Sam than is being done by the home builders of America.

Mr. Truman's return to office shows that the people believe in his policies, and we know that public housing is included in those policies.

Our biggest job now stands out clearly. We must build more Economy homes. We must prove to the people, to the Congress, and to Mr. Truman that we can do it. We must prove that we can provide more homes, more cheaply, than any government agency—by doing it.

During the last two years, private builders have fought to hold down costs against insurmountable odds. In 1948, our national association and all its locals have aimed specifically at carrying out an Economy Housing program. It is fortunate that we did start such a program, and regrettable that its effects could not be felt quickly.

These things are in our favor:

1. The National Association of Home Builders has a solid groundwork laid for an effort to build more Economy homes all over the country.

2. Our associations will realize, from President Truman's re-election, that studying the problems of cutting the cost of homes is insufficient—our members will work harder than ever.

3. With our program already rolling, we will be in a much better position to show concrete examples of our achievements in the low-price field to the 81st Congress. The legislative mill may grind fast and by the time a housing bill comes up for consideration we will be much better prepared than we were last year.

4. President Truman has shown that he can change his mind when he is convinced that it is in the interests of a majority of the people to do so. He knows that a change of mind is nothing to be ashamed of—it only shows a man knows a little more today than he did yesterday. He will listen to facts—if they are backed up with evidence.

5. The complexion of the new Congress makes it fairly certain that something may be done to bolster the financing of homes—we hope it will be a move that will provide far more new dwelling units than any kind of socialized housing program can do, and more speedily.

In every city throughout the nation builders are now breaking ground for Economy Homes. The term applies to houses ranging from 600 square feet to $800 square feet and which, although built as modestly as larger homes, sell for several thousand dollars less than the average size homes being built in these same communities.

The National Association of Home Builders will present these facts to the 81st Congress. It will show that the industry is catching up with the unprecedented housing demand and will urge that Congress permit us to build to the full limit of manpower and materials available.

American Builder, December 1948

NAHB's Program

(Continued from page 61)

The culmination of this effort was seen in the first National Home Week this year, an effort whose impact has not yet been fully appraised.

Of prime importance, in light of today's conditions, is the Economy House program which began to roll last February at the Chicago convention. More and more of the local chapters have formed Economy Housing committees that are persuading members to put a part of their efforts into this class of house.

Most builders are convinced and are trying. The Florida association in September spent most of its effort on trying to implement an Economy House program. At least one member had already begun, with the blessing of the Jacksonville FHA office.

Economy House projects

A current bulletin from Chicago states that the chapter president, Nathan Manilow, has acquired land for 2,000 dwelling units in the economy price range. E. C. Mahoney, another member, has bought land in the south of Chicago to do the same. Henry J. Kranz, another member, already has completed test units in nearby Hobart, Ind.

President of the Rochester chapter, is

THE "Keys to Happiness," latest NAHB idea for a public relations device, as shown at the directors' meeting in Los Angeles. Idea was submitted to lock and key manufacturers for the design of a distinctive front door key with the name of the association and the insignia on it. Yale & Towne Mfg. Co. already has generously responded with the one shown above. Builders who put in a Yale & Towne lock of a certain kind can mail in the key which came with it and receive a pair like the above to present to buyer when the house is turned over.
**Time for Fun at Los Angeles Meeting**

There was some time for relaxing at the Los Angeles meeting of NAHB directors. Here, at a party given by Fritz Burns in his famous post-war home are, left to right: William B. Dixon, Jr., national director at Pittsburgh; Carl Lams, has visited more than 25 cities since his recent appointment to be director with builders and other professional groups.

**HBI Begins Economy House Plan Service In Working Arrangement With Architects**

To encourage its members toward further construction of economy priced homes, the Home Builders Institute of Los Angeles has arranged with three well known architects to provide a series of basic house plans which they believe can be built to sell under $7,000, including all expenses. The houses must be of modern design, quality construction and adequate livability.

The institute’s Economy House committee has been working on the problem for months, and finally is convinced that a complete Economy House package can and must be produced.

Beginning October 15, the new architectural plan service was made available to members. It embodies complete plans of homes, detailed specifications, blueprints and even tract layout assistance. Nine basic plans have been completed with three elevation variations apiece. The architects cooperating in the plan are Robert Alexander, Paul Duncan and Hugh Gibbs.

Among the advantages of the plan are the saving of costly experiments in design and engineering by builders, the elimination of grief and time in controversy with FHA and with community planners. It should save as much as 60 days in processing FHA or VA applications. It will give a direct method for obtaining maximum valuations from lending and financing institutions.

**Detroit Tosses Hot Potato Back to Public Housers**

The Builders Association of Metropolitan Detroit has accepted the challenge that the industry is not building low cost homes, and has undertaken an Economy House program with a new twist. It is building a group of houses to sell at prices that will permit buyers to carry them at charges of from $19 to $34 per month—and it will challenge the public housers to show why they should not be permitted to continue building such houses in volume.

For the homes which the Detroit builders will produce are outlawed in most communities by antiquated building codes, restrictions, zoning regulations, FHA procedure and financing limitations.

This is a new and constructive approach to finding an answer to the current housing cost problem—for it will give the people of Detroit a chance to act as jury and see whether the building industry has been letting the public down, or whether the blame lies elsewhere. More important, it will produce something tangible to be discussed.

**Minneapolis Builders Work For Building Code Revision**

The Minneapolis Home Builders Association presented a request to the city council of that city for approval of gypsum sheathing in home building in Minneapolis. It is expected a public hearing will be given the proposition, and further support will then be possible.
Seattle Builders Undertake Economy House Experiments

The Seattle Master Builders Association, as a result of the drive being made by NAHB to get more Economy Houses built by its members, has undertaken to develop plans for their construction in the Seattle area.

Archie Iverson, chairman of the Economy House program committee, has started two houses as experimental units which he hopes to build and sell at $5,500. The homes are said to be well-designed, and have two bedrooms. The Seattle Association met with the national officers at a dinner in the Edmund Mcmey Hotel recently.

Tucson Builders Plan to Aid Crippled Vets; Name Moore

The Tucson Home Builders Association has named Capt. Ralph B. Moore as assistant executive secretary to conduct a survey among Tucson crippled veterans to determine if there are any who meet VA requirements for construction of homes especially built to meet their needs.

Capt. Moore was a reconnaissance officer in Germany during the war and was wounded in action about a week before the war ended. After his discharge from the hospital, he worked with the army of occupation as an industrial engineer at Frankfort, where he contracted polio and a severe case of arthritis. Sent to the Army-Navy General Hospital at Hot Springs, Ark., he came in contact with many crippled veterans of the type with whom he will work in his new post.

Manny Delugach to Guide Memphis Economy Program

Manny Delugach has been named chairman of the newly formed Economy House committee of the Memphis Home Builders Association. The committee has held its first meeting to try and work out a method of building homes in the low brackets range which is now the building industry's challenge.

Other members of the committee include Charles K. Chandler, Charles Freeburg, John B. Goodwin and Joe Margolin for the builders; Tom Fairies representing the architects; James E. McEachern, mortgage bankers; B. W. Horner, FHA; E. P. Schumacher, VA; Forrest Ladd, building materials dealers, and Joseph A. Fowler, City of Memphis.

St. Petersburg Stages Home Builders Show

The Home Builders Association of St. Petersburg, Fla., has completed a model home for the American Legion drive for aid to crippled children and opened its Builders Home Show to draw emphasis to the association and to that house.

C OSPonsors of the home show are the St. Petersburg Times and Radio Station WTSB. Excellent publicity was obtained with their co-operation.

The model home, which was turned over to the American Legion, is a two-bath, six room design embodying the latest in building materials and accessories.

Gen. Smykal Heads Veterans Committee for Chicago

General Richard Smykal, commanding general of the 33rd Infantry Division of the Illinois National Guard and former chief of staff for the late Gen. Joseph Stillwell, has been named chairman of the committee of veterans housing for the Chicago Metropolitan Home Builders Association.

The committee, comprised entirely of veterans from every branch of the US Army, has been organized to investigate reasons for inadequate production of veterans' housing and to coordinate activities of government agencies to increase that production.

NAHB Sponsors Movie to Show Public How Not to Build Houses

A motion picture short subject entitled How Not to Build a House is now being produced for NAHB by Gibraltar Pictures in Hollywood.

Stressing pitfalls awaiting the amateur builder who tries to erect his own home without professional help, the short movie will drive home the fact that methods used by organized, up-to-date builders are streamlined, keyed for economical production.
To satisfy the woman of the home (and she is mighty important), ANDERSEN WINDOWALLS are called upon to brighten the kitchen, open its workroom space to a view of the outdoors, ventilate it effectively the natural way in summer, and keep it snugly weathertight in winter. In this home two Andersen Casement Window Units, Number 4326, with one-light glazing, have been arranged into a wall of windows.

ANDERSEN WINDOWALLS are sold only through regular lumber and millwork dealer channels. See your millwork distributor or write us for further information.

ANDERSEN Corporation
BAYPORT • MINNESOTA
Choose any combination of top-quality Kelvinators. Regardless of capacity, 5 new Kelvinator Refrigerators are all 31 1/4 in. wide. Regardless of model, 4 new Kelvinator Ranges are all 39 in. wide.

The new Kelvinator Home Freezer are all 39 in. wide.

Only Kelvinator offers the flexibility of uniform widths for easier kitchen planning!

Get Kelvinator’s “Space-Saver” Package...

"Space-Saver" Refrigerator only 24 in. wide is full 6 cu. ft... companion range is only 21 in. wide, with new design permitting installation flush against wall. Top-of-the-line quality throughout. For further information, write Kelvinator Division, Nash-Kelvinator Corporation, Detroit, Michigan.
The November Elections

There is little justification at this moment for attitudes of extreme joy or extreme dismay toward the results of the November elections. That applies equally to those engaged in or affiliated with home building, and to the home buying and home owning public.

In the first place, during the election campaigns, both major party candidates promised more “liberal” housing legislation. Campaign speeches of both candidates implied without specifying that the type of housing legislation each had in mind differed less in broad policy than in operation details. Regardless, therefore, of which way the election went, Congressional consideration of new housing legislation was a certainty in 1949.

It is idle to speculate on what kind of housing legislation would have been proposed by a Republican administration. A purpose can be served, however, in speculating on the policy of the new administration in 1949.

There are a number of possibilities not apparent in an appraisal of the new Congress, based merely on party majority, or an appraisal of President Truman, based on past performance. The new Congress, for instance, will have both “conservatives” and “liberals” in each party. The chairmen of most of the important committees will be Southerners who, with few exceptions, are opposed to radical changes in federal government. Thus, the character of proposed new housing legislation is not likely to be determined by party labels or party allegiance. And there is no reason now to believe that the 81st Congress will be materially less conservative than its predecessor.

There are some sound reasons for assuming that the President Truman of 1949 will not be the President Truman of 1948. As the heir of the New Deal, the President inherited party commitments and party leaders that he had to go along with during the term that expires next month. Considering his background of Missouri conservatism, it is doubtful if President Truman was in accord with all of his heritage of men and policies.

Now, however, having won the presidency in his own right, after what looked like almost a lone battle, he is the unquestioned leader of his party, and is, therefore, in position for the first time to project his own views and choose his own advisors. What and who these are remains to be seen. But, again considering the President’s background among other influences, there is more likelihood that he will tend slightly to the right rather than sharply to the left.

Too many issues and lack of clear definition of most of them, together with a very small popular vote majority gives the President and the new Congress neither a broad nor a clear mandate. The only course open to the new Congress, therefore, is one close to middle-of-the-road. Mr. Truman appreciates more than anyone else his opportunity to become a great president, and doubtless knows that the chief ingredients of presidential greatness are sound advice, able administrators and ability to choose and stay on a safe course. If Congress reads the election results correctly, and the President reaches his own aspirations, there will be no occasion for joy on the part of radicals or dismay on the part of conservatives.
As part of NAHB's National Home Demonstration Week, nineteen members of the Milwaukee Builders' Association cooperated to erect 24 dwelling units in a home demonstration project which was not only outstandingly successful, but was unusual in plan and procedure. The houses, all built under a $12,000 ceiling price exclusive of land, were grouped on a single plat of ground in a growing residential section of Milwaukee.

President Roland Teske of the Association named Elton Schultz general chairman of the project. Early last summer committees were set up and decisions made as to price limits, location and general operation. Teske obtained the land and the Builders' Association took title to it. The land planning committee platted the lots so that the open end of a cul-de-sac faced one of the principal thoroughfares. The 19 members who signed up for participation, each of whom deposited $200 in a general expense fund, then drew lots for the location of their houses in the project. One corner lot was reserved for an Association model home which served as headquarters on the site.

After lot locations for the various builders were determined, each builder submitted plans for his house to another committee of the Association which had to approve them before the member could proceed. There were some adjustments made on locations after the builders submitted their plans. This was done to enhance the beauty and symmetry of the project.

As a variation on the usual plan, each home was built under the responsibility of the owner-builder and each was named after him. The cottages were grouped in blocks of four, two being one way and the other two the other way.

The Builders' Association took care of the funding until the houses were completed, after which each builder was responsible for his own lot.

The lot of the Association model home, or "Parade of Homes" headquarters, was reserved for the Association to use as a commission headquarters and sales office. The interior was plastered over gypsum lath with two walls in the living room finished in knotty pine. The price, including the lot, was $12,500.

This model home was erected by the Mollgaard Co. and served as "Parade of Homes" headquarters. Interior is plastered over gypsum lath with two walls in the living room finished in knotty pine. The price, including the lot, was $12,500.
as a whole. It is easy to see numerous possibilities for misunderstandings and disagreements in such an undertaking, but the Association officials and committees charged with responsibility of expediting the project did such a fine job that the group was able to stay together, work fast and finish on time.

Improvements to the land, such as utility installations, streets, and curbs were installed by the Association, with the total cost of the subcontractor's work being assessed against each lot, which was purchased by the builder finally selected to erect his house there.

Henny Mollgaard, of the Mollgaard Co., was placed in charge of furnishings and decorations for the houses. Through a tieup with the furniture dealers of Milwaukee, 16 of the 24 houses were completely furnished, and the furniture dealers involved also agreed to handle the bulk of paid advertising and promotion.

Ground was broken July 1 and in three months the raw land had been converted to a group of completed houses, ready for inspection. The deadline for completion was set for September 25 and was generally met. After houses were well along toward completion the committee which had set the $12,000 ceiling price on the houses, voted to allow the builders to add $200 for shrubbery and lawns.

The houses were open from October 1 through 17 and more than 150,000 people visited them. No admission was charged. Ten houses were sold before the demonstration was completed.

MILWAUKEE BUILDERS PARTICIPATING IN "PARADE OF HOMES"

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>James R. Baer</td>
<td>Molgaard Co.</td>
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<td>Beverly Realty Co.</td>
<td>Nordale Realty Co.</td>
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<td>Sid Dwyer &amp; Associates</td>
<td>Northwestern Builders, Inc.</td>
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<td>Economy Builders, Inc.</td>
<td>Pioneer Builders, Inc.</td>
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<td>Forman Construction Co.</td>
<td>Roth &amp; Taplin</td>
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<td>Charles W. George</td>
<td>Ray R. Sawyer</td>
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<td>Goelsker &amp; Schulzke Co.</td>
<td>Roland J. Teske</td>
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<td>R. A. Lainey &amp; Co.</td>
<td>Van Dyke Builders</td>
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<td>Joe P. Linke</td>
<td>Alfred J. Weter</td>
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Zielinski Builders, Inc.

Houses shown on the front cover of this issue, left to right, were built by: Nordale Realty Co. ($13,700); Northwestern Builders, Inc. ($13,500); Alfred J. Weter ($12,500); Joe P. Linke ($13,800); Zielinski Builders, Inc. ($11,940)
FLUSH birch doors and natural finish trim feature the interior of this three-bedroom house built by the Mollgaard Co. for $12,550.

AN ATTRACTIVE brick veneer with trim lines built by Charles W. George and priced with the lot at $13,800.
THREE of the four houses built by Van Dyke Builders from one basic floor plan. Exterior of the two at the right is plywood cut in 2-foot wide strips and lapped. Prices are from $12,700 to $13,550 including the lots.

The interior of this house is gypsum board dry wall. One of three finished in this manner. Built by Economy Builders, Inc., the price was set at $13,500.
ONE OF THE outstanding features of all homes in the Milwaukee demonstration was large, well-appointed kitchens. This knotty pine finish in the Goelzer & Schultz house is an outstanding example. The house was priced with the lot at $13,700.

A COMPACT, economical brick veneer with low-pitch roof built by Roth & Taplin to sell for $13,700.
PRESIDENT Roland J. Teske of the Milwaukee Association built a 2-story frame with unfinished powder room to sell for $13,700.

THE ONLY multi-family structure in the "Parade of Homes" is this 2-story, 2-family brick veneer built by James R. Baer, at a cost per unit under the $12,000 ceiling.
THE PHOTO above shows unusually attractive dinette treatment in the house at right, built by R. A. Lainey & Co., and priced with lot at $13,700.

TWO HOUSES from the same basic floor plan built by Forman Construction Co., priced to sell for about $13,800. Exterior of the one below is finished with waterproof striated plywood. Interiors of both houses are dry wall with gypsum board joints taped in regular manner.
SAND-BLASTED bars on the kitchen and living room plate glass windows in addition to the only wood-burning fireplace in the project make this house outstanding. It was built by Pioneer Builders, Inc., and priced at $13,700.

HOUSE at right, built by Beverly Realty Co., was priced at $13,800. The house below was built by Sid Dwyer & Associates and priced to sell for $13,700.
DIVERSIFICATION

Chicago firm is now engaged in building 542 duplex ranch houses, 108 apartment units and a sizeable commercial corner.

THOSE DYNAMIC TWINS—ingenuity and resourcefulness—have enabled J. E. Merron, Chicago builder, to lower costs and also expedite production on his diverse operations. These include 542 three-level duplex ranch house units in Merrionette Manor, 108 apartment homes and a commercial corner, all on Chicago's south side.

Well up on the list of Merrion special methods is an on-site fabrication and pre-assembly plant. Lumber is precision cut to standard sizes, and assembled into wall and partition sections. Jigs have been eliminated by using "master" sections to start and then nailing each section similar to that, one above the other, until the pile reaches a height which makes it impractical for men to nail. The entire pile is then loaded before another is started. This eliminates one extra handling where each section has to be removed from a jig as it is completed, placed on a pile and then loaded for transport to the site.

Interior doors are prefabricated with specially built power equipment and all hardware attached in the plant. All stairway units are likewise precut and assembled in the

TYPICAL street view in Merrionette Manor, a planned community of 542 duplex units.
GOOD VARIETY is achieved with three basic floor plans and more than 20 elevations

Pays for This Home Builder

workshop so they are ready to set in place on the site. In cooperation with the plumbing contractor, a special one-unit plumbing stack is assembled in the shop so it can be set in place in the house in a few moments.

What Merrion is doing, as he freely admits, is to steer a middle course between pre-fab and conventional methods of building. He has taken the most economical and practical characteristics of both and combined them into his present methods. The fact that he is able to deliver attractive homes in the $10,000 price range in high-priced Chicago is a tribute to his planning and methods. Under a special arrangement with city code authorities and unions, he is using the dry wall gypsum board method of interior wall finish throughout Merrionette Manor. Quality is not sacrificed in the least by any of these cost-cutting methods, but in the precutting and preassembly shop operation alone Merrion reports a saving of 17.2 per cent on carpenter labor and lumber. By buying lumber in lengths suited to the framing plan, dimension waste in framing each duplex unit is so small it can be carried away in a bushel basket. In an actual demonstration for Chicago newspapermen, framing material was cut, assembled, and erected on the boxed foundation, sheathing on, rafters up and plumbing stacks installed in about four hours on one of the duplex ranch houses. Scaffolding is erected on each house but once, as the sheathing goes up. When
PORTION OF shop where doors are prefitted and hardware installed with power equipment. Stair units are assembled in the shop.

LIVING ROOM interior in one of the duplex ranch houses. Heat is forced warm air that crew is finished, windows are installed, trim and siding is applied and painted, followed by brick or stone veneer to complete the exterior and permit removal of the scaffolding. At the present time about 250 units are completed and occupied. They are being erected at the rate of about 12 to 18 per week, with final completion of all living units scheduled for the spring of 1949.

The 80-acre plot was scientifically platted with a church and parochial school at the south end and a large shopping center at the north end. A group of two-story dwellings will screen the shopping center from the duplex ranch houses. The curvilinear streets are paved with state specification asphalt. Two trees are being planted on each lot and around the outside of the development to screen it and set it apart from the surrounding area. Ornamental entrances will also be constructed.

Architect Emil Minx has provided three basic floor plans and more than a score of different front elevations to provide excellent variety in appearance of the units. The duplex ranch house idea has proved to be unusually popular. The units are being sold for $10,300 with coal-fired furnaces and for $10,500 with oil-fired units. All heat is forced warm air. Under the G.I. loan plan, veterans pay $500 down and $68.62 per month on a 25-year mortgage. Each resident automatically becomes a member of an association organized to care for maintenance of all common portions of the project. After three years the association management will be turned over by Merrion to the residents. The entire setup is so popular that 44 units were sold in one weekend of this year's Chicago Home and Home Furnishings Festival. At present there are 750 qualified buyers listed for purchase of about 200 remaining units.

Twenty blocks north of Merrion, large-scale development is being made with each of the 150 two-story homes. Two-bed-room, two-bath homes with finished basements are priced at $12,000 to $12,500. The houses are being erected at the rate of about 12 to 18 per week, with final completion of all units scheduled for the spring of 1949.

FLOOR PLAN of J. E. Merrion & Co. new offices which will occupy about one-third of new Williamsburg Block, a business corner.
Two additional Merrion projects are in the pipeline—a large-scale apartment project to be called Merrionette Manor is a 108-unit "apartment homes" project. Each of the 2-bedroom units will be owner-occupied.

Merrion Square—a large-scale apartment project. It is made up of six separate buildings, each of which contains 18 apartments or a total of 108 units, all two-bedroom. Designed by Architect Martin H. Braun in modern American style, units are so situated that each living room has a front view. A central heating plant is provided for each 18 apartments, heated with radiant baseboard forced hot water. The reinforced concrete and brick buildings are finished on the exterior with two tones of face brick—buff and grey—arranged with color contrasts on the horizontal plane. Glass block and large windows are outstanding features.

Merrion prefers to call these "apartment homes" and each unit is being sold to its occupant. Prices range from $13,500 to $16,000. Each purchaser buys stock in the corporation and then gets a proprietary lease, thus renting from himself as a member of the corporation which runs the project. Monthly rental, where equity is established with no more than a $9,000 mortgage, runs from $79.80 to $88.40 per month to retire the mortgage and pay upkeep on buildings, heat, and janitor service. Off-street parkings, full basement facilities and completely equipped playgrounds are plus features.

Another Merrion project, the Williamsburg Block, located at 79th St. and Jeffrey Ave., to be completed about January 1, is one of Chicago's newest and probably most unusual commercial structures. It is built traditional Colonial lines of old rose soft-tone brick and white frame trim. Designed by Architect Ray Gergori, the commercial structure is receiving unusual attention from Merrion because about one-third of it will be devoted to new offices for J. E. Merrion & Co.

Merrion is not only doing a good job of building. He is also conducting an excellent public relations program. One of the highlights of his activity in 1948 was a press tour of Merrionette Manor in August. Written invitations were mailed to Chicago real estate editors, trade press representatives, national magazine editors and out-of-town newspapers with Chicago correspondents. Merrion took all of them on a personally conducted tour of his project, answering questions and explaining operations.
ACCELERATED sale of homes—the goal of every builder—is now becoming an obligation upon the man who plans the houses. If an architect cannot design a house that will outsell its competitors, he is facing the prospect of looking for a job in the carbon paper industry.

The reason this burden devolves upon the architect is that sales today rest on three big factors that form an equilateral triangle. The three sides of this triangle can be designated: (1) design, (2) cost, and (3) public acceptance.

If you will examine such a triangle and label the sides, you will see the importance of the proper relationship of all three.

If the design is too costly, or otherwise faulty, the house will be hard to sell. If cost gets out of hand, it may cramp design and hurt marketability. If marketability—which includes sound merchandising—is lacking, neither attractive costs nor excellent design may be able to salvage that sale. (That could happen in an undesirable location with poor advertising or salesmanship.)

In abnormal times when almost any house will sell at a profit, some corners may be cut in this triangle. But as soon as sales slow down, there is a scramble to adjust these three main factors.

In anticipation of a possible intensification of competitive selling next year in the New York home building area, a “look-see” at what other sections of the country were doing was necessary. Architectural publications have stressed so strongly the strides made in modern—functional—contemporary—or what have you, designs on the West Coast, that I boarded a plane for Los Angeles to see what they really did have out there.

After more than 11,000 miles of travel, renting cars to canvass each major metropolitan area of the Pacific states, I was back in New York six weeks later with more than 400 photographs, plus a firm conviction that a new American style of architecture is now being evolved. It is not being evolved through architects'...
American Builder, December 1948.

Are Voting in a New Type of Architecture

By Rudolph A. Matern
Matern & York, Architects

A report of home building trends, observed by this Long Island architect whose plans are being used in 43 developments, was made after his recent cross country trip that covered 11,000 miles.

It is interesting to see the comparative salability of this modern design. In 43 developments, was made after his recent cross country trip that covered 11,000 miles.

However, especially noticeable throughout the Pacific states is the heritage from homes of the Northeast. The charm of New England colonial themes, Cape Cod cottages, Long Island and Pennsylvania farm houses, is apparent on every hand. Yet each has been interpreted to meet local buyers' demands for larger windows, terraces and patios, and deeper roof overhangs.

We already have seen the western ranch house, its low and rambling lines, and its accent on outdoor living, borrowed and adapted to Midwest and Eastern climatic conditions. Now it is safe to predict that the greater roof overhang of western design will be widely adapted across the continent.

The reason is purely economic. It will meet all requirements of our triangle of salability. It will serve costs by permitting use of a greater variety of exterior materials. It will enhance marketability by improving lines and its versatility offers infinite possibilities in design.

Also in this line of appearance, the influence of the West in color is discerned. Women like color, and the importance of women as sales closers, particularly in home buying cannot be disparaged.

Because of climatic advantages, the West can and does exploit color through both materials and landscaping. The East has much to learn on this score. The builder who will increase his sales by boosting marketability through the use of color in his designs—without burdening in any way the factor of cost—will have to depend upon architects experienced in popular preferences.

You may be ready to ask, what will happen when buyers tire of some of these striking effects and special features in years to come?

If that happens, it would be a tremendous boon to the home building industry.

One of the greatest incentives for people to buy new automobiles in normal times is the rapid outmoding of design year by year. If, through the logical use of improvements in design, this same desire could be created in relation to home ownership, an increased turnover of houses would bring greater advantages in techniques of building, design, equipment and all of the other factors bearing on successful home selling—all within a proper relationship of design-to-cost-to-marketability.
THE INTEREST in this house lies in unusual window treatment of front and sides, and long unbroken roof line. Stone planting box is a continuation of front stoop.

**Popular Model Takes on New Face**

**THIS MONTH'S** blueprint house is designed by Matern and York, New York architects. This house is a practical application of the gradual transition now taking place in domestic architecture. In anticipation of competitive selling next year, Matern is revising a number of popular post-war designs. Approximately 1,500 houses were built on Long Island from the design shown in the small inset.

Matern has found that to maintain a ready public acceptance, a house must rely on three basic factors, namely: Design, cost and marketability. With the trend in design toward the contemporary, or a modern adaption of the traditional, the current blueprint house is a splendid example of the gradual change taking place in design arrangement. The basic floor plan conforms to the most popular post-war model.

The rectangular type of plan that Matern has used produces the greatest economy per square foot of floor space. Twelve-foot joists are supported on center beams and columns with bearing partitions above. The stairs, placed in the center of the house near the entrance door, leave space for a bedroom on either side of the second floor hall. The top riser of the stairs, which is at the center of the second floor hall, also eliminates the need of dormers in the roof. The kitchen, placed at the corner of the house, permits cross ventilation, and also avoids a third door which would be necessary if the position of the dining room and the kitchen were reversed.

This house is planned for a 50-foot wide lot, allowing 15 feet for a side yard. Matern has estimated that the sales price in the Long Island area would be approximately $11,000. This does not include finished rooms on the second floor.

The house is of frame construction placed upon a concrete foundation. The entire basement is available for services and recreation. Exterior walls are covered with 24-inch wood shakes placed 18 inches to the weather, and vertical boards. Fixed and awning-type sash are used in all windows. The roof is covered with thickbutt asphalt shingles.
SCALE 1:10

CEMENT FLOOR
ETCHED INTEGRAL WITH SLABS.

CELLAR PLAN
Tribute Paid to Editor
Of American Builder

E. G. Gavin acclaimed as originator of National Home Week by NAHB at directors’ meeting in California. Outstanding success of this year’s demonstration has established the promotion as a definite part of NAHB program.

AFTER BEING personally invited to be present at one of the directors’ sessions of the National Association of Home Builders at Los Angeles in October, E. G. Gavin, editor of American Builder was presented by President Milton Brock and acclaimed as the originator of National Home Week. Brock’s statement included warm thanks and appreciation from the members of NAHB for the conception and development of an idea that has proved to be the most effective public relations program ever devised in the interest of home builders.

American Builder’s publishers in turn appreciate the action of Brock and the National Association of Home Builders in publicly crediting their editor with the origination of National Home Week.

Gavin first presented the idea and an outline of procedure, together with some of the achievements possible, at a session of NAHB directors during the annual Convention and Exposition in Chicago last February. The idea and plan of procedure was accepted as sound by the directors. Committees were appointed to work on the project and to coordinate the work of individual NAHB chapters. Shortly after the annual convention adjourned, a steady stream of bulletins carrying ideas and plans of procedure for the local chapters emanated from the Washington office. September 5 to 12 was established as the 1948 National Home Week,—the first one ever staged. Because the plan was new and a few chapters were late in getting started, a number of home demonstration weeks were staged later in September and a few in October.

City mayors cooperated by issuing proclamations establishing dates for Home Week in their municipalities. Newspapers, radio stations and civic groups of all types saw beyond the purely business side of the promotion and recognized the value of fostering home ownership as an essential portion of any plan to improve the outlook for their cities.

In response to a questionnaire from NAHB, more than 40 chapters located in leading cities throughout the United States reported active participation in National Home Week and were virtually unanimous in approving a similar promotion in 1949. For the first time home builders have a national promotion plan which can be used to maximum advantage by members of the industry in cities of all sizes for all types of operations, from the largest to the smallest. National Home Week, in one year, has become another of the many activities carried on by NAHB for the betterment of the nation’s home building industry. American Builder congratulates NAHB for successfully conducting this year’s National Home Week and extends best wishes for increasing success as future demonstrations are staged.
On 165 acres of waste land, an area overlooked for years by others, a subdivision is under construction, containing 300 homes, 200 apartments, and a sizable shopping center.

Metal grille work on doors and ornamental touches on structural-iron corner posts dress up apartment entrances.

House shows typical three-bedroom design in development. It was designed by C. F. Irish, architect, Jacksonville, Florida.
The discovery of large tracts of usable land for home building within easy reach of urban centers often requires only enough vision to see beyond the erroneous judgment of other developers who have passed them by. Such vision on the part of a builder is now transforming 165 acres of waste land into a self-contained community with single family, owner-occupied houses, rental garden apartments, and a sizable shopping center to cater to needs of the residents.

The builder is Walter R. Crabtree of Jacksonville, Fla. His development is Lakewood, located five miles from the center of the city. Lakewood ultimately will have 300 single family homes; 200 apartments and a shopping center. The apartments are virtually complete; many singles have been erected and the shopping center is under construction.

Other builders passed up the site Crabtree chose for Lakewood. They admit freely that he had more courage than they to try and reclaim the swampy lagoon that ran through a deep ravine bisecting the tract. It was necessary to support a 100-ton dragline on a tremulous crust overlaying the muck in order to dredge it out and turn it into an asset instead of a liability. Most of the land cost is in the reclamation effort, but is proving a worthwhile investment.

The size of the tract enabled the builder to do a comprehensive community planning job. Curvilinear streets are laid out to take advantage of excellent views of the lagoon for the single family homes. The two-story garden apartments also overlook the lagoon, and serve as buffers between the single family houses and the business center.

The garage shelters for the apartments, in turn, form a buffer strip between the apartments and the rear of the shopping center which is adjacent to them.

The center occupies a 3-acre tract which fronts on a main highway. Later, an equal tract on the opposite side of the highway will be available for additional commercial facilities under another developer. That portion is part of San Jose Estates which is developing 2,000 homesites on 160 acres.
acres adjacent to Crabtree's development.

There are now two lakes on the Lakewood development, in addition to the lagoon which extends from the St. John's River. To form them and the lagoon, about 100,000 cubic yards of muck was removed from the lagoon and creek. This muck, after being dried and allowed to decay, furnishes an excellent foundation for topsoil to support the landscaping around the apartments and individual homes.

All streets are paved with blacktop. Miami type, paving, with roll curb and gutter. A complete artesian well system furnishes water to the development through 6-inch mains. Storm water drainage is provided to give immediate runoff from all lots after showers.

Some of the single family homes in Lakewood were designed by Bernard Wells-Close, Jacksonville architect. Others are by the architectural associates, C. F. Irish, Glen D. Moore and W. H. Marshall. Engineering on the apartments was done by Roy Crosswell of Jacksonville.

The single family houses in Lakewood are both two and three-bedroom types, with the three-bedroom predominating. Prices range from $9,000.

Ornamental iron is used both for structural strength and decoration at the entrances of some of the homes and all of the apartments. It adds distinctive touches in keeping with the characteristic southern climate architecture.

Many of the homes have completely equipped kitchens with electric range, dishwasher, garbage disposal unit and water heater. Some have automatic washers. Attic fans, for summer cooling, are provided in most cases.

The garden-type rental apartments are arranged in attractive groupings. There are one, two and three-bedroom apartments renting respectively at $74, $84 and $91 per month. The rental includes garage, yard and hall service, garbage collection and access to playground facilities for children. Each apartment has an electric range, refrigerator and an oil-burning hot water heater with outside reservoir. Space heaters provide heat in cool weather and attic fans, with automatic louvers, cool the units in hot weather. Duct fans exhaust odors through outside wall of kitchen.

Apartment windows are steel casement and provided with copper screens and venetian blinds. A 24-inch reinforced concrete canopy runs around each apartment structure at the second story beam level as protection against sun and rain. Ceilings are placed at the low point of various stores. Those needing high ceilings are placed at the low point so that bulkheads can be kept uniform.

The center is a commercial type—not the garden type often used with residential district centers—because it is on a main highway which is likely to develop traffic congestion in the future. Parking space is provided for 500 cars.

The grade influences the location of various stores. Those needing high ceilings are placed at the low point so that bulkheads can be kept uniform.

Shops will be of the neighborhood type until the second half of the development gets under way on the tract opposite. Present plans call for a hardware, a grocery of 3,200 square feet, a bakery and delicatessen, dry cleaner, ladies wear shop, bar and cocktail lounge, drug store, beauty parlor and barber shop.

Built on a modular plan of trussed steel and masonry construction, the center permits great flexibility in the arrangement of partitions. An 18 foot module is used, but subdivision can be made on the basis of a 6-foot module. Partitions are not load-bearing. Toilets are provided in every 18 feet of space.

Outside the structures, a canopy will run around the buildings over the sidewalk so that cars can be parked within 8 feet of shelter. An aluminum frame will support this canopy, and full-length glass windows will be used below. The barber shop and beauty parlor will have double glazed insulating windows. Glass block will be used to admit light in the rear of the stores.

Heating will be from unit heaters, supplied with steam from a central heating plant. Louvre type fluorescent lights will light the show windows of each store.
One, two, and three-bedroom garden-type apartments are arranged in attractive groupings, with garages and playgrounds provided.

**Lakewood Garden Apartments**

**Lake Geraldine**

**Shopping center** is a commercial type, and is adjacent to a main highway. Parking space provisions in the center will accommodate 500 cars. Built on a modular plan, the center permits great flexibility in arrangements of partitions, another evidence of careful thought in planning.

**Materials Used in Lakewood Houses and Apartments**

- Readymix concrete
- U. S. Gypsum Rocklath and plaster
- U. S. Gypsum Rockwool
- Certainteed White Asphalt roofing
- Wolmanized pressure treated lumber
- Shevin-Williams and H. B. Davis paints
- Crane plumbing fixtures
- Truscon steel casements
- Gate City Sash & Door awning windows
- Huttig Sash & Door wood sash and millwork
- Coffman metal grillwork
- Lockwood hardware
- Coolaire attic fans
- American Blower kitchen ventilator fans
- Mengel and General Plywood flush doors
- Cavalier bathroom cabinets
- Hotpoint ranges, refrigerators, water heaters
The Garden

This house is all on one level with no steps up in front or down in the rear. The decorative French louvered doors at the front entrance not only enhance the appearance, whether open or closed, but also screen the interior when closed. The enclosed patio, shown below, is an important part of the plan for this residence. It is intended for use in entertaining guests as well as a play area for children. The block wall around the area is 6 feet high.
Is Part of the House

This three-bedroom, one-story house, with its excellent accommodations for outdoor living, is built on a lot 50 x 120 feet. The foundation slab is built up of a 3-inch layer of standard concrete, sealed with asphalt and covered with 2 inches of light-weight aggregate concrete to form the floors, which are not only waterproof but resilient. Walls are constructed of concrete blocks made with light-weight pumice aggregate. The roof is frame covered with hand-split shakes. Location permits a service entrance at the side, assuring maximum privacy in the outdoor living quarters at the rear. Large plate glass windows in the living room minimize the division between the house and the outdoor living room.

The house is located in Los Angeles, Calif. It was designed by Architects Wurdeman & Becket and built by Peter J. Schulte for his son, Joseph Schulte, associated with the Fritz Burns home building organization. Landscaping was by Garret Eckbo, who designed the outdoor living room, which is surrounded by a six-foot high block wall. The price of the house, without the lot, is about $18,000.

THE bedroom windows are high enough to assure privacy and also to permit furniture to be placed under them. All rooms, except the kitchen and bath, have individual Panelray heaters to give zone control of heat. The built-in table adjacent to the kitchen will seat a maximum of 11 persons.
An Engineered Housing Project

Aurora Heights, a complete site fabricated subdivision planned to meet present day needs, now in process of construction

"When the first house was ready to be set up, I invited all the interested citizens to come out, watch the process and inspect the construction." Thus J. Buford Jenkins, Chief Engineer for the Newton Emergency Housing, Inc., silenced the rumors that had been floating around with respect to the soundness of his building methods.

The Aurora Heights housing development project at Newton, Iowa, was launched this spring by a non-profit organization of that city's business men for the purpose of alleviating the acute housing shortage. A capital stock of $200,000 was set up and 140 acres of land was purchased just outside the city limits. Jenkins, who was given complete charge of all work, is a man with an extensive background in handling large construction projects. Being an expert in the field of site fabrication, this engineer immediately set about establishing the foundation for this operation.

FHA approval for the initial group of 15 houses was received on June 7, and Jenkins started to break ground that afternoon. Within 65 days all of the 15 houses were under roof with seven completed, ready for the new owners to occupy. Since the initial grant, the FHA has given approval for construction of three additional groups of 15 houses, making a total of 60 now underway, with 18 houses completed. In addition 12 basements are complete, ready to receive the super-structure.

As the workmen adapt themselves to the new construction methods, the schedule of production has been accelerated. This indicates that a trifle less than one house per week has been completed since the start of the operations. The progress that has been made is all the more remarkable when it is considered that the entire organization has been built up since the original FHA grant.

Skilled and unskilled workmen, accustomed to build in the conventional manner, had to be trained in the mass production methods employed by Jenkins. This involved setting up a cutting shed, where all members were pre-cut from a chart. A series of semi-permanent "jigs" were built around the cutting shed. Electric outlets with underground conduits running to the source of supply are placed on each corner of the "jig" for the use of power equipment. A sufficient number of "jigs" is built to care for every unit of the house, namely; main floor panel with joists and steel beams intact, each exterior wall including the gable end, interior partitions, and roof assembly complete with trusses.

The houses are developed around seven basic floor plans with a "jig"
COMPLETED floor panel with steel beam being placed in position

COMPLETED floor panel on "jig" ready to be moved by crane to house

CRANE (work horse of project), swings a large bucket of concrete over foundation forms. Work is accelerated by this method of operation.

LARGE crane with special hook rigging placing wall section in position

DETAIL view of corner post of "jig" showing electric outlet for power equipment

CLOSE UP view of bucket showing concrete released into forms. Plot plan below
AFTER side and end walls are placed in position on house, then interior partitions, which are also built on a "jig", are installed. Sections are tightly secured arranged for each plan. Four of the "jigs" can be adjusted to conform to variations in the basic plans. These "jigs" can be filled and completed in three hours, using common laborers after they have become acquainted with the method used by Jenkins. The foundation work is controlled in much the same manner. Form panels are assembled on easels placed near the excavation. The panels are then removed from the easels with a large crane, and placed in position in the ground ready for concrete pouring.

The entire jig assembly operation centers around the use of a mammoth crane with special hoists patented by the engineer. Crane is operated from the rear seat, allowing the operator to drive the equipment and move the crane at the same time. The entire building operation centers around this crane. A heavy cable extends along the boom and down to point where a special six-point rigging is attached. Hooks, clevises or bolts are attached to the end of the braided cable of the rigging, depending on the type of section to be moved. These, in turn, are secured to extended points on the completed floor, roof, and wall panels, and carried by the crane over to the house that is in process of assembly. The use of a braided cable in rigging, first employed by Jenkins, is a safety feature that eliminates the whipping action so prevalent in solid cables.

The one-story houses are entirely fabricated on "jigs", taken to building site by the large crane, and completely assembled by seven men in 35 minutes, including interior partitions, after foundation walls are in place. The two-story houses are fabricated in the same manner with the exception of the second floor panel and the roof construction. In this case, the roof trusses are fabricated separately on "jigs". The correct number required are hoisted on the house structure by the crane. They are then placed in position, together with roof sheathing, by hand labor. The construction of the second floor joists and floor is accomplished in the same manner. The end wall panels on the two-story houses are made in one length on the "jig", and then cut in half at the second floor line. This assures a tight fit when the two panels are assembled on the second floor line. A total of 155 men are now employed on the site. Thirty of these are skilled mechanics and 125 are laborers.

The question is often asked, "Doesn't this method produce a house that is structurally inferior to the conventional method?" This builder contends that the results are just the opposite. Nailing of structural members are more positive. The application of diagonal sheathing, building paper, and exterior finish, applied when the wall panel is hoisted into position, is another advantage. The same process is used to fabricate the second floor panel of the two-story houses.

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TWO-BEDROOM one-story house with facing of bevelled siding, typical of this mass housing project, is pictured above. ANOTHER version of the typical one-story house, employing a skirting of bonded plywood on the house exterior.
The crane process is aided by the use of a "jig" which makes for ease of working conditions and a saving of time in the operation. The safe handling of the wall, floor and roof panels from "jig" to site, is accomplished by the special rigging device attached to the cable that prevents buckling or breaking of panels while in transit.

The houses in the Aurora Heights subdivision are developed around seven basic floor plans. Each plan varies at least five times in its exterior treatment, thus providing 35 different arrangements. This subdivision is planned eventually to contain 800 individual dwelling units. The work is scheduled to be completed in a three year period. The operation is set up in units of 30 houses. When this number has been completed, application for an additional 30 houses is then made to FHA.

The price range of the houses, containing 727 up to 888 square feet, vary from $8,200 to $9,200. Houses, containing 1,021 to 1,127 square feet, vary in cost from $10,200 to $11,200. The cost per lot is estimated at $1,200. This includes the land purchase price, cost of grading, the installation of utilities, concrete curbs and walks, and black top streets. The average size of a lot is 60x120 feet.

A SLIGHT variation to the typical two-bedroom plan is used in this house. Wood shingles used as exterior facing

A TYPICAL two-bedroom, two-story house. A combination of wood shingles and bevelled siding used on the exterior
This builder achieves both economy and good appearance by erecting Low-Cost Houses with All-Aluminum

ALUMINUM HAS arrived as a building material on a 52-house project in Muncie, Ind. All exteriors of these houses, including windows and combination doors, are aluminum with the exception of the roofs, trim and window surrounds.

C. L. Bartel, head of the Bartel Co., who has been building low-cost homes in Muncie, has been constantly on the alert for ways in which to cut costs. Careful buying of materials is one of the prime requisites in achieving economy and when Bartel was offered a substantial amount of aluminum siding at a special price, he decided to try it. Because he is a tradesman himself, Bartel was able to work closely with his men in perfecting an application method which not only assures tight, neat appearing jobs with aluminum siding, but also permits a 25 per cent saving in cost as compared with wood bevel siding over conventional sheathing.

The material being used is a product of the American Aluminum Corp., and has % inch insulating board backing, which permits its application without sheathing. All joints are covered with a spline which is held rigidly in place by tension. Aluminum corner pieces, which do not require nailing, assure a tight fit at that point. Special right and left hand end covers are used where all siding abuts windows, doors or other openings. The siding is allowed to weather for about 30 days before it is painted. One painter and a helper, using a DeVilbiss sprayer, paint four houses a day.

The Sterling sliding sash aluminum windows, in an aluminum frame, are installed in wood surrounds. These are 2x3's, rabbetted on the exterior to take the aluminum frame, assuring a neat appearance and a weather-tight fit. The aluminum combination doors, made by Ronor Building Products Manufacturing Co., are shipped to Muncie knocked down. Regular construction crew workmen assemble the doors on the job. Aluminum screens and storm sash are also provided for each house.

The houses are built on a concrete slab. Return air duct for the furnace are provided in the slab by laying 8 and 10-inch clay tile. Interior floor finish is asphalt tile. Walls are gypsum board over conventional studs. Interior trim is all natural finish. Ceilings are insulated with mineral wool and heat is provided by Bard oil-fired forced warm
Exteriors

Although one basic floor plan is being used, no two houses have the same exterior. They are located on 50x125-foot lots. Although the houses are being built to sell for $6,750, the Bartel Co. will retain the 52 houses in this project as rental property. Tenants will pay $50 per month and take care of all interior maintenance, with the builder doing all exterior maintenance. The rental price includes a completely equipped utility room with laundry sink, 30-gallon Crane automatic hot water heater and a Bendix laundry. The houses are being completed at the rate of two or three a week, with about 40 to 50 days required work on each house from start to completion.

POWERED hand saw with special blade is used to cut aluminum

SIDING with insulation board backing is applied to studs

ALL THE houses shown here are finished with aluminum siding

SECTION showing slab construction. Note 8-inch field tile laid around edge to serve as cold air return for warm air furnace

ALTHOUGH one floor plan is used, no two elevations are alike

TWO-BEDROOM houses, which could be sold for $6,750, are rented for $50 a month. Maintenance of interiors is done by tenant, exteriors by home builder
DOLLAR for dollar, no single feature of a home serves a more useful purpose or receives greater use than a plumbing system. The water lines bring into the house one of the most important, if not THE most important item in our daily diet—WATER. The sewers and drainage systems carry away the waste products. Good plumbing is essential to healthful community living. Let us be sure that our current rush for housing does not lower our standards.

Drainage, in the broad sense, means the removal of all wastes that may enter the plumbing system through a system of piping within and outside a building in a manner to prevent the entrance of foul odors and gases getting back into the building.

A general idea of the relation of a sewer to a building, may be gained by referring to Figure 1 (Drawing of sectional view of building). Here is shown the main sewer in the street, the house sewer, the house drain, soil and waste stack, catch basin, downspouts and plumbing fixtures.

This illustration shows what is known as a combined sewer system. Where the storm water and sewage from building enter the same pipeline and are carried out to the main sewer in the street through one pipeline.

A separate system is where the sanitary sewer and the storm water sewer are carried to the street sewer separately.

The depth of house sewers and drains is dependent upon the depth of the main sewer in the street.

The considerations required in the laying of sewers below the basement floors are the following factors:

1. The depth of the upper end necessary to afford a good outlet for the sewage.
2. The grade necessary to give a good velocity, the depth necessary to prevent injurious heaving of the sewer foundations by frost.

No danger need be anticipated of the sewer itself freezing for a stream of warm, flowing sewage will not freeze. Generally there will be no danger of trouble from heaving if the sewer foundations are 4 feet underground.

One of the most essential needs of a community is a safe and adequate disposal system including the necessary piping to deliver the sewage to the disposal plant or other place of sewage disposal.

The ideal sewage system for a community is to have a storm sewer and also a sanitary sewer. The storm sewer can be used to take care of the surface water, downspouts and the like, and without treatment, can be disposed of in some convenient river or lake without becoming a nuisance. Where you have two separate systems, it is possible to have much smaller disposal plants and the flow is much more constant as well as avoiding the peak loads during storms. These sewers in the streets or alleys are called main sewers.

The house sewer is that part of the horizontal piping of a plumbing or drainage system extending from the house drain to the main sewer. The material used to construct the house sewer is usually extra heavy cast-iron soil pipe, vitrified clay pipe, concrete sewer pipe, reinforced concrete sewer pipe, or brick.

Cast iron sewers have a definite advantage over tile sewers, especially...
if the soil in which the sewer is laid has the slightest tendency to be unstable. Settling of tile or concrete pipe causes cracking of the cement joints, thus permitting the sewer to attract roots from trees and other shrubbery to enter the sewer seeking moisture and cause a serious stoppage.

Next to be considered is the house drain. It is defined as that part of the horizontal piping which receives the discharge from soil stacks, waste stacks, and down-spouts (where you have no separate storm sewer) inside the walls of the building. The house drain conveys the discharge to the house sewer and terminates three feet outside of the building walls.

House drains, when exposed within a building, should be constructed of extra heavy cast iron soil pipe with leaded joints, galvanized wrought iron, steel or brass pipe. Underground, it can be constructed of the same material as the house sewer.

It is necessary to keep the house drain above the ground in the buildings where the house sewer is above the basement floor. These house drains are then called “hanging” or “suspended” sewers. Where there are suspended sewers and fixtures, floor drains or other appurtenances are to be installed below the level of the suspended sewer, it is necessary to construct or install a sump or ejector basin.

Tee connections, 90-degree Y connections or 90-degree turns should never be used unless there is an accessible clean-out at that point. A 90-degree turn, using a 45-degree Y and a 1/4th bend, is much superior. In the event of a stoppage, the plumber’s sewer rod can go around the 45-degree Y and 1/4th bend connection easily, while if there is a tee connection, he is very likely to pound the back out of it with his sewer rod and, of course, there is less likelihood of stoppage where there is a wider sweep.

The size of the sewer is based upon the number of fixture units discharging into it and the slope of the sewer. For instance, a sewer with a 1/2-inch per foot pitch can handle more fixture units than a sewer with a 1/2-inch per foot pitch can possibly handle.

Where there is danger of the sewer backing up into the basement, it is advisable to install a back-water valve near the point of entrance of the house drain into the building.

Where this back-water valve is used, it is essential that the downspouts enter the sewer on the street side of the valve. The objection to some types of valves is that they cause a stoppage by the accumulation of solids at that point, therefore, they must be provided with a clean-out.

A catch basin is defined as a receptacle which separates and retains greases, oil, dirt, gravel and all other substances, lighter or heavier than water, in order to prevent them from entering the house drain and house sewer. It is contended by those who advocate the use of a catch basin that those substances which it retains would cause stoppages in the drainage system if they were permitted to flow directly into the house drain.

On the other hand, there are many communities that do not require catch basins for single dwellings and no appreciable amount of obstruction has been found in sewers when the sewers were properly installed.

Grease interceptors are designed to perform the same function as the catch basin. They do not cost as much to install, they are not as large, so consequently they must be cleaned more frequently. They are generally located in the building immediately under the kitchen sink. An unpleasant odor permeates the room during the cleaning process and occasionally the covers are not replaced.
properly causing a definite nuisance due to the leakage of sewer air and obnoxious odors.

The simplest construction of interceptors has proved best from a standpoint of efficient operation, economical manufacture, and good appearance. The unit should be so designed as to allow for maximum distance of travel of grease traps or interceptors employed through the interceptor. Some types of grease traps or interceptors employ for minimum turbulence of the water while it travels through the interceptor. Some types of grease traps or interceptors employ.

house sewer without first going through the gravel basin, much of the gravel will be retained in the horizontal piping and cause a great deal of trouble. Most gravel basins are constructed of cast iron or steel, and are generally located inside of the building.

Some cities advocate running the downspouts from gravel roofs into the catch basin. The objection to that method is that during a downpour the water breaks up the crust that forms in the catch basin sending it into the house drain, thereby defeating the very purpose of the catch basin.

In most cities it is necessary to have the downspouts located within ten or twelve feet of a window or air shaft, it should contain a trap so as to prevent the sewer gas from entering the window or air shaft. The trap should be located in a place that can be readily cleaned, as leaves and other debris frequently cause a stoppage at that point.

When downspouts are placed within buildings they should be constructed of cast iron, galvanized iron or galvanized steel pipe. The size of downspouts is determined by the area in horizontal projection of the roof to be drained. That area is usually based upon the amount and severity of rain-fall in that section of the country. Ordinarily a 4-inch downspout will handle up to 1,300 square feet of roof area. While a 4-inch downspout with a 5-inch increaser will handle 2,400 square feet.

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This is computed with a rainfall rate of 4 inches per hour.

**Soil and Waste Lines**

In order to discuss soil and waste lines, the difference between them must first be clarified.

A soil line is one which receives the discharge from one or more water closets or bed pans, and is generally located outside of the building. Some cities advocate running the downspouts from gravel roofs into the catch basin. The objection to that method is that during a downpour the water breaks up the crust that forms in the catch basin sending it into the house drain, thereby defeating the very purpose of the catch basin.

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A cooling device such as a water chamber or jacket through which the building water supply ordinarily runs. Inasmuch as most cooling chambers are subject to flaw holes or breaks in the castings, they become potential water pollution hazards.

Besides, it has been proved that the water jacket does not increase the efficiency of interceptors. Therefore, there is no reason why they should be included in the construction of any such units.

**Rain Water Leaders**

Where there is a gravel roof, it is necessary to run the downspouts into a gravel basin. This basin is a receptacle designed to retain sediment. If downspouts from gravel roofs are run directly to the house drain or a cooling device such as a water chamber or jacket through which the building water supply ordinarily runs. A cooling device such as a water chamber or jacket through which the building water supply ordinarily runs.

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The most important and particular part of the drainage system is the trap. (Refer to Figure No. 2.) The principal function of the entire venting is to maintain the trap seal. In order to do that, it is necessary to keep the same pressure on the outlet side of the trap as there is on the inlet side, which is, of course, atmospheric pressure. Where there is faulty venting, other fixtures in the system while being discharged, can and do cause pressures greater or less than atmospheric, causing the breaking of the trap seal by aspiration, syphonage or back pressure.

**Traps**

A trap is defined as a fitting or device so constructed as to prevent the passage of gas or air through a pipe or fixture by means of a water seal. There are many different types of traps on the market. (See Figure No. 2) The full "S" trap was possibly the first trap in general use. It was found to create a perfect siphon effect on the crown of the trap, thereby breaking the siphon. On a new installation this system works satisfactorily but after it has been in use for a time, the opening on the crown of the trap becomes clogged up owing to the fact that the soaps and greases float on the top of the waste liquids. Another objection to this installation is the rust pocket formed by the vent pipe where it comes down and out from the wall.

The "3/4" S" trap has the same features as the full "S" trap except that in appearance it resembles an incorrect installation of the "P" trap as shown in Figure No. 3. The "P" trap with proper venting and correctly installed is as good a trap as is made today. As long as the vent remains open there is no danger of trap siphonage or back pressure affecting the seal in that trap.

Another good trap is the drum trap. This trap is very difficult to siphon when properly installed. However, many times this trap is installed in such a way that the cover is on the sewer side of the seal and, if after removing the cover, it is replaced incorrectly, or if for any other reason the cover is not air tight, the drum trap could leak sewer gas for some time without being detected. This, of course, could not occur where the drum trap is inverted and the cover is on the bottom. (All traps, incidentally, should have their clean-outs below the water seal.)

The maximum distance that the trap should be located from its vent connection is very important and most plumbing codes limit this distance between the trap seal and its vent connection to 5 feet.

The fittings used for drainage work should be, for soil pipe work, sweep or sanitary fittings and where screw pipe is used, the fittings should be the recessed and threaded type, with the tappings on the branch openings pitched 1/4 inch to the foot. If reference is made to Figure 3, it will be noted that where the waste opening in the vertical pipe to which the trap is connected, is below the "dip" of the trap, it will siphon itself, even though the waste is properly vented. Therefore, there is a definite relationship between the pitch on the outlet arm on the same arm and the length of that same arm.

**Vents and Venting**

This phase of plumbing is the least understood and requires the greatest amount of study. The lay person or amateur not understanding the fundamentals of venting usually neglects that end of the system and, although the fixtures, traps and other exposed plumbing may appear satisfactory, and, although the job may perform reasonably well for a short period of time, many things occur that prevent the system from operating satisfactorily later on. The amateur's main concern is to see that the supply pipes do not leak and that the waste pipes run off. These things are important, but in the overall picture they are not nearly as important as proper venting. Leaky supply pipes, or a stopped up waste pipe, can be readily observed and corrected. Whereas, sewer gas coming into the house through traps with broken seals or leaky vent pipes inside or outside of the partitions are seldom observed and can cause much illness to the occupants.

If the occupant of a building thought there was a small leak or a chance of a small leak in the domestic gas lines in his building, and he was subjecting himself and his family to them, and even though the doses were too small to kill outright and without the hazard of fire, he would do everything in his power to have those leaks corrected. It can be well said and it has been proved that sewer gas like domestic gas does lower the resistance of humans and animals alike so that they succumb to common diseases if subjected to the gas even in small doses over a period of time. The only difference is that the law compels us to put something into the domestic gas to give it an odor that makes it recognizable.

The best venting job is done with the minimum amount of horizontal vent pipes. The objection to horizontal vents is that rust may accumulate in them and build up, forming a partial stoppage, whereas, vertical vents or those on a 45 degree angle would permit the rust to fall down the vent pipe, and unless there was a rust pocket below that point it would reach a waste line and be washed away by the waste from the everyday use of the fixtures.

There are several different systems of venting, such as "continuous" or "loop" or "circuit." Continuous venting is defined as the continuation of a vertical soil or waste pipe above the point of entrance of the pipe from a fixture trap. This type of venting offers the most resistance to vent stoppage. Any rust forming in the vent line falls down into the waste pipe and in turn is washed down into the sewer. (See Figure No. 3) Loop or circuit venting is employed for the venting of batteries of closets, where instead of providing an individual vent for each fixture, the end of the horizontal waste or soil line is carried up vertically and connected to the main vent or independently carried through the roof of the building. Circuit or loop venting should not be used for wall outlet fixtures.

It is never advantageous to furnish or recommend cheap labor or material, since the health of the occupants depend upon good plumbing and drainage which can be accomplished only by using the best the market can supply.

In conclusion, all those entering upon or actually engaged in the plumbing field should realize the magnitude and importance of the work, their responsibilities to the community, and the necessity for continual study of these most important subjects.

Harry B. Griesbach, author of this article, is a member of the American Society of Sanitary Engineering, and the Chicago Washburne Trade school faculty.
The Lengthening Battle Lines

by R. E. Saberson

TWO YEARS have passed since we really began to take a hunk in the great housing shortage. We are rapidly approaching the time when two million residential units will have been constructed during the hectic period when it was impossible to keep the supply of certain critical materials in the balance with the prodigious demand which has applied, not only to homes, but to practically everything else in common use by American families.

We have not yet solved the housing shortage or caught up with the pent up demand for automobiles and a great many other things too numerous to mention. This inability to suddenly supply everybody with whatever they need, as a result of the several years' stoppage of the civilian production lines, is frequently pointed to as a glaring defect in our way of doing things. Actually it should be regarded as a great blessing. One cannot help but wonder what would be happening today if every family had everything needed in the way of new homes, automobiles, television sets, automatic washers and the innumerable other things that were out during the war or have come into the picture since it ended. If it had been that easy to catch up with the greatest pent up demand in history the bread lines would now be stretching across the country and back again.

Two million homes ain't hay all, though they may now seem not to have been more than a drop or two in the bucket in many localities. On the other hand, in certain areas the picture already has begun to take on an old familiar hue. Nevertheless, it is exceedingly difficult for many to believe that the situation is becoming anything but worse.

Be that as it may, we are frank to admit we still have a big job ahead of us if we are to construct enough residential units to end the housing shortage within the next few months, or years, or whatever period is required to do the job. Let's be those who fear that it will not be done we hasten to affirm not only that it will be accomplished but that we are headed hell bent for the time when houses, like automobiles and every-
As to who will come out on top of the heap we are not prepared to say. We only know that this much competition between men, machines, methods and materials is certainly going to produce houses.

It is safe to say that no one group will capture the entire housing market. That is not the point. On the other hand, the size of the market is sufficient to keep the race at fever heat between groups with the end result adding up to an astonishingly large number of homes.

Under such circumstances it is interesting to read what is happening and the claims that are being made for the various methods. 

A trade publication describes how improved construction methods used by the Small Homes Council at the University of Illinois "cut one-tenth off the cost of building a house" . . . a saving in labor and materials. The Producers Council and the National Retail Lumber Association have gone far in the direction of interesting manufacturers of building materials in adopting modular measurements and in designing houses "to take advantage of savings possible under engineered construction methods to reduce man hours of labor and wastage of materials."

In addition, traditional construction has likewise profited greatly by the extensive use of portable equipment, electric saws, drills, sanders, pipe cutters, threaders, concrete mixers, paint sprayers, power shovels, dump trucks, lift trucks and a long list of modern labor saving devices. Traditional, conventional construction has not been asleep and doesn't propose to be left in the lurch.

Then, of course, the huge projects of the mass builders in the metropolitan areas are too well known to need more than passing mention . . . projects which measure up to the highest standards achieved by any industry . . . where modern homes are constructed almost while you wait . . . where every economy in the use of manpower and materials has been employed to produce the maximum for the lowest possible price. Next come the proponents of factory prefabrication with full page advertisements in the Saturday Evening Post, mile-long factories, presses that rival the automobile industry in size, specially designed delivery equipment, new materials, new methods, new everything!

Finally come the public housers who are still undaunted. Their zeal has not diminished. It matters little that past achievements have not measured up to their promises. What they will be able to accomplish in the future remains to be seen but based upon what is now taking place in the great housing industry you may be sure they will have plenty of competition. That, of course, is exactly what it takes to produce the greatest values for the least cost on houses or anything else and that is where we are headed today as the battle lines keep getting longer and longer.

Whipped by the incessant beating of demagogic drums the "housing situation" is attracting the great and small and a vast number of in-betweens to the home construction field.
How to Find Number Of Joists in Given Span

A quick and practical way to find the number of joists in a given span is suggested by L. C. Miller, building contractor of Hot Springs, Ark.

"Take the length of your building, deduct one fourth, and add one joist," Miller writes. This method will work on floor joists, ceiling joists and rafters when spaced 16 inches on center. It will also work on studding, except that corners and double studs must be added. Example: If the building is 32 feet long, deduct one fourth, or eight, leaving 24. Now add one, and the total is 25 joists.

How to Prevent Doors from Rattling

Simple, but effective, is this suggestion from John Menkveld, of Grand Rapids, Mich. Instead of cutting out a clean and square hole for the latch in the strike plate, cut the hole at a slant. The slant should correspond to the slant of the latch, so that the latch will rest flush against the wood when the door is closed.

How to Provide for Future Installation of Disposal

WITH THE current demand for waste disposal units—in both high and low cost homes—provision for installation of these units should be made at the time of construction. Such provision costs little more, and the added sales appeal that results is well worth the small extra cost. If provision for waste disposal units are made during construction of the building, economies in both plumbing and wiring costs can be made than, if a unit is installed later.

Building codes in the area should be checked, to make sure there is no ban on waste disposal in the kitchen drain.

Small Details Make the Difference

By R. J. Alexander

The difference between good construction and poor construction is usually a matter of small details; extra care in the selection of the proper materials, adequate size and spacing of framing members, and proper nailing and bracing.

This month's detail sheet illustrates several instances in residential construction where good building can be achieved without great additional cost.

Joists under all main bearing partitions should be doubled. The two joists under a partition carrying the soil stack should be set far enough apart to allow the stack to pass between them without any cutting of the joists. The detail sheet shows where joists and headers should be doubled around stair, fireplace and chimney openings.

An important detail, that adds nothing to the cost of construction, is care in the cutting of framing members. If the ridge and plate cuts of rafters and the end cuts of studs and plates are square and true, considerable strength will be added to the finished structure.

Adequate nailing with nails of the proper size is also important. Suggested reading: "Technique of House Nailing," published by Housing and Home Finance Agency, Washington, D.C.

Footings are the main support of any building and should be of ample size and of good materials. Tailing and damp-proofing merit particular attention, if a builder wishes to build a good house.

Proper flashing over door and window frames, around chimneys and fireplaces and in valleys is an item that is sure to indicate the quality of a builder's work.
AMERICAN BUILDER'S BETTER DETAIL PLATE

NO. 7.50. MINOR DETAILS OF GOOD CONSTRUCTION.

- 2 x 4 stud. 2 x 4 plate.
- Floor Joist.
- Cross bridge all joist spans of loft, or more.
- Joint.
- Joint.
- Built-up beam.
- Joint.
- Post.
- Built-up wood beam.
- 1 x 6 tie.
- Concrete base.
- Planbridging.
- Stud to be notched behind rafter.
- 1 x 6 or 2 x 6 ridge.
- Gable, stud.
- 1 x 6 tie.
- Ceiling joist.
- Double plate.
- Size and spacing of rafters according to span.
- Rafter, tie.
- Double plate.
- Lapped at corners.

WALL SECTION.

- Beam and post detail.
- 2 x 4. Lookout.
- Basement wall, of 8 in. concrete block, and over 20 ft. long should have 16 x 8 pilasters, bonded into wall. Dotted lines indicate alternate courses.
- If room arrangement permits, space window openings to allow for adequate wind bracing.
- 1 x 6 brace, notched into stud & plate.
- A right angle to joists.
- Double header. 2 x 6.
- Double stud.
- Fireclay.
- Double header. 2 x 6.
- Frame detail C.
- Wet adhesives.
- Details.
- Plans.
- Detail C.
- Door, window.
- Framing.
- Door, window frame, detail C.
- Door and window frame.
- Flashing.
Varied Designs

Two-story alternated with one-story duplexes in this subdivision resulted in a ready consumer acceptance. Builder made a complete sell-out of 91 houses before he had finished first ten in the group.

Good planning, original design plus sound values, resulted in a sell-out of 91 houses before the first ten were finished in a subdivision in the east side area of Los Angeles, Calif. The buildings were constructed by the Angelus Building Co.

George Dorner Riddle, A.I.A., president of the company, worked out an idea of introducing two-story units into the subdivision, in conjunction with single story, in order to avoid monotonous rows of one basic building design. He also devised an ingenious plot-plan wherein the one and two-story buildings are staggered in such a way that wide spaces are opened between buildings either at the front or at the rear, thus greatly improving the appearance of the subdivision and providing privacy to occupants of the buildings.

There are 36 two-story buildings in the group with living rooms, dining alcoves and kitchens downstairs and two bedrooms and baths upstairs. The remaining 55 buildings in the subdivision are one story, two-bed-
TWO-STORY buildings in this subdivision sold for $17,250. One-story dwellings, 1,800 square feet area, sold for $16,250.

Increase Sales Appeal

SPACIOUS living rooms, like one above, are provided in two-story houses in group. Stairs are made of plastic. Floors of all rooms except kitchen and bath are oak.
BATHROOMS in all the houses are equipped with Pullman lavatories with tile tops. Showers are installed over tubs. Without overcrowded appearance, compactness is achieved, and these bathrooms become another strong selling asset of houses.

Facilities have been incorporated in an area enclosed in a closet in the corner of the kitchen. In this area, laundry tray, space for washing machine and shelving for storage of laundry materials is provided. This space serves the full function normally provided in a service porch or utility room. In this case the floor area used is only about 15 square feet. The closet or cabinet is shut off from the kitchen by a large pair of doors which open flat against the wall when the laundry facilities are being used. This provides a spacious area on wash day, while occupying very little room during the week. Moreover, this arrangement utilizes interior space and only requires ventilation to the attic. In the two-story dwellings, the water heater is also housed in the same area. This feature has met with good acceptance on the part of buyers.

It is not surprising that Riddle was able to design and build buildings which met with such instant approval on the part of the public—because no one could have been in a better position than he to know what had been offered and what had pleased Los Angeles homesseekers in the past. For almost 11 years, Riddle was Chief Architect for FHA in Los Angeles, and he played an important part in developing standards for that area.

One of 55 one-story buildings in group. With area of 1,800 square feet, these buildings readily sold for $16,250.
COMMERCIAL WINDOW AB12823
Large steel window measures 64 1/3 x 63 5/16 inches overall, and features twin vents at center panel. May be installed in frame or masonry. Constructed of heavy, hot-rolled sections, arc-welded. Vertical mullion bars available for group combinations. Screens available for twin-vents. Manufacturer: Kewanee Manufacturing Co., Kewanee, Ill.

WALL HEATER AB12810
"Pion-Aire," radiating-type vented heater, may be installed in wall of standard 2x4-inch stud construction. Fits flat against wall and requires no cutting of floors or floor covering. Operates on natural gas or manufactured gas, and is equipped with automatic safety pilot. Provided in No. 10 model, 10,000 B.T.U. input, for bath or small rooms, and No. 20 model, 20,000 B.T.U. input, for bedrooms and living rooms. Manufacturer: Pioneer Water Heater Corp., Los Angeles, Calif.

VERSATILE HAND TOOL AB12833
Primary use of "Tempotool" is in attaching steel to steel or steel to concrete, brick or mortar. Efficient in installation of electrical conduits and junction boxes, and in affixing sprinkler systems to steel or concrete surfaces. Source of power provided by exploding of cartridge enclosed in chamber or breach of unit. Explosion drives pin or stud through short barrel into steel. Male and female threaded studs available to accommodate nuts or threaded rods. Available in model "22" for light fastening operations; in "38" for heavier jobs. Manufacturer: Tempo Products Co., 1900 Euclid Ave., Cleveland 15, Ohio.

STEEL LADDER SCAFFOLD AB12818
"Trouble Saver" sectional steel ladder scaffolds are 24 inches wide. Made in four heights: 3 feet; 5 feet; 6 inches; and 10 feet. May be used for painting, plastering and general maintenance, or may be incorporated in scaffolding.
folding set-up for hard-to-get-at places. 
Manufacturer: The Patent Scaffolding Co., 
Inc., 38-21 12th St., Long Island City I, 
N. Y.

WINTER AIR CONDITIONERS AB12813
Janitrol, FEC series, is adaptable to rad-
ant heating applications. Six sizes range 
from 60,000 B.T.U. input rating to 180,000 
B.T.U. Four smaller sizes are completely 
factory assembled. Cabinet fronts con-
tain two horizontal ventilating scoops. 
Convex surfaces inside recesses direct venti-
lation air over all controls. Steel chassis is 
removable, and both burner ribbons and 
burner runner-ribbons can be removed from 
chassis. Each ribbon releases as complete 
unit. Each burner has its own non-linting 
primary air shutter adjustment. Manufac-
turer: Surface Combustion Corp., Colum-
bus, Ohio.

FORM SECURING DEVICE AB12829
"Piper Form Tie" will tighten and tie any 
size wire up to and including No. 7. Tool 
may be removed from the form within 30 
seconds. No twisting of wires between 
floors. Tie may be made on 2x4's, 4x4's, 
and studs. Weight, approximately three 
pounds. Made of cast bronze, it is guar-
anteed to withstand all wire form-tying 
requirements. Manufacturer: Piper Form 
Tie, 2219 N. Vancouver Ave., Portland 
26, Ore.

CORNER LEVEL AB12820
"Ken Corner Level" will square two faces 
and top of brick in one operation. Can 
be provided with adjustment of one of 
the glass vials for plumbing a batter or 
incline and tapering surface. Made of 
aluminum in four sizes to fit into the tool 
kit. Manufacturer: Singer-Kennedy Corp., 
21 E. Van Buren St., Chicago 5, III.

BATHROOM ACCESSORIES AB12811
This line of bathroom accessories features 
tumbler holders, towel bars, grab rails, 
and related-recessed fixtures. Character-
ized by a distinctive "morning glory" 
motif, all are triple-plated in chrome. All 
projected fixtures, furnished with concealed 
back plate and screws. Manufacturer: 
Bluejay Chrome Products, Inc., Pittsburgh 
17, Pa.

REFRIGERATOR AB12805
Model M-848, "Hold-Mor" contains 8.37 
cubic feet storage space, Cabinet width, 
2934 inches; height, 5932 inches; depth, 
overall, 25 7/16 inches. Four shelves 
occupy space of 14.53 square feet. Ice 
capacity, 60 cubes. Sealed freezer compart-
ment holds 24 pounds of frozen food. 
"Coldpack" storage space holds up to 12 
pounds of uncooked meat. Manufacturer: 
Norge Div'n, Borg-Warner Corp., Detroit 
26, Mich.

VERSATILE PAINT AB12803
RMS Perma-Dri may be used for acous-
tical treatment, anti-sweat protection, and in-
sulation. Contains heat-processed min-
erals and waterproof adhesive binder. 
Can be applied to thickness of 3/4-inch, 
3/8-inch, or to 1/2-inch or more by use of 
proper paint spray equipment. Perlite 
granules, insulating component part of 
Perma-Dri, are applied over Perma-Dri. 
For acoustical treatment, a light final coat 
of Perma-Dri is applied. Manufacturer: 
Stephenson Air Brush Paint Co., 190 Mac-
Arthur Blvd., Oakland 10, Calif.

HOT WATER SYSTEM AB12809
Designed to fill farm and rural require-
ments, automatic system contains single 
moving part; voluted streamlined castings, 
case ring, stuffing box bearings, and stain-
less steel shaft. Automatic pressure 
switch maintains set pressure; air volume 
control maintains correct quantity of air 
in tank. Units equipped with foot valve 
and strainer. Standard size tanks with 
42, 82, and 120 gallon capacities can be 
used with any unit. Manufacturer: Foster 
Manufacturing Co., One Kinsey Ave., 
Buffalo 17, N. Y.

HARDBOARD PRODUCTS AB12827
"Patterned Presswood" is made by em-
bossing fine-grained leather design on face 
of tempered hardboard 3/8-inch thick. The 
other side is smooth. Standard available 
sizes are 4x6, 4x8, and 4x12 feet. Takes 
wide range of finishes, but two-tone treat-
ment is recommended as most effective, 
unless contrast values obtained in this man-
ner bring grain of simulated Spanish leather 
into relief. Manufacturer: Masonite Corp., 
111 W. Washington St., Chicago, III.

STAIN WITH WAX FINISH AB12826
Cabot's stain was waxed first, then wax 
used soft wax finish in one application. Stain 
penetrates and provides wear-resistant fin-
ish. Available in several shades, including 
white, ivory, and two gray colors. Manu-
facter: Samuel Cabot, Inc., 21 Oliver 
Building, Boston 9, Mass.

FLOOR SANDER AB12824
American fill-type floor sander, weighing 
89 pounds, operates with 8-inch drum and 
heavy duty G.E. capacitor type 1 h.p. 
motor. "Package unit construction" of 
machine is designed for quick motor and 
fan package unit replacement. Sander 
completely enclosed. Vacuum cleaner type 
bag. Manufacturer: The American Floor 
Surfacing Machine Co., Toledo, Ohio.

KITCHEN VENTILATOR AB12804
Emerson Junior, built-in kitchen ventilator 
for ceiling mounting, contains 10-inch fan.
Unit consists of ceiling grille and fan unit, ceiling housing and outside grille. Ceiling grille and fan unit in one section may be installed in ceiling housing after walls are plastered. Grille, finished in baked white enamel, may be repainted to match ceiling. Ceiling housing equipped with shutter that opens when fan is turned on, closes when fan stops. Outside grille is rectangular. Unit may be installed in brick or frame construction. Sleeves adjustable from 18½-inch to 22½-inch. If sleeve extension is necessary, 3½x10-inch rectangular duct may be used. Manufacturer: Lowebco, Inc., 1525 S. 53rd St., Chicago, Ill.

**ROLLING DOOR HANGER AB12824**
The "Har-Vey" plywood hanger is designed for ½-inch and ¾-inch size doors, for which no mortising is necessary. May be used on thicker doors by mortising for proper alignment. Installation consists of settling three brass screws, after which the door can be mounted on Har-Vey's extruded aluminum track, affixed to door frame. Made of bronze, with rollers of phenolite fiber and ball-bearing. Manufacturer: Metal Products Corp., 807 N. W. 20th St., Miami, Fla.

**ALUMINUM KITCHEN CABINETS AB12812**
"Olympia Kitchen Kabinets" are finished in satin-white baked enamel by means of "etching" process. Can be assembled quickly by use of a screwdriver. In unassembled form, cabinets make compact packages for shipping. Manufacturer: Western Metalcraft, Inc., Olympia, Wash.

**INTERLOCKING WEATHERSTRIP AB12821**
Two 9-gauge zinc members, interlocking, form the "E-Z-On" draft control. Weatherstrip may be used for either prefabricated or job-finished windows. Prevents moisture from seeping in between sash and casing. Applied by nailing to inside or outside of window. After it is applied, sash can be removed without disturbing installation.

**DUAL WALL JOINT SEALER AB12825**
"Plastape" seals cracks and joints in dry wall installations in one operation. Applied in paste form with a putty knife, it dries quickly, leaving an even wall surface. Has sufficient elasticity to provide necessary expansion and contraction to prevent cracks and seams from showing later. Manufacturer: Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y.

**PORTABLE COMPRESSOR AB12814**
"Pac-Air" portable compressor is self-contained, air-cooled, gasoline-engine driven. Intended for use by small building contractors, plumbing and electrical contractors, cemeteries and farms, or as utility compressor for large contractors. Two cylinder, single-stage compressor unit equipped with automatic unloader. Compressor and gasoline-engine driver are mounted on air receiver which forms integral part of running gear. May be towed behind truck or passenger vehicle. Manufacturer: Ingersoll-Rand Co., 11 Broadway, New York 4, N. Y.

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When you address inquiries direct to manufacturers concerning a new product described here, please mention that you saw it described in American Builder.
NEWS OF NRLDA AND STATE AND REGIONAL ASSOCIATIONS

NRLDA Honors Dealers Who Did Outstanding Public Relations Work

EXCEEDING even the hope of its sponsors, the public relations program award competition of the National Retail Lumber Dealers Association brought a response that won awards for seven winners and revealed a variety of techniques by which retail lumber dealers are helping their communities, their employees and their businesses.

The entries were from dealers in towns and cities of all sizes. They fulfilled the initial purpose of the NRLDA program, which was supported actively by federated associations and the trade press, of focusing attention on what dealers are doing for their communities to attract public attention through public relations programs.

The annual award program will be continued to focus the attention, also, of allied building industry groups upon the practical public relations being performed by local distributors.

Presentation of the Annual Awards for Outstanding Service to the Community and the Industry in the Field of Public Relations were presented during the national annual meeting of NRLDA at the Roney Plaza Hotel in Miami on November 11, to the following company and organization winners:

Class 1: (For lumber and building materials yards operating in towns of under 1,000 population) F. S. Pendleton Lumber Co., McComb, Ohio. (Population 987)

Class 2: (Firms operating in towns of 1,000 to 5,000) Sterner Coal and Lumber Co., Belmar, N.J. (population 3,435)

Class 3: (Firms operating in towns of 5,000 to 50,000) Richards and Krueger Co., New Braintree, Texas (population 6,900)

Class 4: (Firms operating in communities with populations from 50,000 to 100,000) L. Grossman and Sons Inc., Quincy, Mass. (population 75,000)

Class 5: (Firms in communities of more than 100,000 population) A. W. Barrett Co., Bridgeport, Conn. (population 147,000)

Class 6: (Dealer group public relations programs) Tulsa Lumberman’s Association.

A special award for an Industry Engineered Homes program went to the Edward Hines Lumber Co. of Chicago. The award was presented to Phil Creden who prefaced his presentation with the vital statement that “the whole building industry has been on the defensive before the bar of public opinion since the close of the war. Our company felt the only answer to a better public attitude was the production of homes... When the Industry Engineered Homes program was announced, we knew we had a dramatic way of bringing our story home to the public.”

Judging of some of the groups was a difficult matter because of the excellence of the programs. The awards finally were arrived at after close balloting, solely on the number of points covered by the winning programs. Because of the closeness of the votes, a runner-up was selected in several classes by the judges to receive honorable mention. These are:

Class 2: Diamond Lumber and Hardware Co., Lovell, Wyo.


Class 4: Peterson Lumber Co., El Paso, Texas.


The entries received in this initial contest, which were judged by a panel of trade publication editors, reveal that programs already exist which range in scope from the limited advertising program to a complete plan which embodies all phases of good public relations—a program such as could qualify under all the points used in the judging.

These points included the following purposes:

1. To develop prestige.
2. To promote sales and products.
3. To build employee good will.
4. To prevent and/or solve labor problems.
5. To foster community good will.

(Continued to page 118)
When Ro-Way Overhead Type Doors leave our plant, they're Ro-Way built in every detail—from millwork to hardware and springs.

Ro-Way Door sections are made of first-class, kiln-dried lumber. Millwork is done by skilled craftsmen using the most modern production machinery and methods to give you better-looking, better-fitting, longer-lasting doors.

Hardware, too, is made entirely in our own plant from selected tested steels. Hinges, track and ball-bearing rollers are Ro-Way designed—then Ro-Way built for perfect fit. And one secret of Ro-Way's easier operation is Ro-Way-built power springs—each power-metered to the weight of the door it will lift.

Remember all this next time you specify doors of the overhead type. A Ro-Way Overhead Type Door is every inch a Ro-Way. Not an assembly of parts from various sources. That's your assurance that no matter where a Ro-Way Door is installed, it's sure to be a Ro-Way product from start to finish.

Dependable Ro-Way sales and installation service is available nationwide. Consult your classified telephone directory, or write for distributor's name.

ROWE MANUFACTURING COMPANY
744 Holton Street
Galesburg, Illinois, U. S. A.

AMAZING NEW RO-WAY DOOR REQUIRES ONLY 2 1/2 INCHES OF HEADROOM!
Ro-Way's latest achievement—the new Model 21, 4-section overhead type door. Now in production. Write for details.

There's a Ro-Way for every Doorway!
One big saving leads to another......

Lower Cost In Hanging
Weighing only thirty pounds, the pre-fitted Paine Rezo is easy to handle, easy to hang in many minutes less time.

Lower Cost In Finishing
The clean flush surface of Paine Rezo doors requires less than half the time needed to paint or stain common panel doors.

Lower Cost In Maintenance
The air-cell construction features of Paine Rezo doors are exclusive and patented — minimize warping and shrinking, provide the greatest dimensional stability of any door.

and they all lead to

PAINE REZO DOORS

The positive values that Paine Rezo Doors have to offer builders were never more pronounced than now... good-looking, modern flush doors with patented construction features that make them structurally better, lighter, stronger than any other door. To these advantages add an installed cost that is no more than that of a common panel door. When a premium door like this packs an economy wallop like that, it’s no wonder that more than 2,000,000 of them are in service today in every type of building, everywhere.

Rezo production is still limited, but steadily increased facilities are making them increasingly available. Ask for them at your dealer; write directly for an informative full-color bulletin.

Manufactured by the
PAINE LUMBER CO., Ltd. Oshkosh Wisconsin
ESTABLISHED 1853

I can't help wondering if the city politicians, particularly those who are asking so vociferously for federal funds with which to build suburbanization, will pay any attention to the real desires of the homefolks of America as indicated in recently released statistics which show that nearly half of the record breaking number of homes built in 1948 were located outside the nation's cities. Data collected by the Bureau of Labor Statistics shows that the trend toward building in the rural areas which was interrupted temporarily by the war with its disruption of materials for water and electricity extensions, and its shortening of transportation lines, has definitely been resumed. In 1944 only 33 per cent of the new privately financed non-farm dwellings were built outside of the urban areas. In 1946, it had grown to 40 per cent. In 1947, it was 44 per cent, and the percentage for 1948 is running around 50 per cent or more.

Interesting possibilities are apparent in the matter of the basing point method of pricing. The President of the U.S. will have two vacancies to fill in the Federal Trade Commission next January. Chairman Freer resigned in October and Garfield S. Ferguson is an interim appointee who has not been confirmed. Both of these men approved of outlawing the basing point method of pricing. Should two men be appointed who agree with the reasoning of Lowell Mason (no relative of mine, but I am proud of him) the line-up of the commission would present a 3 to 2 reversal. Lowell Mason was the lone supporter of delivered pricing just as he has been a lone campaigner.

(Continued from page 114)
USE Tomorrow's SAWS TODAY

Stay ahead with Comets! Superior in design, engineering, production, smoothly versatile in operation, they are soaring high in popularity. Refinements in operation, features exclusive with Comets, have earned a distinct appreciation for these fine radial power saws. All factors combine to place them above average level... to present them as tomorrow's saws—available today... to you! Select your model at the nearest Comet dealer or write direct.

Distributors of Davis and Wells Woodworking Machines

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

Comets cut quicker
Dealer Review
(Continued from page 116)

for understandable language and a
more equitable and businesslike con-
duct of the affairs of the F.T.C. Yes,
the situation has interesting possibil-
ties.

You never can tell where a good
idea will develop. One evening
through chance a woodworking ma-
chine operator had his thumbnail
painted with an exotic bright red nail
polish. The next day he found it so
much easier to see where his thumb
was in relation to the buzz saw that
he has been continuing the applica-
tions. Simple but effective and I don't
think it is patented as yet.

NRLDA's Dealer Awards
(Continued from page 114)

6. To build good will of stockhold-
ers.
7. To overcome misconceptions and
prejudices against the company.
8. To promote government under-
standing and good will.
9. To build good will among other
industry elements.
10. To educate the public in the
use of special products and services.
11. To educate the public to a par-
ticular viewpoint.
12. To promote good will among
customers and consumers.

The actual judging of entries took
place at the Shoreham Hotel in Wash-
ington, D.C. on October 22. Associa-
tion executives and the judges all
were impressed by the abundance of
entries for this first contest, and
by the amount of material that can
be used in good newspaper publicity
and other public relations work. There
was a great deal of material that can
be particularly effective if used in
connection with any legislation con-
cerning retail lumber and building
materials dealers and their field of
endeavor.

The success of this year's program
made it apparent that it will be con-
tinued as an annual affair. To enable
every dealer to get off to a head start,
the deadline date for the submission
of next year's entries has been set as
September 23, 1949. Material sub-
mitted by dealers should cover activi-
ties engaged in between September 10,
1948, and September 10, 1949. In Jan-
uary, a 4-page folder will be sent in
bulk shipments through the federated
associations to all dealers interested
in public relations programs. The
folders will give all rules and in-
formation for those wishing to par-
ticipate next year.

(Continued to page 120)
Z-Z-Zip through your jobs with these speedy SKIL Tools

Chances are you're already using SKIL Saws to cut time off every cutting operation.

But that's not enough today! You need the same kind of savings on all your jobs...and you can get them with these other fast-working SKIL Tools to speed all drilling, sanding and sawing.

SKIL Tools are light, compact, powerful. Designed to do more jobs...engineered to do them faster... built to serve you longer. Ask your Distributor to demonstrate SKIL Tools today!
What every builder should know about

LUMITE

RUSTPROOF!

LUMITE brings big savings to builders because it's rustproof screening at an amazing low cost. It saves money through the years because it can never rust, rot, or corrode. It never needs painting. It can't stain paint under windows. It's unaffected by wind, rain or snow. It's non-inflammable.

Sold through Hardware, Lumber and Building Supply Dealers and Screen Manufacturers. Widths to fit all doors, windows and porches. For more complete information, consult Sweet's File or write LUMITE DIVISION, Chicopee Manufacturing Corporation, 47 Worth Street, New York 13, N. Y.

SPECIFY BY NAME

LUMITE

Woven of saran

Dealer Review

(Continued from page 118)

From the judges' study of the entries, it is apparent that many of the programs can be strengthened by being broadened to pay more attention to the employee and recognize his individual importance to the company and to the community.

An excellent example of such a factor was a part of the A. W. Barratt program which won an award. This firm sends a monthly house organ to all employees with factual messages on timely industry subjects. It furnishes employees with all available data that will encourage attendance at night schools for instruction on various industry subjects. Employees are given "length of service" pins and hold annual Barratt Family Gatherings to foster good employee relations. There is a management safety council and advisory council to work with employees.

During the judging, it was brought out that some of the entries were examples of very fine advertising programs, but that product advertising alone is not a strong public relations program. Some excellent presentations included either a single phase of the public relations program or failed to round out the program with evidence of the tangible success of the effort. Therefore, some beautifully presented programs were rated lower than others which may not have appeared so elaborate, but which were of broader scope.

The judges strongly recommended that the awards be continued as an annual activity and expressed admiration for the high quality of all entries. They included: C. T. (Bill) Parsons, Southern Lumber Journal; Robert Kerr, American Lumberman; Jack Parshall, Building Supply News; Stanley Horn, Southern Lumberman; W. G. Grindoll, Mississippi Valley Lumberman; Newell Clark, American Builder; Dexter Johnson, Western Building; Charles Westwood, Retail Lumberman; Donald Moore, Southern Building Supplies.

Red Cedar Shingle Bureau Annual Meeting Dec. 10

RED CEDAR shingle manufacturers and distributors will gather in Seattle, Wash., Friday, December 10, for the 32nd annual meeting of the Red Cedar Shingle Bureau, advises W. W. Woodbridge, the secretary-manager.

Prominent lumbermen and merchants are scheduled to address the assembled shingle producers.
Add
COLOR INTEREST

to masonry

with low-cost
BONDEX
CEMENT PAINT

Every day sees new examples of Bondex colors used to give distinction to masonry walls. The trend covers not only exteriors and basements but interior walls as well. Bondex Cement Paint with its wide range of shades is particularly suitable for masonry applications for 3 reasons:

- Bondex and masonry naturally go together because the basic ingredients of both are compatible
- Bondex shields masonry against destructive dampness
- Bondex protects masonry against surface disintegration

The reputation and dependability of Bondex is well-established. Use Bondex in colors or white — on concrete and cinder block — on stucco and stone — on new or used brick.

FULL RANGE OF BONDEX COLORS TO CHOOSE FROM

Dutch White • Oyster Shell • Old Spanish White
Antique Ivory • Carthage Cream • Adobe
Tropical Coral • Spanish Buff • Monastery Gray
Grotto Blue • Ivy Green • Brick Red • Pure White

THE REARDON COMPANY • ST. LOUIS 6
Chicago 9 • Los Angeles 21 • Bayonne, N. J.
Montreal 1

BONDEX
THE Patented
CEMENT PAINT

that outsells all other
cement paints combined
First stage of framing construction. Stran-Steel floor joists are placed in position.

Fibre-backed steel mesh is nailed directly to Stran-Steel joists.

Two-inch concrete floor has been poured and finishing operations are under way.

Accurately-sized Stran-Steel studs are now assembled into wall sections.
Construction is proceeding without a hitch on the first two blocks of the $14,000,000 Kent Village garden-type apartment project now being erected in Prince Georges County, Maryland, near Washington, D. C.

Roberts Construction Corporation, owner and contractor, ascribes much of this gratifying progress to Stran-Steel framing. This precision framing is providing greater speed, economy and ease of construction than would have been possible with any other framing material.

Nailable Stran-Steel framing permits economical dry-wall construction with plaster board. Its permanent rigidity eliminates the possibility of subsequent wall movement from warping and shrinking. And an incombustible Stran-Steel framework adds substantially to the fire-safety of the completed building.

If you're planning a building of any type—residential, commercial or industrial—it will pay you to investigate the advantages of Stran-Steel framing. Ask your local Stran-Steel dealer for full information, or write for his name and address.

GREAT LAKES STEEL CORPORATION
Stran-Steel Division • Dept. 30 • Penobscot Bldg. • Detroit 26, Mich.
UNIT OF NATIONAL STEEL CORPORATION

Completed wall panels ready for erection.

Raising a precision Stran-Steel wall panel into position.

Completed exterior framework of first unit ready for close-in.

Close-in, wallboard is nailed directly to Stran-Steel framework.
royal jet-flow
outperforms heating units
costing three times as much*

M. J. BROCK says:
"We consider the Royal Jet-Flow a remarkable develop-
ment in home heating, giving the small home owner the type of heat
that has heretofore been available only in a
high-cost home." M. J. BROCK & SONS

* Proved by tests conducted in America's
Finest Independent Laboratory. Royal Jet-Flow uses jet principle and high outlet delivery
to achieve a velocity of 300 feet per minute.
Heats entire average size house with a mini-
imum differential from room to room. Royal
Jet-Flow costs only slightly more than a floor
furnace—much less than forced air.

write today for complete information

royal heaters, inc.
1024 WESTMINSTER AVENUE
ALHAMBRA, CALIFORNIA

Catalogs and
HOW-TO-DO-IT INFORMATION

481—SYSTEM OF LIGHT STEEL FRAMING—is discussed in a
24-page catalog issued by Stran-Steel Div., Great Lakes
Steel Corp., Penobscot Bldg., Detroit 26, Mich. Erection
methods, typical examples, specifications, and engineering
data concerning Stran-Steel are illustrated and described in
detail.

482—UNIVERSAL KNOCK DOWN HOUSING FRAMES—are de-
scribed in Service Sheet No. 88, issued by The Richmond
Fireproof Door Co., N.W. Fourth St., Richmond, Va.
The eight-page service sheet includes architectural details;
assemble and typical anchor details. Specifications and
diagrams are included.

483—WEATHER CONTROL—for hot water and radiant heat-
ing systems is the subject of an 18-page catalog by Sar-
cothen Controls, Inc., Empire State Building, New York
1, N.Y. Typical Sarcothen hook-ups, installation details,
description of accessories, specifications, illustrations and
diagrams are included.

484—GAS UNIT HEATERS—“Pittsburgh” gas unit heaters,
Series “C,” featuring cast iron heat exchangers, are illus-
trated and described in a folder published by Automatic
Specifications for six sizes, with output ranging from
68,000 to 172,000 AGA B.T.U. per hour, are included.

485—LINOILEUM AND TILE—“Armstrong’s Floors and
Walls,” A.I.A. File No. 23, a new 35-page booklet, de-
scribes products and recommended uses of various floor and
wall coverings manufactured by the Armstrong Cork Co.,
Lancaster, Pa. Detailed drawings of installation pro-
cedures are shown with illustrations and also with eight
pages of Armstrong’s specifications.

486—COPPER CONVECTORS—Descriptions of use, construc-
tion, and C.M.C. ratings of “Streamaire” copper con-

vectors manufactured by Young Radiator Co., Racine,
Wis., are given in a new 10-page catalog issued by that
company. The catalog is well illustrated, containing nu-
merous charts and diagrams.

487—BUILDER’S HARDWARE—Packaged push and pull bar
sets are the subject of a pamphlet published by the City
Plating & Manufacturing Co., 22nd and Cole St., St.
Louis 6, Mo. The modern styling and quality fabrication
of this hardware are described and illustrated with pic-
tures of the different styles of bars available.

SERVICE COUPON—CLIP and MAIL to CHICAGO

American Builder, December 1948.

Readers Service Department
American Builder
105 W. Adams St., Chicago 3, Ill.

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

Numbers

Name

Street

City

State

OCCUPATION*

*Please note that occupation must be stated if full service is to be given.
INCORPORATING the newest type smooth running, precision-mated gears, this exclusive geared motor drive brings blade teeth closer to the drive shaft for greater driving power...smoother, cleaner cuts...delivers 5 H.P. blade performance with 3 H.P. constant-speed motor. Increased blade-reach beyond motor housing makes deeper, more powerful cuts possible with smaller blades. End results are savings on blade costs, saving on power costs, and faster, cleaner cutting.

Three more reasons why it pays to choose the Walker-Turner Radial Saw:

• Gliding ram provides full work visibility...freedom from obstruction...accuracy. Eight ball bearings act over ram travel of 21 1/2".

• Two positive anti-kick-backs hold the work on both sides of the cutting tool...for double safety in every operation.

• Universal head swings, tilts, locks...in any position for all woodworking operations possible with rotating cutting tool—cross cuts, compound miters, rips, dadoes, routs, shapes, tenons, etc.

MAKE EXTRA PROFITS WITH THESE, TOO.
Before selecting any woodworking equipment, consider the possibilities of the Walker-Turner Band Saw, and the Bench Model Drill Press. They’re fast, safe, sure and SAVING...in a few months extra profits mark off initial costs.

For complete catalog, write to Walker-Turner Division, Kearney & Trecker Corporation, Plainfield, New Jersey.
Chromtrim 73 and 75 Series of metal mouldings combine beauty with durability. These economical and quality wall lino and tile board metal mouldings are the preferred trim by carpenters and builders for basement, bathroom or kitchen walls.

The popular Chromtrim 73 Series is for use with wall linoleum. The single flange design gives enough nailing surface to install easily without marring Chromtrim’s high lustre finish. All sections are slotted and punched on 8” centers, to simplify leveling up after installation.

The Chromtrim 75 Series is similar in style and finish to the 73 Series, but accommodates the 5/32” tile board material. Chromtrim 7313 and 7513 panel dividers also make a practical combination divider and cap section between bottom panels of tile design and top panels of a contrasting color or texture. Chromtrim 73 and 75 when installed reveal no trace of the strong wide flanges which are concealed by the wall covering and tile board. Chromtrim 73 and 75 assure a snug fit on all wall linoleum and tile board jobs.

All Chromtrim mouldings are pre-cut and individually wrapped in convenient five and ten foot lengths, and shipped complete with nails in tough fibre tubes to prevent marring or bending.

R. D. WERNER COMPANY, INC. 295 Fifth Avenue, New York City 16, N. Y.  
IN CANADA: R. D. WERNER COMPANY, LTD. @ PORT DALHOUSIE, ONT.

Please send descriptive literature, catalog and prices on Chromtrim’s 73 and 75 Series of metal mouldings.

NAME:  
FIRM:  
ADDRESS:  
CITY:  
STATE:  
DEPT. AB-12

NEW PRODUCTS  
(Continued from page 113)

are made from same alloy. Tested and approved by Detroit Testing Laboratory; it requires 1,250 pounds to pull the 7/8” rung out of 2-inch side rail. Rubber bars attached at ends of side rails. Manufacturer: Chesley Industries, Inc., Detroit, Mich.

DOMESTIC EXHAUST FANS AB12830  
"Kitchen-Aire" domestic exhaust fans have stamped aluminum impeller, motor mounted on neoprene grommets, and new style blade. Angle mounting post is incorporated, as well as counter-balanced backdraft damper of stamped aluminum. Size of sleeve and damper permit eliminating adaptors. Manufacturer: Stewart Manufacturing Co., 3205 E. Washington St., Indianapolis, Ind.

PORTABLE HEATER AB12819  
The Age oil-fired temporary heater has capacity of 100,000 B.T.U.’s. Used on construction jobs, in warehouses, on farms, and for industrial applications. Use from 1/20 up to 2/3 gallons of kerosene, No. 1 or No. 2 fuel oil per hour. Manual control. No attendant required. Weight, less than 75 pounds. Manufacturer: All-Gas Equipment Co., Milwaukee, Wis.

HEAVY DUTY WATER SYSTEM AB12828  
Automatic and self-priming water system is fitted with Roth turbine type pump. Unit is adaptable to shallow well installations in home, farms, summer cottages, or tourist courts. Available in a number of styles and sizes, each unit includes a high pressure pump, single-phase electric motor, heavy galvanized-steel tank of size specified, combustion check valve and strainer, pressure switch, air valve, automatic air volume control, heavy galvanized steel base and pressure gauge. Manufacturer: Roy E. Roth Co., Rock Island, Ill.  

(Continued to page 128)
Write for this Catalog today

on the NEW Multi-Outlet Wired Strip that gives you a S-P-R-E-A-D of outlets

You'll find in this booklet:

1. How PLUG-IN STRIP fits into architectural design.
2. How easily PLUG-IN STRIP is installed.
3. A complete illustrated catalog-chart of all the parts and fittings required for any job.
4. Instructions on the use of LOPO-TRIM—the metal quarter-round for housing telephone and other low-potential wiring.

And for:

ARCHITECTS, CONTRACTORS WHOLESALERS
A handy 16⅛” x 10” Catalog Wall Chart

National Electric Products Corporation
Pittsburgh 30, Pa.
HEATILATOR

1. Complete form for the masonry

2. Saves time, labor and materials

The Heatilator comes to you as a complete steel unit. The smoke dome, throat, downdraft shelf and damper are all built right in. You simply set the Heatilator unit in position, then lay your masonry around it. You don’t have to figure out the proper size and proportions of your fireplace. When you use the Heatilator unit, your fireplace is bound to be right!

- Heatilator Fireplace Circulates Heat
- Will Not Smoke

These two features alone, even if there were no others, make the Heatilator Fireplace outstanding. This is why more builders and home owners prefer the Heatilator Fireplace. It’s been proved for more than 21 years in thousands of homes, cottages and camps.

You save money on your fireplace with Heatilator

HEATILATOR, INC.
8112 E. Brighton Ave., Syracuse, N. Y.

Heatilator is the registered trademark of Heatilator, Inc.

NEW PRODUCTS
(Continued from page 126)

PLATFORM FOR LADDER

"Safety Tread Ladderstep," made to fit any standard rung ladder, has 10 by 6 by 5-inch platform of 3/4-inch hardwood. Pink form is bolted to brackets of cast aluminum with tensile strength of 21,000 pounds per square inch. Platform is equipped with 5 by 8-inch "Safety Walk" tread material to prevent foot slippage, is designed to lessen fatigue caused by standing on ladder rungs, and to permit worker freedom to use both hands at work. Manufacturer: Saginaw Bearing Co., Saginaw, Mich.

BATHROOM FIXTURES

Chrome-Tex towel bars are available in 30-inch, 24-inch, 18-inch and 12-inch sizes, with streamlined multiple rack. Tissue holders redesigned, and improvements added to line. Manufacturer: Chrome-Tex, Inc., 2187 E. Second St., Cleveland, Ohio.

ROOFING AND SIDING MATERIAL

Corrugated aluminum sheet, .032-inch thick, weighs 56 pounds per 100 square feet. For industrial construction, it may be used for both roofing and siding. Produced with corrugation depth of 7/8-inch pitch of .666 inches. Several sheet sizes available. Manufacturer: Reynolds Metal Co., 2500 S. Third St., Louisville, Ky.

(Continued to page 130)
NOW! FOR VALLEYS AND FLASHING

THIS SPECIAL LOW-COST SHEET COPPER

REVERE HOME FLASHING is a new type of sheet copper—in a special gauge, size and temper—designed for use in valleys and flashing on residential construction including low-cost houses. And it is priced much lower than you'd expect! Unlike other metals used for valleys and flashing, copper does not require painting. It can never rust or rot. And the new Revere Home Flashing is so thrifty to buy and install that you can use it for valleys and flashing on even the most moderately-priced houses.

PACKAGED FOR EASY HANDLING!—Revere Home Flashing is packaged for your convenience. Each package contains 10 sheets of this special sheet copper cut to 18" x 48", a generous supply of hardware bronze nails, and an illustrated instruction book that clearly shows how to install copper in valleys, around chimneys, doors, windows and other wall and roof joints.

Revere Home Flashing provides more than economical weather-proofing. It adds an important selling point to the house; it shows that the builder uses quality material; and it assures complete satisfaction for the owner. And it does all this at such low cost that you'll want to start using it right away.

ASK YOUR BUILDING SUPPLY DEALER—Your building supply dealer has Revere Home Flashing in stock or can get it for you promptly. Ask him today, and start now to give your customers—and yourself—the protective advantages of the Revere Home Flashing System.

OF COURSE, QUALITY CONSTRUCTION CALLS FOR COPPER GUTTERS, DOWNSPOUTS AND PLUMBING LINES, TOO.
These important features plus plenty of power and rugged construction make Stanley Saws a practical choice for on-the-job cutting. W8 Saw cuts any depth from 0 to 2 3/4" and can operate from any A.C.-D.C. outlet. Round arbor shaft permits using any standard saw blade. Each Saw is furnished with ripping gauge and packed in Stanley metal carrying case. More hours of profitable work in this portable electric saw ... more jobs you can use it on, more power on every job, more years of usefulness.

See Stanley W8 Saw or W7 and W9 models at your dealer's, or write for circular. Stanley Electric Tools, 492 Myrtle St., New Britain, Conn.

Saw Track No. 158 changes the Stanley Saw into a bench saw for production work.
Far above all other things to remember when buying insulation for your jobs are these two money-saving facts: INSULITE builds — INSULITE insulates at the same time. Two things for the cost of one! A double-duty building material that helps you build better competitive houses — so you can sell them faster — make more profits — have more satisfied customers.
Federal Judge Rules That Glaziers Cannot Refuse to Work with Pre-Glazed Sash

A PRELIMINARY injunction, of nation-wide significance to the building industry, was issued November 10 against the AFL Chicago Glaziers union, Local 27, in Federal District court, which enjoined the union and its officials from withholding glaziers from Joliet, Ill., contractors who use pre-glazed sash.

The injunction, based on charges filed by 66 members of the Joliet Contractors association, held the local guilty of unfair labor practices under the Taft-Hartley law. One Joliet contractor testified in the trial that the ban on the use of pre-glazed sash had increased the cost of a home 60 to 80 dollars. The national labor relations board brought the suit against Local 27 to force the union to provide glaziers to contractors who use pre-glazed materials.

The court instructed Walter L. Moldawer, NLRB attorney, to draw up the injunction. It will enjoin the union from inducing glaziers to refuse to work on sites where pre-glazed sash is installed, and refusing to furnish glaziers on request to glazing subcontractors who do work for contractors using pre-glazed sash.

Judge Walter J. LaBuy, who issued the injunction, said "The evidence clearly establishes violations of the act, and the responsibility of all defendants. There is no doubt of that, so the injunction will issue."

Daniel D. Carmell, attorney for the union, attempted to show during the trial that individual glaziers had refused to work where pre-glazed sash was used, and not on instructions from union officials. Carmell indicated he might appeal the case.

Sloane-Blabon Wins Award For Tile Flooring

C. J. CHRISTOVERSON, contract manager of Sloane-Blabon Corp., received an "Oscar" for his company's prize winning Korosel floor tile entry.

Hiram McCann, editor of Modern Plastics magazine, presented the award at the publication's competition Award luncheon at the Hotel Plaza, New York City.

Sloane-Blabon's entry of Korosel floor tile won an award for in the building materials classification of the Seventh Modern Plastics competition. At this competition, more than 1,300 entries, comprising more than 7,000 products, were judged.

Sloane-Blabon Corp. has offices at Fifth Ave. and 47th St., New York 16, N.Y.
Must Owners of your new houses POLICE THE THERMOSTAT?

Automatic Anthracite Stokers Installed in an existing boiler or furnace and in new houses, automatic hard coal stokers deliver plenty of heat quickly... save up to 50% on fuel bills... eliminate fuel worries.

There are no Ifs, Ands or Buts when you specify Automatic Anthracite Heating

Owners of your new houses can have plenty of worry-free heat because there's plenty of hard coal and there is anthracite equipment to fit any heating requirement. A whole winter's supply of anthracite can be stored easily in advance. Everyone wants this kind of security and convenience. They have just that when you specify automatic anthracite equipment.

Look over the two types of domestic anthracite equipment shown here. They burn the cheaper sizes of economical hard coal... completely automatic from bin feed to ash removal.

Write to us for more detailed information on all types of anthracite heating equipment—domestic and commercial.

ANTHRACITE INSTITUTE
101 Park Avenue • New York 17, New York
AUTOMATIC Tacking Team

THE BEST WAY TO TACK

- INSULATION
- BUILDING PAPERS
- SCREEN WIRE
- BUILDING FELT

The Duo-Fast gun and hammer tacker team takes top honors in the field of tacking proficiency for speed - accuracy - dependability. It is a team that will save time and money on every tacking job. One hand does the complete job easily. Both tackers feed and drive staples automatically. Both use the same size Duo-Fast staples. It's the perfect combination for a job well done.

Write today for information on the Duo-Fast top honors tacking team and other Duo-Fast automatic tackers.

FASTENER CORPORATION
888 FLETCHER STREET
CHICAGO 14, ILLINOIS

When it comes to building papers

Raltex Papers are Right

RIGHT FOR under flooring, under roofing and general heat and cold insulation. IMPERVIOUS, the aristocrat of building papers, meeting Federal specs. UU-P-147. Waterproof—windproof—rotproof.

RIGHT FOR concrete curing papers. WOVENKRAFT, criss-cross jute reinforced. Waterproofed—tear-resistant—asphalt blanket—strong—pliable. Comes in widths up to 9 feet.

RIGHT FOR general building use and job protection. CREPED, saturated kraft. A waterproof asphalt saturated creped sheet.

WRITE FOR Raltex Price Schedule and samples.

W. RALSTON & CO., INC.
Sales Office: 220 E. 42nd St., New York 17, N.Y.
Plant: Old Bridge, New Jersey

American Builder, December 1941

Profit Fir Door Dimensions Changed

MEMBER companies of the Fir Door Institute have decided to change the dimensions of “prefit” doors. The new doors will go into production as soon as individual mills have completed their change-over requirements.

For the past two years, the Douglas Fir Door Industry has manufactured prefit doors in sizes 2 feet, 5 13/16 inches by 6 feet, 73/8 inches, or 3 1/6 inch less in width and 1/4-inch less in height than the nominal book size.

Prefit doors, manufactured by member mills of the Fir Door Institute and mills inspected by FDI, will conform to these new dimensions:

“Prefit doors shall be manufactured to actual book size at the factory. Thus, a nominal 2 feet, 6 inch by 6 feet, 8 inch door shall now prefit to that same net size... A tolerance of 1/32 inch plus or minus is permissible. Scuff strips shall be securely attached to the bottom of each stile for protection in handling.”

Masonite to Acquire Marsh Wall Products, Inc.

MASONITE CORP. plans to acquire ownership of at least 80 per cent of the stock of Marsh Wall Products, Inc., Dover, Ohio. Among the many hardboard processors in the country, Marsh is one of the largest.

Eugene Holland, president of Masonite, said the completion of the proposed transaction will mark Masonite’s entrance into the business of applying decorative finishes to the hardboard it manufactures.

Masonite filed a registration statement covering 81,250 common shares with the Securities and Exchange commission. The company has 700,000 shares of authorized stock, of which 600,000 shares are outstanding.

Holland said Masonite intends to operate the Marsh company as a subsidiary, utilizing its large modern plant and the successful production methods it has developed. He added that the Marsh plant will be operated with the present personnel.

Reynolds Reorganizes Products Sales Setup

THE OUTCOME of a recent meeting of sales managers of Reynolds Metals Building Products division, Louisville, Ky., was the formulation and adoption of plans to decentralize sales operations of that division, breaking it down into four sections geographically.

Each sales territory will comprise an area in itself, and each will operate as a separate unit, responsible to its individual district sales manager.
THRUSH Adjustable Supply Tee

FOR BALANCED ONE-PIPE HOT WATER HEATING SYSTEMS

Bronze Sizes

CAST IRON

SOLDER CONNECTIONS

Patent Applied For

BRONZE

now available in BRONZE

Now you can give your customers the finest one-pipe Thrush Adjustable Hot Water Heating with forced circulation and year 'round domestic water supply, using either iron or copper piping. The famous Thrush Adjustable Supply Tee permits accurate adjustment of heat from each radiator. Better heating increases customer satisfaction, builds your reputation. See our catalog in Sweet's or address Department G-12.

H. A. THRUSH & CO. • PERU, INDIANA

BRANCH OPEN

BRANCH HALF OPEN

BRANCH CLOSED
EASY TO INSTALL!
EASY TO REGULATE!

Two More Reasons Why Building Professionals Welcome the New EAGLE UNIVERSAL DOOR CLOSER

Installation is simplified by mounting template which shows exact positioning of closer for openings from 90° to 120° and for hold-open or non-hold-open operation.

Mounting plate is screwed into position indicated by template, eliminating need for holding closer during installation.

Closer is easily inserted into mounting plate and locked into position by one set screw. Adjustment of leverage can be made by sliding closer in mounting plate.

Never before...a door closer so easy to regulate. The field swing is automatic and the latching speed is regulated through a single screw as illustrated. Turning the screw to the right decreases latch speed; turning to the left, increases latch speed.

Changes In Sales Staff Announced By Norge Division of Borg-Warner

INCLUDED in sales staff changes in the Norge division of Borg-Warner Corp. were the appointments of three product managers; R. C. Connell, gas range sales manager; M. B. Robb, home heater sales manager, and J. Edward Wyatt, Jr., contract sales manager.

Connell replaces W. M. Davis, who has resigned. He was formerly Norge product sales manager of Ludwig Hommel & Co., Pittsburgh Norge distributor, and is also experienced in retail sales and sales management.

Robb is widely known in the heating field and, among other positions, held that of sales manager of Evans Products Co.

Wyatt was formerly executive vice president of the Dearborn Stove Co., and has had wide merchandising experience, in addition.

Avco Announces Results of American Kitchens Survey

THE MAJORITY of persons interested in obtaining new kitchen equipment own their own homes; are married, and under 34 years of age, according to a recent survey made by American Central division, Avco Manufacturing Corp. The survey, designed to find the number of possible users of American kitchens, revealed that almost 50 per cent of those who responded intended to build their own homes. Of this per cent, the majority said they would build in 1949. The average expected expenditure was $10,000.

Of those responding to the survey, about 40 per cent said they would remodel their present dwellings. Thirty-one per cent of this total said they had already started the work.

The survey was conducted by enclosing a post card with each catalogue sent out by Avco, starting in September. The cards were staggered so that every magazine on the schedule would gain equal weight in the mailing.

New Trane Company Plant Now in Production

THE Trane Co. has opened the nation's first factory devoted exclusively to mass production of a standard convecto-radiator in Scranton, Pa.

R. James Trane, vice president of The Trane Co. and son of the president, is the general manager. Myles Erickson is office manager and purchasing agent for the eastern division. Louis Antol, formerly an assistant superintendent at Trane's La Crosse factory, is the superintendent.

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Recommended for retraction
HERE'S WHY THE
American Home
METAL CASEMENT
IS OUTSIDE
STORM-SASHED!

Here are some of the reasons dealers give us for insisting on Outside Storm Sash for Metal Casements...and why we think you will want to sell "American Home" Casements to your builders and contractors:

1. Outside storm sash is the only kind that provides the ideal 2-inches of dead-air insulating space between glass panes.

2. Outside storm sash is the only kind that protects the entire window and glass from cold, dirt, snow, rain, corrosion, condensation and frosting.

3. Outside storm sash is quicker and easier to handle. Only one sash is needed for each window instead of two or three of the "inside" type.

4. Outside storm sash eliminates the necessity of taking down screens, winter storing and putting them up again in the spring.

5. Outside storm sash costs only one-third as much as the less efficient inside-attached type.

We asked 4,500 dealers what they wanted in a residential metal casement. More than 4,000 specified OUTSIDE STORM SASH. The "American Home" Window is the only metal casement designed and built to meet this dealer specification.

Mesker - first to say: "Here it is!"
The rapidly increasing use of "Trouble Saver" equipment for all types of building and construction work is practical proof of their value to contractors. "Trouble Savers" provide maximum safety, convenience and economy.

**LADDER JACKS**

ONE-MAN Ladder Jacks adjust to any pitch on either side of the ladder. Weight is distributed on three rungs. Indispensable for carpentry, painting, cornice work, etc. They're instantly adjustable . . . and absolutely safe!

**SCAFFOLD BRACKETS**

Simplify the installation of safe working platforms for many types of side wall work. Scaffolding brackets, made of rail steel, are light, easy to handle and extra safe. Made in nail-attached, stud and bolt-attached types.

Write for new Catalog M and complete information on all types of "TROUBLE SAVERS" equipment.

**LOW COST ENTRANCE OR STOOP RAILS . . . In 5 Stock Sizes**

Inexpensive—distinctive entrance rails, ideal for front and rear doorway platforms. Available in 5 stock sizes, at low cost, from building supply dealer. They are decorative, practical, and an investment in safety.

**So Easy to Install!**

Illustration shows extended newel post and conventional attachment knee on top and bottom rail for easy installation. Rugged, solid construction, with distinctive Coffman hand-weight inside scroll at newel post.

All types “custom” railings made to your dimensions. Have your local BUILDING SUPPLY DEALER secure our "Blue Print Service" and quotation on your current job.

Write Dept. AB, P. O. Box 259, for free catalog of designs, sizes and prices.

Manufactured of the coveted "Complete Builders Line" of hand-weight Ornamental Iron.

**Attention DEALERS, BUILDERS, AND CONTRACTORS**

The most beautiful all chrome finish fluorescent medicine cabinet with plate engraved Everlast mirror, all General Electric equipment, plastic caps, Underwriters' approved, retail at $67.75. This medicine cabinet unit is built for the purpose of saving all wiring and fixtures necessary for the bathroom as it contains all the wiring and switches necessary and also a convenience outlet for electric range or any other use. Each fixture has a separate switch so that you may light one or two lights as you desire and will provide sufficient light for any bathroom without any extra fixtures. The only thing necessary is to connect the cabinet with the main line. The price of this cabinet is very reasonable and at the same time it covers all the cost of wiring and fixtures for the bathroom.

Manufacturers representatives and distributors invited. Manufactured by FLUORESCENT LIGHTING CO. MONTICELLO, N. Y.

**W. B. "Bill" Turner Joins Metal Lath Association**

W. B. "BILL" TURNER has accepted an appointment as commissioner of the Metal Lath Manufacturers Association, Cleveland, Ohio. He assumed his new duties October 15 when he retired from his position as manager of sales of the Fireproof Materials division of Inland Steel Products Co. H. B. Brown, who recently joined Inland Steel Products Co. after many years of experience in the manufacture and distribution of fireproof building materials, has succeeded Turner as manager of sales of the Fireproof Materials division.

"Bill" Turner can well be termed the "Dean" of the metal lath industry. He has more years of service than any other active member of the association, is president of that organization at present, and has held the office on several previous occasions.

**Perfection Stove Plant Nears Completion**

THE REBUILT Ivanhoe Road plant of Perfection Stove Co., Cleveland, Ohio, is nearing completion. The modern structure will provide the existing plant with an additional half-million square feet of manufacturing space.
Windows bearing this "Quality-Approved" Seal are today's big building value for two important reasons:

First, they help you build better and at less cost. Second, they give your houses a big "plus" in sales appeal.

The quality seal on your windows means best materials, sound design and strong construction. Only manufacturers who meet these rigid standards may use this "Quality-Approved" Seal on their windows.

Quality-approved aluminum windows—double hung, casement and projected—give your prospects window advantages they are looking for: good looks, easy cleaning and lifelong freedom from painting, periodic replacements and repairs.

You'll need no "extra" window parts or accessories when your windows bear the "Quality-Approved" Seal. They come ready to be installed, with no finish to apply.

Write for information and names of manufacturers who can supply you. Address Dept. A.

Aluminum Window Manufacturers Association
209 Cedar Ave., Takoma Park, Washington 12, D.C.
Interest Grows In Heating-Ventilating Exposition

INTEREST in the Ninth International Heating and Ventilating Exposition, to be held in the International Amphitheater, Chicago, Ill., January 24 to 28, 1948, continues to increase with the closing of the few remaining gaps in available display space. Information drawn from specifications filed by exhibitors indicates that practically every type of equipment employed in the varied uses of heating, ventilating, and air conditioning will be represented. Many new products will be on display for the first time.

The exposition is under the auspices of the A.S.H.V.E. in conjunction with its 55th annual meeting. G. L. Tuve, president, has been appointed chairman of the advisory committee for the exposition. The newly appointed advisory committee of 33 members includes representation of 17 associations in such allied fields as acoustics, architecture, air filtration, insulation, and fuel.

Clark Equipment Wins Legion Citation

The Clark Equipment Co. has been selected by the National Executive Committee of the American Legion to receive its annual citation as the outstanding employer in Michigan for giving "exceptional service in the employment of veterans, both physically able and disabled or handicapped." All four of the Clark, Mich., plants—Battle Creek, Buchanan, Berrien Springs and Jackson—are covered by the award. A program of awards, national in scope, was inaugurated last year, when the Ford Motor Co. was the honored concern in Michigan.

Laboratory Tests Douglas Fir Plywood Panels

Facilities for testing Douglas fir plywood in the panel-making industry's quality control program will be expanded with the erection of a laboratory at Eugene, Ore.

This new branch testing laboratory of the Douglas Fir Plywood Association is designed to offer more rapid service to Oregon and California factories which are now sending plywood specimens to the main laboratory at Tacoma, Wash.

The new laboratory will test samples of the different types of panels, produced by Oregon and northern California factories, to maintain standards set up by the plywood industry in cooperation with the U. S. Department of Commerce.

Robert H. Ripley will be local head of the new laboratory.
Why Keymesh

Reinforcing for Stucco
Overcoating & Plaster

Insures a Stronger, More Durable Wall

Provides stronger reinforcement—
Keymesh is made of strong, copper-bearing steel wire. It’s specially woven with a reverse twist—Keymesh lays flat when unrolled. No bumps or bulges to cause uneven thickness of the "scratch" coat. Keymesh is heavily galvanized for protection against corrosion.

Embeds thoroughly—The special open mesh design of Keymesh allows each steel strand to be completely embedded by the "mud", insuring lasting strength of the wall. Keymesh is the right size for easy troweling, and the right size for holding the scratch coat firmly while setting. Joins easily with compact, smooth laps. No bumps or high spots in the first or following coats.

Keeps distance from wall—Keymesh is easily furred out with special Keymesh furring nails to keep it at a uniform and proper distance from the wall—to insure full thickness of the scratch coat.

Contractors and builders—Try Keymesh on your next stucco job. It’s easy to handle, doesn’t cut hands—saves lather’s time. Plasterers prefer Keymesh because it lays flat, trowels easily. Find out for yourself why Keymesh can help reduce your costs. And write for new Contractors Data Book on Keymesh Reinforcing.

Shipped in handy sized rolls, 150 feet x 3 feet. For EXTERIOR Stucco or Overcoating, use: Keymesh—1½" hexagon mesh, 17 gauge galvanized wire, or 1" hexagon mesh, 18 gauge wire. For INTERIOR Plaster or Base for Tile, use: Keymesh—1" hexagon mesh, 20 gauge galvanized wire.

Keystone Steel & Wire Company
Peoria 7, Illinois
Cut 7 to 10 times FASTER—
ON THE JOB
with a
Blue Streak
MOST POWERFUL PORTABLE ELECTRIC GUIDED SAW

CUT WET OR DRY
using Diamond or Abrasive Wheels
BRICK • TILE • TERRAZZO
MARBLE • SLATE • GRANITE
ASBESTOS PRODUCTS • REFRACTORIES
CONCRETE and CONCRETE PRODUCTS
LIGHT STRUCTURAL STEEL and PIPE
WEIGHING ONLY 78 LBS.,
The Stone Blue Streak is rated 2½ H.P.—110 universal or 220
single phase. Will cut 5-inch depth of cut and up to 10 feet
in length with a 14-inch wheel.
Write us today
for further information
STONE MACHINERY CO., INC.
Dept. A-12 Box 1363 Syracuse, N.Y.

Plywood Association Announces Winter Meeting Schedule
THE National Plywood Distributors Association has announced the fol-
lowing winter schedule of meetings:
Midwest meeting, January 10-11, will be held in the Edgewater Beach
hotel, Chicago, Ill.; northeast meet-
ing, January 13-14, will be held in the
Commodore hotel, New York, N. Y.;
the southern meeting, slated for Jan-
uary 17-18, will be in the Atlanta
Biltmore hotel, Atlanta, Ga., and the
western meeting, January 26-27, will
be held in the Ambassador hotel, Los
Angeles, Calif.
The date for the national conven-
tion is June 13, 14 and 15; to be held
in the Edgewater Beach hotel, Chi-
cago, Ill.

Sterling Tool Products
Name New Sales Manager
D. A. HUTCHINSON has been
named general sales manager of
Sterling Tool Products Co., Chicago,
Ill., it was announced by S. A. Cros-
by, president.
Hutchinson, formerly assistant
sales manager, succeeds J. A. Proven
who recently resigned.
H. P. Gangwer, comptroller, has
been named vice president.

Autzen on Board of
M & M Wood Working Co.
HERBERT MALARKEY, presi-
dent of the M and M Wood
Working Co., has announced that a
vacancy on his company's Board
of Directors has been filled by
Thomas Autzen, president of the
Portland Manufacturing Co., Port-
land.
Autzen, a member of a promi-
nent pioneer lumber family and
with wide interests in the lumber
industry and other enterprises in
Oregon and Washington, has been
an associate of the M and M Wood
Working Co. in a number of its
operations for the past seventeen
years.

D. A. HUTCHINSON
"Duty-Designed" means these completely new Timken Silent Automatic heating units are designed right, built right, priced right to give small homes the finest in quiet, dependable, economical heat.

Where every foot of cubage counts—and where quietness plus reliability count most of all—that’s the place for Timken Silent Automatic “Duty-Designed” oil heating equipment for small homes!

It's made specifically to fit the job in every way—ultra-compact for vital space conservation; supremely quiet for utility room installations; completely dependable for long-lasting, trouble-free service; competitively priced to provide top-quality equipment at budget cost.

Operating economy is also in keeping with small home needs. This Timken Silent Automatic “Duty-Designed” equipment is fired by the same wall-flame type of burner that has a 20-year record for thrifty efficiency. Fuel oil savings up to 25% or more are commonplace.

For full details, write the factory or phone your local Timken Silent Automatic Authorized Dealer! He’s listed in the “yellow pages.”
Upson Salesmen Taught
Application Methods
In "Refresher Course"

When a man sells laminated fibre
wall and ceiling panels, he should
be able to put on a carpenter's apron,
get himself a hammer and a rule, and
put those panels on a wall or ceiling
the way they should be applied.

Such is the theory behind a series
of sales training classes under way at
the headquarters plant of The Upson
Co., Lockport, N. Y.

District sales managers and sales
representatives have been coming into
Lockport to take a "refresher course"
in wall and ceiling panel application,
directed by L. E. Keller, Upson tech-
nical sales manager.

When the class of salesmen-carpenters
assembles in the company's sales
experimental building, the program is
outlined to them and "Professor"
Keeler puts them to work. They un-
load full-wall panels from a truck,
fasten U-clamps to them, and ease
them into the building through a door

FULL-WALL panel is taken into building
opening. The particular application
problem is explained to them, and it is
up to them to work it out.

Floating fasteners hold the panels
(Continued to page 146)
Our employee morale was low. But through the grapevine, I found the answer. It wasn’t the pay or the hours. It was our dingy, noisy old office! So I called a contractor and he suggested, “Hide the old walls and ugly pipes with Gold Bond Gypsum Wallboard, deaden the noise with acoustical tile, and you’ll have a place that girls will love to leave home for!”

You can have a happier office, and one you can be proud of, with the improved materials created by modern research. Take Gold Bond Gypsum Wallboard for example. It’s fireproof. And the big, durable panels transform shabby old rooms into modern interiors like magic.

To smother noise, call your Gold Bond Acoustical Applicator, in the phone directory under “Acoustical Contractors.” He’ll cover the ceilings with sound absorbing Gold Bond Acoustical Tile.

Whether it’s an office or a home, you’ll build or remodel better with trademarked Gold Bond Products made by National Gypsum, and priced the same as unknown brands. For fireproof insulation that keeps furnace heat in and summer heat out, use full thick Gold Bond Rock Wool Batts. Cuts heating costs up to 40%. For existing homes, call your Gold Bond Rock Wool Applicator and have him “blow” Gold Bond Rock Wool into the outer walls and top floor ceilings. You’ll find his name in the phone directory under “Insulation.”

For stronger, more weatherproof outside walls with lower cost, use fireproof Gold Bond Gypsum Sheathing under the exterior finish. And for charming rooms of long-lasting beauty, use fireproof Gold Bond Gypsum Lath and Plaster.

Over 150 Gold Bond building products, each guaranteed to do a specific job better, are available through your local Gold Bond lumber and building material dealer. See him first!

Gold Bond Building Products add greater fire protection, permanency, and beauty at no extra cost. These include fireproof wallboard, lath, plaster, sheathing, wall paint, insulation, metal lath and sound control products.

NATIONAL GYPSUM COMPANY
BUFFALO 2, NEW YORK

———

Something new has been added to the Gold Bond series in the POST. With this ad we break away from home remodeling to show businessmen what a little modernizing can do for them. Plenty of offices and stores are begging for smart, low cost remodeling, and this ad will start the ball rolling for future jobs for you. When they come in, don’t forget us—always ask your dealer for Gold Bond Building Products.

NATIONAL GYPSUM COMPANY, BUFFALO 2, N. Y.

(Appeared in full color in the Saturday Evening Post November 20th)
Buy Steel Casement Windows

for less than Wood Frames
... save Installation Time.

When you install steel casement windows you save on the initial cost compared with wood frames, and you save on installation time and labor cost, as well.

With VENTO Steel Casement Windows you get these cost-saving features plus the long, satisfactory wear that VENTO Quality Windows provide. Made of heavy-section steel and carefully fitted, VENTO Quality Steel Windows stand firm and swing true—a winning combination of sturdy wearing quality and trouble-free operation.

You get prompt delivery when you order VENTO Quality windows. Your order will be delivered within a week, if necessary, preventing possible costly delay at the job site.

Don't forget — the finest houses contain VENTO Quality steel casement windows.

Builders, wholesale distributors, dealers — write for catalog today!

(Continued from page 144)

PANEL is applied in sales-training school for doors and windows after panels are on the wall; how to apply panels over cracked plaster and old walls in remodeling work; how to apply Upson Dubl-Thik Fibre-Tile in bathroom and kitchen walls, and how to apply moldings and copings after panels have been applied.

College Scholarships

for Employees’ Children

DIRECTORS of Masonite Corp., have established five annual competitive college scholarships, each worth $750 a year, for children of employees in its hardboard plant at Laurel, Miss., as a memorial to William H. Mason, founder of the company.

Eugene Holland, president, in announcing the board’s action, said a total of 20 students will receive substantial aid each year after the program has been in effect three years. The company’s principal objective, Holland said, is to help promising high school graduates.

Winners of the annual competition will be chosen by an impartial committee on the basis of scholastic accomplishment, leadership ability, personalitiy, and financial need.
Charge the suds unit with 1 or 2 table-spoonfuls of Vel, Dreft, Chat, Tide or other well-known household detergents. "I bought it the minute I saw it!"

**EASY TO SEE WHY IT'S EASY TO SELL THIS**

**New MANVILLE DISHMASHER**

Here's a dishwasher that more people can afford to buy
and more builders can afford to install!

Its handy operation lightens house/old burdens . . . gives the fast,
sanitary and thrifty kind of dishwashing that every housewife wants . . .
eliminates the dishpan, dishrag and "dishpan hands" . . . uses less
hot water and washing powder.

The handsome design of this Manville Dishmaster® will modernize any sink
and "dress up" the kitchen. Yet it's not a gadget. This permanent fixture is
manufactured to highest standards of quality and fully guaranteed. As easy to install
as a new set of faucets. Choice of table or wall type to fit any sink.

**This is a real sales opportunity—especially if you lead the way in your community. Fair-trade, with full markup for dealers.**

$39.50

**LIFETIME CHROME**
by **Gerity**

Gerity-Michigan
CORPORATION
Adrian, Michigan
**Serving the Nation’s Builders**

**GASOLINE POWERED 12” Tilting Arbor Saw**

Power is no problem with the ‘97’ — it carries its own 3 h.p. gasoline motor and a 5-foot (½” diam. core) flexible shaft. Saw and motor are mounted on tough timber skids. May be converted for use with standard electric motor. A ‘must’ for every builder... Mail coupon below now!

![Image of gasoline powered 12” Tilting Arbor Saw]

**FRANK J. SMITH**

**Philip Carey Company Appoints New Advertising Sales Promotion Manager**

APPOINTMENT of Frank J. Smith as advertising and sales promotion manager of the Philip Carey Manufacturing Co., Cincinnati, Ohio, was recently announced by E. W. Smith, vice president in charge of sales. Frank Smith suc-

**Infra Insulation Reflects 97% of Radiant Heat**

Infra Accordion Multiple Aluminum Insulation absorbs and emits only 3% of Radiant Heat. Infra forms a series of low-conductive air compartments as well as 4 radiant-heat-rejecting aluminum surfaces. It blocks vapor and convection currents.

Infra weighs 1 oz. per sq. ft., occupies 1 cu. in. of space. Ordinary insulation which weighs 32 oz. per sq. ft., occupies 18 cu. in. Installed, Infra’s mass has a ratio of 1 to 431 of low-conductive air against 1 to 23 for ordinary insulation.

Infra insulates against heat, condensation, vapor, vermin, mold and fire.

**American Builder, December 1948**

**Of All Heat Transfer Through Wall Spaces, 65% to 80% is Radiant**

**Infra C Factors and Rockwool Equivalents**

C.052 Heat Flow Down, equals 6” Rockwool.
C.083 Heat Flow Up, equals 3.97” Rockwool.
C.10 Lateral Heat, equals 3½” Rockwool.

**WRITE FOR FREE 32-Page BOOKLET**

"Simplified Physics of Thermal Insulation."

Architects and engineers use it as a handbook, and colleges as a text, on heat transfer, condensation, vapor, mold, radiant heating, etc. Contains master chart of k, C, R and U factors of all insulations, of all thicknesses, weights, densities, etc. Address Dept. AMB.

**Infra INSULATION, INC.**

10 Murray St., N.Y., N.Y.
Adaptable to any firing method, the "300" Series National Heat Extractor Boiler, for steam or hot water, assures continuous heating comfort. It can be installed as a hand-fired unit and later converted to automatic firing to take advantage of changing fuel supplies. The "300" Series is particularly suited to larger homes, small apartments and commercial buildings. Radiators, convectors, unit heaters, baseboard heating units or radiant panels can be used with the "300" Series to form a complete and modern heating system.

Durable cast iron construction, multiple-flue sections, extended heating surface, extra thick insulation, special baffles (for oil and gas firing) and an attractive jacket are some of its unique features that add up to heating satisfaction.

Domestic hot water, year 'round, is another convenience of the "300" Series, offered by the easy addition of an integral tankless type or storage type National Water Heater.

For complete information on the "300" Series Heat Extractor—or the similarly designed "100" and "200" Series for smaller installations or the "400" and "500" Series for larger installations—phone our nearest office or write to us at Johnstown.
ALUMINUM WINDOWS.

Check your full window costs including all material, weatherstripping, field hanging, fitting, adjusting, prime and finish painting... then compare... the cost of the Thorn completely assembled aluminum windows, either Double hung or casements, with built-in weathering features.

You will probably find you are paying more for much less window value.

J. S. THORN COMPANY
PHILADELPHIA 32, PA.

Homasoni, gets a letter

Dear Sir:—

I am one of 36 men who constructed and then lived in the Byrd Expedition buildings (at Little America, Antarctica for over a year in 1934-35) which were assembled from Homasoni lined sections left over from the establishment of the first Little America in 1929. These sections were already the veterans of five years' storage in damp New Zealand warehouses, but were still so strong and easy to saw, fit, and assemble that we were considerably surprised. But when we had dug down to the old camp and found also that the Homasoni in the original buildings was in perfect condition after one year of soaking in melted snow (1929-30) and five years under the terrific pressure of 20 feet of ice, we were completely sold. When other wallboards would have pulped, cracked or dissolved, Homasoni remained firm and trustworthy insulation against blizzards and temperatures to minus 75!

I am not in the habit of using my few leisure hours to throw bouquets, I have too much to do, but I feel that merit deserves reward, so here goes — believe it or not, the above remarks are paled into obscurity by my present opinion of your fine product. When, as a technical observer, on the recently concluded Navy "Operation Highjump", I was one of the few who were privileged to dig down 12 feet to our old home 10 miles from the newest camp-site. I found the 18 year old Homasoni in the walls and ceilings of the "Messhall" and "Science Lab" (the only buildings we could reach) absolutely unharmed by time, water, or cold. Hundreds of tons of ice had forced up the wood floors and pushed down the ceilings until they met in the center of the rooms, and puddles of ice everywhere evidenced the repeated freezing and thawing of the many seasons, but the walls were straight, unbuckled and scarcely stained.

Later, when our Expedition was leaving for its return to the States (February, 1947) and I had occasion to make one last run to the old camp to mark the entrances against the future, I hacked out a piece of the messhall wall to send to you for analysis. I am mailing it to you for whatever purpose you may wish to use it, and if you ever want me to convince some doubting customer of yours, just lead me to him. At least I can assure you that when at last I build the home I've been planning throughout several years of roaming the world, the insulation will emphatically be Homasoni.

Yours sincerely,

Amory H. Waite, Jr.
Radio Engineer
BAE II 1934-35 and 1946-47

P.S. I forgot one item. When I was carrying your specimen up the rope ladder from the whaleboat to the ship, it fell out of my pack and drifted away to sea. To my amazement its generation-old waterproofing qualities were still intact for it kept floating! Another boat speared it with a boat hook an hour later and returned it to me, punctured, but still definitely useable wallboard. The hole, therefore, is a badge of honor rather than a defect.

AHW
Modern apartment buildings are designed for utmost utility...for greater comfort and convenience...for new beauty. So, too, are Norge appliances! Norge products provide maximum comfort and satisfying economy. For Norge engineers are fulfilling the pattern for modern living with appliances styled to complement good room design, and constructed for functional efficiency. Norge Division, Borg-Warner Corp., Detroit 26, Mich. In Canada: Addison Industries, Ltd., Toronto, Ontario.
OAK FLOORS HARMONIZE
WITH ANY COLOR FURNISHINGS

That's one advantage of oak floors that is becoming increasingly important. With new trends in home furniture and furnishings, it is imperative, for most buyers, that they don't need to change floors or floor coverings every time they buy a new chair or change the colors and pattern of wallpapers, drapes or paint.

You'll find this point useful when you are selling homes with oak floors, to add to their long established values in beauty, durability and economy. Point out, that present furniture can be used with oak floors with all its attractiveness... and that these floors will form perfect settings for new purchases.

Get the attractive, free booklet Oak Floors for Long-time Beauty from your lumber dealer. It details all these values of oak floors, Ask also for the new Builders' Data Book, giving specifications for planning, laying and finishing oak floors. Get these two helpful books today.

For long range sales and profits... sell the value of oak floors.


OAK FLOORS
BEAUTY - DURABILITY
ADAPTABLE - ECONOMY

It does not rattle...
It does not buckle...
It does not come in modular sizes...
You don't nail it, screw it, suspend it. You don't fasten it TO your walls or ceilings... because it is PART of those walls and ceilings, an integral, monolithic part of the entire building.

To the DESIGNER, it fits willingly his every form of expression. The flat surfaces, the angular; the inside, the outside curves. And any decorative treatment may be achieved, to become an integral part of the whole.

To the OWNER it provides the satisfaction of a smooth, clean, joint-free job, that is vermin-proof, rodent-proof, fire safe and acoustically right. More economical in first cost than any "Substitutes", it is its long life that affords real life-long economy.

And for the best in fine finishing lime, remember Ohio Hydrate's brands:

"Ohio White Finish" and "Hawk Spread".
They are identical.
They have no equal.

THE OHIO HYDRATE & SUPPLY COMPANY
WOODVILLE OHIO
why have a question...
when you can have

CRANE?

- Why have owners wonder, "Is this the best?" When it's Crane, they know it's best! They themselves have chosen Crane in national surveys... year after year... above all other plumbing brands.

And you know it's best for them! The broad Crane line includes a style for every taste—a price for every building budget.

You can offer them Crane quality not only in bathroom fixtures, but in kitchen sinks and laundry tubs... each with the most popular development in years—Crane Dial-ese controls!

You can offer Crane quality in heating... complete systems for hot water, warm air, or steam... for coal, coke, oil, or gas.

See your Sweet's Builders' File for selections from the Crane line or check your plans early with your Crane Branch or Crane Wholesaler.

ELEGANCE WITHOUT WASTE...
The spacious look of this prize-winning room belies its true dimensions. Featured is the Crane Marcia Group: Marcia Counter-Top Lavatory, Criterion Bath and Closet.

CRANE CO., GENERAL OFFICES: 836 S. MICHIGAN AVE., CHICAGO 5
PLUMBING AND HEATING VALVES • FITTINGS • PIPE
NATION-WIDE SERVICE THROUGH BRANCHES, WHOLESALERS, PLUMBING AND HEATING CONTRACTORS
ONE UNYIELDING STANDARD OF
Quality...
Modern Functional Design for the Most Discriminating
Taste in Interior Decoration

General Controls new, compact, snap-action, T-70 Metro-
therm Thermostat sets a new standard of functional beauty
and accuracy in room temperature control. The harmonizing,
lustrous stainless steel cover is connected directly to the
thermally responsive element so that the entire cover,
sensitive to air temperature and radiant heat, immediately
transmits temperature changes to the control mechanism.
Its remarkable sensitivity insures constant heating comfort.
It is truly a thermostat that lives thermally in the room.
The T-70 Metrotherm Thermostat extends only ¾” from
the wall. Its ivory plastic base acts as a blanket to thermally
isolate the thermostat from the wall. From every point of
view—both appearance and performance—this thermostat
typifies the ultimate in modern engineering design.

THE T-70 SERIES Metrotherm Thermostats are available
individually or in General Controls broad line of heating
control packaged sets. For complete specifications covering
the T-70 Metrotherm Thermostat and General Controls
Automatic Pressure, Temperature and Flow Controls for
Domestic, Commercial and Industrial applications, request
new Catalog.

Automatically yours for Better Heating

GENERAL CONTROLS
Manufacturers of Automatic Pressure, Temperature and Flow Controls

American Builder, December 1943.
WHY
THIS STRONG
GARAGE DOOR
OPERATES
EASILY
for Life!

Compare Strand's Outstanding Features:

1. EASY OPERATION—Built for troublefree performance, Strand All-Steel Garage Doors won't warp, sag, swell or rot. A child can lift the Canopy Door; the Receding (track) Type rolls smoothly out of sight on ball bearing rollers.

2. STRONG AND DURABLE—All-steel, electrically welded construction provides outstanding strength and durability for a lifetime of service. Galvannealing affords a hot galvanized zinc coat for rust protection, oven baked to provide a clinging base for paint.

3. SMART, conservative design gives lasting attractive appearance. Galvannealed steel makes its good looks enduring.

4. INSTALLED QUICKER—the strong Strand Canopy and Receding (track-type) Door comes with less crating to remove; it is already assembled in one piece; hardware also comes assembled; and installation is quickly and correctly made with ordinary tools.

5. LOW IN COST—The result of volume production concentrated in one plant—standardization on two models. Strand is America's greatest garage door value.

You can get Strand Doors without waiting and without limit. Order today from your dealer—or mail the coupon, mentioning your dealer's name.

ALL STEEL GALVANNEALED • OVERHEAD • ONE PIECE

STRAND
GARAGE DOORS

TWO TYPES • • RECEDING (TRACK) AND CANOPY

—produced by Strand Building Products Co., a subsidiary of Detroit Steel Products Co.

Fenestra
BUILDING PRODUCT

STRAND BUILDING PRODUCTS COMPANY
Dept. AB12, 1710 Buhl Bldg., Detroit 26, Mich.
Please rush literature with detailed descriptions of Strand all-steel Garage Doors.
I am ( ) Builder, ( ) Dealer, ( ) Prospective Owner,
( ) Other.
Name ____________________________
Address ____________________________
City __________________ State ________
Model 60
MallSaw
2" Capacity
6" Blade

You Can Do More
WITH A
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